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PeopleSoft CRM 9.1 Order Capture Applications PeopleBook

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PeopleSoft CRM 9.1 Order Capture Applications PeopleBook
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Contents

Part 2

PeopleSoft Order Capture

Chapter 3

Chapter 4

Chapter 5

Chapter 6

Working with Order Capture Business Projects **101**

Chapter 7

Integrating Product Configuration **119**

Chapter 8

Integrating with Fulfillment and Billing Systems **151**

Chapter 9

Working with PeopleSoft Service Management **171**

Chapter 10

Using Order Capture and Service Management in the Communications Industry **203**

Chapter 14

Working with Bulk Orders **343**

Chapter 15

Chapter 16

Chapter 17

Part 3

PeopleSoft Order Capture Self Service

Chapter 18

Chapter 19

Chapter 20

Part 4

PeopleSoft Order Capture and Service Management for Multilevel Product Bundles

Chapter 21

Chapter 24

Appendix A

Oracle's PeopleSoft CRM Order Capture Applications Preface

This preface discusses:

- PeopleSoft application fundamentals.

- PeopleSoft industry application fundamentals

- PeopleSoft automation and configuration tools.

- PeopleSoft services foundation.

- PeopleSoft business object management.

- PeopleSoft product and item management.

- PeopleTools PeopleBooks.

Note. All information found in this PeopleBook is applicable to PeopleSoft CRM for High Technology.

PeopleSoft Application Fundamentals

The *PeopleSoft CRM 9.1 Application Fundamentals PeopleBook* contains essential information describing the setup and design of the PeopleSoft CRM system. This book contains important topics that apply to many or all PeopleSoft applications across the PeopleSoft CRM product line.

The *PeopleSoft CRM 9.1 Application Fundamentals PeopleBook* contains these parts:

- CRM Multi-Product Foundation.

    This part discusses the design and setup of the PeopleSoft CRM system, including security considerations.

- Workforce Management.

    This part discusses PeopleSoft CRM workflow, the Active Analytics Framework (AAF), business projects, and scripts.

- Interactions and 360-degree views.

    This part discusses how to manage interactions and set up and use the 360-degree view, a powerful tool that enables users to view and work with any transaction or interaction that is associated with a customer or worker.

- Self-Service for Customers.

    This part discusses how to set up, administer, and use self-service applications for customers and workers.

- Relationship Management.

  This part discusses how system users manage their contacts and tasks.

- Entitlement Management.

  This part discusses setting up agreements and warranties.

- SmartViews.

  This part discusses how to set up and use SmartViews to manage key customer segments and accounts in a central environment.

See Also

PeopleSoft CRM 9.1 Application Fundamentals PeopleBook, "Oracle's PeopleSoft CRM Application Fundamentals Preface"

PeopleSoft Industry Application Fundamentals

The *PeopleSoft CRM 9.1 Industry Application Fundamentals PeopleBook* discusses configuration options including security and financial account administration common to PeopleSoft vertical solution applications.

The *PeopleSoft CRM 9.1 Industry Application Fundamentals PeopleBook* contains essential information describing the setup and design of PeopleSoft CRM industry-specific applications and the use of features that are common to multiple applications within PeopleSoft CRM industry applications, including information about:

- Industry-specific tables.

- Industry-specific setIDs and roles.

- Products for industries.

- Arrangements and contracts.

- Industry-specific business objects.

- Application security for financial services.

- Financial accounts.

- Churn management.

- Fraud management.

See Also

PeopleSoft CRM 9.1 Industry Application Fundamentals PeopleBook, "Oracle's PeopleSoft CRM Industry Application Fundamentals Preface"

PeopleSoft Automation and Configuration Tools

The *PeopleSoft CRM 9.1 Automation and Configuration Tools PeopleBook* discusses automation and configuration tools that are common to multiple CRM applications. This is an essential companion to your application PeopleBook.

The *PeopleSoft CRM 9.1 Automation and Configuration Tools PeopleBook* contains these parts:

- Correspondence management.

  This part discusses the setup and application of manual notifications, automatic notifications and manual correspondence requests among CRM objects.

- Automation tools.

  This part discusses PeopleSoft CRM workflow, the Active Analytics Framework (AAF), business projects, and scripts.

- Configuration tools.

  This part discusses configurable search pages, configurable toolbars, attributes, display templates and industry-specific field labels and field values.

- Knowledge management.

  This part discusses the setup of Verity search.

- Business process management.

  This part provides information on the two different approaches to manage business processes in PeopleSoft CRM and discusses:

  - The setup of the Business Process Execution Language (BPEL) infrastructure to initiate and manage BPEL process instances.

  - The setup of Business Process Monitor to view the status information of initiated BPEL process instances.

  - The setup of BPEL worklist integration to send CRM worklist entries (both notifications and action items) from BPEL processes.

  - The setup and execution of business projects.

See Also

PeopleSoft CRM 9.1 Automation and Configuration Tools PeopleBook, "Oracle's PeopleSoft CRM Automation and Configuration Tools Preface"

PeopleSoft Services Foundation

The *PeopleSoft CRM 9.1 Services Foundation PeopleBook* discusses configuration options that are common to PeopleSoft Integrated FieldService, PeopleSoft Order Capture, and the PeopleSoft call center applications (PeopleSoft Support, PeopleSoft HelpDesk, and PeopleSoft HelpDesk for Human Resources).

There are three parts to the *PeopleSoft CRM 9.1 Services Foundation PeopleBook:*

• Solution management.

 Solution management enables users to establish a set of predefined solutions that call center agents and field service technicians can use to resolve customer problems.

• Transaction Billing Processor Integration.

 PeopleSoft Transaction Billing Processor enables PeopleSoft Integrated FieldService, PeopleSoft Support, and PeopleSoft Order Capture to integrate with PeopleSoft Billing and PeopleSoft General Ledger through the use of the PeopleSoft Contracts architecture. The integration enables PeopleSoft CRM users to bill and book revenue for recurring, one-time, and on demand services.

• Environmental Systems Research Institute (ESRI) integration.

 The integration with ESRI, a mapping software, enables users to view the location of reported cases and the location of field service activities through the Map Dashboard.

See Also

PeopleSoft CRM 9.1 Services Foundation PeopleBook, "Oracle's PeopleSoft CRM Services Foundation Preface"

PeopleSoft Business Object Management

The *PeopleSoft CRM 9.1 Business Object Management PeopleBook* discusses how to create and manage customer and worker business objects in PeopleSoft CRM.

The *PeopleSoft CRM 9.1 Business Object Management PeopleBook* has these parts:

• Business Object Management Basics.

 This part provides an overview of the business object relationship model and discusses setting up role types, relationship types, and control values.

• Data Management for Organization Business Objects.

 This part discusses how to set up and manage companies, sites, and partner companies.

• Data management for Individual Business Objects.

 This part discusses how to set up and manage persons, including contacts and consumers, and workers.

- Business Object Management.

  This part discusses how to define and use business object searches, quick create, and the customer identification framework to manage business objects.

- Customer and Worker Data Integrations.

  This part discusses how to integrate customer and worker data with other systems.

See Also

PeopleSoft CRM 9.1 Business Object Management PeopleBook, "Oracle's PeopleSoft CRM Business Object Management Preface"

PeopleSoft Product and Item Management

The *PeopleSoft CRM 9.1 Product and Item Management PeopleBook* discusses how to set up products in PeopleSoft CRM, including installed products, product packages, and products that are service offerings such as service agreements and warranties.

See Also

PeopleSoft CRM 9.1 Product and Item Management PeopleBook, "Oracle's PeopleSoft CRM Product and Item Management Preface"

PeopleTools PeopleBooks

Cross-references to PeopleTools documentation refer to the PeopleTools 8.52 PeopleBooks.

PeopleBooks and the PeopleSoft Online Library

A companion PeopleBook called *PeopleBooks and the PeopleSoft Online Library* contains general information, including:

- Understanding the PeopleSoft online library and related documentation.

- How to send PeopleSoft documentation comments and suggestions to Oracle.

- How to access hosted PeopleBooks, downloadable HTML PeopleBooks, and downloadable PDF PeopleBooks as well as documentation updates.

- Understanding PeopleBook structure.

- Typographical conventions and visual cues used in PeopleBooks.

- ISO country codes and currency codes.

- PeopleBooks that are common across multiple applications.

- Common elements used in PeopleBooks.

- Navigating the PeopleBooks interface and searching the PeopleSoft online library.

- Displaying and printing screen shots and graphics in PeopleBooks.

- How to manage the locally installed PeopleSoft online library, including web site folders.

- Understanding documentation integration and how to integrate customized documentation into the library.

- Application abbreviations found in application fields.

You can find *PeopleBooks and the PeopleSoft Online Library* in the online PeopleBooks Library for your PeopleTools release.

Part 1

Order Capture Applications

Chapter 1
Getting Started with PeopleSoft CRM Order Capture Applications

Chapter 2
Navigating in Order Capture

Chapter 1

Getting Started with PeopleSoft CRM Order Capture Applications

This chapter provides an overview of PeopleSoft Order Capture applications and discusses:

- PeopleSoft Order Capture business processes.

- PeopleSoft Order Capture integrations.

- PeopleSoft Order Capture and PeopleSoft Order Capture Self Service implementation.

Note. Although Order Capture and Order Capture Self Service are separately licensed applications, most references to business processes and implementation steps in this chapter apply equally to both applications.

PeopleSoft Order Capture Applications Overview

PeopleSoft Customer Relationship Management (PeopleSoft CRM) consists of two applications which contribute to the interactive selling experience:

- *PeopleSoft Order Capture.*

  This internally facing application is a robust customer relationship management (CRM) order management tool that enables customer sales representatives (CSRs) or sales representatives to manage orders and quotes.

- *PeopleSoft Order Capture Self-Service.*

  This externally facing application enables web users—such as brokers, business customers, and consumer customers—to easily create and manage their own orders and quotes.

Order Capture Applications

Order Capture applications utilize:

- The CRM customer data model (CDM, also referred to as the business object relationship model [BORM]).

  The CDM (or BORM) is a powerful tool with which you can define the structure of your customer base and the relationships between various business entities such as companies, sites, partners, resellers, or consumer families. The BORM enables businesses with complex business models to define this data structure within their CRM systems, which controls system behavior, workflow, and business rules according to that definition.

  See and *PeopleSoft CRM 9.1 Business Object Management PeopleBook*, "Oracle's PeopleSoft CRM Business Object Management Preface."

- The CRM product data model.

  This data model enables the definition and creation of the products and services the PeopleSoft software will support. You have numerous options in doing so such as, dynamic packages, nested packages, product relationships, and complex configurations.

  See and *PeopleSoft CRM 9.1 Product and Item Management PeopleBook*, "Setting Up Products."

- PeopleSoft Enterprise Pricer.

  This pricing tool uses the latest PeopleTools technologies to deliver a robust, high-performance engine. It integrates seamlessly with Order Capture applications to apply complex pricing structures and scenarios. PeopleSoft Enterprise Pricer has an intuitive user interface that is geared to use by your marketing managers.

  See and *PeopleSoft Enterprise Pricer 9.1 for CRM PeopleBook*, "Oracle's PeopleSoft Enterprise Pricer for CRM Preface."

- CRM catalog.

  CRM catalog functionality is available to Order Capture applications. With it, you can create region-specific catalogs, display template configurations, apply permission-filtering, and enable product comparisons. CRM catalogs integrate fully with Order Capture, Order Capture Self Service, and PeopleSoft Advisor for the purpose of product, service, or solution recommendations. Additionally, Catalog Search employs the Verity search engine.

  See and *PeopleSoft CRM 9.1 Product and Item Management PeopleBook*, "Creating Catalogs."

Order Capture

Order Capture offers these features:

- Order and quote management.

  Order Capture delivers order and quote management functionality for both tangible and nontangible products, such as services. (For example, a monthly service agreement for cable television service is a service product.)

- Order Capture workbenches.

  Order Capture workbenches are unique to the enterprise, and they perform three main functions. First, they are a central navigation point from which you can set up Order Capture and Order Capture Self Service, after you have defined your business units. The system consolidates specific setup tasks into one of three workbenches: Setup Workbench, Capture Type Workbench, and Integration Workbench. These workbenches all appear in the Set Up CRM, Product Related, Order Capture menu.

  Second, you can configure the 'look and feel' of the Order Capture runtime pages by defining and then selecting specific display templates.

  Third, you can create application class sets and plug the logic of those application classes into a workbench feature to create new events for your order capture business process.

  Note. "PeopleSoft CRM Red Paper - Understanding Application Classes in PeopleSoft Order Capture and PeopleSoft Order Capture Self Service" explains how to harness the power of application classes. This document is available in My Oracle Support.

- Functional Area Navigation (FAN) pages, personalizations, and hotkeys.

  CSRs can begin their interactive selling activities from a FAN page that provides one-click access to the main features of Order Capture. Customer Service administrators can personalize the look and feel of the order entry form for CSRs and CSRs can use hotkeys for rapid data entry.

- Integration with fulfillment.

  Order Capture provides integration with both PeopleSoft and third-party fulfillment systems or supply chain management products. For example, there is a tight integration with PeopleSoft Supply Chain Management (PeopleSoft SCM) so that order fulfillment and detailed maintenance activity is possible.

  Note. Integration points support the sending and receiving of orders, quotes, product availability, and order status information.

- Order capture business projects.

  Configurable business projects power order fulfillment. Business projects enable you to configure the phases, tasks, and events that occur once an order is submitted.

- Interactive Reports.

  Order Capture delivers instant, detailed business analytics information for revenue and metrics. User roles control access to enterprise-wide report information.

- Quick Create.

  Order Capture enables you to create customers, consumers, and contacts while you are in the midst of a transaction without having to navigate to the standard setup components to define customer information.

- Correspondence management.

  Order Capture can establish automatic correspondences using email or print for order or quote maintenance, or submission activity. Also, CSRs can generate correspondences manually by clicking the Send Correspondence button on the Entry Form page.

- Support for taxes, including value-added tax (VAT).

    Order Capture integrates with third-party software applications to calculate and display tax information directly on order forms.

- Integration to Agreements.

- Integration with PeopleSoft Proposal Management.

- Bulk order creation and maintenance.

- Credit card integration.

- Freight integration with third-party software vendor.

See and <u>Chapter 1, "Getting Started with PeopleSoft CRM Order Capture Applications," External Applications, page 8.</u>

Order Capture Self Service

In addition to most Order Capture features, Order Capture Self Service delivers:

- Support for self-service registration and profile and address maintenance.

- A Contact Us feature that includes real-time chat with a CSR.

- Security roles and privileges that control what a self-service user sees.

- Quick entry, to enable the rapid creation of orders.

- Order tracking functionality.

- Other standard self-service features, such as Checkout and Shopping Cart.

Order Capture Applications Business Processes

This section discusses the business processes that you can perform using Order Capture applications.

Order Capture Process Flow

This diagram illustrates the primary Order Capture business processes, which identifies:

1. High-level implementation and setup tasks for which an Order Capture implementer is responsible.

2. Main business processes available for use by an Order Capture CSR.
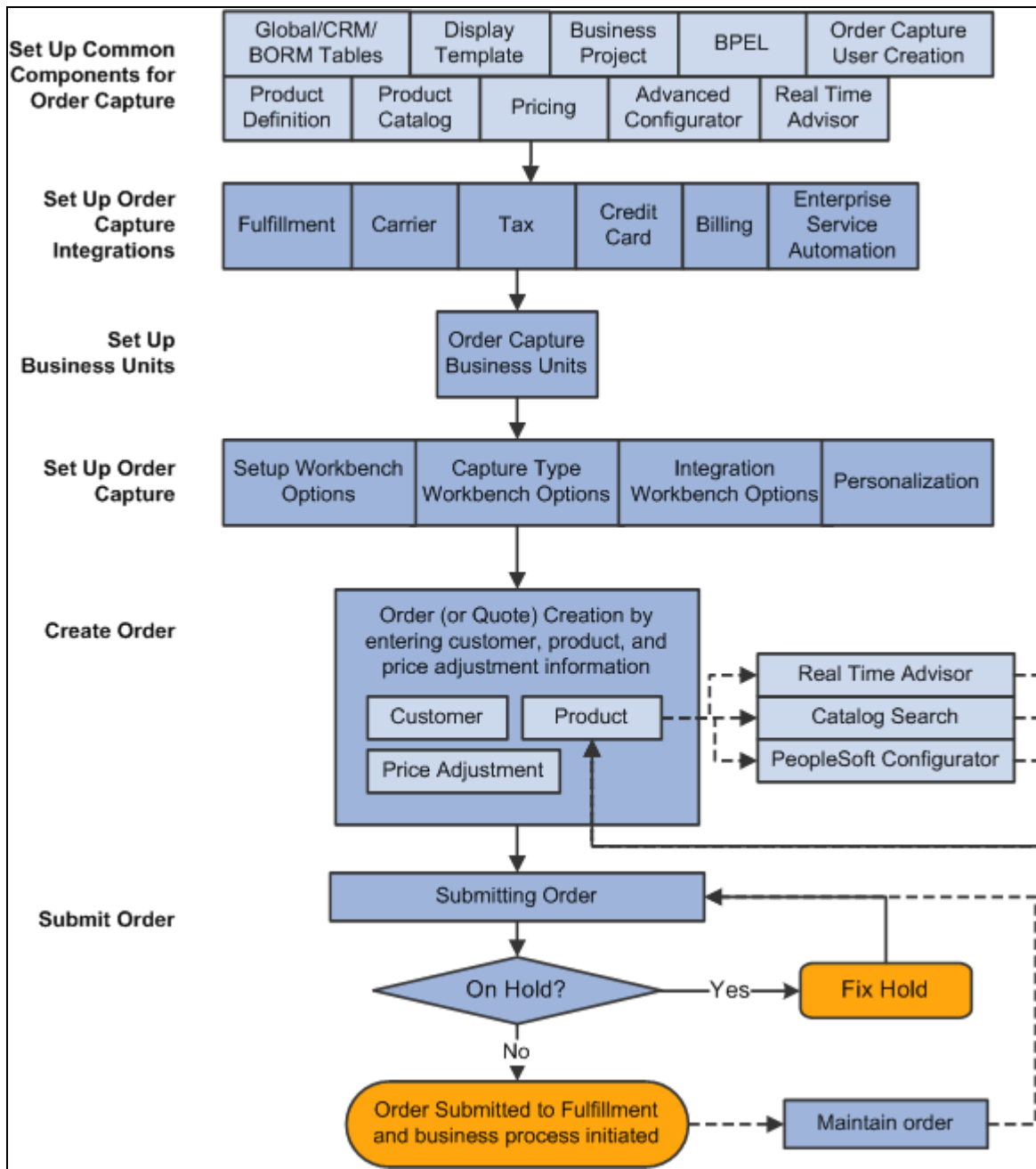
Order Capture setup and implementation tasks and simple ordering process flow

We discuss these setup processes in the setup chapters in this PeopleBook.

We discuss these business processes in the business process chapters in this PeopleBook.

See Also

Order Capture Integrations

Order Capture integrates with most PeopleSoft CRM applications. Generally, this occurs in the form of other CRM applications channeling CSRs, call center agents, marketing managers, or sales representatives to the entry form where they can create an order or quote.

PeopleSoft CRM Applications

Order Capture integrates directly with these PeopleSoft CRM features or applications:

- 360-Degree View.

- PeopleSoft Advanced Configurator.

  This integration enables complex configuration of products directly from the order line.

- PeopleSoft FieldService.

  Order Capture provides support for both service order generation and installed products.

- PeopleSoft Marketing.

  Order Capture displays campaigns that are targeted to your customers.

- PeopleSoft Real-Time Advisor.

  This integration enables CSRs to launch a PeopleSoft Advisor dialog and, using a question and answer session, match a buyer with a recommendation for a product, service, or solution.

- PeopleSoft Sales.

  This integration supports the creation of a quote or order from a sales lead or opportunity.

- PeopleSoft Support.

  This integration enables call center agents to generate a sale from a case.

- PeopleSoft TeleSales.

  This integration enables telesales representatives to quickly convert a phone call opportunity into a sale.

External Applications

Order Capture and Order Capture Self Service use integration points to connect to fulfillment systems and other third-party applications. PeopleSoft CRM integration points connect you to:

- PeopleSoft SCM or similar systems.

  This integration enables order fulfillment.

- Credit Card Integration Point.

  This enables integration with third-party credit card authorization and payment vendors directly from Order Capture and Order Capture Self Service.

- Carriers and tax calculation systems.

    Integration with third-party freight and tax calculation vendors enables order capture applications to calculate freight, sales tax, and VAT directly from an order.

Note. Supplemental information about how to set up third-party application integrations is located on the My Oracle Support website.

Refer to the Partners section of the Oracle corporate website for a list of Oracle-validated integrations provided by Independent Software Vendor (ISV) partners.

See Oracle Validated Application Integrations - Find a Partner Solution

Order Capture Applications Implementation

PeopleSoft Setup Manager enables you to generate a list of setup tasks for your organization based on the features that you are implementing. The setup tasks include the components that you must set up, listed in the order in which you must enter data into the component tables, and links to the corresponding PeopleBook documentation.

Order Capture applications also provide component interfaces to help you load data from your existing system into order capture tables. Use the Excel to Component Interface utility with the component interfaces to populate the tables.

This table lists all of the Order Capture components that have component interfaces:

Component	Component Interface	Reference
CARRIER	CARRIER_SCI_CI	See and Chapter 4, "Setting Up PeopleSoft Order Capture," Setting Up Freight Integration, page 84.
RO_BUS_UNIT	RO_BUS_UNIT_CI	See and Chapter 3, "Defining Order Capture Business Units," page 17.
RO_CATALOG	RO_CATALOG_CI	See and Chapter 5, "Understanding Product, Pricing, Proration, and Catalogs," page 91.
RO_DEFN	RO_DEFN_CI	See and Chapter 4, "Setting Up PeopleSoft Order Capture," Setting Up Order Capture Tables, page 40.
RO_DEFN_INTEGRATE	RO_DEFN_INTEGRATE_CI	See and Chapter 4, "Setting Up PeopleSoft Order Capture," Defining Integrations and Mappings, page 78.
RO_TYPE	RO_TYPE_CI	See and Chapter 4, "Setting Up PeopleSoft Order Capture," Defining Order and Quote Processing, page 65.
RB_SRTY_PRIV	RB_SRTY_PRIV_CI	See and PeopleSoft Order Capture Self Service.

Component	Component Interface	Reference
RB_SRTY_PRIV_DELTA	RB_SRTY_PRIV_DELTA_CI	See and PeopleSoft Order Capture Self Service.
RB_SRTY_PRIV_DFLT	RB_SRTY_PRIV_DFLT_CI	See and PeopleSoft Order Capture Self Service.
RX_GUEST_REG_TMPLT	RX_GUEST_REG_TMPLT_CI	See and PeopleSoft Order Capture Self Service.
RX_REP_REG_TABLE	RX_REP_REG_TABLE_CI	See and PeopleSoft Order Capture Self Service.
RB_RULE_BRN	RB_RULE_BRN_CI	See and Chapter 23, "Setting Up Multilevel Product Bundles," Setting Up Configuration Rules for Multilevel Product Bundles, page 541.
RB_RL_COM_INC_ATTR	RB_RL_COM_INC_ATTR_CI	See and Chapter 23, "Setting Up Multilevel Product Bundles," Setting Up Configuration Rules for Multilevel Product Bundles, page 541.
RB_RULE_COMM_ATTR	RB_RULE_COMM_ATTR_CI	See and Chapter 23, "Setting Up Multilevel Product Bundles," Setting Up Configuration Rules for Multilevel Product Bundles, page 541.
RB_RULE_ER	RB_RULE_ER_CI	See and Chapter 23, "Setting Up Multilevel Product Bundles," Setting Up Configuration Rules for Multilevel Product Bundles, page 541.
RB_RULE_INCO_PRE	RB_RULE_INCO_PRE_CI	See and Chapter 23, "Setting Up Multilevel Product Bundles," Setting Up Configuration Rules for Multilevel Product Bundles, page 541.
RB_RULE_CRF	RB_RULE_CRF_CI	See and Chapter 23, "Setting Up Multilevel Product Bundles," Setting Up Configuration Rules for Multilevel Product Bundles, page 541.
RB_RULE_FRO_SS	RB_RULE_FRO_SS_CI	See and Chapter 23, "Setting Up Multilevel Product Bundles," Setting Up Configuration Rules for Multilevel Product Bundles, page 541.
RB_RULE_COMM_CVR	RB_RULE_COMM_CVR_CI	See and Chapter 23, "Setting Up Multilevel Product Bundles," Setting Up Configuration Rules for Multilevel Product Bundles, page 541.
RB_RULE_COMM_TRG	RB_RULE_COMM_TRG_CI	See and Chapter 23, "Setting Up Multilevel Product Bundles," Setting Up Configuration Rules for Multilevel Product Bundles, page 541.
RB_RULE_FUNC_ATTR	RB_RULE_FUNC_ATTR_CI	See and Chapter 23, "Setting Up Multilevel Product Bundles," Setting Up Configuration Rules for Multilevel Product Bundles, page 541.

Component	Component Interface	Reference
RB_RULE_FRF	RB_RULE_FRF_CI	See and Chapter 23, "Setting Up Multilevel Product Bundles," Setting Up Configuration Rules for Multilevel Product Bundles, page 541.
RB_MIG_ACT_DFN_CMP	RB_MIG_ACT_DFN_CMP_CI	See and Chapter 23, "Setting Up Multilevel Product Bundles," Setting Up Migration Actions, page 532.
CFG_ERR_CODE	CFG_ERR_CODE_CI	See and Chapter 22, "Understanding Multilevel Product Bundle Integration," Configuring Integration Parameters for the Configurator Controller Component, page 461.
RB_MOD_TYPE_DFN_CP	RB_MOD_TYPE_DFN_CP_CI	See and Chapter 22, "Understanding Multilevel Product Bundle Integration," Mapping Order Capture AAF Terms to Configurator Controller Counting Functions, page 468.
CFG_SETUP	CFG_SETUP_CI	See and Chapter 7, "Integrating Product Configuration," Integrating with Product Configurator Solutions, page 121.

Other Sources of Information

In the planning phase of your implementation, take advantage of all PeopleSoft sources of information, including the installation guides, table-loading sequences, data models, and business process maps. A complete list of these resources appears in the preface in the *PeopleSoft CRM 9.1 Application Fundamentals PeopleBook,* with information about where to find the most current version of each.

See Also

PeopleTools 8.52: PeopleSoft Setup Manager PeopleBook

PeopleTools 8.52: PeopleSoft Component Interfaces PeopleBook

PeopleSoft CRM 9.1 Application Fundamentals PeopleBook, "Oracle's PeopleSoft CRM Application Fundamentals Preface"

Chapter 2

Navigating in Order Capture

This chapter lists the pages used to navigate in Order Capture.

Navigating in Order Capture

Order Capture provides custom navigation pages that contain groupings of folders that support a specific business process, task, or user role.

Note. In addition to the Order Capture custom navigation pages, Order Capture provides menu navigation, standard navigation pages, and PeopleSoft Navigator.

See Also

PeopleTools 8.52: PeopleSoft Applications User's Guide

Pages Used to Navigate in PeopleSoft Order Capture

This table lists the custom navigation pages that are used to navigate in PeopleSoft Order Capture.

Order Capture Setup Center

Use these pages to navigate in the Order Capture Setup Center:

Page Name	Navigation	Usage
Set Up Order Capture	Set Up CRM, Order Capture Setup Center	Set up and configure features, including products, pricing rules, and catalogs.
Define Configurator Schema	Click the Define Configurator Schemalink on the Set Up Order Capture page.	Set up user interface, pricing, and output of configured products and services.
Products and Items	Click the Products and Items link on the Set Up Order Capture page.	Access the Inventory Item Definition, Product Definition, Product Unit of Measure, and Product Price pages to create and maintain products, packages, items, and pricing.

Page Name	Navigation	Usage
Pricing Rules	Click Pricing Rules link on the Set Up Order Capture page.	Access the Environment, Price List, Arbitration Plan, and Price Rule page to create multiple price lists and pricing rules.
Catalogs	Click the Catalogs link on the Set Up Order Capture page.	Access the Catalog Definition and Catalog Template Definition pages to create and maintain catalogs, templates, and installation options.
Advisor Dialogs	Click the Advisor Dialogs link on the Set Up Order Capture page.	Access the Advisor Dialog Creation and Environment pages to create and maintain advisor dialogs.

Order Capture Center

Use these pages to navigate in the Order Capture Center:

Page Name	Navigation	Usage
Order Capture Center	Order Capture Center	Manage quotes and orders, and browse products and services.
360-Degree View	Click the 360-Degree View link on the Order Capture Center page.	View details of all customer quoting and ordering activity.
Find Products	Click the Find Products link on the Order Capture Center page.	Browse and search all available products and services.
Quotes	Click the Quotes link on the Order Capture Center page.	Access the Add Quote and Search Quote pages to create and manage quotes.
Interactive Reports	Click the Interactive Reports link on the Order Capture Center page.	Access the Enterprise Order Revenue, Enterprise Order Metrics, Order Revenue, and Order Metrics pages to run Order Capture Interactive Reports.
Order	Click the Order link on the Order Capture Center page.	Access the Add Order, Add Bulk Order, and Search Orders pages to create and manage orders.
Service Management	Click the Service Management link on the Order Capture Center page.	Access the Maintain Service, Bulk Maintain Service, Start Service, Transfer Service, Stop Service, and View Service Management Order pages to create and maintain services.

Part 2

PeopleSoft Order Capture

Chapter 14
Working with Bulk Orders

Chapter 15
Understanding Order Capture Integration with PeopleSoft Policy and Claims Presentment and PeopleSoft Banking Transactions

Chapter 16
Working with PeopleSoft Proposal Management

Chapter 17
Working with Interactive Reports for Order Capture

Chapter 3

Defining Order Capture Business Units

This chapter provides an overview business units and discusses how to define Order Capture business units.

Understanding Business Units

A business unit is an operational subset of an organization. Each business unit has its own way of storing information and has its own processing guidelines. You can use one business unit for all situations, or you can divide operations based on whatever criteria make the most sense. For example, you can create business units for different product lines or regions or even entry source. Order Capture transactions use business units as key identifiers. Once you determine how many business units you need and how to organize them, define them in the Order Capture system.

Note. PeopleSoft implementation personnel can help you to define an appropriate business unit structure.

In Order Capture, business units drive the business process of creating and tracking orders that customer service representatives (CSRs), sales representatives, and self-service customers create. To implement Order Capture, you must create order capture business units. These business units define processing rules to capture orders and enable the integration with other PeopleSoft applications, such as Order Management.

For integration purposes, ensure that business unit definition records are synchronized across all systems. Business unit definitions that you create in PeopleSoft CRM are available in PeopleSoft Supply Chain Management. You must make PeopleSoft Order Management and Inventory business unit definitions available to PeopleSoft CRM. To synchronize business unit records across your business enterprise, use the business unit enterprise integration point (EIP).

This is the process for defining business units:

1. Define global PeopleSoft business units, if you run multiple PeopleSoft applications.

2. Define PeopleSoft Customer Relationship Management (PeopleSoft CRM) business units.

3. Link PeopleSoft business units and PeopleSoft CRM business units to Order Capture.

   Note. For example, you can create a business unit in Order Capture, and connect that business unit to Sales later.

Before you create multiple order capture business units, ensure that you understand tableset controls, which you use to determine values for fields on transactional pages.

PeopleSoft CRM 9.1 Application Fundamentals PeopleBook, "Working with Business Units and TableSet Controls"

Defining Order Capture Business Units

This section discusses how to:

- Create order capture business units.

- Specify order capture self service options.

- Specify order capture telecommunications service options.

See Also

Pages Used to Define Order Capture Business Units

Page Name	Definition Name	Navigation	Usage
Order Capture Definition - Internal	BUS_UNIT_RO1	Set Up CRM, Business Unit Related, Order Capture Definition, Internal	Create Order Capture business units, update existing business units, and establish default business units.
Order Capture Definition - Self Service	BUS_UNIT_RO2	Set Up CRM, Business Unit Related, Order Capture Definition, Self Service	Specify order capture self service settings.
Order Capture Definition - Communications	BUS_UNIT_RBT	Set Up CRM, Business Unit Related, Order Capture Definition, Communications	**Note.** This page appears only if the Show Communications Tab field is selected on the Order Capture Definition - Internal page. Specify order capture business unit settings that are specific to telecommunications service providers.

Creating Order Capture Business Units

Access the Order Capture Definition - Internal page (Set Up CRM, Business Unit Related, Order Capture Definition, Internal).

Order Capture Definition - Internal page (1 of 3)

Order Capture Definition - Internal page (2 of 3)

Order Capture Definition - Internal page (3 of 3)

Business Unit	Displays the business unit that you entered to access the page.
	Note. If the company uses more than one PeopleSoft application and defines the same business units across applications, use the same name for business units that are designed to share the same setID.
Description	Enter a description of the business unit. This description appears on the Order Capture Entry Form page and in other places where the business unit appears.
Status	Select an *Open* or *Closed* status. You cannot process transactions for a closed business unit.
Short Description	Enter a brief description of the business unit. This description appears on the Order Capture Entry Form page and in other places where the business unit appears.

Default Business Unit   Select to specify that this business unit as the default business unit. If no order capture business unit is defined on the Overall Preferences page for the user who logged on, the system uses the default business unit that you identify as the default business unit for new orders and quotes.

The system uses the same mechanism to determine a user's access to catalogs.

Note. This check box appears only after you create a business unit.

See and *PeopleSoft CRM 9.1 Application Fundamentals PeopleBook*, "Setting Up Security and User Preferences."

Default Set ID   Enter the setID that determines your preliminary tableset sharing setup. This setID determines the setIDs that the system assigns to each record group for the new business unit, and the setID that is assigned to a record group determines the tableset that provides values for the business unit. If you enter an existing setID, the system copies the set control definition of that business unit to the new business unit.

Note. This field appears only when you open the page in Add a New Business Unit mode. It disappears after you create the business unit.

Submit Confirmation   Select to view a confirmation page once an order or quote is submitted. If the submission was successful, the CSR can either return to the order or quote just submitted or begin to create a new order or quote. If the submission was placed on hold, the CSR is able to link directly to the Holds page.

If you clear this option, the system populates the header statuses automatically, and the Submit Confirmation page does not appear.

Create BU (create business unit)   Click to establish the setID controls for the order capture business unit based on the default setID that you specify.

Note. This button appears only when you open the page in Add a New Business Unit mode. It disappears when you create the business unit.

Business Unit

Field Service   Enter the PeopleSoft FieldService business unit to map to this order capture business unit.

Note. When ordering a product that requires installation, a service order is created in this PeopleSoft FieldService business unit.

Marketing   Enter the PeopleSoft Marketing business unit to map to this order capture business unit. Order Capture displays campaign offers that are associated with this Marketing business unit.

Order Management

Enter the PeopleSoft Order Management business unit to map to this Order Capture business unit. Order Capture maps to this Order Management business unit for order fulfillment.

Proposal Management

Select the PeopleSoft Proposal Management business unit with which Order Capture integrates.

Note. PeopleSoft Proposal Management is part of a suite of Enterprise Service Automation (ESA) applications, within the PeopleSoft Financial Management Solutions product line. PeopleSoft CRM can to send PeopleSoft Proposal Management information when an engagement service product is included in a quote and receive pricing information when an engagement is fulfilled in PeopleSoft Proposal Management.

Contracts

Enter the PeopleSoft Contracts business unit to map to this Order Capture business unit. This only applies if you want to take advantage of the integration from Order Capture to PeopleSoft's billing system.

General Ledger

Enter the PeopleSoft General Ledger business unit to map to this Order Capture business unit. This enables the PeopleSoft General Ledger application to record billing information.

Note. This only applies if you want to take advantage of the integration between Order Capture and PeopleSoft's billing system.

Tax Settings

Tax Vendor

Select a tax vendor. If you select *Taxware, Vertex,* or *WorldTax,* Order Capture integrates with the relevant third-party system for tax calculations. If you want value-added tax to be part of your pricing calculations during order entry, select *WorldTax.* If you select *None,* the system does not calculate taxes when creating orders or quotes.

Note. You cannot show tax on an order or quote unless you select a vendor.

Test Tax Interlink

Click to verify that the tax integration is functioning correctly.

Important! Make sure that the business interlink is properly configured before testing the integration.

If your tax vendor is Vertex or Taxware, be sure to get the latest version of the your taxation product to work with your current PeopleTools version.

Company and **Division**

Enter codes that Taxware and Vertex use for reporting and tax calculation purposes. Check the vendor documentation for further information.

Order Origin	Enter the business unit where sales orders originate. Taxware references this location to calculate sales taxes for local jurisdictions that use this information in their taxing practices. Check the Taxware documentation for further information.
Order Acceptance	Enter the business unit where orders are accepted. Both Taxware and Vertex reference this location to calculate sales taxes. Check the Taxware or Vertex documentation for further information.
Store Location	(Optional) Enter the Store Location parameter used by third-party tax vendors. This is a 10 character maximum field.

Order Capture

Freight Vendor	Select a freight vendor type. Values are:
	None: No freight is calculated on the order.
	External: Order information is passed to an external vendor, and the calculated freight amount appears on the order.
Test Freight	Click this link to verify that the freight integration is functioning correctly.
Card Vendor	Select a card vendor. If you select *3rd party,* the system submits credit card information to a third-party system for credit card authorization processing.
Ship From	Enter a ship-from location, assuming that all products ship from this location. This information is used when calculating taxes and freight costs.
Source	Enter an informational code that identifies the source of the order. For example, you could specify *Phone* if you receive most orders for this business unit by telephone.
	Note. The CSR can change this field's default value.
Sub Source	Select a sub source code that further classifies the source of the order.
	The system makes sub source codes available based on the selected source code.
	See and Chapter 4, "Setting Up PeopleSoft Order Capture," Defining Sub Source Mappings, page 62.
Preferred Carrier	Select the default carrier that you want to use when creating orders or quotes.
Capture Priority	Select a capture priority of *Urgent, High, Medium,* or *Low* to specify the default priority for all orders that are created in the business unit. You can change the priority during order creation.

Quote Conversion Warning   Unless specified on the business unit definition, a quote that is converted to an order will automatically be submitted. When a quote that contains an engagement service product is converted, the engagement service is updated in the PeopleSoft Proposal Management system. If you want to display a warning for the CSR which indicates that the quote that is about to be converted to an order contains at least one Engagement Service product, then select *Display Warning.* If you want to bypass the warning, select *No Warning.*

Base Currency   Enter the default currency. A base currency is required for the business unit, even if you are not transacting in foreign currencies.

Site Address Includes   Select an order capture site address. The selection here includes all existing site addresses for a customer. You can increase the number of addresses available during order entry. Values are:

- *Site addresses only:* Displays site addresses only.

  Note. This is the default selection.

- *All customer addresses:* Displays the existing site addresses plus all other customer addresses.

- *Customer Bill To addresses:* Displays the existing site addresses plus any billing addresses.

- *Customer Ship To addresses:* Displays the existing site addresses plus any shipping addresses.

Rate Type   Select the method that the system uses to set the exchange rate between currencies for Order Capture transactions.

Fulfillment Specialist Email Enter an email address to which an email is sent if you create an order that contains a literature-type product.

Credit Rating Value   Enter a minimum credit rating value. If the customer's credit rating is less than this amount, the order that is associated with that customer is automatically placed on hold.

Catalog Refresh (minutes)   Enter a catalog refresh interval amount in minutes. When you view the product catalog, the system automatically checks when the last refresh occurred. If the interval since the last refresh is greater then the time that you enter here, the system forces a refresh.

Quote Valid For   Enter the default number of days for which a quote is valid after the creation date. The system adds this number to the quote creation date to calculate the expiration date. Once the expiration date passes, the status changes to *Expired.*

                                 Note. You cannot convert expired quotes to orders.

Days Quote Due

Enter the number of days that the system automatically adds to the quote creation date to indicate a final date by which a quote should be converted to an order. A quote's due date is then set to the resulting date. For example, if you want quotes to elapse 30 days after creation, enter *30* here.

Note. The number that you define here does not appear on the quote itself.

Bill Type Identifier

Select the bill type that you want associated with the setID. The bill type prompts on all bill type identifier codes that are synchronized from PeopleSoft Billing. The bill type identifier is a user-defined value in PeopleSoft Billing. Order Capture delivers CRM_ORDER as sample data.

Note. On the Billing and Pricing Options page, the Bill Type field is optional. If it is not defined in PeopleSoft CRM, the billing plan in PeopleSoft Contracts sets the field based on the PeopleSoft Contracts business unit.

Bill Source

Select the bill source that you want associated with the setID. The bill source prompts on all bill source identifier codes that are synchronized from PeopleSoft Billing. The bill source code is a user-defined value in PeopleSoft Billing. Order Capture delivers CRM_ORDER as sample data.

Note. On the Billing and Pricing Options page, the Bill Source field is optional. If it is not defined in PeopleSoft CRM, the billing plan in PeopleSoft Contracts sets the field based on the PeopleSoft Contracts business unit.

Default Service Duration

For a service, specify a start date and an end date on an order. The end date is calculated by adding the duration to the start date. If you have not specified a duration on the product definition, the order will pick up the duration from this field. Duration is the numeric value plus the quantifier, which is either *days, months, quarters, weeks,* or *years.*

Quote Conversion

Select *Convert to Order Only* if you want to give the CSR the chance to modify an order prior to submission. Select *Convert to Order and Submit* if you want quotes that are converted to orders to automatically be submitted. This is the default selection.

Note. Your selection here will apply to all orders placed from this business unit.

Order Level Adjustments

Select if you want to prorate adjustments or not.

Schedule

Select the default schedule for subscription products.

Subscription Term

Select the default term for subscription products.

Agreement Coverage Grid   Select an option to indicate when to populate the agreements covered
product grid.

- *Always Populate Grid*

  Select to automatically populate the covered products grid with eligible
  products.

- *Populate Upon Request*

  When this option is selected the Include Ordered Products link is
  displayed on the Select Covered Products grid. Clicking the link adds
  any additional eligible products from the order onto the grid, so that
  they may be added to the agreement.

- *Notify CSR Only*

  Select to notify the CSR of any additional eligible products that can be
  ordered to the agreement.

Clone Options

Select Clone Options to determine adjustments that will be carried into the cloned order.

When Order Level Adjustments = Do Not Prorate Adjustments, both clone options are available.

When Order Level Adjustments = Prorate Order Adjustment , Copy Header Adjustment is selected and is
read only.

When both the clone options are selected, both line level and order level adjustments are copied when an
order or quote is cloned, when an order is converted to a quote, or when a quote is converted to an order.

When Copy Line Adjustment is checked, only the line adjustment is copied in both the order and quote.

When Copy Header Adjustment is checked, both line adjustment and order level adjustments are copied in a
quote whereas only order level adjustments are copied in an order.

Copy Line Adjustment   Select this option to carry the line adjustment into the cloned order.

Copy Header Adjustment   Select this option to carry the header adjustment into the cloned order.

Order Change Notifications

The system can send order change notifications to specified parties when order maintenance occurs, and
Order Capture receives a message from the fulfillment system.

Accepted, Partially Accepted, Select the recipients that you want Order Capture to notify when the
and **Rejected** fulfillment system informs PeopleSoft CRM that order changes are fully
accepted, partially accepted, or rejected. Values are:

- *Notify CSR Only.*

- *Notify CSR and Customer.*

- *Notify Customer Only.*

- *Notify Nobody.*

Advisor Dialogs

Display Session Information Select to display the Advisor Dialog Session information when a dialog is
accessed from Internal Order Capture. If not selected, the Advisor Dialog
Session information will not appear when a dialog is accessed.

Bulk Order

On the Order Capture Definition page, you plug in relationship views for both consumers and organizations.
The master order/recipient order relationships are determined by the relationships that you establish in the
Relationship Viewer.

Consumer Hierarchy Select a relationship view for a single consumer, or contact. This will
determine all of the possible bulk order recipients at runtime by
automatically populating all of the child relationships for the parent chosen
here.

Multiple Orders Per Select this check box to allow single recipients to receive more than one
Recipient order. An Order field appears on the runtime page, enabling you to enter the
number of orders you want to specify per recipient.

Organization Hierarchy Select a relationship view for the company, or organization. When the end
user enters a company name, it will prompt against the table you select here
to determine the child relationships available.

Fulfillment

Fulfillment Logging This flag enables logging of fulfillment data. When this flag is checked and
the order is submitted, business project activity, such as phase task, is
captured in the table RO_OB_LOG. The log contains fulfillment data for
transactions that occur from the time the Fulfillment Logging check box
was selected. Data from fulfillment activity prior to that time is not
available.

Catalog Display Options

Display Browse Catalog	Select this check box to display the browse catalog along with the search tree hierarchy while searching in Order Capture.
Display by Customer, Display By Partner Contact, and **Display By User**	Select the check box to indicate if catalogs should be displayed by User, by Customer, or by Partner.

Note. When catalogs are displayed from the order, the list of authorized catalogs can vary depending on the selected partner, customer, and user logged in.

When a partner or customer is not selected on the order, the list of authorized catalogs will depend strictly on the user logged in. In that case, only catalogs that the user is specifically authorized for will be available.

Max Catalog Rows Returned (maximum catalog rows returned)	Enter the maximum number of items that can be returned in a product catalog search. By default, the value is set to 250. You can perform some testing to find out the optimal value for your organization.

This setting helps to sustain performance on catalog search, especially when users perform searches without entering any search criteria (wild search). When a wild search happens, Verity search returns no results if the searched catalog contains more than 64,000 items and users need to refine the search. By limiting the number of rows to return in a catalog search, the system gets better search results (rather than getting nothing, in case of performing wild searches in huge catalogs) and performance.

Priority	Select the priority to determine which catalog is displayed. The priority indicates which catalog takes precedence if more than one mode qualifies.

Order Submission

Allow Future Dated Orders	Select to enable future dated order functionality. This enables the user to create orders and service management orders that are scheduled to be fulfilled on dates in the future. The orders are queued until execution time when they are submitted in the background.
Allow Temporary Services	Click to enable the business unit to create and manage service management orders with installed services that have end dates (temporary services).

This option is not supported for subscriptions or agreements.

Line Dates Editable on Order	Select to enable the user to modify the order line start date and end date to be different than scheduled fulfillment date.

Note. If this option is selected, dates are only editable in certain circumstances depending on the product.

Use Lead Time for Start Date   Click to set the system to calculate the start date of the service product that is added to an order using the lead time of the service product.

Suppose that the lead time that is specified for a service product definition is 2 days. When this service product is added to an order on January 1, the start date of this service product, as displayed on the Line Details page, is January 3. The start date is calculated as:

Start date of service product = current date + service product lead time

Submission Mode   Select to control when the business logic for the order is launched. This enables a quicker submission processing if the business logic is not launched immediately on submission. Depending on the order type and action, business processes or business projects, will run, these deliver the business logic for the order. Launching these processes in the background and not directly upon submission makes for a quicker response to the user. A process triggered by the *QUEUED_ORDER_SUBMISSION* Schedule JobSet Definition can submit orders in the background.

Note. For any option other than *Do Not Queue ,* you must activate the *QUEUED_ORDER_SUBMISSION* Schedule JobSet Definition. This JobSet Definition starts the business projects in the background for queued orders.

* *Do Not Queue* Do not queue the orders. Start order business logic immediately upon submission.

* *Only Queue Future Dated Orders* Queue orders only if their Scheduled Fulfillment Date is in the future. These queued orders are automatically submitted by the *QUEUED_ORDER_SUBMISSION* JobSet at a future calculated execution date and the business logic run. For this option, the *QUEUED_ORDER_SUBMISSION* JobSet can be run once a day to pick up orders that are waiting in the queue and are ready to be submitted based on their execution date.

* *Queue All* Queue all orders regardless of the Scheduled Fulfillment Date. The orders are automatically submitted in the background by the *QUEUED_ORDER_SUBMISSION* JobSet and the business logic run. For this option, the *QUEUED_ORDER_SUBMISSION* JobSet should be run at a frequent interval to pick up orders that are waiting in the queue and to submit them in the background.

See *PeopleTools 8.52: PeopleSoft Process Scheduler PeopleBook*

Price Order	The Price Order flag controls when the pricing engine will be called to retrieve the unit price. Products' list prices can be retrieved by the pricing engine, from the product definition model, or not at all depending on the option selected for displaying initial list price. List prices will always be repriced upon order submission.

Price as Lines Added: This is the default, and will cause a reprice of the entire order as each new line is added to the order. This will keep the order total up-to-date as new lines are added, however, it is the least efficient method of pricing and should only be the choice when orders are seldom over 20 lines.

Price at Save: This pricing option will not price the order until the order is saved, or when the Update Totals button is pressed. As new lines are added to the order, only their list prices are retrieved. The order totals are not updated until pricing is called. This method is preferred when orders contain a large number of lines.

Price at Update Totals: This pricing option will only price the order when the Update Totals button is pressed. As new lines are added to the order, only their list prices are retrieved. The order totals are not updated until pricing is called. Also, the order may be saved without calling pricing. This option may be preferred when very large orders are entered, and the order is saved along the way. The save will be much faster as pricing is not involved.

Initial List Price	Select from where list prices of products are retrieved to be displayed initially on orders.

Pricing Engine: (default) Display prices returned from PeopleSoft Enterprise Pricer. If the selected price order is *Price as Lines Added,* this is the only option available.

Product Model: Display prices that is established from the Product Price component. This option yields better performance than the pricing engine option.

Show No Price: Display no prices. If this option is selected, each order line shows a zero price until the pricing engine is invoked at submit or update totals. This option yields better performance than the product model option.

Specifying Order Capture Self Service Options

See and <u>Chapter 18, "Defining Order Capture Self-Service Business Units," Creating an Order Capture Self-Service Business Unit, page 392.</u>

Specifying Order Capture Telecommunications Service Options

Access the Order Capture Definition - Communications page (Set Up CRM, Business Unit Related, Order Capture Definition, Communications).

Note. This page appears only if the Show Communications Tab field on the Order Capture Definition - Internal page is selected.

Order Capture Definition - Communications page (1 of 3)

Order Capture Definition - Communications page (2 of 3)

Order Capture Definition - Communications page (3 of 3)

If your implementation includes services for phone number assignment, wireless equipment tracking, or prepaid services and accounts, access both the Internal business unit setup page previously described, as well as the Communications setup page described in this section.

See and <u>Chapter 9, "Working with PeopleSoft Service Management," page 171.</u>

Mobile Number Portability

Port-In Allowed	This will control whether the enterprise user will be allowed to enter port in information for wireless service. The option to port in and existing mobile number will be presented on the number search page when this is checked.
Temporary Phone Numbers	Temporary numbers can be issued as part of a port-in request. This would not typically be the case for a port-in within the United States, but may be needed in EMEA, where the port is a lengthier (1 week+) process. Values are:

• *Optional*

• *Never*

• *Always*

PAC Required (port-in authorization code)	Indicates if a PAC must be entered as part of the port in information. These codes are required in most EMEA countries, but are not required in the United States.

Port In Cancellations	Indicate at which point in the port in process a cancellation of the port-in order may take place. A carrier may have rules about when they will allow you to cancel a port-in order. The values to choose from are as follows.
	Always allow cancel — A cancellation may be attempted at any point in the port in process. This does not mean the cancellation will be successful, as the number may have already been ported at the time the cancellation is requested.
	Cancel until products ship — Allow for a cancellation until a product on the order has been shipped.
	Never allow cancel — At no time will a cancellation be allowed.
	Until port-in date agreed — Allow for a cancellation up until the point where the original wireless provider has agreed to the port in date.
OCN (operating company number)	This is the Operating Company Number of the new service provider requesting the port in. When the new local service provider is a reseller and they do not have an OCN, the value of "ZZZZ" should be used.
Default Port-In Days	Enter the number of days to add to the current date to default the Port-In date
Network ID	This field indicates the NPAC managed service provider ID of the new service provider requesting the port in.

Pre-Paid Accounts

Prepaid Accounts Allowed	This will control whether the enterprise will support the ordering and management of prepaid services and accounts.
	An anonymous consumer can be created and used with Prepaid accounts. This user is associated to the system through Communications Setup. Once the Prepaid customer has been identified to the system, it can be used when ordering prepaid accounts and services. Fundamentally a prepaid service does not need a 'real' customer. A Prepaid Consumer is created in the CDM and associated to the system in the Communications Setup. The Order can use this customer when a Prepaid Service order is placed and the customer is not identified. It has a fake Bill To, and Sold To. and has the Billing Account Administrator relationship to ensure the user can create accounts.
	See and <u>Chapter 10, "Using Order Capture and Service Management in the Communications Industry," page 203.</u>
	The Order can use this customer when a Prepaid Service order is placed and the customer is not identified only when the order is coming from a Storefront. If the Source of the order is anything else, the order needs to be fulfilled and a real customer must be used.

Threshold Amount   Defines the default Threshold dollar amount for a Prepaid Account. When creating a prepaid account, it can be set up to automatically add money when the account balance falls below a certain dollar amount. That is the Threshold dollar amount.

Auto Load   The CSP Admin may want to set up whether or not the default Prepaid Customer should automatically be loaded in when using Add Prepaid Service from the 360-degree view. A Storefront may want to have the Prepaid Customer pre-loaded with each prepaid service order. However, a call center would not.

Do Not Contact   A default setting for whether or not the Do Not Contact setting in CDM should be set for new customers created on a Prepaid order.

Security Question   The CSP Admin may want to set up a default for the Security Question for the Prepaid Account. This security question and its answer appear when the order is taken and when the customer calls in after the order is fulfilled. Since customer information may not have been taken at order time, this security question and answer help confirm the consumer owns the account.

Wireless Service Provider

Enter the wireless service providers from which you will allow customers to port in mobile numbers.

Provider ID   This user defined value identifies a wireless service provider such that it may be selected while entering the port in information. For example, you may enter *VERIZON* as the Provider ID for Verizon Wireless.

Status   Indicates if this service provider is active or inactive. Only active service providers may be selected when entering port in information.

Description   Enter the description to be displayed on the port in information page.

Contact Name   This is a contact person at the donor service provider who could be contacted if issues arise during the porting process.

Network ID   This field indicates the NPAC managed service provider ID of the donor service provider.

OCN (operating company number)   The OCN of the donor service provider. This value, along with the network ID, will identify the donor service provider in external EIP communications.

Automatic   When Automatic validation is selected, the port in information may be communicated to external systems via Enterprise Integration Points. The validation methods chosen here will be displayed on the port in information page, and the CSR may select a method as appropriate to their actions. Automatic validation is the default when enabled.

Fax Number	This is the fax number used in fax communications relating to the port in process. This check box should be checked when port ins may be instantiated / validated via fax.
Phone Number	This is the phone number used to communicate information relating to the port in process. The check box should be checked if port ins may be instantiated / validated over the phone.
Website URL	This is the website address to be used when manually entering information relating to the port in process. The check box should be checked if port ins may be instantiated / validated through a website.

Phone Number and SIM Assignment on Order

Source Code	Select the default source code value. Delivered values include *CTI,Fax, Phone,Self-Service,* and *Storefront.*
Phone Number required	Determines if the Assign Number link should be displayed on the Line Summary grid.
Auto-default Phone Number	This field automatically assigns a phone number to services that require a phone number. This check box is accessible if Phone Number Required check box is selected.
SIM Number required	This field determines if the Assign SIM link should be displayed on the Line Summary grid. For example, a Call Center user will not enter a SIM number whereas a storefront user must enter a SIM number.

Service Management

The Service Management setup definition is used by business processes defined for Service Management. Business processes, depending on the Action and the Action Reason, can create a Sales Lead and/or send notification.

Line Action	Values for line actions include *Activate,Add, Change, Change Attribute, Change Phone, Charge, Disconnect, New Order, Remove, Renew, Resume, Suspend,* and *Suspend/Change.* Line actions are setup in the Order Capture Setup Workbench.
Reason	Defines the reason associated with the action.
Create Lead	This check box defines if a sales lead needs to be created.
Delay Lead in Days	Defines the delay in days for creating the sales lead.
Send Email	Select if an email needs to be sent.
Delay Email in Days	Define the delay in days for sending an email.

Email Template   Define the email template used to compose the email.

Customer-supplied handset

Product ID   Define the product ID for Customer supplied handset. The Service Provider can capture and track the IMEI or the serial number of the handsets not supplied by the provider.

Allow Trial period

Allow Trial Period   Select to enable to use of trial periods to apply to products and services in orders.

When enabled, the Trial Duration field appears on the Entry Form page of orders at runtime, with the default value that is defined for the selected source and sub-source on the page.

Chapter 4

Setting Up PeopleSoft Order Capture

This chapter provides overviews of Order Capture setup, toolbar configuration, and application class set creation; lists common elements; and discusses how to:

- Set up Order Capture tables.

- Define order and quote processing.

- Define integrations and mappings.

- Set up credit card integration.

- Set up freight integration.

- Define tax installation options.

Understanding Order Capture Setup

Order Capture is configurable and supports industry solutions without a need to modify application logic. This is achieved through configuration of the order capture entry forms and order capture business processing logic. Order maintenance functionality, in particular, requires configuration capabilities to enable you to determine the states at which an order capture is eligible for maintenance (change or cancellation).

The majority of Order Capture setup is performed in three individual workbenches:

- Setup

- Capture Type

- Integration

After you define toolbar preferences, create application class sets, and set up third-party integrations, you can perform all the remaining setup tasks here as well.

The three workbenches bring together most setup elements. Together, they enable configuration of the capture forms and the business logic. You can configure workbenches by capture type, such as order, quote, and service management. Capture types can take on different forms and different business processing logic depending upon the events you select, their sequence, and the business process or business project that you specify for each.

In addition, business logic can be processed entirely within the PeopleSoft environment, externally, or both. Depending on the order capture event and the CRM product, you can process some or all of the order capture logic using the web services of a distributed computing environment rather than calling or creating internally executing PeopleSoft business projects. PeopleSoft delivers order capture transactions that link to business processes that call web services, to perform tasks such as order submission, service cancellation, and order status update. If you are implementing or upgrading PeopleSoft Service Management, especially for telecommunication services, you will incorporate web services into your order capture setup, as there are no business projects for some of the service management tasks.

See and

You can configure and control order maintenance activities by capture status, at both the header and the line levels. Aesthetics are also controlled here, as you also configure presentation and labeling of capture forms by type.

Note. Although these workbenches combine both mandatory and optional steps, you are not *required* to perform any setup steps if you apply the delivered system data. This system data prepopulates all the workbench pages, and the values comprise all of the workbench settings that are necessary to get the Order Capture system up and running.

See Also

PeopleSoft CRM 9.1 Automation and Configuration Tools PeopleBook, "Working with Business Processes and Web Services"

Understanding Toolbar Configuration

You can configure the toolbar that you use for order and quote processing as well as the subtabs and page labels that appear on the order entry forms. The toolbar feature provides a simple way to navigate to different pages and sections within the same component. You can set up the toolbar so that, in an order form, users can jump from one area to another—such as from Billing on the Order Entry form to Interaction History on the History page—by selecting the relevant name.

This table summarizes toolbar configuration features:

Feature	Description
Toolbar buttons	Toolbar buttons include PeopleTools actions and Order Capture specific actions. Buttons such as Save,Refresh,Add,Next in List, Previous in List,Return to Search, and Update/Display map to corresponding buttons in PeopleTools. Order Capture buttons perform application-specific actions, such as cloning an order.

Feature	Description
Page subtabs	Page subtabs are links that appear on a component page above the toolbar. Each subtab links to sections of a page that are defined based on a page's group boxes. In Order Capture, you can use page subtabs to provide users with quick access to different page sections and to control the availability of information on a page.
Toolbar configuration	You can choose the toolbar elements that appear and arrange them in any sequence. You can also modify the definitions of the delivered toolbar buttons or use application classes to create new buttons.
Personalization by end user	Order Capture users, such as customer service representatives (CSRs), can personalize the toolbar by selecting which buttons appear on it. Personalized configurations are associated with user IDs and do not affect the base toolbar definition. As an administrator, during setup, you decide whether users can personalize toolbars and specify the buttons in the toolbar that these users can hide in the personalization process.

See Also

PeopleSoft CRM 9.1 Automation and Configuration Tools PeopleBook, "Configuring Toolbars"

Understanding Application Class Set Creation

Order Capture uses the application class registry to store references to processing logic. Existing Order Capture application classes handle processing for the main order and quote classes, as well as industry-specific extensions.

To register, or create, classes, you must enter the full class path into the application class registry. After the system stores this information, you can dynamically instantiate the class through PeopleCode. The registry enables you to create subclasses of the main class and substitute these classes for the main class. Order Capture uses this registry to dynamically invoke the logic that is required for each capture type. PeopleSoft Customer Relationship Management (PeopleSoft CRM) industry-specific applications invoke different logic from Order Capture. You can create and register additional classes without modifying the delivered extensions.

Common Elements Used in This Chapter

	Click to clone a workbench page to a different setID.
	Click to proceed to the next item in the list.

| | Click to return to the previous item in the list. |
| | Click to return to the main page. |

Setting Up Order Capture Tables

To set up Order Capture tables, use the Capture Setup Tables component.

To set up sub source tables, use the Sub Source component.

To set up sub source mapping tables, use then Sub Source Mapping component

This section provides an overview of multichannel framework (MCF) types, lists common elements, and discusses how to:

- Access Order Capture setup tables.

- Define charge frequencies.

- Define charge types.

- Create data event handlers.

- Create dynamic events.

- Define hold codes.

- Define reason codes.

- Define header statuses.

- Create line actions.

- Create line status types.

- Create line statuses.

- Create line status values.

- Define MCF types.

- Define note origins.

- Define note types.

- Create note visibility.

- Define priorities.

- Define source codes.

- Define sub source codes.

- Define sub source mappings.

• Define frequency mappings.

Understanding MCF Types

Order Capture enables communication with customers from within the application. Order Capture can also send communications automatically when an order or quote is submitted or maintained. To do this, you must define correspondence templates and packages in advance. PeopleSoft delivers sample Order Confirmation, Quote Confirmation, and Order Maintenance templates and packages.

Specific Order Capture MCF templates are marked for use with print correspondence, email correspondence, or both. Use these templates to generate email or print notifications from key transactions, such as an order or quote.

Note. Order Capture templates contain both static text and tokens. Tokens represent key data (product ID, price, order ID, and so on) from the Order Capture system.

Order Capture delivers these sample MCF templates for major transactions:

• Order Confirmation.

• Quote Confirmation.

• Order Maintenance.

• Order Status.

   Note. This correspondence package is used only when automatically responding to a structured email that was sent from an external source.

• Order Status Failed.

   Note. This correspondence package is used only when responding to an invalid structured email request.

You can define additional MCF types for Order Capture on the MCF Types (multichannel framework types) page.

Common Elements Used in This Section

Application Class ID   Enter the PeopleTools application class ID that is stored in the
                                  PSAPPCLASSDEFN table.

Package Tree Viewer   Click to access the Application Packages Lookup page and select an
                                  application class. The system populates the Application Class ID and
                                  Application Class Path fields according to the class that you select.

                                  Note. This is the highest-level package that contains this class. You can
                                  retrieve values through the Application Package Designer.

Pages Used to Set Up Order Capture Tables

Page Name	Definition Name	Navigation	Usage
Capture Setup Tables Workbench	RO_DEFN	Set Up CRM, Product Related, Order Capture, Setup Workbench, Capture Setup Tables Workbench	Access Order Capture setup tables.
Capture Setup Tables - Charge Frequencies Workbench	RO_DEFN_CHGFREQ	Click the Charge Frequencies link on the Capture Setup Tables Workbench page.	Define charge frequencies.
Capture Setup Tables - Charge Types Workbench	RO_DEFN_CHGTYPE	Click the Charge Types link on the Capture Setup Tables Workbench page.	Define charge types.
Capture Setup Tables - Data Event Handlers Workbench	RO_DEFN_DATAELM	Click the Data Event Handlers link on the Capture Setup Tables Workbench page.	Create data event handlers. Here you define application class references that are dynamically called for the purpose of auditing system and user actions. These references also control the processing for order maintenance.
Capture Setup Tables - Hold Codes Workbench	RO_DEFN_HOLD	Click the Hold Codes link on the Capture Setup Tables Workbench page.	Define hold codes.
Capture Setup Tables - Reason Codes Workbench	RO_DEFN_HLD_DEN	Click the Reason Codes link on the Capture Setup Tables Workbench page.	Define reason codes.
Capture Setup Tables - Dynamic Events Workbench	RO_DEFN_DYEVENT	Click the Dynamic Events link on the Capture Setup Tables Workbench page.	Create dynamic events. Define application class references that are dynamically called for the purpose of providing plug-and-play processing during component processing.
Capture Setup Tables - Frequency Mappings Workbench	RO_DEFN_SCHDMAP	Click the Frequency Mappings link on the Capture Setup Tables Workbench page.	Map recurring price frequency in PeopleSoft CRM to a schedule in PeopleSoft Contracts.
Capture Setup Tables - Header Statuses Workbench	RO_DEFN_HDSTAT	Click the Header Statuses link on the Capture Setup Tables Workbench page.	Define header statuses that correspond with your business process.

Page Name	Definition Name	Navigation	Usage
Capture Setup Tables - Line Actions Workbench	RO_DEFN_LNACTN	Click the Line Actions link on the Capture Setup Tables Workbench page.	Create line actions such as Add, Remove, and Suspend. Capture type lines use these actions.
Capture Setup Tables - Line Status Types Workbench	RO_DEFN_LS_TYPE	Click the Line Status Types link on the Capture Setup Tables Workbench page.	View or edit engagement service line status types.
Capture Setup Tables - Line Statuses Workbench	RO_DEFN_LNSTAT	Click the Line Statuses link on the Capture Setup Tables Workbench page.	Create line statuses that correspond with your business processes.
Capture Setup Tables - Line Statuses DropDown Workbench	RO_DEFN_LNPRMPT	Click the Line Status DropDown link on the Capture Setup Tables Workbench page.	Control or view the line status values available for your engagement service products.
Capture Setup Tables - MCF Types Workbench	RO_DEFN_MCFTYPE	Click the MCF Types link on the Capture Setup Tables Workbench page.	Define MCF types, such as print or email.
Capture Setup Tables - Note Origins Workbench	RO_DEFN_NOTORIG	Click the Note Origins link on the Capture Setup Tables Workbench page.	Define note origins.
Capture Setup Tables - Note Types Workbench	RO_DEFN_NOTTYPE	Click the Note Types link on the Capture Setup Tables Workbench page.	Define note types.
Capture Setup Tables - Note Visibility Workbench	RO_DEFN_NOTVSBL	Click the Note Visibility link on the Capture Setup Tables Workbench page.	Create note visibility.
Capture Setup Tables - Priorities Workbench	RO_DEFN_PRIORTY	Click the Priorities link on the Capture Setup Tables Workbench page.	Define priorities for orders.
Capture Setup Tables - Source Codes Workbench	RO_DEFN_SOURCE	Click the Source Codes link on the Capture Setup Tables Workbench page.	Define source codes—such as phone, web, and fax—for inbound capture requests.
Capture Setup Tables - Sub Source Codes Workbench	RO_DEFN_SUB_SRC	Click the Sub Source Codes link on the Capture Setup Tables Workbench page.	Define sub source codes.
Capture Setup Tables - Sub Source Mapping Workbench	RO_DFN_SRC2SSRC	Click the Sub Source Mapping link on the Capture Setup Tables Workbench page.	Define mappings between source and sub source codes.

Accessing Order Capture Setup Tables

Access the Capture Setup Tables Workbench page (Set Up CRM, Product Related, Order Capture, Setup Workbench, Capture Setup Tables Workbench).

Capture Setup Tables Workbench page

| **Details** | Click the link in the Details column to view, create, or modify values for each Order Capture setup table. |
| **Progress** | In the Progress column, the system displays the number of rows of data defined for each of the steps listed in the details column. |

Defining Charge Frequencies

Access the Capture Setup Tables - Charge Frequencies Workbench page (click the Charge Frequencies link on the Capture Setup Tables Workbench page).

Capture Setup Tables - Charge Frequencies Workbench page

Charge frequencies are defined per product, and they represent the frequency of a recurring charge. In Order Capture, these frequencies appear on the order entry form in the Totals section.

Note. If you define a recurring price and charge frequency for a product in a price list or in the product model, then that frequency and recurring price also appear in the Totals section of the order entry form.

Charge Frequency   Displays the code for the frequency of the recurring charge.

Description   Displays the description of the recurring charge's frequency. This field is visible to the end user.

See Also

Defining Charge Types

Access the Capture Setup Tables - Charge Types Workbench page (click the Charge Types link on the Capture Setup Tables Workbench page).

Capture Setup Tables - Charge Types Workbench page

In Order Capture, charge types appear in the Totals section of the order entry form. Charge types are additional charges or discounts (such as shipping and taxes) that are applied to the order.

Charge Type   Displays the system code for the charge type.

Description   Displays the description of the charge type. This field is visible to the user.

Creating Data Event Handlers

Access the Capture Setup Tables - Data Event Handlers Workbench page (click the Data Event Handlers link on the Capture Setup Tables Workbench page).

Capture Setup Tables - Data Event Handlers Workbench page

See Also

PeopleSoft CRM 9.1 Automation and Configuration Tools PeopleBook, "Using Application Classes"

PeopleSoft CRM 9.1 Automation and Configuration Tools PeopleBook, "Working with Business Processes and Web Services"

Appendix A, "Order Capture Delivered Business Processes and Web Services," page 723

Defining Hold Codes

Access the Capture Setup Tables - Hold Codes Workbench page (click the Hold Codes link on the Capture Setup Tables Workbench page).

Capture Setup Tables - Hold Codes Workbench page

Set up hold codes to create hold logic that executes when you submit a specific capture type for processing. These codes are created as extensions of a base hold validation class so that they are dynamically created and carried out. You can add configurable hold logic here without additional system configuration.

Add a new class in the RO_CAPTURE_TYPES application package for each hold code that you add. The new class performs the hold validation.

Hold Codes

Hold Code	Displays a unique code identifier.
Level	Select the level of the capture data for which this hold is triggered. This determines the type of data that is passed to the hold check. If you select *Header,* the system evaluates header-level holds once per capture. If you select *Line,* the system evaluates line-level holds once per capture line.

Allow Manual Change To Status	Select to enable a user to manually change the status of (or remove) this hold when it is triggered. If the hold is absolutely required in this condition, clear this check box. For example, if a billing customer is not specified on an order, a CSR is not permitted to simply remove this hold; the CSR should perform a corrective action to remove the hold. In this example, the CSR must return to the order and specify a bill-to customer.

Applies To

You can define holds differently for the enterprise user (usually CSR), and the partner user, or where the order is placed on behalf of a partner. You can select any combination of the three offerings.

Select *Non-partner orders placed by an enterprise user* if you want to apply the defined holds to simple orders placed by a CSR or non-partner orders. Select *Partner orders placed by an enterprise user* if you want to apply the holds to orders entered on behalf of a partner. Select *Orders placed by partner user* to apply the holds to orders submitted by partners.

See Also

PeopleSoft CRM 9.1 Automation and Configuration Tools PeopleBook, "Using Application Classes"

Defining Reason Codes

Access the Capture Setup Tables - Reason Codes Workbench page (click the Reason Codes link on the Capture Setup Tables Workbench page).

Capture Setup Tables - Reason Codes Workbench page

An enterprise can set up reason codes for specific actions that might occur. For example, when a hold is overridden or a service is cancelled, you should record a reason for the action.

Reason Type
Select the type of action to which the reason code applies. Available values include, but not limited to:

- *Cancellation Reason* The reason the service was cancelled. Cancellation reason codes appear in the Service Management application when the user selects the Cancel line action for a given service.

- *Hold Denial* The reason for rejecting holds on orders placed by or for a partner. Hold Denial reason codes are available during order entry.

- *Hold Override* The reason the hold was overridden. Hold Override reason codes appear in either Service Management or order entry when a hold is overridden.

See and *PeopleSoft CRM 9.1 Application Fundamentals PeopleBook*, "Setting Up Security and User Preferences."

Creating Dynamic Events

Access the Capture Setup Tables - Dynamic Events Workbench page (click the Dynamic Events link on the Capture Setup Tables Workbench page).

Capture Setup Tables - Dynamic Events Workbench page

Dynamic events are application classes that are loaded during the component lifecycle. When you load the component, enter data, and save, the system loads these events and, based upon methods in these classes, carries out certain logic.

Note. You can use these classes to plug in new logic without configuring the existing application.

See Also

PeopleSoft CRM 9.1 Automation and Configuration Tools PeopleBook, "Using Application Classes"

PeopleSoft CRM 9.1 Automation and Configuration Tools PeopleBook, "Business Process Management"

Appendix A, "Order Capture Delivered Business Processes and Web Services," page 723

Defining Header Statuses

Access the Capture Setup Tables - Header Statuses Workbench page (click the Header Statuses link on the Capture Setup Tables Workbench page).

Capture Setup Tables - Header Statuses Workbench page

Status	Displays the status code identifier for the header status.
Description	Displays the description of the header status. This description is visible to CSRs and self-service users.

**Allow Manual Change To
Status**

Select to enable the CSR to make a manual change to this status during
order entry.

Note. Since a quote has an expiration date, a batch job examines the quote expiration dates and assigns any
expired quotes a new header status of *Expired,* or whatever you choose to call it here. This action also triggers
an integration point to update any associated proposals in the PeopleSoft Proposal Management system to
Canceled. The exception to this rule is, that if any other quote that is not expired has a reference to the same
proposal ID, it is not cancelled in PeopleSoft Proposal Management. If an *Expired* quote is revised, the line
status for the engagement status is reset to *Draft*and an integration point is automatically sent to PeopleSoft
Proposal Management.

Creating Line Actions

Access the Capture Setup Tables - Line Actions Workbench page (click the Line Actions link on the Capture
Setup Tables Workbench page).

Capture Setup Tables - Line Actions Workbench page

Primarily, use line actions to help manage service management transactions.

Line Action	Displays the system code identifier for the line action.
Description	Displays the description for the line action. This description is visible to the CSR.

Creating Line Status Types

Access the Capture Setup Tables - Line Status Types Workbench page (click the Line Status Types link on the Capture Setup Tables Workbench page).

Capture Setup Tables - Line Status Types Workbench page

Line Statuses

When entering quotes, the options for the quote lines depend on the line status. This page defines those status types. The *Engagement Service* line status type is used for engagement services products, and the *Default* line status type is used for any product that is not flagged as an engagement service product.

Creating Line Statuses

Access the Capture Setup Tables - Line Statuses Workbench page (click the Line Statuses link on the Capture Setup Tables Workbench page).

Capture Setup Tables - Line Statuses Workbench page

Line Statuses

Status   Displays the unique numeric code identifier for the line status.

Description   Displays the description for the line status. This description is visible to the
                              CSR.

Note. There are six line statuses specifically designed for engagement services. These line statuses appear on
the Entry Form page, and they map to corresponding statuses in PeopleSoft Proposal Management. You can
edit the names of these statuses on this page.

Defining Line Status Values

Access the Capture Setup Tables - Line Statuses DropDown Workbench page (click the Line Statuses
DropDown link on the Capture Setup Tables Workbench page).

Capture Setup Tables - Line Statuses DropDown Workbench page

The status types that you define on the Line Statuses page determines what appears on this page. Since PeopleSoft delivers *Engagement Service* and *Default,* you can specify alternative status values for each of these two types.

Order Capture uses data defined on this page to create the line status options on orders and uses the current line status to determine which statuses are available for selection.

Defining MCF Types

Access the Capture Setup Tables - MCF Types Workbench page (click the MCF Types link on the Capture Setup Tables Workbench page).

Capture Setup Tables - MCF Types Workbench page

MCF Type   Displays a unique identifier for the MCF type of correspondence.

Defining Note Origins

Access the Capture Setup Tables - Note Origins Workbench page (click the Note Origins link on the Capture Setup Tables Workbench page).

Capture Setup Tables - Note Origins Workbench page

Note origins (descriptions) appear on the Notes tab of the order entry form. This note origin (description) is display-only and indicates the source of the note, such as *Internal* or *Web*.

Note Origin	Displays the system code identifier for the note origin.
Description	Displays the description for the note origin. This description is visible to the CSR.

See Also

PeopleSoft CRM 9.1 Application Fundamentals PeopleBook, "Working with Notes and Attachments"

Defining Note Types

Access the Capture Setup Tables - Note Types Workbench page (click the Note Types link on the Capture Setup Tables Workbench page).

Capture Setup Tables - Note Types Workbench page

Note types appear in the Note Types drop-down list box on the Notes tab of the order entry form.

Note Type   Displays the system code identifier for the note type.

Description   Displays the description for the note type. This description is visible to the CSR.

See Also

PeopleSoft CRM 9.1 Application Fundamentals PeopleBook, "Working with Notes and Attachments"

Chapter 13, "Managing Orders and Quotes," Adding and Viewing Notes and Attachments, page 324

Creating Note Visibility

Access the Capture Setup Tables - Note Visibility Workbench page (click the Note Visibility link on the Capture Setup Tables Workbench page).

Capture Setup Tables - Note Visibility Workbench page

Note visibility appears in the Visibility field of the Notes tab of the order entry form. It controls who can see the note, and it applies equally to notes and attachments. A note can be visible internally to CSRs or externally to Order Capture Self Service users. For example, if the CSR sets the visibility of a note to *Internal Only,* the self-service user cannot see the note. For attachments, a separate drop-down list box appears when an attachment is added to the order. This field contains the same visibility descriptions.

Visibility   Displays the system code identifier for note and attachment visibility.

Description   Displays the description for note and attachment visibility. This description is visible to the CSR.

Defining Priorities

Access the Capture Setup Tables - Priorities Workbench page (click the Priorities link on the Capture Setup Tables Workbench page).

Capture Setup Tables - Priorities Workbench page

Priority descriptions appear in the header details of the entry form for Order Capture. They contain no processing logic; they are for informational purposes only.

Third-party fulfillment systems can use priorities to determine processing order.

Capture Priority	Displays the system code identifier for the capture priority.
Description	Displays the description of the capture priority. This description is visible to the CSR.

Defining Source Codes

Access the Capture Setup Tables - Source Codes Workbench page (click the Source Codes link on the Capture Setup Tables Workbench page).

Capture Setup Tables - Source Codes Workbench page

Source codes indicate the origin of an order or quote, and their descriptions appear in a drop-down list box in the header details of the entry form.

External Source	Select if the order originated from an external system source. For example, you may have another system that generates orders. This option enables you to migrate these orders into Order Capture so that you can view all of the orders for a particular customer through a single application.
Tracking URL Internal (tracking uniform resource locator internal)	Enter a uniform resource locator (URL) for Order Capture to view a summary of the externally created orders. When CSRs search for orders or quotes and click one of these externally sourced orders, they are transferred to this URL to view the orders.
Tracking URL Self-Service (tracking uniform resource locator self-service)	Enter a URL for Order Capture Self Service to view a summary of the externally created orders. When users search for orders or quotes in Order Capture Self Service, they are transferred to this URL to view the orders.

Defining Sub Source Codes

Access the Capture Setup Tables - Sub Source Codes Workbench page (click the Sub Source Codes link on the Capture Setup Tables Workbench page).

Capture Setup Tables - Sub Source Codes Workbench page

Use this page to define sub source codes that provide further classification of source codes.

Defining Sub Source Mappings

Access the Capture Setup Tables - Sub Source Mapping Workbench page (click the Sub Source Mapping link on the Capture Setup Tables Workbench page).

Capture Setup Tables - Sub Source Mapping Workbench page

Sub Source Code	Select a sub source code to associate with the source code.
	At runtime, when you select a source in an order or quote, the system populates the Sub Source field with values that are mapped to the selected source code on this page.
Trial Duration (In Days)	Enter the minimum length (in number of days) of trial periods that is allowed in your country for selling products and services through the specified source and sub-source combination.
	See and Chapter 24, "Working with Orders for Multilevel Product Bundles," Trial Period Enablement, page 653.

Defining Frequency Mappings

Access the Capture Setup Tables - Frequency Mappings Workbench page (click the Frequency Mappings link on the Capture Setup Tables Workbench page).

Capture Setup Tables - Frequency Mappings Workbench page

Price Frequency Mappings

Frequency   Select the relevant PeopleSoft CRM pricing frequency for the schedule that
                                 you defined in PeopleSoft Contracts.

Schedule ID   Enter the Schedule ID for purposes of the integration with PeopleSoft
                                 Contracts. Schedule ID determines how many billing transactions will be
                                 created. PeopleSoft Contracts only supports weekly, monthly, or annual
                                 schedule types.

                                 Note. Schedule ID is synchronized from PeopleSoft Financials
                                 Management to CRM. It determines the number of billing transactions that
                                 are created in PeopleSoft Billing. For example, if a service was $10 per
                                 month and was valid for one year, we would want twelve $10 charges to be
                                 applied to that customer. This does not mean that the customer is billed
                                 twelve times but only that there will be twelve bill lines for that customer.
                                 If you bill monthly, then each bill will have one line. If you bill yearly, then
                                 each bill will have twelve lines.

See Also

PeopleSoft CRM 9.1 Services Foundation PeopleBook, "Transaction Billing Processor Integration"

PeopleSoft CRM 9.1 Services Foundation PeopleBook, "Setting Up an Integration to the Transaction Billing
Processor"

(FSCM) *PeopleSoft Application Fundamentals 9.1 PeopleBook,* Defining Financials and Supply Chain
Management Common Definitions, "Defining Common Journal Definitions"

Defining Order and Quote Processing

To create type definitions, use the Type Definition (RO_TYPE) component.

Note. In this workbench, you apply data from the Setup Workbench to a specific capture type.

This section discusses how to:

- Create type definitions.

- Define hold processing.

- Define business process conditions.

- Define audit events.

- Define maintenance setup.

- Define dynamic events.

- Define MCF types.

- Define process types.

Pages Used to Define Order and Quote Processing

Page Name	Definition Name	Navigation	Usage
Type Definition Workbench	RO_TYPE	Set Up CRM, Product Related, Order Capture, Capture Type Workbench, Type Definition	Create type definitions for the Order, Quote, and Order Copy capture types.
Type Definition - Hold Processing Workbench	RO_TYPE_HOLD	Click the Hold Processing link on the Type Definition Workbench page.	Define hold processing for the capture type.
Type Definition - Business Process Conditions Workbench	RO_TYPE_BPEVENT	Click the Business Process Conditions link on the Type Definition Workbench page.	Define business process conditions that fire for the capture type.
Type Definition - Audit Conditions Workbench	RO_TYPE_ADEVENT	Click the Audit Conditions link on the Type Definition Workbench page.	Define audit events for the capture type.

Page Name	*Definition Name*	*Navigation*	*Usage*
Type Definition - Maintenance Conditions Workbench	RO_TYPE_DEEVENT	Click the Maintenance Conditions link on the Type Definition Workbench page.	Define maintenance conditions by defining the data element events for the capture type. Data elements and their associated classes drive the maintenance and audit processing for the capture type.
Type Definition - Dynamic Events Workbench	RO_TYPE_DYEVENT	Click the Dynamic Events link on the Type Definition Workbench page.	Define dynamic events for this capture type. Dynamic events allow for dynamic, pluggable processing for a capture type, using dynamic event classes.
Type Definition - MCF Types Workbench	RO_TYPE_MCFTYPE	Click the MCF Types link on the Type Definition Workbench page.	Define MCF types that this capture type uses.
Type Definition - Process Types Workbench	RO_TYPE_PROCTYP	Click the Process Types link on the Type Definition Workbench page.	Define process types for a capture type.
Build Condition	RO_TYPE_PHRASE	Click the Edit button for an event on the Type Definition - Business Process Conditions Workbench, Type Definition - Audit Conditions Workbench, or Type Definition - Maintenance Workbench page.	Search for and select the events that trigger business process, audits, or maintenance workflow.

Creating Type Definitions

Access the Type Definition Workbench page (Set Up CRM, Product Related, Order Capture, Capture Type Workbench, Type Definition).

Type Definition Workbench page

Type Definition is the main workbench page for creating type definitions for the Order, Quote, and Order Copy capture types.

Workbench Details

Description	Displays the description of the capture type. This appears during capture entry.

Real-Time Status Rule   Select when to invoke the real-time status integration point . Values are:

Upon Request Only: Invokes the integration point when the CSR clicks Refresh on the toolbar.

Prior to Capture Status Only: Invokes the integration point when the user searches and selects a capture.

Capture Status and On Request: Invokes the integration point when the user clicks Refresh and when the user searches and selects a capture.

Do Not Fire.

Fire From Status   Select the status at which the processing occurs, such as *Open* or *In Process.*

Statuses are identified by numeric status codes in the system. The selection here should represent the lowest numeric status code, which is the point at which the real-time status integration point fires.

Application Class Set   Select application class set extensions that the system created during the application class registry setup step. *Order Extensions* is the default class set for orders; *Quote Extensions* is the default class set for quotes.

To Status   Select the status at which the processing occurs, such as *Open* or *In Process.*

Statuses are identified by numeric status codes in the system. The selection here should represent the highest numeric status code, which is the point at which the real-time status integration point fires.

Use Auto Numbering   Select to enable autonumbering schemas, which the system chooses based on capture type and setID. If the system does not use these schemas, then the CAPTURE_ID is generated using the PeopleTools `UIDGen()` built-in function.

See and *PeopleSoft CRM 9.1 Application Fundamentals PeopleBook*, "Setting Up General Options," Setting Up Automatic Numbering.

Display Template	Control the user interface of the runtime component (RO_CAPTURE) by selecting a display template. Before you can make a selection here, you must create a display template or modify an existing template. You can define a new display template for Order Capture by navigating to Set Up CRM, Common Definitions, Component Configuration, Display Template Definition. You can modify an existing template by navigating to Set Up CRM, Common Definitions, Component Configuration, Display Template Details.
	Note. Display templates allow for extensive configurability. For example, you can choose to divide the order entry form into sections and you can control the visibility of these sections (as well as the fields within the sections) from the display template. We deliver two display templates for Order Capture. These are CORE_ORDER (Order Template) and CORE_QUOTE (Display template for Quote). Since several industry-specific applications rely upon Order Capture, other display templates are also made available and those templates contain fields most relevant to that particular sector.

See and *PeopleSoft CRM 9.1 Application Fundamentals PeopleBook*, "Setting Up SmartViews," Use of Templates.

See and *PeopleSoft CRM 9.1 Application Fundamentals PeopleBook*, "Setting Up SmartViews," Defining SmartView Templates.

Workbench Steps

Details	Click a link in this column to view, create, or modify specific configurations for business processing logic.
Progress	Displays the number of steps completed from those that are available.

Defining Hold Processing

Access the Type Definition - Hold Processing Workbench page (click the Hold Processing link on the Type Definition Workbench page).

Type Definition - Hold Processing Workbench page

After you define holds in the Setup Workbench, you must enable or disable them for every capture type. Hold conditions appear on the Holds tab of the entry form after submission.

Enabled   Select to make the corresponding hold code active or inactive for the current capture type.

Defining Business Process Conditions

Access the Type Definition - Business Process Conditions Workbench page (click the Business Process Conditions link on the Type Definition Workbench page).

Type Definition - Business Process Conditions Workbench page

When you submit an order or quote, business processes fire immediately or are queued for future-dated orders and quotes. You can view the type of business process condition that is used on the Related actions tab of the order entry form.

Define business process conditions for each capture type here, and include events for order submission as well as order maintenance activity.

Business Project Events

Sequence   Enter the order in which the Order Capture business process condition fires when more than one event fires for a single capture.

Enabled   Select to activate the corresponding event.

Event Name   Enter the event name for the business process you select in the Business Process Name field.

                                The exact Event Name must be entered for the corresponding Business Process Name. If you use an unrecognized event name, the default is to run the business process associated to the event.

                                Valid names are: *BulkOrderGenBP*; *BulkOrderSubBP*; *CommChange*; *CommActivateService*; *CommChangeService*; *CommDisconnectService*; *CommResumeService*; *CommSuspendService*; *CoreCancelService*; *CoreMaintBP*; *CoreOrderBP*; *CoreQuoteBP*; *CoreRenewService*; *ESAOrderBP*; *HeaderOpenStatus*; *PACRequest*; *PortInRequest*; *Telco New Order BPEL*; *PortinBP*; and *CommSuspendChangeService.*

                                The field becomes read-only after you save the page.

Edit	(Optional) Click to launch the Build Process Conditions page, where you can override the delivered PeopleCode logic for initiating the process using the terms of the Active Analytics Framework (AAF).
	For example, if the current PeopleCode condition fires the event when RO_HEADER.STATUS_CODE >= 2000, you can override it by defining a different condition that fires the event, for example, RO_HEADER.STATUS_CODE >= 1000. When an AAF condition is defined, the PeopleCode condition is ignored.
	See and *PeopleSoft CRM 9.1 Automation and Configuration Tools PeopleBook*, "Business Process Management."
	See and <u>Appendix A, "Order Capture Delivered Business Processes and Web Services," page 723.</u>
Business Process Name	Select an order capture business process to be initiated when the process conditions are met.
	Order Capture delivers three business processes representing the order, the quote, and order change/maintenance.
Allow Multiple Instances	Select to enable multiple instances of this business process to start and run against the same capture.

See Also

PeopleSoft CRM 9.1 Automation and Configuration Tools PeopleBook, "Automation Tools"

<u>Chapter 6, "Working with Order Capture Business Projects," page 101</u>

Defining Audit Conditions

Access the Type Definition - Audit Conditions Workbench page (click the Audit Conditions link on the Type Definition Workbench page).

Type Definition - Audit Conditions Workbench page

Audit events appear in Change History on the History tab of the order entry form. Audits help identify the specific events that took place relative to this specific order or quote.

Note. If audit conditions are not defined on this page, hard-coded conditions are used.

Audit Events

Audit Event Name	Displays a reference to the AAF term.
Edit	(Optional) Click to launch the Build Condition page, where you can create condition statements using AAF terms to determine when the audit event is fired.
Sequence	Enter the sequence in which the audit events fire. Events can fire simultaneously.
Enabled	Select to enable the corresponding audit event.
Audit Handler	Select the data element from the Setup Workbench extended application class that writes the audit message. A generic audit-message handler writes the message text to the Related History page when the audit event results in *True.* Create other audit handlers if you need configured logic.
Message Set Number	Enter the message set reference of the audit message that the event handler writes to the Related History page.
Message Number	Enter the message set number reference of the audit message that is to be written to the Related History page.

Message Text   Select whether the audit message's *Explain* text or *Short* text is written to the Related History page.

Defining Maintenance Conditions

Access the Type Definition - Maintenance Conditions Workbench page (click the Maintenance Conditions link on the Type Definition Workbench page).

Type Definition - Maintenance Conditions Workbench page

You can enable or disable maintenance events that you created when you defined maintenance handlers in the Setup Workbench. In maintenance setup, you connect maintenance events, maintenance handlers, and event types.

Note. If maintenance conditions are not defined on this page, hard-coded conditions are used.

Maintenance Event   Displays a reference to the AAF term.

Edit   (Optional) Click to launch the Build Condition page, where you can create condition statements using AAF terms to determine when the maintenance event is fired.

Sequence   Enter the order in which the audit events fire when more than one audit fires.

Enabled   Select to enable the corresponding audit event.

Maintenance Handler	Select the data event handler (that you created in the Setup Workbench) that handles processing when the maintenance event evaluates to *True* or *False*. Based on the result of the event, logic is fired to make data elements of the capture editable or uneditable during a maintenance request.

Note. Certain handlers also determine if a capture needs maintenance processing and whether it is allowed based on the evaluation of associated events.

Event Type	Select an event type that determines when the event is run, as well as the level of data that is passed to the maintenance handler. Enabler events are fired when a capture is first loaded. These events determine if maintenance processing is required based on the event definition. If they are required, the handler is invoked, and the system sets the capture internal logic set to *MaintenanceRequired.* Then, the system evaluates exclusive events to determine if the capture can be maintained. Whether or not the capture is maintained is determined as a consequence of the result of these events.

When you request capture maintenance by clicking the Maintain button in the Order Capture toolbar, the system evaluates remaining events by header, line, and line status, based on the defined sequence. These events determine maintenance eligibility of data. After all events are run, the system presents the capture, with the appropriate editable and maintainable data, to the CSR.

Defining Dynamic Events

Access the Type Definition - Dynamic Events Workbench page (click the Dynamic Events link on the Type Definition Workbench page).

Type Definition - Dynamic Events Workbench page

Sequence	Enter the sequence in which the dynamic events fire. Events can fire simultaneously.
Enabled	Clear this check box to disable loading for this application class.
Dynamic Class	Displays a reference class, which you create in the Setup Workbench. These classes dynamically fire during capture processing.
	Note. PeopleSoft CRM delivers events for component defaulting and component saving.

Defining MCF Types

Access the Type Definition - MCF Types Workbench page (click the MCF Types link on the Type Definition Workbench page).

Type Definition - MCF Types Workbench page

To define new correspondences, connect the MCF type and package ID. Once you complete this setup step, you can generate correspondence for Order Capture.

Enabled	Select to enable the MCF type for the corresponding package ID.
MCF Type	Displays the event that you defined as an MCF type in the Setup Workbench.

Package ID	Select a package ID for Order Capture. Order Capture uses predefined templates that facilitate the creation of standardized communication between the user and the CSR. You make templates available to end users by grouping them in *template packages.* These packages can contain one or more *templates definitions,* which in turn reference *template files.* They also have package IDs, which are available for selection here.
	Note. This field contains a list of package IDs that are defined in the correspondence package definition with a usage of *Order Capture* and a language of *English.*

See Also

PeopleSoft CRM 9.1 Automation and Configuration Tools PeopleBook, "Correspondence Management"

Defining Process Types

Access the Type Definition - Process Types Workbench page (click the Process Types link on the Type Definition Workbench page).

Type Definition

Process Types

Workbench

Save	⟳ Refresh	Clone	Search	Next	Previous	Workbench		Personalize

Capture Type SM   SetID COM01
Description Service Management

Insert the process types for this capture type.

Process Types Customize | Find | First 1-14 of 14 Last

Process	*Description	Default Process Type		
ACT	Activate Service	☐	+	−
CHA	Change Attribute	☐	+	−
CHG	Change Service	☐	+	−
CNCL	Cancel Service	☐	+	−
DIS	Disconnect Service	☐	+	−
EDCH	Change End Date	☐	+	−
PAC	PAC Request	☐	+	−
PORT	Port-In Request	☐	+	−
RDCH	Change Resume Date	☐	+	−

Type Definition - Process Types Workbench page

Note. The PeopleSoft system does not use this capture type definition. However, certain industry-specific applications, such as the communications solution, create process types here.

Defining Integrations and Mappings

To define integrations, use the Integration Definitions (RO_DEFN_INTEGRATE_GBL) component.

This section discusses how to:

- Define integrations.

- Define header status mappings.

- Define line status mappings.

- Define source mappings.

- Specify inventory business units.

Pages Used to Define Integrations and Mappings

Page Name	Definition Name	Navigation	Usage
Integration Definitions Workbench	RO_DEFN_INTEGRT	Set Up CRM, Product Related, Order Capture, Integration Workbench, Integration Definitions Workbench	Define integrations (such as mapping to fulfillment systems).
Integration Definitions - Header Status Mappings Workbench	RO_DEFN_HDSTMAP	Click the Header Status Mappings link on the Integration Definitions Workbench page.	Define status mappings at the header level to (and from) external systems.
Integration Definitions - Line Status Mappings Workbench	RO_DEFN_LNSTMAP	Click the Line Status Mappings link on the Integration Definitions Workbench page.	Define status mappings at the line level to (and from) external systems.
Integration Definitions - Source Mappings Workbench	RO_DEFN_INTSRC	Click the Source Mappings link on the Integration Definitions Workbench page.	Define source mappings to message nodes.
Integration Definitions - Inventory Business Units Workbench	RO_DEFN_INTEGRT	Click the Inventory Business Units link on the Integration Definitions Workbench page.	Specify inventory business units.

Defining Integrations

Access the Integration Definitions Workbench page (Set Up CRM, Product Related, Order Capture, Integration Workbench, Integration Definitions Workbench).

Integration Definitions Workbench page

Workbench Details

Description	Displays the description of the integration definition.
Status Refresh Interval	Enter the number of seconds that must elapse before the system carries out an additional status call. For example, if the interval is set to 60 (seconds), then the system makes only one status call per minute, regardless of how many times the user clicks the Refresh toolbar button.
Fulfillment Node	Enter the Integration Broker node name that the system uses to perform order fulfillment for this setID. Each of the defined header, line, and source mappings refer to this fulfillment node.

Workbench Steps

Header Status Mappings	Click to access the Header Status Mappings page and define mappings between external-system statuses and internal PeopleSoft CRM statuses at the header level.
Line Status Mappings	Click to access the Line Status Mappings page and define mappings between external-system statuses and internal PeopleSoft CRM statuses at the line level.
Source Mappings	Click to access the Line Status Mappings page and define mappings between a message node and the corresponding source in PeopleSoft CRM.
Inventory Business Unit	Click to access the Line Inventory Business Units page and specify the business units in PeopleSoft Supply Chain Management (SCM) with which the current CRM setID integrates. The business unit is used during the product availability display.

Defining Header Status Mappings

Access the Integration Definitions - Header Status Mappings Workbench page (click the Header Status Mappings link on the Integration Definitions Workbench page).

Integration Definitions - Header Status Mappings Workbench page

For integrations, map PeopleSoft CRM header statuses and partial header statuses to their counterparts in the external fulfillment system.

Node Name	Displays the message node that points to an external fulfillment system, which uses the statuses that appear in the External Status column.

External Status   Displays the equivalent of the PeopleSoft CRM status for an external
                                       system. (Typically, external systems use status values that are different
                                       from the status values that PeopleSoft CRM uses.) For example, a
                                       PeopleSoft CRM status of *6000* (complete) maps to a status of *C* in
                                       PeopleSoft Order Management.

CRM Status   Enter the Order Capture status.

Description   Displays the text equivalent value of the numeric status value that you
                                       enter. Define the description text for partial statuses in the Setup
                                       Workbench Header Statuses step.

Partial Status   Enter a partial status code for the header status mapping. Partial status
                                       codes are identified in the status header for an order that has order lines in
                                       different stages of the fulfillment cycle.

Defining Line Status Mappings

Access the Integration Definitions - Line Status Mappings Workbench page (click the Line Status Mappings
link on the Integration Definitions Workbench page).

Integration Definitions - Line Status Mappings Workbench page

For integrations, map PeopleSoft CRM line statuses and partial line statuses to their counterparts in the
external fulfillment system.

Node Name   Displays the message node that is associated with the data.

External Status	Displays the equivalent of the Order Capture order line status for the external system. (Typically, external systems use status values that are different from the status values that PeopleSoft CRM uses.) For example, a PeopleSoft CRM status of *4000* (in fulfillment) maps to a status of *O* (open) in PeopleSoft Order Management.
CRM Status	Enter the Order Capture line status code.
Description	Displays the text equivalent value of the numeric status value that you enter. The description of the partial status is visible to the CSR.
Partial Status	Enter a partial status code for the line status mapping. Partial status codes identify the status of an order that has order lines in different stages of the fulfillment cycle. Example: If one schedule on the line is back-ordered (2000) and another schedule is shipped (6000), then the partial status is the partial version of the bigger number—in this case, 6000.

Defining Source Mappings

Access the Integration Definitions - Source Mappings Workbench page (click the Source Mappings link on the Integration Definitions Workbench page).

Integration Definitions - Source Mappings Workbench page

Publishing Node	Displays the message node to which Order Capture sends data. The publishing node provides a mapping between the external node and the source code, which you define on the Source Codes page in the Setup Workbench. When you are using an external system to display an order, this mapping tells the system to which node to transfer the user and to display the order.
Source Code	Select the source code to which this data should map in Order Capture.

Specifying Inventory Business Units

Access the Integration Definitions - Inventory Business Units Workbench page (click the Inventory Business Units link on the Integration Definitions Workbench page).

Integration Definitions - Inventory Business Units Workbench page

Inventory Business Unit	Enter the business unit in PeopleSoft SCM Inventory that Order Capture integrates with.

Setting Up Credit Card Integration

This section provides an overview of credit card integration and discusses how to set up credit card processing.

Understanding Credit Card Integration

Order Capture uses a third-party payment service for acceptance of credit cards as a payment type. Order Capture retrieves credit card information from either the customer profile or when the CSR (or user) enters it during the order submission and checkout process. During this process, the user can save credit card information so that the next time this user signs in, credit card information appears in the appropriate order entry form.

Setting Up Credit Card Processing

To set up credit card processing for Order Capture and Order Capture Self Service:

•   Define the types of credit cards that you accept.

•   Establish your merchant account with a third-party credit card provider, such as CyberSource.

•   Set up the connection parameters for credit card processing calls.

See *PeopleSoft 9.1 PeopleBook: Integration Interfaces*

See and *PeopleSoft CRM 9.1 Application Fundamentals PeopleBook*, "Setting Up Credit Card Encryption," Understanding Credit Card Encryption.

Setting Up Freight Integration

This section provides an overview of freight integration setup and discusses how to:

- Set up the freight calculation integration.

- Test the freight calculation integration.

- Define carriers.

- Construct tracking numbers.

Understanding Freight Integration Setup

After you correctly install your third-party freight (carrier) application, perform these steps from within the PeopleSoft CRM application to set up freight integration:

1. Follow the instructions that are provided in the PeopleSoft CRM Installation Guide to properly configure your system.

2. Set up the freight calculation integration.

3. Add a freight calculation *vendor* to the business unit definition.

4. Test the freight calculation integration.

5. Define your carriers.

6. (optional) Construct tracking numbers.

Setting Up the Freight Calculation Integration

PeopleSoft CRM integrates with ConnectShip to calculate freight charges. The freight calculation integration transfers the to address, carrier, and combined product weights data to ConnectShip.

To set up the freight calculation integration:

1. Activate the following application messages: *RATE_REQUEST,RATE_REQUEST_XFRM*, and *RATE_RESPONSE.*

2. Confirm that the *ALLPAGES* permission list has full permission to the *FREIGHT* channel.

   Select PeopleTools, Security, Permissions & Roles, Permission Lists, and open the *ALLPAGES* permission list. Select the Message Monitor tab and look for an entry for *FREIGHT*. If not found, add a new entry for the *FREIGHT* channel, and grant it full access.

3. Activate the *FREIGHT* channel through the Message Monitor, on the Channels tab.

4. Activate the *OutSync* node transaction on the node, *PSFT_XOUTBND,* for the *RATE_REQUEST* transaction.

    Select PeopleTools, Integration Broker, Node Definitions.

5. Activate the *OutSync* node transaction on the node, *PSFT_XOUTBND,* for the *RATE_REQUEST_XFRM* transaction.

    Note. This transaction uses an *HTTPTARGET* override connector and allows you to specify the URL to connect to Progistics.

    Replace the URL on the *RATE_REQUEST_XFRM* node transaction with your ConnectShip Progistics server URL, which uses the following format: *http://<machine>/Progistics/XML_Processor/Server/XMLProcDLL.asp.*

    If you are not using port 80 on the ConnectShip Progistics server, indicate the port in this URL: *<machine>:8080*

6. Select PeopleTools, Integration Broker, Relationships, and activate the *RATE_REQUEST* relationship.

    On the Trans Modifier tab, select *Edit* and activate the *RATE_REQUEST* modifier.

Testing the Freight Calculation Integration

When you test the integration, use UPS Ground as the carrier.

Note. To carry out the freight calculation test, you must have configured UPS Ground for your business unit on your ConnectShip Progistics server.

To test the freight calculation integration:

1. Open the Order Capture Business Unit definition in PeopleSoft CRM for the business unit that you set up.

    Select Set Up CRM, Business Unit Related, Order Capture Definition.

2. Click the Test Freight Calculation button.

    If an amount other than zero appears, you are set up correctly. If zero appears, check the display message to determine what is not correctly set up.

See and

Page Used to Define Carriers

Page Name	Definition Name	Navigation	Usage
Carriers	CARRIER	Set Up CRM, Product Related, Order Capture, Carrier Definition, Carriers	Define carriers for integration with Order Capture.

Defining Carriers

To define carriers, use the Carriers (CARRIER) component.

Access the Carriers page (Set Up CRM, Product Related, Order Capture, Carrier Definition, Carriers).

Carriers page

Active	Select *Active* or *Inactive.* If you select *Inactive,* the carrier does not appear:
	• As a valid carrier in the order capture business unit definition for PeopleSoft CRM Order Capture Self Service.
	• On the order entry form for PeopleSoft CRM Order Capture.
Description	Enter a description that appears in several order capture locations where shipping information is defined.
Third Party Freight Calc. Key (third party freight calculation key)	Enter the key that the third-party freight calculation system (for example, the ConnectShip Symbol) uses to identify this carrier.
Fulfillment Carrier Key1 and **Fulfillment Carrier Key2**	Enter keys that map the PeopleSoft CRM carriers to the equivalent carriers in the fulfillment system. For example, if you use PeopleSoft Order Management as your fulfillment system, key 1 would map to Carrier ID, while key 2 would map to Ship Via Method.
URL Identifier	Use this URL to construct a link to the carrier's shipment tracking page.
Message Set Number	Displays two message numbers.

Message Number   Enter the message numbers that the system uses to construct the package tracking link.

Constructing Tracking Numbers

An order may consist of multiple shipments and, consequently, of multiple tracking numbers. Order Capture and Order Capture Self Service support the construction of a single tracking link, which displays all shipments at once.

To construct a tracking link:

1. Point the URL identifier to a URL definition.

    This is the static (unchanging) portion of the carrier's tracking URL.

2. If there is more than one shipment to track, ensure that the first message catalog entry message number is appended to the URL.

    Parameter %1 within the message is replaced by the package number (for example, *1* for the first package, *2* for the second package). The shipment's tracking number replaces Parameter %2. If only one shipment is being tracked, this message is not used in constructing the URL.

3. For the last package, append the second message catalog entry to the URL using the same parameter replacement rules as the first message number.

Note. You use the second message catalog entry only if a tracking link is constructed for one package. If the second message catalog entry is not present, then you use the first message catalog entry.

UPS Example

If two United Parcel Service (UPS) packages are tracked at once, this link would work:

http://wwwapps.ups.com/etracking/tracking.cgi?sort_by=status&track=Track&TypeOfInquiryNumber=T&InquiryNumber1=444&InquiryNumber2=555

Note. PeopleSoft CRM ships with the URL definition UPS_TRACK, which is defined as http://wwwapps.ups.com/etracking/tracking.cgi?sort_by=status&track=Track&TypeOfInquiryNumber=T. PeopleSoft CRM also ships with a single message catalog entry: 18065, 80. This contains &InquiryNumber%1=%2.

When you construct this link, the URL definition is initially appended with this message catalog entry. Replace %1 with the first shipment number (1) and %2 with the tracking number for the first shipment (444), which yields this string:
http://wwwapps.ups.com/etracking/tracking.cgi?sort_by=status&track=Track&TypeOfInquiryNumber=T&InquiryNumber1=444. The next shipment is the final shipment, but because there is no defined second message catalog entry, the first entry is appended once more. This becomes the final link:
http://wwwapps.ups.com/etracking/tracking.cgi?sort_by=status&track=Track&TypeOfInquiryNumber=T&InquiryNumber1=444&InquiryNumber2=555.

FedEx Example

This link tracks two Federal Express (FedEx) shipments (tracking numbers 444 and 555):

http://www.fedex.com/cgi-bin/tracking?action=track&tracknumbers=444,555.

The URL definition, FEDEX_TRACK, contains http://www.fedex.com/cgi-bin/tracking?action=track&tracknumbers=. The message catalog entry 18065, 81 is %2, (note the comma). The message catalog entry 18065,82 is simply %2.

Note. FedEx does not use the %1 parameter (which is the shipment number).

For these two packages, the URL definition is initially appended with the first message catalog entry and becomes http://www.fedex.com/cgi-bin/tracking?action=track&tracknumbers=444.

For the final package, the second message catalog entry is used and appended to the above string, resulting in http://www.fedex.com/cgi-bin/tracking?action=track&tracknumbers=444,555.

If only one package is tracked, the second message catalog entry is appended to the URL definition, yielding http://www.fedex.com/cgi-bin/tracking?action=track&tracknumbers=555.

Note. In the last example, the first message catalog entry was not used.

Defining Tax Installation Options

This section provides an overview of tax installation options setup and discusses how to define tax provider options.

Understanding Tax Installation Options Setup

Order Capture works with third-party systems such as Taxware, Vertex, and WorldTax to calculate taxes on orders.

Once the preferred tax application is installed to work with PeopleSoft CRM applications, you must define tax settings for your business units and then define advanced tax installation options for either Taxware or Vertex. Taxware uses the STEP feature, while Vertex uses its Tax Decision Maker (TDM). If you use these, you must select the appropriate check boxes on the Tax Provider page.

Note. You can also take advantage of product groups.

Tax Settings for Business Units

Business units determine tax sets, which are entered when you define your business units on the Order Capture Definition page.

See and <u>Chapter 3, "Defining Order Capture Business Units," Creating Order Capture Business Units, page 19.</u>

Tax Product Groups

You can set up product tax groups to take advantage of the Taxware Product Matrix or the Vertex Product Taxability files in Vertex TDM.

A *tax product group* is a product group with a product group type of Tax, which you define in PROD_GROUP_TBL.

Note. If you organize your data wisely, using tax product groups reduces taxing errors and product maintenance time.

Each order line has a single product ID. You can associate a tax product group with each product. Order Capture sends the product ID and the tax product group through the interface, and Taxware or Vertex determines whether the product ID or product tax group takes precedence.

Note. If you use Taxware, you can simplify data entry by creating tax product groups that are equal to any of the Taxware product codes that apply to your company's business. Create or update your product IDs with the tax groups that apply.

See and *PeopleSoft CRM 9.1 Product and Item Management PeopleBook*, "Setting Up Products," Defining Products.

Page Used to Define Tax Provider Options

Page Name	Definition Name	Navigation	Usage
Tax Provider Options	TAX_PROV_INFO	Set Up CRM, Product Related, Order Capture, Tax Provider Options, Tax Provider Options	Define tax provider (Taxware or Vertex) options.

Defining Tax Provider Options

To define tax provider options, use the Tax Provider Options (TAX_PROV_INFO) component.

Access the Tax Provider Options page (Set Up CRM, Product Related, Order Capture, Tax Provider Options, Tax Provider Options).

Tax Provider Options page

Taxware

Use STEP	Select, if you are using the Taxware STEP module, to indicate that additional fields must be sent through the interface.
Reason Code Matching	Select how you want to handle tax certificate entry reason lookup in STEP. Select *Exact Reason Code Match,* the more restrictive of the two options, to have Taxware find only tax certificates that were entered with the exact reason code that you set up on the order line. If you select *Use Default Record,* Taxware looks for an exact match. If it does not find one, it uses a default tax certificate for exemption.
Certificate Level	Select which taxing jurisdiction level tax certificates apply. If you select *Individual Certificate Levels,* STEP looks for certificates at all individual levels and exempts tax only for the levels at which a certificate is found. *State Level Only* prompts STEP to look for a certificate only at the state level.

Vertex

Use TDM	Select to use the Vertex TDM application to set up exceptions to taxability rules in the states where they apply. In TDM, you can set up product classes, which are equivalent to tax product groups and product IDs. You can decide whether to use product IDs or product classes.

Chapter 5

Understanding Product, Pricing, Proration, and Catalogs

This chapter discusses:

- Products, PeopleSoft Enterprise Pricer, and catalogs.

- Product setup.

- Pricing setup.

- Proration of price adjustments.

- Catalog setup.

See Also

PeopleSoft CRM 9.1 Product and Item Management PeopleBook, "Setting Up Products"

PeopleSoft Enterprise Pricer 9.1 for CRM PeopleBook

PeopleSoft CRM 9.1 Product and Item Management PeopleBook, "Creating Catalogs"

Products, PeopleSoft Enterprise Pricer, and Catalogs

This section discusses the integration of products, pricing, and catalogs with Order Capture.

Products

Product definitions provide the foundation for many features of PeopleSoft Customer Relationship Management (PeopleSoft CRM), including product ordering, catalogs, and catalog searches. Product records are also used by PeopleSoft Advisor to create the Advisor dialogs that are accessed from within Order Capture and Order Capture Self Service.

You can use many of the elements used to define products—such as product brand, product category, product group, and product attributes—to dynamically generate catalogs based on criteria that you specify. For example, you can create rules that select only certain brands for inclusion in a catalog or that include products based on their attributes.

Pricing

PeopleSoft Enterprise Pricer enables real-time, dynamic pricing on quotes and orders based on company pricing policies. Order Capture users define rules that determine which discounts, surcharges, giveaways, and conditions apply. As products are added to a quote or an order, PeopleSoft Enterprise Pricer applies all of the pricing rules (for both non-recurring and recurring charges) that match the defined conditions to determine final prices. Conditions might include number of products ordered, type of customer, or customer region. The same pricing engine also allows customer service representatives (CSRs) to manually adjust prices and view all price adjustments related to an order or a quote.

Catalogs

The PeopleSoft CRM Catalog contains a hierarchy of products that Order Capture and Order Capture Self Service can access. You can access catalogs from different locations within the collaborative selling suite of applications. Users can navigate directly to Catalog Search and enter search criteria in the search dialog box, or configure the PeopleSoft CRM portal homepage to display a catalog search pagelet. You can also navigate to the catalog by using the order form.

Note. To navigate to the catalog by using the order form, you must have the PeopleSoft CRM Portal Pack installed.

Using the order form, CSRs can search catalogs for product information. Order Capture Self Service customers can also view catalog information.

In addition, you can restrict user access to a product by validating it against a catalog when the product is added to an order.

CSRs and customers can also access the product catalog by way of PeopleSoft Advisor dialogs, and CSRs and customers can launch PeopleSoft Advisor from the catalog to retrieve product recommendations based on dialog interactions.

If you try to submit a product without linking it to a catalog, the order is held with the message *Product (number), (Name) on Line 1 is not in the Customer's Product Catalog.* You have two choices:

*   You can override the hold by changing the hold status.

*   You can turn off this hold.

    If you turn the hold off, it will never fire for any CSRs. If you do not want to use catalogs at all in the system, or you do not care if customers order products not in their catalog, then you can simply turn the hold off via the Order Capture Workbench.

    To turn off this hold, navigate to Set Up CRM, Product Related, Order Capture, Capture Type Workbench. Choose the SetID you are working with. Change the Capture Type codes for each scenario. Start with Quote or Order. Chose Hold Processing. Clear *Product Catalog Violation* and save.

Note. The default catalog in Find Products in the left navigation changes after selecting a different business unit in the Add Order page. This ensures that the CSR will see consistent catalogs while being in Add Order or in Find Product.

Product Setup

To define products and packages in PeopleSoft CRM, you:

1. Create definitional elements to associate with product elements such as product brand, product category, and competency codes.

   These are reusable attributes that you associate with product IDs in step 2 to create unique product and package definitions.

2. Create the product and associate definitional elements (as well as other product attributes and parameters) with the product IDs.

3. Assign product units of measure on the Product Attributes by UOM page.

4. Define package components on the Package Components page (for products defined as packages).

5. Establish product prices using the Product Price page (for individual products and packages with top-level pricing) or the Product Component Pricing page (for packages using component-level pricing).

6. Define product relationships on the Product Relationships page.

7. Associate standard or custom notes with products on the Notes page.

See Also

PeopleSoft CRM 9.1 Product and Item Management PeopleBook, "Setting Up Products"

Pricing Setup

Documentation on how to set up and use PeopleSoft Enterprise Pricer appears in the *PeopleSoft Enterprise Pricer 9.1 for CRM PeopleBook.*

See and *PeopleSoft Enterprise Pricer 9.1 for CRM PeopleBook*, "Oracle's PeopleSoft Enterprise Pricer for CRM Preface."

Proration of Price Adjustments

This section provides an overview of adjustment price proration and discusses:

• Order level adjustments.

• Price adjustment history.

• Proration of adjustments per line.

• Customer billing integrations.

Order Level Adjustments

Order Capture enables you to prorate order level adjustments when creating and maintaining orders and quotes. To use this functionality, you must create a Total Order Discount/Surcharge price rule in Enterprise Pricer.

Proration of order level adjustments consists of three major components:

• Configuring the application to use proration.

  A field on the business unit determines if the order level adjustments are prorated or not.

• Dividing adjustments over the order lines.

  The ratio for the prorated adjustment considers the net price of each line with the quantity ordered in order to prorate the order level adjustment appropriately.

• Displaying adjustment history.

  The history table keeps track of the adjustments that are applied to each line. Any adjustment that affects the net unit price is reflected in the history table.

These guidelines apply to creating orders with an order level adjustment:

Guideline	Description
Different adjustment types	More than one order level adjustment can be applied to the order at the same time. These adjustments can be either a fixed amount or a percentage.
Manual order level adjustments	You can add a manual adjustment that will apply to the entire order. The manual order level adjustments are grouped with the order level adjustments that were applied by the Enterprise Pricer. The sum of both the manual and system adjustments gives the total order amount that will be prorated. Note that the system does not support the proration of recurring prices. **Note.** Manual adjustments are not supported in service management orders.
Order level discount across order lines	The ratio for the prorated adjustment considers the net price of each line with the quantity ordered in order to prorate the order level adjustment appropriately.
Price adjustment history	The history table keeps track of the adjustments that are applied to each line. Any adjustment that affects the net unit price is reflected in the history table.
Repricing an order	When proration is turned on, it is performed every time the order is repriced.
Order of adjustments	The adjustments from price rules defined to be applied at the line level are always applied first. The manual adjustments are applied second and price protect the line. The prorated order level adjustments are applied last.
Discount/Surcharge in the total section	When the order level adjustments are prorated, the fields use to store the order level adjustment on the order are set to 0. The Discount/Surcharge rows in the total grid are hidden.

Guideline	Description
Holds	By adjusting the price on a line with a prorated adjustment, it is possible that the order will go on hold if the price goes under the minimum selling price. The existing holds are applied.
Package Products	Package products are prorated just like other products on the order. Pricing for these can be at the component level, or at the product header level.

The following guidelines apply to maintaining orders with an order level adjustment:

Guideline	Description
Protected prorated adjustments	Order lines with these statuses protect the prorated amount for that line: • 5000 – *Picked* • 5100 – *Partially Picked* • 5500 – *Purchased* • 5600 – *Partially Purchased* • 5700 – *Billed* • 5750 – *Partially Billed* • 6000 – *Shipped* • 6010 – *Complete* • 6100 – *Partially Shipped* **Note.** When the prorated amount is protected, it is not recalculated every time the proration calculation is done.
Cancelled order lines	When prorating the order level adjustments, the lines that are cancelled are excluded from the proration, as well as Engagement Service products.
Adding product to order	Adding a product to the order forces the proration to be done again.
Changing existing order line	Change to an existing order lines forces the proration to be done again.
Deleting order line	Deleting an order line forces the proration to be done again.
Minimum order level adjustment	If an order is being maintained, it is possible that the prorated adjustments that are protected based on the line status will be higher than the new order level adjustment that will be calculated after the order is changed. In this case, the amounts that are protected will remain the same and won't be decreased to match the new order level adjustment.

The following guidelines apply to converting a quote with an order level adjustment to an order:

Guideline	Description
Calculation of order level adjustments for orders that come from a quote.	There is no flag on the order that can be use to indicate that the order level adjustments are price protected. This flag exist only for the line prices. When an order is created from a quote, the Related Actions tab on the order contains a reference to the originating quote. This reference is used to determine if the order level adjustment should be recalculated, or if the one calculated on the quote should remain.
Proration of order level adjustments for orders that come from a quote.	When an order is created from a quote, there is no proration of order level adjustments done on the order. The proration is done only on the quote. If the business unit is set up to allow for editing the order following conversion from a quote, then any changes made to the order results in recalculating the prorated adjustments.

Proration of Adjustments Per Line

The following guidelines apply to prorating the order level adjustment per line:

Guideline	Description
Order lines included in the proration	Order lines that are cancelled or that already have a prorated adjustment that is protected are not included in the proration. Both scenarios do not apply to Engagement Service products.
Order lines excluded in the proration	Order level adjustments that have already been billed should remain the same and should not be reapplied. For example: an order was created with 4 order lines and a prorated order level discount of 20$ had been prorated evenly across these lines (each line receiving 5$ discount). Line 1 has been billed and the other lines have not. If you maintain the order and add a fifth line, the 20$ order level discount still applies. When the proration is done again, instead of giving 4$ per line, the line that was billed will keep 5$ of the 20$ and the other 15$ will be divided across the 4 other lines.
Displaying order level adjustments as an amount	Order level adjustments can be both a percent and an amount. The total adjustment is calculated as an amount so that the amount can be divided across the lines.
Net unit price adjustment	The net unit price on the line is the price that gets updated. Order Capture does not store the extended price for a line. The net unit price multiplied by the quantity gives the extended price. The order quantity is included when calculated with the adjustment ratio applied.

Guideline	Description
Adjustment ratio calculation	The following formula is used to find the adjustment to apply to the net price on the line: ((Order Level Adjustment – Protected Amount)* (Net Price)/(Order Sub Total – Extended Line Price of Protected Lines)).
Recurring charges	Only nonrecurring charges are affected by the proration.
Price protected lines	The prorated adjustment amount can be applied to a line, even if that line is protected.
Giveaway products	Giveaways lines are excluded from the proration
Free periods products	Free Periods lines are excluded from the proration

Calculation Example

If an order has these two lines:

Product	Quantity	List Price	Extended Price
1000	3	20.00	60.00
1001	7	15.00	105.00
Total order price			165.00

To prorate an order level discount of $20.00 USD, first calculate what the unit price of each product must be to arrive at the discounted order amount:

- For product 1000, the discounted unit price is $20.00 - (20.00 * 20.00 / 165.00), or $17.58 USD.

  The extended price is 3 * 17.58, or $52.74 USD.

- For product 1001, the discounted unit price is $15.00 - (20.00 * 15.00 / 165.00), or 13.18 USD

  The extended price is 7 * 13.18, or $92.26 USD.

In this scenario, the $20.00 order-level prorated discount needs to be proportionately distributed between the two order lines, therefore, the calculations of the actual discounts for order lines of products 1000 and 1001 are (20.00 * 20.00 / 165.00) and (20.00 * 15.00 / 165.00) respectively.

The order total is $52.74 + $92.26, or &145.00 USD.

Note. When line quantities are greater than 1, the entire discount amount might not prorate evenly across the order lines. For example, using an order discount of 20.05 in the above scenario, would the result in only USD $20.03 of the discount being applied. The remaining $02 USD cannot be evenly spread to a unit price when the line quantities are 3 and 7, and therefore remains unapplied.

Price Adjustment History

The following guidelines apply to reviewing price adjustment history:

Guideline	Description
Prorated adjustments on the price adjustment page	The price adjustment history page shows all the adjustments that are applied to the list price in order to calculate the net unit price. The prorated adjustments are displayed on this page.
Deleting history rows	The Adjustment History page allows the user to delete an adjustment that was applied manually. System adjustments and prorated adjustments cannot be removed. To remove prorated adjustments that result from a manual order level adjustment, remove the manual order level adjustment. You cannot remove prorated adjustments that result from a price rule.
Add a Final Unit Price to the adjustments page	Final Unit Price reflects the list price with discounts subtracted, and surcharges added. This is displayed in the Unit Price field on the order line.

Customer Billing Integrations

The current integration to Supply Chain Management (SCM) and TBP will not be affected by the changes made for prorating the order level adjustments.

The following guidelines apply to billing integrations to Supply Chain Management (SCM) and TBP:

Guideline	Description
Integration to TBP with proration turned ON	When proration has been turned ON, the order level adjustments will be prorated across the order lines and passed to the TBP as part of the line price. No adjustments are stored at the order level.
Integration to SCM and TBP with proration turned ON	When proration has been turned ON, and the order/quote contains products that are passed to TBP and other that are passed to the fulfillment system, the order level adjustments will be prorated across the order lines and passed to SCM and TBP as part of the line price.
Integration to TBP with proration turned OFF	When proration has been turned OFF, the order level adjustments will be stored at the order level but they won't be passed to TBP.
Integration to Supply Chain Management (SCM) with proration turned OFF	When proration has been turned OFF, the order level adjustments will be stored at the order level and they will be passed to SCM as an order level adjustment.

Guideline	*Description*
Integration to Supply Chain Management (SCM) and TBP with proration turned OFF	When proration has been turned OFF, and the order/quote contains products that are passed to TBP and other that are passed to the fulfillment system, the order level adjustments will be stored at the order level and will be passed to SCM as an order level adjustment.

Catalog Setup

PeopleSoft CRM enables you to define the layout and content of online product catalogs for internal and external use. You define the look and feel of catalogs by creating display templates, and then define the contents that you want to organize and present according to your template definitions. You can designate products for inclusion in a catalog either by direct association (using product IDs) or by creating business rules to dynamically build product content based on the selection criteria that you define. Similarly, you can control user access to catalogs (as well as tailor catalogs to users) by directly associating user IDs with specific catalogs or by setting up business rules to establish permissions.

See Also

PeopleSoft CRM 9.1 Product and Item Management PeopleBook, "Creating Catalogs"

Chapter 6

Working with Order Capture Business Projects

This chapter provides overviews of Order Capture business projects and the Order Bridge and discusses how to:

*   Define Order Capture business projects.

*   View Order Capture business projects.

*   View the Order Bridge.

See Also

PeopleSoft CRM 9.1 Automation and Configuration Tools PeopleBook, "Setting Up Business Projects"

PeopleSoft CRM 9.1 Automation and Configuration Tools PeopleBook, "Using Business Projects"

Understanding Order Capture Business Projects

PeopleSoft Customer Relationship Management (PeopleSoft CRM) delivers business projects that automatically manage certain predefined application processes. Using a business project to manage these tasks simplifies the management of conditional logic that often varies based on industry- and customer-specific needs.

Order Capture delivers three prebuilt business projects, each of which is a combination of phases and tasks designed to manage the order capture business process. Order Capture business projects are advantageous because they automate the processing steps for orders and quotes. To enable the configuration of key order processing events, Order Capture uses business projects as the agent to initiate and verify those events. Specifically, they trigger and confirm the status of key events, such as email confirmation, creation of installed product records, publishing of data to a fulfillment system, and notification of shipment completion.

Note. Order Capture business projects are registered as actions related to the order and can, therefore, be found on the Related Actions page of the Order Capture component.

This table describes the three core Order Capture business projects that the PeopleSoft system delivers:

Business Project	Object Name	Event Name	Internal Description	Triggering Event
Order	CORE_ORDER_BP	CoreOrderBP	Order Capture BP	The order status changes to *Submitted.* The business project is instantiated when the STATUS_CODE field on the RO_HEADER record equals a code status of 1000.
Order Maintenance	CORE_ORD_CHG_BP	CoreMaintBP	Order Change BP	When an order is maintained and submitted, the system saves changes to the order to RO_HISTORY. When an RO_HISTORY record is created with *Open* status, the CoreMaintBP event is triggered. The business project is instantiated when the RO_HISTORY_STATUS field on the RO_HISTORY record changes to *Submitted* status.
Quote	CORE_QUOTE_BP	CoreQuoteBP	Quote BP	The quote status changes to *Submitted.* The business project is instantiated when the STATUS_CODE field on the RO_HEADER record equals a code status of at least 1000.

Note. Order Capture also supports industry-specific business projects. Features and functionality such as service management, phone number administration, client management, policy and claims presentment, banking transactions, bill presentment and account management, and High Technology include their own business projects that are tailored to the specific needs of their respective industries. Consult the documentation for those applications to better understand how their business projects work with the Order Capture framework.

Understanding the Order Bridge

The Order Bridge provides an alternate view of order progress than a business project. Each task in a business project might generate additional system tasks, for example, notifications, Application Engine Processes, and messages sent or received from other external PeopleSoft applications or third-parties. These tasks do not appear on the Business Project page, but they do appear on the Order Bridge.

Each business project that is associated with an order appears separately. Order Bridge is accessible only from the Fulfillment tab on the Order page. Events appear in a hierarchical view with the business project at the top, followed by phases, tasks, and events that are generated by the task, including subprojects.

Defining Order Capture Business Projects

This section provides an overview of business project definition and discusses how to set up and view Order Capture business projects.

Note. This section supplements the general PeopleSoft CRM documentation, which explains how to set up business projects for all PeopleSoft CRM applications. Because Order Capture delivers a centralized Capture Type Workbench, the method to set up business projects differs slightly from other PeopleSoft CRM applications.

See Also

PeopleSoft CRM 9.1 Automation and Configuration Tools PeopleBook, "Setting Up Business Projects"

Understanding Business Project Definition

Order, quote, and maintenance business projects, like other business projects, are broken down into phases, tasks, and transition rules. *Tasks* are the basic unit of work in a business project. *Phases* represent groups of tasks. When you create phases, tasks, and transition rules, you define the central element of the business project. *Transition rules* establish the conditions by which the business project moves from one phase to the next.

Phases	Phases encapsulate one or more related tasks and constitute the main steps of the business project. Phases are always performed sequentially. For each phase in a business project, you define its possible target phases and the conditions under which each target is appropriate. These conditions are called *transition rules.*
	Order Capture business projects contain several phases. For example, the order business project (CORE_ORDER_BP) has eight main phases, but the quote business project (CORE_QUOTE_BP) has only two phases. These specific phases are explained below.
Tasks	When you set up a phase, you define the sequence of tasks in the phase. Tasks are single actions that directly correspond to an Application Engine program or Data Mover script. A new task begins when all preceding tasks in a phase are complete.
	Tasks within a single phase can be performed either in parallel or in sequence. To define tasks in parallel, you assign each task the same sequence number. Sequence numbers for several tasks in Order Capture business projects have the same sequence number and are, therefore, performed simultaneously.

Note. To view sequence numbers, access the Capture Type Workbench, Business Projects page.

See and Chapter 4, "Setting Up PeopleSoft Order Capture," Defining Business Process Conditions, page 70.

Transition Rules	Transition rules determine the transition from one phase to the next, based on the success or failure of tasks within the phase. The outcome of a task can be:

- *Cancelled.*

- *Complete - Success.*

- *Complete - Failed.*

See Also

PeopleSoft CRM 9.1 Automation and Configuration Tools PeopleBook, "Setting Up Business Projects," Defining Tasks

PeopleSoft CRM 9.1 Automation and Configuration Tools PeopleBook, "Setting Up Business Projects," Defining Phases

Setting Up and Viewing Order Capture Business Projects

Out-of-the-box, PeopleSoft delivers hardcoded conditions to determine the triggering action that first launches the business project. These hardcoded conditions can be overridden by defining your own condition. This is done from the Capture Type Workbench: Set Up CRM, Product Related, Order Capture, Capture Type Workbench, in the Business Process Conditions page.

Click on the Edit button to edit the condition. You then use the AAF condition builder, selecting AAF Terms defined for Order Capture, and the proper operators and values.

When defining the Event Name within the Capture Type Workbench, the system is expecting certain names, and if an unrecognized name is used, it will assume that the Business Project tied to that event should always be run, depending on the condition defined. When no condition is defined for an unrecognized event name, the business project will always be run when an order is submitted.

This table lists the predefined event names:

Event Name	Description
CommChange	Communications Change Order in Service Management
CommActivateService	Communications Activate Service in Service Management
CommChangeService	Communications Change Service in Service Management
CommDisconnectService	Communications Disconnect Service in Service Management
CommResumeService	Communications Resume Service in Service Management
CommSuspendService	Communications Suspend Service in Service Management
CoreCancelService	Core Order Cancel Service in Service Management
CoreMaintBP	Core Order Maintenance
CoreOrderBP	Core New Order
CoreQuoteBP	Core New Quote
CoreRenewService	Core Order Renew Service in Service Management
ESAOrderBP	Core Order with Proposal Management (Engagement Service products)
PACRequest	Port Authorization Code request in Service Management
PortInRequest	Port-In request in Service Management
Telco New Order BPEL	Communications New Order
CommSuspendChangeService	Communications Suspend and Change Service in Service Management

Access the Business Project Events page in Capture Type Workbench: Set Up CRM, Product Related, Order Capture, Capture Type Workbench, Business Project Conditions.

Here you can perform the following tasks:

• Add business project events that are triggered for the Order or Quote.

- Add business project events that are triggered for the Service Management Order.

- Enable or disable delivered business projects.

- Alter the sequence of the business project events so that they are triggered sequentially or in parallel.

- Allow multiple instances of the business project.

  This task is recommended for Order Maintenance but not for Order or Quote.

See and *PeopleSoft CRM 9.1 Automation and Configuration Tools PeopleBook*, "Setting Up Business Projects."

Viewing Order Capture Business Projects

This section discusses how to:

- View the Order Capture business project tree.

- Review phases of the order business project.

- Review phases of the order maintenance business project.

- Review phases of the quote business project.

See Also

PeopleSoft CRM 9.1 Automation and Configuration Tools PeopleBook, "Using Business Projects"

Page Used to View Order Capture Business Projects

Page Name	Definition Name	Navigation	Usage
Business Project Status	RC_BP_STATUS	Orders and Quotes, Search Orders and Quotes, Related Actions Click the View Details button on the Related Objects page.	View the status of all three Order Capture business projects.

Viewing the Order Capture Business Project Tree

Access the Business Project Status page (Orders and Quotes, Search Orders and Quotes, Related Actions. Click the View Details button on the Related Objects page).

Business Project Status page

The Order Capture business project tree provides a visual representation of the business project. The left side of the page displays all phases and their possible targets. Clicking a phase causes the right side of the page to display details such as the phase's task list and the transition rules for each of its targets. The first phase appears at the top of the tree, and each time a transition to a different phase occurs, that new phase is added to the tree. Because business project definitions permit any phase to transition to any other phase, a single phase can be instantiated more than once and, as a result, can appear multiple times in the tree.

Note. Only phases that have been instantiated appear in the tree. The system does not display future phases because it cannot tell which ones will be instantiated.

Status	Enter the overall status of the Order Capture business project. When you first invoke a business project, the status is *In Process*. You can manually change the status to *Cancel* any time before the business project is finished. When the project is finished, the system updates the status to *Complete*.
	You cannot manually set the business project status to *Complete*. The only way to complete a business project is to transition from the last activity either manually or automatically.

Outcome	Appears only for sub-business projects whose outcomes are set manually. Once the sub-business project is complete, set the outcome to either *Success* or *Failed.*
Description	Displays the text from the field specified on the Parent Object page of the business project definition. If the information is not descriptive enough, return to the parent object to modify it.
	The description is the only information provided about the parent object from which this business project was invoked.
🗁 and ⊞	These icons appear at the top level of the tree hierarchy. They indicate phases that have been instantiated. They enable you to expand and collapse the tree.
🗁	Indicates the second level of the tree hierarchy.
●	Indicates that the task or phase is in progress.
✖	Indicates that the task or phase is canceled.
✔	Indicates that the task was successfully completed or that the phase is complete.
	Note. Phases do not distinguish between successful and unsuccessful completion.
■	Indicates that the task has failed.
	Note. This icon does not necessarily mean that the task will end. For example, the Order Maintenance business project automatically checks shipment status every 120 minutes. If no shipment has been made or if the order has not been canceled, the task displays this icon, and the business project repeats the task. The task continues to kick off every two hours (placing this icon in the Tree Viewer each time) until successful. For each instance of no shipment or order cancellation, you see this icon in the tree.

Phase Detail

This region appears when you select a phase from the business project summary region.

Phase	Displays the name of the phase currently selected in the business project tree.
Status	Displays the phase status. Values are: *In Process, Complete,* or *Canceled.* (If you cancel a business project, the phase that was in progress is also canceled.)
	Phase statuses don't distinguish between successful and unsuccessful completion.

Transition Rule	Displays how the system transitioned to the selected phase, or indicates that transition was performed manually. If the phase is not complete, no text appears.
Target Phase	To make a manual transition, select the next phase and save the page. You can do this only if the transition definition specifies a manual transition.
	Manually transitioning out of a phase changes the source phase's status to *Complete,* but it does not affect the status of any of the incomplete tasks in the source phase.

Updating the Tree

Save and Update Tree	Click to save changes to the page and to update the business project tree based on those changes. For example, click this button to complete a manual transition after you select a phase from the Target Phase drop-down list box.

Reviewing Phases of the Order Business Project

Access the Business Project Status page (Orders and Quotes, Search Orders and Quotes, Related Actions. Click the View Details button on the Related Objects page).

Business Project Status page

Order Business Project (CORE_ORDER_BP) Phases

Contract Request

If the PeopleSoft Contracts integration is active, this phase examines the Contract Mapping table for the Customer and Business Unit on the order to determine if a contract number exists. If it does, this phase is marked *Complete.* If no contract number exists for this customer and business unit, a Contract Request message is sent to the PeopleSoft Contracts system, and the phase waits until PeopleSoft CRM receives a response from PeopleSoft Contracts with the contract number. Once the response is received, this phase is marked *Complete.*

If the integration with Transaction Billing Processor (TBP) in PeopleSoft Contracts is not active, this phase is set to *Complete* automatically and the business project moves on to the next phase.

Note. The Workflow Rule RO Contract Request, which is the event performed by the CONTRACT_REQ task, runs the Application Engine program RO_CONTR_EIP.

Installed Product Creation   For order lines that require installed products, this phase creates the installed products with the status as indicated in the Product Definition component. The order may contain products that require an installed product, as indicated by the Installed Product page in the Product Definition component.

In addition, when creating installed products for serialized items, the system creates one installed product for each quantity ordered. For nonserialized items, the system creates a single installed product for the entire quantity ordered on the order line.

Installed products contain values from the order, such as customer information, site, order ID, and quantity ordered.

Note. The Workflow rule RO_Create Inst Prod, which is the event performed by the CREATE_IP task, runs the Application Engine program RO_CREATE_IP.

See and *PeopleSoft CRM 9.1 Product and Item Management PeopleBook*, "Setting Up Products," Defining Products.

Agreement Creation   If the order contains an agreement product, the Agreement Creation Phase creates the new agreement or updates the existing agreement with the products being covered.

Note. The Workflow rule RO_Create Agreement, which is the event performed by the CREATE_AG task, runs the Application Engine program RO_CREATE_AG.

See and *PeopleSoft CRM 9.1 Application Fundamentals PeopleBook*, "Setting Up and Managing Agreements and Warranties."

Publish Order

If the CRM system is set up to fulfill orders by an external system, the Publish Order phase publishes order details. The CRM_SALES_ORDER application message must be active for the phase to perform this task.

If the TBP integration is active and the order contains service or agreement products, this phase publishes the CONTRACT_TXN application message if the message is active.

Note. The Workflow rule RO_EIP Publish, which is the event performed by the PUB_NEW_ORDER task, runs the Application Engine program RO_EIP_PUB.

If your ordering process does not include an integration to a supply chain management system for order fulfillment, remove this phase from the business project to avoid getting errors from the RO_EIP_PUB process. To do so:

1. Make a copy of the business project using the Business Project Definitions Save As page.

   You cannot modify the business project directly if an instance of it is currently in process.

2. Delete the Publish Order phase from the Transitions page on the newly cloned business project. Make sure to update the Source and Target phases to account for the removal of the phase.

   Save the new business project.

3. Replace the current business project with this new business project on the Type Definition - Business Process Conditions Workbench page for the appropriate setID and capture type.

See and Chapter 8, "Integrating with Fulfillment and Billing Systems," page 151.

Order Email Confirmation

This phase uses the Multi-Channel Framework to send an email confirmation to the primary email address of the contact on the order. On completion of this phase, the system creates a *correspondence* entry on the Related Objects page of the order. The confirmation email provides a current snapshot of the order, including order number, status, order line details, order totals, and shipping details.

If no primary email address exists for the order contact, no email confirmation is sent.

Note. The Workflow rule, RO Order Email Confirmation, which is the event performed by the ORDER_EMAIL task, runs the Application Engine program RO_SND_EMAIL.

Shipment Completion   This phase examines the status of the order header for a *Completed* or *Cancelled* status. If the order is found to be complete or canceled, this phase exits with a *Successful* status.

If the order contains service or agreement products, the order line status for these products will be set to *Complete* as no fulfillment process is necessary. If this order contains *only* service or agreement products, the order header status will be set to *Completed* and this phase exits with a *Successful* status.

Should this order contain products requiring fulfillment, this phase will wait until the fulfillment process notifies the business project that all lines are fulfilled. This can happen through the Advanced Shipping Notice, Sales Order Status, or Real-Time Status integration points. Once the business project is notified that all lines are fulfilled, this phase exits with a *Successful* status.

Note. The Workflow rule RO_Check Shipment Completion, which is the event performed by the CHK_SHP_COMPLETE task, runs the Application Engine program RO_SHP_OVR.

Service Order Creation   Installed products created in an earlier phase may need a service order. This phase creates service orders for any installed products that are flagged as Service Order Required on the Product Definition page. The service listed on the Product Definition page is used to create the service orders. This phase is the final phase of the business project, and it does not run until the order is completed or canceled.

Note. The Workflow rule RO_Create Service Order, which is the event performed by the CREATE_SO task, runs the Application Engine program RO_CREATE_SO.

Reviewing Phases of the Order Maintenance Business Project

Access the Business Project Status page (Orders and Quotes, Search Orders and Quotes, Related Actions. Click the View Details button on the Related Objects page).

Order Maintenance Business Project (CORE_ORD_CHG_BP) Phases

Order Email Confirmation   This same phase is used in the Order Capture business project. It provides a current snapshot of the order following order maintenance.

Publish Order Change

If the order is to be fulfilled by an external system, this phase publishes the order maintenance details, if the application message CRM_SALES_ORDER_CHANGE is active.

If the PeopleSoft Contracts integration is active and the order contains service or agreement products, this phase publishes the CONTRACT_TXN application message if the message is active.

Note. The Workflow rule RO EIP Change Pub, which is the event performed by the PUB_CHG_ORDER task, runs the Application Engine program RO_EIP_CHPUB.

If your ordering process does not include an integration to a supply chain management system for order fulfillment, refer to the Publish Order field description in the *Reviewing Phases of the Order Business Project* section for information on removing this phase from the business project.

See and <u>Chapter 8, "Integrating with Fulfillment and Billing Systems,"</u> <u>page 151.</u>

Order Changes Complete

This phase examines the status of the order history (RO_HISTORY) by looking for any change history records with *Open* status. If no open history records are found, this phase exits with a successful completion. If the open history records exist, this phase will wait until it is notified that the changes have been processed.

The Sales Order Change Notice integration point informs the business project that the requested changes were processed and allows this phase to exit with a *Successful* status.

Note. The Workflow rule RO_Check Order Changes, which is the event performed by the CHK_ORDCH_COMPL task, runs the Application Engine program RO_ORDCH_OVR.

Installed Product Creation

The order may contain products that require an installed product, as indicated by the Installed Product page in the Product Definition component. For any order lines that were maintained that require installed products, this phase adds, changes, or deletes the installed products as necessary.

Maintenance actions involved in adding, creating, or deleting installed products include adding new lines to the order, changing the quantity of existing lines on the order, or canceling lines on the order.

In addition, when creating installed products for serialized items, the system creates one installed product for each quantity ordered. For nonserialized items, the system creates a single installed product for the entire quantity ordered on the order line.

Installed products inherit values from the order, such as the customer information, site, order ID, and quantity ordered.

Note. The Workflow rule RO_Create Inst Prod, which is the event performed by the CREATE_IP task, runs the Application Engine program RO_CREATE_IP.

Order Notification   This phase determines the confirmation or rejection of the requested order maintenance by examining the order history (RO_HISTORY). Should notifications be required for the order, as defined in the Order Capture business unit setup, this phase uses correspondence management to create a maintenance confirmation email, and may also create a worklist entry for the customer service representative who entered the most recent order maintenance.

Note. The Workflow rule RO Order Change Notification, which is the event performed by the ORDER_NOTIFY task, runs the Application Engine program RO_ORD_NOTIF.

See and <u>Chapter 8, "Integrating with Fulfillment and Billing Systems," page 151.</u>

Reviewing Phases of the Quote Business Project

Access the Business Project Status page (Orders and Quotes, Search Orders and Quotes, Related Actions. Click the View Details button on the Related Objects page).

Business Project Status page

Quote (CORE_QUOTE_BP) Phases

Order Email Confirmation   This is the same phase that is used in the Order Capture business project. It provides a current snapshot of the quote.

Publish Order   When using an external fulfillment system, this phase publishes the quote details if the application message CRM_QUOTE is active.

Note. The Workflow rule RO_EIP Publish, which is the event performed by the PUB_NEW_ORDER task, runs the Application Engine program RO_EIP_PUB.

If your ordering process does not include an integration to a supply chain management system for order fulfillment, refer to the Publish Order field description in the *Reviewing Phases of the Order Business Project* section for information on removing this phase from the business project.

See and Chapter 8, "Integrating with Fulfillment and Billing Systems," page 151.

See Also

PeopleSoft CRM 9.1 Automation and Configuration Tools PeopleBook, "Using Business Projects,"
Monitoring Business Projects

Viewing the Order Bridge

This section discusses how to view the Order Bridge.

Note. The Order Bridge displays only business project instance details; it does not display the details of
instances of business processes, which are created externally by web services.

See Also

Chapter 3, "Defining Order Capture Business Units," Understanding Business Units, page 17

Page Used to View the Order Bridge

Page Name	Definition Name	Navigation	Usage
Fulfillment	RO_FULFILLMENT	• Orders and Quotes, Add Order, Order, Fulfillment • Orders and Quotes, Search Orders and Quotes, Order, Fulfillment	View detailed order-related events.

Viewing the Order Bridge

Access the Fulfillment page (Orders and Quotes, Add Order, Order, Fulfillment).

Business Project	A business project is a structured, workflow-enabled task list. It is used to coordinate and track the work involved in performing tasks. Usually, only one business project exists per order.
Phase	A phase is a group of tasks. Each phase has to be completed before it will transition to next one. A phase is completed when all tasks are completed or failed.
Task	Basic unit of business projects.

Event   An event is any transaction created in the system. It might occur in different components, and is uniquely identified.

Integration Broker   PeopleSoft Integration Broker facilitates synchronous and asynchronous messaging with other PeopleSoft applications and with third-party systems. PeopleSoft Integration Broker uses a variety of communication protocols, while managing message structure, message content, and transport disparities.

Application Engine Process   An Application Engine process is run for automatic tasks. It might create messages, sub-business projects, and transition to next task.

Sub-business project   Sub-business projects are business projects that are incorporated into phases of other business projects.

Chapter 7

Integrating Product Configuration

This chapter provides overviews of product configuration in PeopleSoft Order Capture applications and product data synchronization for use with Oracle Configurator, and discusses how to:

*   Integrate with product configurator solutions.

*   Create configurator schemas.

*   Execute product configuration sessions at runtime.

Understanding Product Configuration in PeopleSoft Order Capture Applications

A customer or service agent using a PeopleSoft CRM Order Capture application can sign in to Order Capture, create a new order or open an existing one, click the Configurator icon on the Order page (which triggers the product configuration session), make changes to the order, save it, and pass the configuration and order data to the CRM system for storage or further processing. Users can perform these operations from PeopleSoft Order Capture and Order Capture Self Service.

Order Capture applications support two external, non-PeopleSoft configurator solutions:

*   PeopleSoft Advanced Configurator.

*   Oracle Configurator.

Important! Note that these two options are mutually exclusive. You may integrate PeopleSoft CRM Order Capture with either PeopleSoft Advanced Configurator or with Oracle Configurator, but not both at the same time. The same restriction applies to PeopleSoft CRM Order Capture Self-Service.

Note. You should not create an order in either PeopleSoft CRM Order Capture or PeopleSoft CRM Order Capture Self-Service and configure a product that is pointing to an Advanced Configurator schema if both Oracle Configurator and Advanced Configurator are installed.

Integrating with Advanced Configurator or Oracle Configurator enhances:

*   Quote and order processes.

*   Pricing.

*   Installed product configuration and service maintenance.

When integrated with Order Capture applications, Advanced Configurator or Oracle Configurator:

- Ensures that the product selections are compatible and correct.

- (Optionally) provides the list price of the configured product.

    This price may be further surcharged or discounted by the Enterprise Pricer engine.

- Calculates and displays delta pricing, in which users can observe the effects of their selections on pricing.

- Displays the details of a configuration within Order Capture.

- After the configuration session, returns the user to the calling component (such as Order Capture).

Insurance and Financial Products

Agents can use Order Capture to take applications for financial services and process them. If the services are configurable, the configuration interface appears for selections to be made. When the session is complete, the agent returns to the order form and continues. Customers can perform these actions through Order Capture Self Service.

Similarly, insurance products such as coverages and deductibles are more efficiently ordered and maintained when you use the integrated Advanced Configurator or Oracle Configurator.

Service Products

Users can quote and order services through Order Capture. If the services are configurable, the user can access the configuration page from the order or quote in the same way as any other configurable product.

See Also

PeopleSoft Advanced Configurator 9.1 PeopleBook, "Oracle's PeopleSoft CRM Advanced Configurator Preface"

Oracle® Configurator Implementation Guide Release 11i

Oracle® Configurator Developer User's Guide Release 11i

Understanding Product Data Synchronization for Use with Oracle Configurator

This section discusses how to ensure that the product data used by PeopleSoft Order Capture is synchronized with the data used by Oracle Configurator.

Overview

To prepare for using Oracle Configurator with PeopleSoft CRM Order Capture, you must synchronize certain product-related data between the two systems. This may be done using Oracle Warehouse Builder (OWB), a separately licensed product from Oracle. PeopleSoft delivers ETL (Extract, Transform, Load) maps that may be used by OWB to load data from PeopleSoft into Oracle E-Business application staging tables. A separate script provided by Oracle must then be run to move the data from the staging tables to the actual Oracle Configurator data tables.

Assumptions

This documentation assumes that you have installed:

* PeopleSoft CRM Order Capture.

* Oracle Configurator.

* Oracle Warehouse Builder. Details for how to use OWB are included in the documentation provided with that product.

Integrating with Product Configurator Solutions

To define installation options, use the Installation component. Use the CFG_SETUP component interface to load data into the tables for this component.

This section provides overviews of setup for product configuration using Advanced Configurator and Oracle Configurator, and discusses how to:

* Configure settings in Integration Broker for Advanced Configurator integration.

* Configure settings in Integration Broker for Oracle Configurator integration.

* Activate the Product Configurator.

* Specify message node and debugging information.

* Set up configurable products and product packages.

* Synchronize product data with Oracle Warehouse Builder.

Setup for Product Configuration Using Advanced Configurator

After completing the installation and configuration of Advanced Configurator, you need to perform these setup steps to enable product configuration in Order Capture applications:

1. Configure integration settings in Integration Broker for Advanced Configurator and Order Capture applications.

2. Make sure that the Advanced Configurator product is activated on the General Options page.

   This product option is enabled as delivered in the system.

3. Specify node and debug information on the Installation Setup page.

4. Set up configurable products and product packages.

5. Create schemas for use in configuration sessions.

   The integrated system delivers appropriate schemas for use based on the selected configurator solution.

Setup for Product Configuration Using Oracle Configurator

After completing the installation and configuration of Oracle Configurator, you need to perform these setup steps to enable product configuration in Order Capture applications:

1. Configure integration settings in Integration Broker for Oracle Configurator and Order Capture applications.

2. Activate the Oracle Configurator product on the General Options page.

3. Specify node and debug information on the Installation Setup page.

4. Set up configurable products and product packages.

5. Synchronize product data for use with Oracle Configurator.

6. Create schemas for use in configuration sessions.

   The integrated system delivers appropriate schemas for use based on the selected configurator solution.

Important! The Single Sign On between the Oracle Configurator and PeopleSoft is certified only with Oracle Application Server.

Pages Used to Integrate with Product Configurator Solutions

Page Name	Definition Name	Navigation	Usage
General Options	RB_INSTALLATION	Set Up CRM, Install, Installation Options, General Options	Activate the configurator product with which PeopleSoft CRM integrates.
Installation Setup	CFG_SETUP	Set Up CRM, Product Related, Advanced Configurator, Installation, Installation Setup	Specify configuration messaging nodes with CRM applications and debugging options.
Product Definition - Definition	PROD_DEFN	Products CRM, Product Definition, Definition	Set up package or product configuration.

Configuring Settings in Integration Broker for Advanced Configurator Integration

Perform the following steps to configure Integration Broker to support the integration between Advanced Configurator and PeopleSoft CRM:

1. Install PeopleSoft Advanced Configurator Server and deploy the desired solutions on this Configurator Server.

   See PeopleSoft Enterprise Customer Relationship Management 9.1 Installation Guide

2. Navigate to PeopleTools, Integration Broker, Gateways, and click the Search button on the Gateways search page.

   This accesses the Gateway ID: LOCAL page.

3. Enter *http://<< PeopleSoft Web Server >>/PSIGW/PeopleSoftListeningConnector* as the Gateway URL, and click Save.

   Note. Remember that the URL is case-sensitive.

   ---

4. Load the Connector information by clicking the Load button.

   A *Loading Process was successful* message appears.

5. Click OK to continue.

6. A grid appears.

   This grid displays all of the loaded connectors. For each connector ID, a connector class name exists.

   Click Save.

7. Click the Refresh button next to Refresh Integration Gateway.properties file.

   A *Gateway Refresh Process was successful* message appears.

8. Click OK to continue, then Save.

9. Access the Node Definitions page from PeopleTools, Integration Broker, Node Definitions.

10. Open the PSFT_CFG node.

11. On the Connectors tab for the new node name, (where the value of Gateway ID should be LOCAL and Connector ID should be HTTPTARGET), change the "PRIMARYURL" property to be the URL of your Advanced Configurator server. (The URL is case-sensitive.)

    Note. Advanced Configurator integration does not support URLs beginning with *https* for use with Secure Socket Layers (SSL).

    ---

12. Save these settings.

13. Enter PSFT_CFG in the Message Node Name field.

    You may want to set up two nodes: one for internal-facing applications and one for Self Service (external) applications. If so, you can create another node that is identical to the shipped PSFT_CFG node in every respect other than its name and the associated URL.

    Save the change.

Configuring Settings in Integration Broker for Oracle Configurator Integration

Perform the following steps to configure Integration Broker to support the integration between Oracle Configurator and PeopleSoft CRM:

Note. If you have already set up the corresponding steps to work with Advanced Configurator, you will only need to modify one of the settings in order to make it work for Oracle Configurator: proceed directly to step 10 in the following list to specify the proper PRIMARYURL value for Oracle Configurator.

1. Navigate to PeopleTools, Integration Broker, Configuration, Gateways, and click the Search button on the Gateways search page.

   This accesses the Gateway ID: LOCAL page.

2. Enter the Gateway URL as http://<< PeopleSoft Web Server >>/PSIGW/PeopleSoftListeningConnector, and click Save.

   Note. Remember that the URL is case-sensitive.

3. Load the Connector information by clicking the Load button.

   A *Loading Process was successful* message appears.

4. Click OK to continue.

5. A grid appears.

   This grid displays all of the loaded connectors. For each connector ID, a connector class name exists.

   Click Save.

6. Click the Refresh button next to Refresh Integration Gateway.properties file.

   A *Gateway Refresh Process was successful* message appears.

7. Click OK to continue, then Save.

8. Access the Node Definitions page from PeopleTools, Integration Broker, Integration Setup, Node Definitions.

9. Open node PSFT_CFG.

10. On the Connectors tab for the new node name, (where the value of Gateway ID should be LOCAL and Connector ID should be HTTPTARGET), change the "PRIMARYURL" property to be the URL of your Advanced Configurator server. (The URL is case-sensitive.)

    The URL should be in the format <server URL>:<Port>/OA_HTML/COPXML where <server URL> and <Port> are the URL and port number (respectively) of the server.

Note. Advanced Configurator integration does not support URLs beginning with *https* for use with Secure Socket Layers (SSL).

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11. Save these settings.

Activating the Product Configurator

Access the General Options page (Set Up CRM, Install, Installation Options, General Options).

Select the Oracle Configurator check box to activate the Oracle Configurator, or the Advanced Configurator check box to activate Advanced Configurator. The Oracle Configurator check box is not selected when delivered so if you are already working with the Advanced Configurator, you will be able to continue to work without any changes. If both Oracle Configurator and Advanced Configurator are selected, then the Oracle Configurator integration will take precedence and there will be no sample schemas available for Advanced Configurator.

Important! If you wish to use Oracle Configurator, in addition to selecting the Oracle Configurator check box, you should keep the Advanced Configurator check box selected.

Oracle Configurator

This section only applies if the integration to Oracle Configurator is present.

Order Capture Internal	Enter an Application ID. The Application ID used here should be the same as that defined in Oracle Applications for use in integrating with PeopleSoft CRM. This Application ID is used to integrate the Configurator Server with internal-facing CRM applications, such as PeopleSoft Order Capture.
Order Capture External	Enter an Application ID. The Application ID used here should be the same as that defined in Oracle Applications for use in integrating with PeopleSoft CRM. This Application ID is used to integrate the Configurator server with customer-facing CRM applications like Order Capture self-service.

Note. This documentation only discusses the setup required within the PeopleSoft application. To integrate with Oracle Configurator or Advanced Configurator, you must also implement and set up the corresponding Configurator product, including the steps required from that application to link to the PeopleSoft CRM system. For details, refer to the Oracle Configurator or Advanced Configurator integration with PeopleSoft documentation. which is available on My Oracle Support.

For more information about registering applications within Oracle systems, see the *Oracle Applications System Administrator's Guide.*

The *Oracle Configurator Implementation Guide* contains information about the Application ID initialization parameter and the Applications applicability parameter which is used when defining a publication in Oracle's Configurator Developer.

See Also

PeopleSoft CRM 9.1 Application Fundamentals PeopleBook, "Setting Up General Options," Setting Up General Options

PeopleSoft Advanced Configurator 9.1 PeopleBook, "Oracle's PeopleSoft CRM Advanced Configurator Preface"

Specifying Message Node and Debugging Information

Access the Installation Setup page (Set Up CRM, Product Related, Advanced Configurator, Installation, Installation Setup).

Installation Setup page

The Installation Setup page enables you to specify the PeopleSoft Integration Broker Messaging Node for internal CRM applications, such as Order Capture. You also can specify an external node for customer-facing applications such as Order Capture Self Service. Be sure to specify at least one node; otherwise, an error message is generated. Order Capture and Order Capture Self Service use these nodes to call out to the Advanced Configurator server at run time.

Integration Broker Setup

Configurator Server Node	Select *Define External Node Only,Define Internal Node Only,*or *Define Internal/External Nodes,* depending on whether you want to use Advanced Configurator with internal applications, self-service CRM applications, or both. When using both internal and external CRM applications, you can define a separate node for the self-service application so that transactions are stored on a separate, secure server.
	Note. The Internal Node and External Node fields appear or disappear depending on your selection.
Internal Node	Enter a configurator node name. This node is used to integrate the configurator server with internal-facing CRM applications, such as Order Capture.
	Note. Nodes are available from the drop-down list, which prompts against the PSMSGNODEDEFN table.
External Node	Enter a configurator node name. This node is used to integrate the configurator server with customer-facing CRM applications, such as Order Capture Self Service.

Configurator Debug Information

Debug	When you turn debugging on, raw configuration details are displayed in XML format at runtime. Specifically, this means that when you have completed your configuration session, you are presented with two pages prior to returning to the application that invoked the selected configurator application. These two pages contain an XML request and an XML response. The XML request page displays the XML data that was sent to the configurator server to retrieve information about the configuration; the XML response page displays the XML data that was returned by the configurator server. This is a useful tool for debugging your schemas because you can quickly verify that XML configuration details are being returned from the calling application just as you would like them to be. When you turn debugging off (default), you do not see the two XML pages prior to returning to the calling application from your configuration session.

The Configurator Solution Tester also enables this request and response XML to be displayed, as well as providing further debugging options.

Note. Log files are available from the appropriate directory on the configurator server when Configurator Debug is activated. For example, if your Advanced Configurator server is running on Microsoft Windows, the logs are stored in C:\bea\weblogic81\config\CalicoDomain\logs.

Setting Up Configurable Products and Product Packages

Access the Product Definition - Definition page (Products CRM, Product Definition, Definition).

An example of a product definition that uses an Advanced Configurator or Oracle Configurator schema for configuration purposes

Schema Enabled	Select to indicate that the package or product is a configured one using an Advanced Configurator or Oracle Configurator schema.
Schema	If Oracle Configurator is selected as an installation option, you will see the Oracle Configurator schemas in the search results. Similarly if Advanced Configurator is selected as an installation option, then only Advanced Configurator schemas will show up in schema search.
	If both Oracle Configurator and Advanced Configurator are installed, then Oracle Configurator will take precedence and only the Oracle Configurator schemas will show up in the search results.

The Product Definition component supports the creation of multilevel product bundles, which are N-level product offerings, that can be ordered or serviced through the order capture application. The order capture application integrates with Advanced Configurator, which has undergone major update to support the rule-based configuration of these product bundles during the ordering process. Refer to this see reference for more information on the multilevel product bundle functionality, currently delivered for the communications solution.

See and <u>Chapter 21, "Understanding Multilevel Product Bundles," page 431.</u>

Synchronizing Product Data with Oracle Warehouse Builder

To use the Oracle Warehouse Builder (OWB) application to move data from PeopleSoft CRM to Oracle Configurator:

Note. This task does not apply to Advanced Configurator.

1. Open the Oracle Warehouse Builder application.

   Open Design Center in OWB.

2. Import the data maps provided by PeopleSoft CRM.

   Navigate to Design, Import, Warehouse Builder Metadata and search for and open the file named ECRM_PROD_CZ_Fullsync.mdl

3. Create Locations to represent the PeopleSoft CRM, Oracle EBusiness, and OWB databases.

   In the OWB Connection Explorer window, right click on the node labelled Oracle and select New to create a new Oracle database location. Configure each location to point to its respective database.

   Note. A sample file entitled Admin-Location.mdl is provided by PeopleSoft, and this may be imported into OWB for reference. If you wish to use this file instead of creating a new location file, configure the file settings to point to the specific databases that you are working with.

4. Configure each of the three delivered modules (CZ, ECRM, and DEPLOY) to associate them to the correct location.

   In OWB, edit each of the three modules provided by PeopleSoft and associate the correct location to each module. This must be done on both the Meta Data Location tab and the Data Location tab.

   For example, the ECRM module refers to the PeopleSoft CRM application. Associate the Meta Data Location and Data Location for this module with the Location you have created in the previous step that is associated with your PeopleSoft CRM database. Repeat this procedure to associate the CZ module with the Oracle Configurator database and the DEPLOY module with the OWB database.

5. Configure each map to associate each map object with its corresponding location.

   For each of the six maps in the DEPLOY module, right click the map and select Configure. For each table or view listed in the map, choose the location that corresponds to that map object.

   For example, associate an Oracle Configurator table map object to the Oracle location created in a previous step.

   Map object names for the Oracle Configurator application begin with the prefix CZ. Map object names for the PeopleSoft CRM application begin with the prefix ECRM.

6. Synchronize the maps to associate the map objects with their corresponding database objects (tables or views).

   In OWB, edit each map. Each map will have two or more tables or views. For each table or view contained in the map, highlight the object and click the Synchronize icon to associate that object with the corresponding physical table/view from the database. (If necessary, refer to OWB documentation for more details on the Synchronization procedure.)

7. Validate the completed maps.

   In OWB, for each of the six delivered maps, select the map and click on the Validate icon.

8. Deploy each map.

   In OWB, navigate to Tools, Control Center Manager. For each map, right click and select Set Action, Create to choose the desired map action. Then right click each map and select Deploy to create the map. (A result status of "success" should be displayed.)

9. Run each map to move the data from the source database to the target database.

   In OWB Control Center Manager, right click on each map and select Start.*Important*: The map named CZ_ECRM_IMP_SEQUENCE must be run before any of the other maps. (There are no order dependencies for running the remaining five maps.)

At this point, the data from your PeopleSoft CRM system should have been moved successfully to the staging tables in your Oracle EBusiness database.

You must now run a separate SQL script, provided by Oracle, to move the data from the Oracle EBusiness staging tables into the actual tables used by Oracle Configurator. For more details on this procedure, refer to the Oracle Configurator integration with PeopleSoft documentation, which is available on MetaLink.

See Also

Creating Configurator Schemas

This section provides an overview of configurator schemas and discusses how to:

* Create schemas for external solutions.

* Create schemas for internal solutions.

* Establish configuration display and pricing options.

* Specify request details.

Understanding Configurator Schemas

Configuration schemas establish the display, pricing, and configuration details for specific a configuration and what information to retrieve from the configuration models on the configurator server. Three schema setup pages are available for Configurator products: Display, Price, and Request Details.

The Request Details page enables you to specify in detail what the request will look like that goes from Order Capture to the Configurator server and in turn, what details on the configuration will be returned to Order Capture from the Configurator server (all via XML). Finally, it enables you to specify what XSLT style sheet to use when rendering the configuration details to the user in HTML on the line details page of Order Capture.

External Solutions and Internal Solutions

Two types of configurator schemas are available: externally created solutions and internally defined solutions. External and internal solutions can be distinguished like this:

Important! The concept of external and internal solutions applies to Advanced Configurator only. Oracle Configurator accepts only one type of solutions (external).

External Solution	Enables you to direct runtime data from the model to an HTML-based UI that is built specifically for this solution with JSP and external HTML editing tools (such as Macromedia Dreamweaver).
	Note. Templates for Macromedia Dreamweaver are bundled with the Configurator application.
Internal Solution	Enables you to define the user interface from within the PeopleSoft CRM schema setup pages.

Pages Used to Create Schemas

Page Name	Definition Name	Navigation	Usage
Display	CFG_SCHEMA_DISPLAY	Set Up CRM, Product Related, Advanced Configurator, Schemas, Display	Define the Configurator user interface to be displayed at run time.
Price	CFG_SCHEMA_PRICE	Set Up CRM, Product Related, Advanced Configurator, Schemas, Price	Specify options to return the configuration list price, as well as to establish recurring pricing for configured products.
Request Details	CFG_SCHEMA_OUTPUT	Set Up CRM, Product Related, Advanced Configurator, Request Details	Define the configuration details to be sent to and received from the configurator server.

Creating Schemas for External Solutions

Access the Display page (Set Up CRM, Product Related, Advanced Configurator, Schemas, Display).

Display page (for external solution)

The solution type of external solutions is *External Solution.*

Schema ID	The schema ID is a unique identifier for the configuration schema. The schema ID is the identifier that is associated with an item or product so that the system knows how to properly configure the product or package. **Note.** The schema ID should match the solution ID if you are using an external solution.
Description	Enter a description for the schema ID.

Solution Properties

Frame Dimensions	Specify the width and height of the embedded, runtime configuration page in pixels. **Note.** When you save the page, validation logic ensures that the page is at least 800 pixels in width and in height.
Solution Type	Select *External Solution* to select from the existing (externally defined) sets of configurator solutions on the configurator server. This field applies to Advanced Configurator only.
External Solution	When the solution type is *External,* you use a predetermined list of solutions, each of which already has the user interface display set. Click the Lookup button to select an external (predefined) solution from a list of all the current configurator solutions that exist on the configurator server. This field applies to Advanced Configurator only.

Solution	Click to select an external (predefined solution(s)) from a list of all the current Configurator solutions that exist on the Oracle Configurator server.
	This field applies to Oracle Configurator only.
Solution Tester	Select to launch the Configurator Solution Test tool, which displays the user interface for this solution ID.
Model Tester	Select to test model functionality for the underlying model of this solution ID.
	If Oracle Configurator is the selected configurator application, clicking this link takes you to the Oracle Configurator model debugger.

Creating Schemas for Internal Solutions

Access the Display page (Set Up CRM, Product Related, Advanced Configurator, Schemas, Display).

Display page (for internal solution) (I of 2)

Display Options
- ☐ Show Violations   ☑ Show Eliminated   ☐ Show Delta Price

▼ Captions
- Return [Return]   Update [Update]
- Cancel [Cancel]   None [None]

▼ Miscellaneous
- ☑ Validate on Return   ☐ Show Configuration List Price   ☑ Show Application Violations

Display page (for internal solution) (2 of 2)

Note. This page appears when you select a solution type of *Internal Solution.* This page enables you to specify your own solution type instead of choosing one from the default list that is available when you select an external solution.

Schema ID	The schema ID is a unique identifier for the configuration schema.
Description	Enter a unique description for the schema ID.

Solution Properties

Frame Dimensions	Specify the width and height of the runtime configuration page in pixels.

Note. When you save the page, validation logic ensures that the page is at least 800 pixels in width and in height.

Solution Type	Select *Internal Solution,* which enables you to define your own solution without returning to the environment of the PeopleSoft Advanced Configurator.

Note. When you select *Internal Solution,* the page is updated to display additional sections, which are explained subsequently.

Configuration Type	Select *Component* when the solution contains a single model. Select *Compound* if the solution contains multiple models. If you select *Component,* the list displays only the solutions on the server that contain a single component model. Likewise, selecting *Compound* displays a list of the solutions on the server that contain multiple models.

Note. If you select *Component,* all fields on the Display page will be available for updating.

If you select *Compound,* the only modifiable fields will be the Compound ID, Model Version, Page Title, Validation on Return, and Captions fields. You need to have the individual component schemas already defined.

Model ID or **Compound ID**	Select a model ID (or, in the case of a compound model, a compound ID) for the internal solution.
Use Most Current Version	Select to use the most current model. **Note.** When you select this check box, the Model Version options disappear.
Solution Tester	Click to launch the Configurator Solution Test Tool, which launches the model, any database connections, and the actual user interface. Use this tool to verify that the results from the business logic are properly displayed and to check and tune presentation layout (if it is a custom UI) and navigation. This link is keyed by solution ID.
Model Tester	Click to test constraints and conditions that are defined in the model. A test UI is launched, so you can divide testing into two phases: business logic (model constraints and calculations) and presentation (UI, using the Solution Tester). This link is keyed by solution ID.

Display Properties

Page Title	Enter a title for the configuration display.
Restore Policy	You can select a restore policy that selects either the original model version or the most current model version. This option gives you control over whether the user's older, saved configurations are run against the newest model version if the user requests a saved configuration to view or to use as the basis for a new configuration. The problem to consider is whether the new model, which can change substantially through updates, can properly display and process configuration data that is produced by an older model.

Page Information

Tab	You can control the number of tabs that appear on the page. Enter the number of the tab here, and make your selections for the content of the tab in the Control Setup section.
Tab Caption	Define a label for each tab.
Number of Columns	Define the number of column controls that you want to appear in the configuration page for this tab.

Control Setup

Sequence	Determine the sequence of the controls that are displayed on the tabs that you create for the configuration page.

Type   Select *Configuration Attribute,Expression,External Variable,* or *Selection.*

Name   Enter a name for the configuration attribute, expression, external variable, or selection.

Attribute   Define the attribute that appears in the drop-down list or as a radio button selection.

Caption   Enter a descriptive caption that appears on the page.

Control Type   Select to render the control type as either a drop-down list, or radio button.

Field Processing   Select whether this runtime page uses dynamic or deferred processing. The *Dynamic* option causes the page to refresh automatically when the user enters data and presses the Tab key to move out of a field. The *Deferred* option leaves processing until the user clicks the Submit button.

Control Size   Specify the maximum number of characters to allow in the control. This option appears if the control type is Configuration Attribute or External Variable.

Display Options

These options appear only for control type Selection.

Show Violations   Select to display red violations text on the selections.

Show Eliminated   Select to show options that are constrained away by previous selections. If this check box is cleared, invalid selections will not appear at all.

Show Delta Price   If you have pricing information, select this check box to display pricing change in the form of how much has been added to or subtracted from the price. This is also known as the ability to show *plus-minus pricing*.

Captions

Return, Return to Manager,   Specify the text to use on the labels of the action buttons. These buttons
Cancel, Update, and**None**   will be viewable on the configuration page. Return,Cancel,Update, and None are available for component models. Return,Cancel, and Return to Manager are available for compound models.

Miscellaneous

Validate on Return   Select to check the validity of the configuration before returning to the calling CRM application.

Show Configuration List Price   Select to display the list price at the top of the configuration page.

Show Application Violations   Select to show violation messages during product configuration. These violation messages appear at the top of the configuration page in a red text and red button format.

Establishing Configuration Display and Pricing Options

Access the Price page (Set Up CRM, Product Related, Advanced Configurator, Schemas, Price).

Price page (1 of 2)

Price page (2 of 2)

Configuration schemas establish the pricing details for specific configuration and what information to retrieve from the configuration models on the Configurator server.

Price Mode

The Price Mode group box appears when you specify *Configurator* in the List Price Source option. This section applies to Advanced Configurator only.

Mode	Indicates which price mode, Standard or Advanced, is employed to define the pricing schema as shown on the Configuration List Price grid. Clicking the *Advanced* link makes operators and expressions available to further define each control's pricing.
	Click Standard to change the mode from Advanced and remove the operators and expressions. See the following explanation.

Pricing Properties

List Price Source	Select *Configurator* or *Product Definition* to indicate whether to draw pricing data for the controls from the configurator model or from the product definition.
	Selecting *Configurator* displays the Configurator List Price grid, in which you specify the controls to be priced and their definitions. The product definition contains this information already.

Configuration List Price

The configuration list price is a list price. PeopleSoft Enterprise Pricer can act further on this price and may place a surcharge on it or discount it, depending on the setup in the Enterprise Pricer application. However, you can operate on these values using the Operator drop-down described subsequently. In addition, the values that are represented on each of the rows in the grid are summed to yield the total price.

Note. This section applies to Advanced Configurator only. It is available when you have selected *Configurator* in the List Price Source field.

Type	Select *Expression* to identify and define an expression from the configurator model to be used to deliver a list price. Select *Selection* to indicate that an attribute of the specified selection is the source for a list price for that selection.
	Note. When the Type is Expression, Name is the only field available for editing. The Delta Price Only check box remains available for selection.
Name	Type or select a name for the selection or expression from the Name lookup list. Names are supplied by the model.
Attribute	Select the attribute of the specified selection from which to take the list price value.
Operator	Appears when Price Mode is set to Advanced. Use the Operator drop-down list to define an expression to operate on the list price that is passed to it from the left-hand side of the row.

Delta Price Only	Select to return delta price information for the selection or expression. Delta information is a price value that indicates the difference, plus or minus, that the picking of a particular selection had on a price. Delta pricing must be enabled in the model as well.
Recurring Price Source	Select *Product Definition* to indicate that recurring pricing information is to be taken from the product definition. Select *Configurator* to define the source for recurring pricing for the product. The Recurring Price grid appears when you select the *Configurator* option.

Total Price

This section applies to Oracle Configurator only. It is available when you have selected *Configurator* in the List Price Source field. It displays the total price and price type of the configured entry.

Type	Specify the price type for the configured entry.

Recurring Price

Recurring and **Expression**	Select expressions, defined in the configurator model, for:

- Recurring Price: Select an expression that provides a value for a recurring charge to be added to the list price.

- Recurring Frequency: Select an expression that defines which recurring frequency to use when you add the recurring charge order line, for example, MNTHLY.

- Frequency Description: Select text that describes the recurring frequency in words, such as Monthly.

Specifying Request Details

Access the Request Details page (Set Up CRM, Product Related, Advanced Configurator, Schemas, Request Details).

Request Details page (1 of 2)

Request Details page (2 of 2)

You should recognize that the Request Details page is affected by the Configuration Type option on the Display page, but is not affected by Solution Type. The option to include components, connections, and structure in the configuration details is not available for the configuration type of *Component*. However, all options on the Request Details page are available to the user when the configuration type is *Compound*.

Request Details

Request Message	Specify a *Custom XML* or *Default XML* output. Configuration details are in XML, and a default XSLT is provided with Configurator. Select *Custom XML* to access a text entry field where you can define a request.
Define Request	When you select *Custom XML,* the Define Request link appears. Click the link to access a text entry field into which you can enter the XML request.
Render With	Enter *Custom Stylesheet* or *Default Stylesheet* stylesheet to determine how the information that is returned by the request is displayed. When you select the *Custom* option, the Define Stylesheet link appears and you can define your own stylesheet.
	By using a custom stylesheet, you can change the order in which the information is displayed or the amount of information displayed. For example, a custom stylesheet could be used to display expressions first, followed by selection points, and then conflicts. Or you could display just the selection points with selections and not bother to display the actual domain members that are selected or their quantity.
Define Stylesheet	Click to define a custom XSLT stylesheet for this schema ID. The link accesses a page containing a large text entry field into which you can insert a text defining a stylesheet.

Request Properties

This section applies to Advanced Configurator only.

Configuration Details	Select this check box to request configuration details that are provided by Configurator. When you select this box, a Configuration Details group box appears and enables you to make detailed selections. The Configuration Details options determine what is included in part of the default xml request.
Package Components	Select to choose name and attribute options for package components. A Package Components grid appears at the bottom of the page. A package component is one of many products that will eventually make up a package. For example, a computer product may actually consist of several products such as a monitor, keyboard, and mouse, as well as the actual computer.
Product Selector	Select to choose name and attribute options for product selections. A Product Selector grid appears at the bottom of the page. The option replaces the product ID on the order capture line with the product ID that is specified in the chosen selection point.
Purchased Components	Select to choose name and attribute options for purchased components. A Purchased Components grid appears at the bottom of the page. Selecting this option categorizes purchased components for display purposes; no additional processing is performed.

Manufactured Components   Select to choose name and attribute options for manufactured components. A Manufactured Components grid appears at the bottom of the page. As with Purchased Components, selecting Manufactured Components categorizes manufactured components for display purposes; no additional processing is performed.

Routing Operations   Select to choose name and attribute options for routing operations. A Routing Operations grid appears at the bottom of the page. As with Purchased Components, selecting Routing Operations categorizes routing operations for display purposes; no additional processing is performed.

Delta Information   Requests the display of the differences between this configuration and the last submitted configuration. Differences include additions, deletions, and changes to selection points, expressions, and externs.

Compound Violations   Select to return a list of configuration violations for a solution based on a compound model. This check box is displayed only when you select a configuration type of Compound on the Display page.

Configuration Details

This section applies to Advanced Configurator only.

Options in this section of the page determine what information about the configurations that are generated under this schema will be returned to, and stored in, Order Capture. The first three fields—Components, Connections, and Structure—are available only when you select a configuration type of Compound on the Display page.

Components   Select *All Components* or *None.*

Connections   Select *All Connections,Filtered List,* or *None.*

Structure   Select *Include Structure* or *None.*

Selections   Select *All Selections,Filtered List,* or *None.*

Expressions   Advanced Configurator uses Boolean, date, string, and numeric logic as key parts of its configuration capabilities. Select this check box to return values that are calculated by expressions (in the model) during the configuration session.

External Variables   Advanced Configurator can retrieve external data for the configuration session at runtime. Select this check box to return external value details during the order capture configuration session.

Configuration Attributes   Configuration attributes data is normally not essential to the function of the Configurator, and includes data such as a person's name, phone, or email. Select this check box to return configuration attribute data at runtime.

Display Options

This section applies to Advanced Configurator only.

Display Component Violations	Select to return component violation information at runtime.
Display Selection Violations	Select to return selection violation information at runtime.

Package Components

This section applies to Advanced Configurator only.

The Package Components grid appears when you select the Package Component check box in the Request the Following section, which is described subsequently. If the product is a package item, then you can select which of the package components and their attributes to include in the request details.

Executing Product Configuration Sessions At Runtime

This section provides an overview of how to configure products using Advanced Configurator or Oracle Configurator, and discusses how to:

- Configure product details using Advanced Configurator.

- Configure product details using Oracle Configurator.

Understanding How to Configure Products Using Advanced Configurator or Oracle Configurator

You can launch product configuration sessions at runtime from:

- PeopleSoft Order Capture.

- PeopleSoft Order Capture Self Service.

- PeopleSoft Installed Products.

- Product Catalog (Product Details).

The following table identifies the Collaborative Selling entry points from which you can access PeopleSoft Advanced Configurator:

Application/Access Point	Page Name	Navigation
Order Capture (RO_CAPTURE)	Entry Form Order (RO_FORM)	Create Order/Create Quote, Entry Form Add a (configurable) product to the order line, and click the Configure Product button.
Order Capture Self Service (RE_CART)	Shopping Cart (RE_CART)	Add a (configurable) product to the shopping cart, and click the Configurator button.
Product Catalog (RB_CATALOG)	Product Details (RB_PROD_DTL)	Access a product catalog, select a product from the Product Display page, and click the Configurator button.

Users can configure their products and product packages by clicking the Configure Product link within the calling application. When the product is configured, the configuration is saved to the database. This occurs for both simple and compound configurations. When the configuration session is complete, and order information is updated, the system returns the user to the main calling application.

Note. Users may also view configuration details for an existing installed product by navigating to Installed Product and Service, opening an installed product entry that refers to a configured product, and clicking on the View Configuration link.

Configuring Product Details Using Oracle Configurator

When a configurable product is selected on an Order Capture line, the user can configure that product by clicking the Configure Product link on that product line:

Order Line with link to configure a product

After clicking the Configure Product link the user will be shown the configuration options available for that product, and will be able to make the desired configuration selections:

Configuring a product using Oracle Configurator

Depending on the configuration rules for the product, selecting an option on the configuration page may restrict the other available configuration choices:

Product configuration session showing pricing information and cross edit checks

The meanings of the icons displayed near the configuration radio buttons and check boxes are displayed in the legend area of the page. Click the Show Legend link to see the legend information:

Configuration page with expanded legend area

After selecting the desired configuration options and clicking the Finish button, the user will be returned to the order line, and will see the selected configuration products on the order line:

Order entry form showing updated product configuration in the order line

Configuring Product Details Using Advanced Configurator

Advanced Configurator enables you to extract information from individual configurations for additional processing and record-keeping. A common use of configuration details is the populating of the line details of an order or quote. When you set up the schema for the solution, you specify whether you want to extract configuration information and which data you want. Advanced Configurator delivers the data in XML form. Because you also specify an XSLT or stylesheet in the schema, the XML formatted data is rendered in a meaningful form.

The following example illustrates a configuration session that is initiated from within Order Capture. When a configurable product is selected in an order, the user can configure that product by clicking the available Configure Product link on that product line:

Example of an order line with a configurable product: before configuration

Click the Configure Product link to initiate a product configuration session, which shows the configuration options of the product that are available for selection:

Configuring a product using Advanced Configurator (1 of 2)

Configuring a product using Advanced Configurator (2 of 2)

Note. Configuration display pages can vary widely depending upon how they were created.

The process for ordering configured products using Order Capture is similar to the process for ordering standard products with one exception. After you enter the order line on the Order - Entry Form page, you must configure the product by clicking the Configure Product or Reconfigure Product link and selecting the desired options for that configured product on the Configuration page.

Cancel Changes   Click to cancel this configuration session and return to the Order component in Order Capture.

Return to Order   Click to submit this configuration session and return to the Order component in Order Capture.

After selecting the desired configuration options, update the changes and return to the order line. The order line is updated with new product configuration and new pricing:

Example of an order line with a configurable product: after configuration

Configuration details of a product is displayed on the Configuration and Attributes section of the Line Details page:

Example of product configuration

Chapter 8

Integrating with Fulfillment and Billing Systems

This chapter provides an overview of fulfillment integration and discusses how to:

- Activate integration points.

- Create autonumbering for orders and quotes.

- Map line statuses.

- Publish order and quote messages.

- Subscribe to order status messages.

- Subscribe to order and quote acknowledgements.

- Subscribe to advanced shipping notices (ASNs).

- Manage externally originating orders.

- Integrate with billing systems.

Understanding Fulfillment Integration

This section discusses:

- Integration setup.

- Integration points.

- Activation of integration points for use with PeopleSoft SCM.

- Order maintenance integration points.

- Customer Data Hub (CDH) impact on integrations with PeopleSoft Financials and Supply Chain Management (FSCM).

See Also

Chapter 4, "Setting Up PeopleSoft Order Capture," Defining Integrations and Mappings, page 78

Chapter 3, "Defining Order Capture Business Units," page 17

Integration Setup

The primary setup of Order Capture integration occurs in the Order Capture Integration Workbench. The Integration Workbench is designed so that all of your fulfillment and maintenance activity can be configured there. There are also a few fields that must be populated on the Business Unit Definition page.

Integration Points

Order Capture uses integration points to transfer information between itself and an order fulfillment system, such as PeopleSoft Order Management or PeopleSoft Inventory. These integration points enable you to configure your collaborative selling solution to work with any third-party fulfillment system or enterprise application integration (EAI) system.

Note. Delivered integration points are configured for integration with PeopleSoft Supply Chain Management (SCM), which provides corresponding integration points for example, integration points that publish the information for which PeopleSoft CRM listens. Integration with other fulfillment or EAI systems might require the use of the PeopleTools Integration Broker to build the necessary transformation layer on top of the existing integration points that PeopleSoft delivers.

PeopleSoft provides the following integration points to support the order fulfillment process:

Integration Point	Description	Message / Transaction Name	Relationships	Type
Get Autonumber	Requests an ID number (to be used for a new order or quote) from your fulfillment system. This integration point is used only when autonumbering is used for order ID assignment.			Outbound / Synchronous
Get Order Status	Requests current order and order line status from your fulfillment system.	SCM_GET_ORD_ STATUS and SCM_ORD_STAT US	ORDER_STATUS	Outbound / Synchronous

Integration Point	Description	Message / Transaction Name	Relationships	Type
Get Product Availability	Requests product availability information from your fulfillment system. **Note.** The Get Product Availability integration point gives PeopleSoft CRM users on-demand access to product availability information. Users click the Check Availability button on the order or quote Entry Form page to initiate the transaction.	SCM_GET_PROD _AVAIL and SCM_PROD_AVA IL	None	Outbound / Synchronous
Publish Order	Sends new orders to your fulfillment system.	CRM_SALES_OR DER and SALES_CRM_OR DER_LOAD	ORDER_PUBLISH	Outbound / Asynchronous
Publish Order Change	Sends changed orders to your fulfillment system.	CRM_SALES_OR DER_CHANGE and SALES_CRM_OR DER_CHANGE_L OAD	ORDER_PUBLISH _CH	Outbound / Synchronous
Publish Quote	Sends new quotes to your fulfillment system.	CRM_QUOTE and SALES_CRM_QU OTE_LOAD	ORDER_PUBLISH	Outbound / Asynchronous
Receive ASN	Listens for ASNs published by your fulfillment system.	ADVANCED_SHI PPING_NOTICE	None	Inbound / Asynchronous
Receive Order Acknowledgement	Listens for order acknowledgements published by your fulfillment system.	SALES_ORDER_ ACKNOWLEDGE MENT	None	Inbound / Asynchronous

Integration Point	Description	Message / Transaction Name	Relationships	Type
Receive Quote Acknowledgement	Listens for quote acknowledgements published by your fulfillment system.	SALES_QUOTE_ NOTICE	None	Inbound / Asynchronous
Receive Order Change Acknowledgement	Listens for order change acknowledgements published by your fulfillment system.	SALES_ORDER_ CHANGE_NOTIC E	None	Inbound / Asynchronous
Sales Order Status	Listens for order updates published by your fulfillment system.	SALES_ORDER_S TATUS	None	Inbound / Asynchronous

Note. The integration points listed in the preceding table use PeopleTools Integration Broker messages. Application Message Monitor and Send Master (a PeopleTools testing utility) help you track and test the messages and transformations that make up these integration points. The Get Autonumber integration point is an exception in that it uses PeopleTools Business Interlink technology.

Activation of Integration Points for Use with PeopleSoft SCM

If you are using PeopleSoft SCM, you need to:

- Activate the product, customer, and business unit integration points.

  These integration points synchronize the customer, product, and business unit data in the two systems. This synchronization is required when you use PeopleSoft SCM as your fulfillment system.

- Activate PeopleSoft CRM services, service operations and routings for the PSFT_EP node.

- Activate the SCM integration points that support the CRM/SCM fulfillment integration.

  The SCM integration points for Product Availability and Get Order Status are XML links rather than Integration Broker transactions; the activation process for those integration points is therefore different.

Note. If a product uses an inventory item, that item must also be in the CRM (Item Master Table), otherwise the CRM CI Process will fail. Make sure that you sync the item master first before ProductFullSync or ProductSync.

Order Maintenance Integration Points

When an order is captured in PeopleSoft CRM, it is passed to the fulfillment system for processing. Subsequent changes to the order are sent from and received by the fulfillment system by means of appropriate integration points. The integration points support integrations with PeopleSoft SCM and other third-party fulfillment systems. The Get Order Status integration point is used as part of the Order Maintenance process when an order is retrieved for maintenance. This ensures that PeopleSoft only allows edits on orders and order lines that are not yet fulfilled.

Note. Order maintenance messages, such as CRM_SALES_ORDER_CHANGE, always contain RO_HEADER information, and always publish the RO_INTEGRATION, RO_HISTORY, and RO_CHARGE data for the order. The remainder of the CRM_SALES_ORDER_CHANGE data only contains order information that has been added or changed.

Order maintenance activities require customer service representatives (CSRs) to have accurate information about changed orders. The following table explains the four integration points that form the backbone of Order Capture's order maintenance activities:

Integration Point Name	Object Name	Description	Type
PUBLISH ORDER CHANGE	SALES_CRM_ORDER_ CHANGE_LOAD	Notifies PeopleSoft SCM of an order maintenance request. It is a transformation of the CRM_SALES_ORDER_ CHANGE message.	Publish
PUBLISH ORDER CHANGE	CRM_SALES_ORDER_ CHANGE	Notifies non PeopleSoft fulfillment systems of the order maintenance request.	Publish
SALES ORDER CHANGE ACKNOWLEDGEMEN T	SALES_ORDER_CHAN GE_NOTICE	Notifies Order Capture when changes are processed in SCM.	Subscribe
SALES ORDER STATUS	SALES_ORDER STATUS	Notifies Order Capture of the current state of the order in SCM.	Subscribe

Here is a complete list of the SCM integration points to activate for complete fulfillment functionality:

- SALES_CRM_ORDER_LOAD

- SALES_CRM_QUOTE_LOAD

- ADVANCED_SHIPPING_NOTICE

- SALES_ORDER_ACKNOWLEDGEMENT

- SALES_QUOTE_NOTICE

- SALES_CRM_ORDER_CHANGE_LOAD

- SALES_ORDER_CHANGE_NOTICE

- SALES_ORDER_STATUS

Customer Data Hub (CDH) Impact on Integrations with PeopleSoft Financials and Supply Chain Management (FSCM)

Customer merges can happen in the CRM system at any time. This raises the possibility that customer information on a transaction that was originally sent by Order Capture to FSCM via an EIP message is replaced on the CRM transaction due to a merge. This would cause the customer on the original transaction to be lost, because FSCM does not update customers information due to PeopleSoft merges. To ensure that it is always possible to map from the current customer BO_ID in CRM to the original customer BO_ID is SCM, a field that stores the original customer information has been added to the following EIPs:

- Fulfillment EIPs.

  - CRM_SALES_ORDER and SALES_CRM_ORDER_LOAD

  - CRM_QUOTE and SALES_CRM_QUOTE_LOAD

  - CRM_SALES_ORDER_CHANGE and SALES_ CRM_ORDER_CHANGE_LOAD

  - SALES_ORDER_ACKNOWLEDGEMENT

  - SALES_QUOTE_NOTICE

  - SALES_ORDER_CHANGE_NOTICE

  - SALES_ORDER_STATUS

  - SCM_GET_PROD_AVAIL and SCM_PROD_AVAIL

- Billing EIPs.

  - CONTRACT_RESPONSE

  - CONTRACT_REQUEST

  - CONTRACT_TXN

- Proposal Management EIPs.

  - OSA_ESA_PROPOSAL

  - OSA_ PROPOSAL_PRICE

  - OSA_ESA_PROPOSAL_STATUS

The existing mapping tables between CRM and SCM are not changed as part of this feature.

If CDH is installed, this mapping of CRM customers to SCM customers is maintained by the CDH data synchronization process, otherwise the mapping is maintained by the Customer Sync EIP.

Note. If PeopleSoft SCM is your fulfillment system, you must keep customer and product data synchronized in the two systems. The Product Sync EIP manages product data synchronization. If you have CDH installed, the CDH data synchronization process manages customer data synchronization; otherwise the Customer Sync EIP manages customer data synchronization.

See Also

PeopleSoft CRM 9.1 Business Object Management PeopleBook, "Understanding Customer Data Hub Integration"

Activating Integration Points

This section discusses how to activate Integration Broker integration points.

Activating Integration Broker Integration Points

Integration Broker integration points are inactive when delivered. You must activate fulfillment integration points. If you are integrating with PeopleSoft SCM, you must activate the Order Management and Inventory integration points listed in the previous section as well. To activate integration points, activate each of the following elements:

• *PeopleTools Application Messages*:

   You no longer need to activate messages. Messages are created and viewed through PIA. Navigate to PeopleTools, Integration Broker, Integration Setup, Messages to view the messages.

• *Integration Broker Service Operations and Routings:*Service Operations are accessed through PeopleTools, Integration Broker, Integration Setup, Service Operations. Select the Active check box and save the service operation to activate.

   Routings can be either accessed from a tab on the Service Operations page, or directly through PeopleTools, Integration Broker, Integration Setup, Routings.

   Select the Active check box and save to activate a routing.

You need to set the necessary Queues (called Channel in previous releases) to a Run status in order to process integration broker messages. This is accessed through PeopleTools, Integration Broker, Integration Setup, Queues. Fulfillment uses queues CRM_ORDER_STATUS, SALES_ORDER_LOAD, SALES_ORDER_ACKNOWLEDGEMENT and SALES_ORDER_STATUS.

Creating Autonumbering for Orders and Quotes

You can choose either the autonumbering or grid option for your orders and quotes. Autonumbers are controlled by business unit. When you set up autonumbering, you choose the business unit that controls autonumber generation and specify whether autonumbers are generated in the PeopleSoft CRM system or in an external fulfillment system.

Choosing a Business Unit to Control Autonumber Generation

When you define an Order Capture business unit, you map it to an Order Management business unit. You can map multiple Order Capture business units to a single order management business unit. Therefore, to ensure a single source for all numbers that are sent to the order management system, CRM uses the order management business unit to drive autonumbering. For example, if order capture business unit A is mapped to order management business unit B, then when you create an order in business unit A, its number is generated based on the rules for business unit B.

Note. By design, PeopleSoft SCM cannot use CRM as its autonumbering master for orders and quotes, only for customers, contacts, and products.

Establishing an External ID Source for Orders and Quotes

You can generate order and quote numbers in the CRM system or in your order fulfillment system. If the CRM system does not have an external autonumbering master for orders and quotes, then order numbers are created locally. In this case, be sure that your autonumbering rules include a CRM-specific prefix so that numbers are unique across both your CRM and order fulfillment system. If your fulfillment system is the autonumbering master, the Get Autonumber integration point fetches order numbers from the external system as orders are created. Because order numbers in both systems come from a common autonumbering definition, this configuration ensures that order numbers are unique across both systems.

Note. The external ID for an order or a quote in Order Capture is used to identify the order or quote in your fulfillment system. The `RO_INTEGRATION` table stores the external ID data. This table stores the external ID by source code (for example, SCM), thus allowing for multiple external IDs per CRM order. In addition to storing the external order number, we use this table to store a mapping of sequence numbers on header and line notes.

Notes no longer have sequence numbers in CRM, but SCM requires a sequence number to identify a note, which is why we map the information in `RO_INTEGRATION`. In our previous release, `EXTERNAL_ID` was simply a field on the `RO_HEADER` table.

Mapping Line Statuses

When you send an order to your fulfillment system, that system is responsible for tracking status of the order; CRM integration points bring status information into CRM to display the status of an order.

Understanding Line Status Mappings

Because different systems can use different order statuses, you must map your fulfillment system's statuses to Order Capture statuses. The Get Order Status integration point reads the map and converts your fulfillment system's statuses into Order Capture statuses. For line statuses, *Partial* means that if a part of one line is backordered and part is shipped, it is in fact, partially shipped.

Header status mappings may differ slightly. PeopleSoft delivers a map for all the Order Management statuses. If you integrate with a different fulfillment system, modify the map accordingly.

Note. Order Capture maps the status values to node, PSFT_EP, and if you are using a different node name for your Order Management system, you need to enter status mappings against your node name. The node name is read-only once the data is saved.

The following table shows the delivered line status mappings for SCM statuses:

SCM Status	CRM Status	CRM Partial Status
X (Canceled)	1 (Canceled)	1 (Canceled)
Q (Requisitioned)	1000 (Open)	1100 (Partially Open)
U (Purchased)	1000 (Open)	1100 (Partially Open)
B (Backordered)	2000 (Backordered)	2100 (Partially Backordered)
P (Pending)	3000 (Pending)	3100 (Partially Pending)
H (On Hold)	3500 (Fulfillment Hold) **Note.** Holds that originate in PeopleSoft CRM have the status, 9000. This is to differentiate a hold that originated in PeopleSoft CRM (status 9000), from a hold that originated in SCM.	3500 (Fulfillment Hold)
O (In Fulfillment)	4000 (In Fulfillment)	4100 (Partially In Fulfillment)
K (Picked)	5000 (Picked)	5100 (Partially Picked)
C (Closed)	6000 (Shipped)	6100 (Partially Shipped)
S (Shipped)	6000 (Shipped)	6100 (Partially Shipped)

Publishing Order and Quote Messages

When you capture an order or quote in Order Capture, the system instantiates the `CORE_ORDER_BP` or `CORE_QUOTE_BP` business project. Both of these business projects include a task that runs the `RO_EIP_PUB` Application Engine process, which triggers the Publish Order and Publish Quote integration points. These integration points, which consist of the `CRM_SALES_ORDER` and `CRM_SALES_QUOTE` messages, make order and quote information available to your fulfillment system. PeopleSoft delivers the Integration Broker transformation rules required to integrate with SCM; integration with other systems requires additional transformation rules.

If you use Order Management, integration points receive the transformed messages and enter order data into Order Management staging tables. The orders have a source code of *CRM* and start with a status of *Open.*

Note. The instantiation of these business projects is determined by the setID. Some setIDs may run business processes.

Running Batch Jobs in Order Management (PeopleSoft SCM customers only)

Subsequent to order submission, the Order Management fulfillment process starts with the `OMEC` process followed by the `OM_BACKGRND` process; `OM_EC` - OM Electronic Commerce is the process that moves data from the staging tables to the order production tables. `OM_BACKGRND` - Order Completion process completes the defaulting of values onto the order. .In Order Management, you can set up exclusions to choose which subprocesses within `OMBACK` to run or skip based on the order source code. Because orders that originate in CRM already have tax, freight, and pricing information, you should configure `OMBACK` to skip tax, freight, and pricing calculations for orders with the PeopleSoft CRM source code.

There are fours specific SCM processes you need to run to complete the pre-fulfillment tasks. These consist of:

1. Order Validation Process (OM_EC)

2. Order Completion Process (OMBACK)

3. Outbound Acknowledgement (OMEC Outbound)

4. Data Exchange (Data Publish)

Batch Job	Description	Steps
1: Order Validation (OMEC)	When you submit an order, the transaction is loaded into order staging tables. We first need to run the Electronic Commerce SQR process (OMEC), which: • Parses data such as customer information and product information to ensure that it is valid. • Sets system defaults and status flags for subsequent processes. • Loads data into the production order tables (order staging data found to have errors is not loaded into the production tables until the errors have been resolved).	To run the OMEC batch job: 1. In the FDM menu, navigate to Order Management, Electronic Commerce, Validate Staged Orders/RFQs. 2. Add a new Run Control ID. 3. In the Processing Options group box, select the Inbound Order/RFQ Activity check box. **Note.** This will make 2 extra fields (Transaction Type and Integration Point Control ID) available in the Processing Parameters group box. 4. Leave the remaining 3 "queue" check boxes in Processing Options unchecked. 5. In the Processing Parameters group box, choose the specific (Order Management) Business Unit you specified on the Order Capture Definition. 6. Choose the Transaction Type of *PO* (Inbound Sales Order). 7. Leave the Integration Point Control ID field blank. 8. Click the RUN button. This tells the system to process our orders that are sitting in the staging tables. You will automatically be taken to the Process Scheduler Request. 9. Choose the Server Name, *PSNT,* and then click *OK.* You will return to the Electronic Commerce page. 10. Click the Process Monitor link and examine the Run Status of your job. You are looking to see the status change from *Posting* to *Success.* Click Refresh repeatedly to see if the status has changed.

Batch Job	Description	Steps

2. Order Completion (OMBACK)	The Order Completion process (OMBACK):
	
	• Applies the agreement, sold to customer, ship to customer, bill to customer, and order group defaults to the order header and order lines.
	
	• Performs order pricing, and does tax defaulting and tax calculations.
	
	• Processes estimated shipments and external freight calculations.
		To run the OMBACK batch job:
		
		1. Navigate to Order Management, Quotes and Orders, Process Orders, Order Completion
		
		2. Add a new Run Control ID.
		
		3. Select the same Business Unit you chose previously in the From Business Unit field.
		
		   Note. The To Business Unit field automatically populates with the same Business Unit.
		
		4. In the From Order Number and To Order Number fields, select the entire range of your pending orders, and then click *Run.*
		
		   Note. You will automatically be taken to the Process Scheduler Request.
		
		5. As with the previous job, choose the Server Name,*PSNT,* then click *OK..*
		
		6. Click the Process Monitor link, and examine the Run Status of your job. You are looking to see the status change from *Posting* to *Success.* Click Refresh repeatedly to see if the status has changed.
		
		   Note. You can now view orders in the PeopleSoft SCM system.

Batch Job	Description	Steps
3. Outbound Acknowledgement (OMEC Outbound)	The Outbound Publish process (OMEC Outbound) puts entries in the order acknowledgement queue, which are subsequently used to publish order acknowledgements to PeopleSoft CRM.	To run the OMEC batch job: 1. In the FDM menu, navigate to Order Management, Electronic Commerce, Validate Staged Orders/RFQs. 2. Select the Run Control ID you created when you ran OMEC. 3. 3. Uncheck the Inbound Order/RFQ Activity check box, and check the Acknowledgement Queue. 4. Click Run, and you will go to the Process Scheduler Request. 5. Select the *PSNT*Server Name, and click *OK*. 6. Click the Process Monitor link on the Electronic Commerce page. 7. Examine the Run Status of your job. You are looking to see the status change from *Posting* to *Success*. Click Refresh repeatedly to see if the status has changed.

Batch Job	Description	Steps
4. Data Exchange (Data Publish)	The Data Exchange job is used to publish the Sales Order Acknowledgement message to PeopleSoft CRM, using the information from the order acknowledgement queue.	To run the Data Publish job: 1. In the FDM menu, navigate to Data Exchanges, Publish Outbound Message. 2. Select your existing Run Control ID. 3. On the Publish Outbound Message screen, there are a variety of check boxes. Select the Sales Order Acknowledgement check box. The Sales Order Acknowledgement will change to a link. Click on this link. 4. On the Order Acknowledgement Message Selection Criteria page, first choose your Business Unit and then select *CRM* as the Source Code. Leave everything else blank. **Note.** In the Outbound Messages Selected group box, *Order Acknowledgement Queue* is pre-selected. 5. Click *OK.* This takes you back to the Publish Outbound Message page. Click *Run.* 6. Enter *PSNT* as the Server Name, and click *OK.* Then click on the Process Monitor link. If the orders are *In Process,* this means that you have run the entire cycle of SCM batch jobs successfully.

Note. If you navigate to Order Management, Quotes and Orders, Create/Update Order, and choose your business unit, you can search for any order and see that a specific order is *In Process.*

Understanding the Transformation Process

PeopleSoft delivers transformation rules that you can use when sending information to Order Management. The Application Engine program that performs the transformation has three stages:

1. It evaluates products and packages that were ordered and transforms order lines as follows:

   a. Service products are not sent at all, but other products are sent exactly as defined in the order line.

   b. Product packages are sent as packages, as there is a 1 to 1 mapping of information with Order Management here. However, lightly configured packages are broken into multiple order lines and packages contained in other packages are broken into multiple order lines. Each product included in the package within a package is given its own order line. For example, if Package 1 consists of product A and Package 2, while Package 2 consists of products B and C, then an order line for Package 1 is broken into three order lines: one each for products A, B, and C.

   > **Note.** If you use PeopleSoft SCM and you set pricing at the package level (rather than the component level), no pricing details are sent; each component is sent with a price of zero. Therefore, if you are a SCM customer, pricing for dynamic packages needs to be at the component level.

2. It performs an XSL transformation to structure the integration point data for Order Management.

3. It adds SCM customer information (for example, bill to and ship to addresses) to the order data by looking at the tables (RB_INT_CUSTOMER and RB_INT_CUST_ADS) that map PeopleSoft CRM customer data to SCM customer data. This mapping is maintained by the Customer Sync integration point.

> **Note.** If you use PeopleSoft SCM as your fulfillment system, you must keep customer and product data synchronized in the two systems. The Customer Sync and Product Sync integration points manage this synchronization.

Understanding the Message Content

This section describes certain parts of the order and quote messages published by CRM. For more details about the messages, refer to the integration point catalog and the message definitions. Order and quote messages published by PeopleSoft CRM include:

- *EXTERNAL_ID field from the Integration table RO_INTEGRATION:* This is the ID that maps to the order or quote number in the fulfillment system.

- *Order Management business unit:* This is the business unit that is associated with the Order Capture business unit (on the Order Capture Business Unit Definition page).

- *An order source code of "CRM":* If Order Management is your fulfillment system, this code affects certain processes. For example, Order Management allows CRM orders to be price protected.

- *Order line numbers:* Order Capture expects the fulfillment system to carry the line numbers through the entire fulfillment process. For example, if an order has five lines and lines two, four, and five are sent to Order Management, then the order in Order Management has three order lines numbered 2, 4, and 5. This enables order line tracking even when different order lines are sent to different fulfillment systems.

- *Pricing:* This includes order-level discounts, shipping, and tax information.

- *A price protection setting:* This prevents Order Management from altering price information.

- *Order level discount information.*

- *Giveaway information:* The ORDER_LINE_TAG field ties a giveaway to a specific order line.

- *Credit card information:* PeopleSoft stores encrypted credit card data, which is what the message sends.

• *Quote messages:* Quotes include additional information specific to quotes, such as the quote due date and expiration date.

Subscribing to Order Status Messages

In PeopleSoft SCM, the Data Exchanges > Publish Outbound Message utility enables you to publish a snapshot of the order as it exists in the SCM system. The Sales Order/Quote Status option enables you to publish orders by business unit, source code (for example, CRM), customer, order type, order number range, order date range, and order change date range. Also, you can choose to publish orders for specific order status values.

Order Capture subscribes to these SALES_ORDER_STATUS messages to provide a method for synchronizing changes made to the order in SCM, so that the order reflects the same information. For example, if an order is maintained in SCM, and a new order line is added, the SALES_ORDER_STATUS message delivers that order and its new line to Order Capture.

Also, as part of the SALES_ORDER_STATUS processing, the current order status is updated, just as the Get Order Status integration point provides.

Getting On-Demand Status Updates

The Get Order Status integration point provides on-demand status updates. Users invoke the update by clicking the Refresh button on the Order Tracking page.

The Get Order Status integration point updates:

• The status for individual order lines.

• The scheduled shipping date and the scheduled arrival dates.

The integration point also updates the RO_LINE_HIST table, which stores a history of line statuses. You can query this history, but it does not appear on any Order Capture pages.

Subscribing to Order and Quote Acknowledgements

In PeopleSoft SCM, the Batch Publish job publishes regular acknowledgments (the SALES_ORDER_ACKNOWLEDGEMENT and SALES_QUOTE_NOTICE messages) and change acknowledgements (the SALES_ORDER_CHANGE_NOTICE message) for orders that come from electronic commerce channels—that is, for orders that are entered into the SCM staging tables.

Note. Change acknowledgements are not published for orders that originate within PeopleSoft Order Management.

In CRM, the Receive Order Acknowledgement and Receive Quote Acknowledgement integration points subscribe to SCM messages, while the Receive Order Change Acknowledgement integration point subscribes to the change acknowledgement message. When PeopleSoft CRM receives a change acknowledgement, the order status and change history are updated, while rejected order changes are rolled back. When Order Capture receives a simple order acknowledgement, it updates the order header status to In Process, and it sets the order line statuses to the line status map that you established in the Integration Workbench. When an SCM order line status is set to Open, and this is the status that the acknowledgement message sends, Order Capture maps this to a status of In Fulfillment.

Change History was created with a status of *Open* when order changes were initially submitted. When the change acknowledgement is processed, changes that were accepted by the Fulfillment system are marked Confirmed, and changes that are not accepted are marked Rejected. When a requested change is rejected, the original values on the order are restored back to their values prior to the change. For example, if a quantity on an order line was increased from 1 to 2, and that change is rejected because the order line had shipped, the quantity is restored to 1 following the processing of the change acknowledgement.

Change Acknowledgement updates order statuses just as the Get Order Status integration point does, providing a current snapshot of the order status at the time the Change Acknowledgement was published. Order statuses are set based on the status mapping that you establish. The Change Acknowledgement also creates order notifications based upon the setup for the Order Capture business unit.

Notifications may be specified to go to the customer, the CSR, both, or none, based on the acceptance of the changes that were requested. In addition, when notifications are specified for the CSR, the notification is sent based on the CSR's preferred notification setting as found in the Worker component, which can be email, worklist, or both. Notifications to the customer are sent to the email address of the contact listed on the order, or for a consumer order, the consumer's email address. If there is no email specified for the contact or consumer, notifications cannot be sent to the customer. Email notifications show the changes requested, along with the acceptance status of Confirmed or Rejected, and display the order following the Change Acknowledgement processing. A CSR's Worklist notification is a link to the order in the Order Capture Worklist.

Subscribing to ASNs

PeopleSoft Inventory publishes ASNs that provide the number of items that have shipped for a specific order line. These messages do not contain status information about items that have not shipped.

The Receive ASN integration point subscribes to the ASN message.

When PeopleSoft CRM receives an ASN, it updates statuses using the following logic:

1. The shipped quantity from the ASN is added to any previously recorded quantity shipped.

2. If the total shipped quantity is greater than or equal to the quantity ordered, the line and all items in the line have a status of Shipped.

3. If the total shipped quantity is less than the quantity ordered, the system assumes that the items with the highest status were shipped and adjusts statuses accordingly.

Since status numbers increase as an item moves through the fulfillment process, the unshipped item with the highest status is considered the most likely item to have been shipped.

For example, consider the following status update history for an order line consisting of ten items:

Time	Message	Status From Message	Status Displayed in the Status By Quantity Section of the Order
10:00 am	Acknowledgement	10 In Fulfillment	10 In Fulfillment
1:00 pm	ASN	5 Shipped	5 Shipped 5 In Fulfillment
2:00 pm	Order status	10 Partially Shipped	10 Partially Shipped
5:00 pm	ASN	3 Shipped	3 Shipped 7 Partially Shipped
8:00 pm	ASN	2 Shipped	5 Shipped 5 Partially Shipped
10:00 pm	ASN	10 Shipped	10 Shipped

At 10:00 am, the order was submitted. An order acknowledgment message caused the system to set the status of all ten items to *In Fulfillment.*

At 1:00 pm, an ASN message indicated that five items had been shipped. Status changes for these five items and the remaining five items keep the status *In Fulfillment.*

At 2:00 pm, the order status message provided one status for all ten items of that order line, which will be displayed in the Line Details section and the Status By Quantity section of the order in the CRM system.

At 5:00 pm, an ASN message indicated that three more items were shipped. The system updates the Status By Quantity section after the receipt of this ASN message: three items with the status of *Shipped* and seven items with the status of *Partially Shipped.* Note that the update only reflects the change in item shipment gathered in this particular ASN message. Access the Package Tracking section of the order to view the total number of items that have been shipped successfully.

At 8:00 pm, an ASN message indicated that two items have shipped. The order will now show us that five have shipped and five are *Partially Shipped* (even though its true that all have shipped, we don't know that unless we look at the package tracking section).

At 10:00 pm, we receive an Order Status message, and it tells us that ten items have shipped, and now the CRM system shows ten *Shipped.*

Note. If an ASN is received for any component of a static package, the entire package is considered to have been shipped. When all products on the order have been marked either *Shipped,Complete,* or *Cancelled,* the order header status is set to *Complete.*

Managing Externally Originating Orders

As mentioned previously, Order Capture uses the SALES_ORDER_STATUS integration point to receive order updates from any order-generating systems it integrates with.

If the SALES_ORDER_STATUS xml message contains orders that did not originate in Order Capture (for example, EDI orders), then order header information is created in CRM so that these orders are viewable through the Order Capture search screen. When users attempt to drill down for further details, they are transferred to the uniform resource locator (URL) that is specified for the order's source code on the source code workbench for the associated setID. If no URL is specified, then only the order header information is available for review.

On the source code workbench, you can specify different target pages to be used when accessing orders internally using the Orders and Quotes component, or externally via the self service interface. The system marks orders that originate outside of CRM, and if you provide the system with the URL for the external system, then a user who attempts to view such an order in the CRM order tracking pages is automatically redirected to the system where the order originated.

See Also

Chapter 4, "Setting Up PeopleSoft Order Capture," Defining Source Codes, page 60

Integrating with Billing Systems

Order Capture integrates with PeopleSoft Transaction Billing Processor to allow access to standard billing functionality such as revenue recognition structure, billing cycle details, and account rules for applying revenue to the General Ledger. It also allows the enterprise to apply surcharges and taxation to billable amounts and process them through user-defined invoice formats.

Setting Up an Integration to PeopleSoft Transaction Billing Processor

This integration is detailed in a chapter in the *PeopleSoft CRM 9.1 Services Foundation PeopleBook.*

See Also

PeopleSoft CRM 9.1 Services Foundation PeopleBook, "Transaction Billing Processor Integration"

Using the Transaction Billing Processor Integration from Order Capture

If a contract doesn't exist, the Order Capture transaction triggers a new contract to be created in the Billing system. Pricing is done by the Enterprise Pricer through Order Capture. For agreement products, pricing is also done by the Service Pricing routines. Order Capture sends the total for each order line containing a service or agreement product to the Transaction Billing Processor.

Note. Transaction Billing Processor integrates with Order Capture and enables you to create invoices and recognize revenue for *service* products. However, Order Capture sends standard products through the integration to Order Management. Order Capture uses Proposal Management to send engagement-type services.

 Order Capture only sends transactions that are ready to be billed to the Transaction Billing Processor. Order Capture also sends tax parameters, which are used to retrieve the sales and use tax or VAT rate.

See Also

PeopleSoft Contracts 9.1 PeopleBook

Chapter 9

Working with PeopleSoft Service Management

This chapter provides overviews of PeopleSoft Service Management, bulk service management, service management business projects and integration points, and discusses how to:

* Manage services.

* Work with bulk service management.

Understanding Service Management

Service management functionality provides the interface for the customer service representative (CSR) as well as the self-service user to initiate changes such as the addition, replacement, or removal of features to an existing service. It also provides the interface to perform changes at the service level, such as disconnect service, suspend, and resume service.

Service management is used for managing subscriptions. Service management enables users to cancel, change, suspend, or resume a subscription that they previously established with the enterprise.

Service management flows the submitted orders through to the appropriate operations support system applications for provisioning and activation using product actions and product-specific business processes.

Product actions determine what actions are allowable for specific services and service features. Product service feature relationships provide valid features that can be added to an existing service.

When a customer initially orders a service, the service and service features are created in a multi-tier hierarchy in the Installed Products component. Service management is the component that is used to change those features associated with an installed service.

After service is established, several transactions and business processes are required to manage that service.

Attributes are prompted for Change Features however attributes are not required for Disconnect,Suspend and Resume Service actions.

The Maintain Service component supports service actions based on the industry. These actions are implemented through business projects or BPEL processes depending on the industry. The setup to determine the implementation is in the Capture Type Workbench. The Maintain Service component uses the following service actions for the communications industry implemented through BPEL processes:

- Change (change the attributes, change phone number, or features of a service)

  Note. Physical products should not be ordered by means of the Change action. Physical products may need to go through fulfillment process, which is not built into the Change business process. A physical product such as a handset should be added to the order with the default action New Order. Relate the new handset to the existing Installed Service. In this way the installed product for the new handset will be created under the existing service.

- Change End Date

- Suspend/Resume Service

- Change Resume Date

- PAC (Port Authorization Code) Request

- Port-In Request

- Activate

- Remove

- New Order

- Suspend/Change

- Disconnect Service

- Suspend Service

- Resume Service

- Cancel Service

- Renew Service

See the *Understanding Service Management Business Projects and Integration Points* section for a list of business projects that are used in service management orders.

See Also

CDH Smart Search and Customer Merge

If CDH integration is activated, the search page for service management orders (of all types) displays an option to use the Smart Search feature. The user will also be able to use Smart Search from Quick Create pages. If potential matches are found, they appear on the Potential Duplicates page region with a match score that shows the likelihood of the match being a duplicate. The user can then select two or more potential duplicates and submit them for merge evaluation from the BO Search pages.

Merge routines are used to handle customer merges for service management transactions.

See Also

PeopleSoft CRM 9.1 Business Object Management PeopleBook, "Understanding Customer Data Hub Integration"

Understanding Bulk Service Management

Bulk Service Management enables you to capture large numbers of service management orders for a set of installed services. It is achieved by placing one template order and then applying the changes on a set of selected installed services.

Service Management functionality is composed of the following elements:

• Bulk Service Management order capture – the online component used for capturing information from the customer.

• Offline process for generating child orders.

• Offline process for submitting child orders.

Bulk service management orders follow these rules:

• You can select only one customer per order.

• You can perform only one action per order.

• For the Change action, you can modify only services of one type.

• Only one installed product, therefore only one service, can be modified per one child modification order.

Bulk Service Management Process Flow

This diagram illustrates the bulk service management process flow, which includes selecting a customer or account, an action, installed services on which the action is performed, submitting the service request and tracking request status:
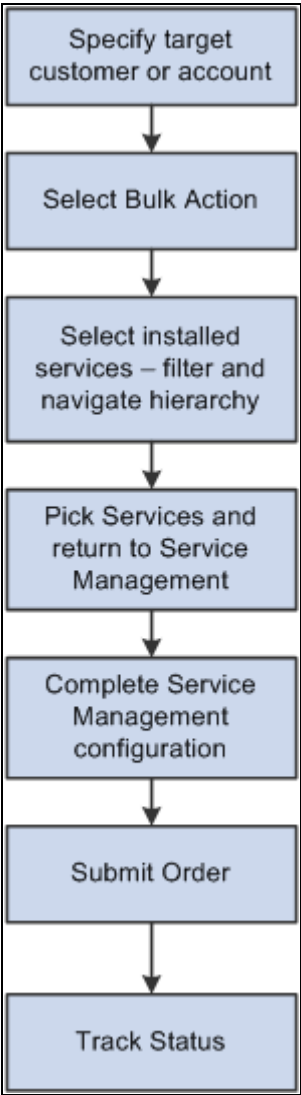
Bulk service management process flow of creating multiple child service management orders for a set of selected installed services

Actions

Bulk service order management actions allow you to update service status, change features or attributes of services, as well as change the contact or account information of services.

This table lists the actions available in Bulk Service management:

Action	*Description*
Disconnect	Status change
Suspend	Status change
Resume	Status change

Action	*Description*
Renew	Status change
Cancel	Status change
Change	Enables you to modify service attributes or change service features, including adding or removing features. By removing features, the status of selected installed service is set to *Disconnected.*
Change Account	Enables you to change the associated account from one to another for selected installed services. As delivered, this action is supported in the communications and energy industries.
Change Contact	Enables you to change the associated customer contact from one to another for selected installed services. As delivered, this action is supported in the communications and energy industries.

Note. Both Change Account and Change Contact actions utilize business projects, not BPEL, to process the request. For any bulk service management order that is created for either action, that single order is used to process the update for all the services linked to the request; no child orders are generated for each associated installed service for processing purposes.

As delivered, these two actions are available as bulk actions for the COM01 setID.

Understanding Service Management Business Projects and Integration Points

This section provides information on:

• Service management business projects.

• Service management integration points.

See and <u>Chapter 10, "Using Order Capture and Service Management in the Communications Industry," page 203.</u>

Service Management Business Projects

Business projects are used to perform service actions (for example, resume or suspend service) that are requested in service management orders. The table lists some of the business projects that are delivered for service management:

Business Project	Description
TELCO_CHGSVC - Change Service	This business project is instantiated if the selected service action is *Change.* First, new installed products are created for new features that are added (installed product status = Pending Auto-Activation) to the installed product as well as for features that are going to be removed (installed product status = Pending Disconnection). All of these installed products are associated with the parent installed product. Then, the process publishes a change service message to the billing system. After receiving a confirmation from the billing system regarding the change of service, the statuses of the children installed product are updated accordingly (activated or disconnected), together with the header status and line status of the corresponding service management order, which are updated to *Complete.*
TELCO_SUSPEND - Suspend Order BP	This business project is instantiated if the selected service action is *Suspend.* First, it updates the status of the parent installed product to *Pending Suspension,* then it publishes a suspend service message to the billing system. After receiving a confirmation from the billing system regarding the suspension of service, the status of the parent installed product is then updated to *Suspended,* together with the header status and line status of the corresponding service management order, which are updated to *Complete.*
TELCO_RESUME - Resume Order BP	This business project is instantiated if the selected service action is *Resume.* First, it updates the status of the parent installed product to *Pending Resume,* then it publishes a resume service message to the billing system. After receiving a confirmation from the billing system regarding the resumption of service, the status of the parent installed product is then updated to *Resume,* together with the header status and line status of the corresponding service management order, which are updated to *Complete.*
TELCO_DISCONN - Disconnect Order BP	This business project is instantiated if the selected service action is *Disconnect.* First, it updates the status of the parent installed product to *Pending Disconnection.* Then, it sends a message to the billing system to get the account information. Next, it checks if the installed product is a service or a feature, and see if it has a phone number as an attribute. If yes, the phone number is put in the aging process based on setup. After receiving a confirmation from the billing system regarding the service disconnection, the status of the parent installed product is then updated to *Disconnected,* together with the header status and line status of the corresponding service management order, which are updated to *Complete.*

Business Project	*Description*
SM_CANCEL_SVC - Service Mgmt Cancel Service	This business project is instantiated if the selected service action is *Cancel.* **Note.** The Cancel Service BP is also used to Change End Date of a Temporary Service or to Change the Resume Date for a Service that has a pending Resume scheduled.
SM_ORDER_BP - Service Management Order BP	This business project is instantiated when a service management order is submitted. It publishes to corresponding external systems and sends a correspondence letter to the contact of the order.
SM_RENEW_SVC - Service Mgmt Renew Service	This business project is instantiated if the selected service action is *Renew.*
BULK_CHG_CNT - Bulk Change of Contact	This business project is instantiated if the selected service action is *Change Contact.* It first checks if contact is a member of the account for the selected installed product. If contact is not a member, then contact is made the member of the account and this information is published to the external billing system. The contact information is updated on the selected installed product and also on the children and grand children of the selected installed product. The update, however, does not apply to installed products with the status of *Pending Disconnection,Disconnected* or *Uninstalled.*
BULK_CHG_ACCT - Bulk Change of Account	This business project is instantiated if the selected service action is *Change Account.* It first checks if contact is a member of the selected "To Account". If contact is not a member, then contact is made the member of the "To Account" and this information is published to the external billing system. The account information is updated on the selected installed product and also on the children and grand children of the selected installed product. The update, however, does not apply to installed products with the status of *Pending Disconnection,Disconnected* or *Uninstalled.*

Note. To enable the use of business projects, make sure that they are referenced for the needed capture types (for example, the *SM* type for service management) by setID using the Capture Type Workbench.

See Also

Chapter 4, "Setting Up PeopleSoft Order Capture," Defining Business Process Conditions, page 70

Service Management Integration Points

Business projects publish messages to external systems regarding updates that are made to installed products in the Service Management component. This section lists the integration points that are delivered for service management:

• Adding service.

• Changing service.

• Suspending service.

• Resuming service.

• Disconnecting service.

• Renewing service.

Important! Refer to the Interactive Services Repository application in My Oracle Support for more information about these integration points, including brief description, product family, product owner, business process association, data rules and setup rules.

Add Service

When a CSR or customer places an order for a new service, the add service message gets published to the billing system through the TELCO_NEW_ORDER business project (phase: Telco Add Services).

• Integration Point Name: RBT_NEWSRVC_MSG.Version_1 (Notification)

• Service Name: RBT_ADDSRVCFT_MSG

• Integration Set Name: ADD SERVICE

Change Service

When a CSR or self-service user changes (that is, adds, removes, or replaces) service features of a service in the CRM system, the corresponding change service message gets published to the billing system through the TELCO_CHGSVC business project (phase: Change Services). The Change Service integration set consists of two messages, one for adding service features and the other for removing service features.

• Integration Point Name: RBT_ADDSRVCFT_MSG.V1 (One Way)

• Service Name: RBT_ADDSRVCFT_MSG

• Integration Set Name: CHANGE SERVICE

• Integration Point Name: RBT_REMOVESRVCFT_MSG.V1 (One Way)

• Service Name: RBT_REMOVESRVCFT_MSG

• Integration Set Name: CHANGE SERVICE

This integration point cannot be used to exchange one service for another, such as wireless for wireline.

Suspend Service

Only CSR are able to suspend services. When a CSR suspends a service in the CRM system, the suspend service message gets published to the billing system through the TELCO_SUSPEND business project (phase: Telco Suspend Service).

• Integration Point Name: RBT_SUSPENDSRVC_MSG.V1 (Notification)

• Service Name: RBT_SUSPENDSRVC_MSG

• Integration Set Name: SUSPEND SERVICE

Resume Service

Only CSRs are able to reinstate services. When a CSR resumes a service in the CRM system, the resume service message gets published to the billing system through the TELCO_RESUME business project (phase: Telco Resume Service).

• Integration Point Name: RBT_RESUMESRVC_MSG.V1

• Integration Set Name: Service Management Order

• Service Name: RBT_RESUMESRVC_MSG

Disconnect Service

The customer needs to contact a CSR to terminate services. When a disconnect service request is submitted in the CRM system, the disconnect service message gets published to the billing system through the TELCO_DISCONN business project (phase: DisSvc Disconnect Services).

• Integration Point Name: RBT_REMOVESRVC_MSG.V1 (One Way)

• Integration Set Name: DISCONNECT SERVICE

• Service Name: RBT_REMOVESRVC_MSG

Note. For service management-related integration points, a separate inbound asynchronous message (Message Name: RBT_IPSTATUS_MSG; Queue Name: RBT_NEWACT_CHNL) is needed and that is used to update the status of service records within the CRM system after status change.

Renew Service

The customer needs to contact a CSR to renew services. When a renew service request is submitted in the CRM system, the generic service management order message gets published and subsequently transformed into the contract transaction message through the SM_ORDER_BP business project. In addition, the SM_RENEW_SVC business project runs to perform the updates to the corresponding installed service and installed agreements.

• Integration Point Name: CRM_SERV_MGT_ORDER.VERSION_1

• Integration Set Name: Service Management Order

• Service Name: CRM_SERV_MGT_ORDER

Managing Services

This section discusses how to:

- Create service requests.

- Select installed services.

- Collect attributes.

- Configure packages.

Note. The Service Management component is a modified version of the Order component that is used for managing service requests. Refer to the *Managing Orders and Quotes* chapter for the description of common fields and functionality that are used in both components. This section is intended to provide information that is specific to the Service Management component and not applicable to the Order component in the standard ordering process.

See Also

Pages Used to Manage Services

Page Name	*Definition Name*	*Navigation*	*Usage*
Manage Service - Entry Form	RO_FORM	• Service Management, Maintain Service, Manage Service - Entry Form • Service Management, Start Service, Manage Service - Entry Form • Service Management, Transfer Service, Manage Service - Entry Form • Service Management, Stop Service, Manage Service - Entry Form • Service Management, View Service Management Order, Manage Service - Entry Form	Manage customer service requests. You can change, suspend, resume, or disconnect services.

Page Name	Definition Name	Navigation	Usage
Manage Services - Select Installed Services	RO_INSSVC_TREE	Click the Add Installed Product button on the Manage Service - Entry Form page.	Select installed services for the service management order.
Attributes for <product name>	RO_ATTR_RUN_SEC	Click the Collect Attributes link on the Manage Service - Entry Form page.	Modify the attributes of the selected installed services.
Configure Package - Manage Services	RO_MODIFY_SERV	Click the Configure Package link on the Manage Service - Entry Form page.	Configure the package of the selected installed services.

Creating Service Requests

Access the Manage Service - Entry Form page (Service Management, Maintain Service).

Manage Service - Entry Form page (1 of 4)

Line	Line Action	Reason	Product Description	Options	List Price	Unit Price	Recurring Price	Recurring Frequency	Start Date	
	Remove ▾	▾	200 Anytime Minutes		0.00	10.00	21.00		08/28/2009	
	Add		300 Anytime Minutes		11.00	11.00	31.00	Monthly		
	Add		500 Mobile to Mobile Minutes		15.00	15.00	3.00	Monthly		
			3G Voice Services		0.00	0.00				
			Caller ID		0.00	0.00				
			Voice Mail		0.00	0.00				
13	Change ▾	▾	Wireless Service	▦ Collect Attributes 🛒 Reconfigure Package	0.00	0.00	30.00	Monthly		🗑

Line Summary

Products | Availability

Product Entry

[Add Installed Product]   Show Add Products ▷

Shipping Summary

Customer Softgear Inc.   🔍   **Contact** Ted Pepper ▾

Address 4435 Pinehurst Rd New York, N ▾ 📇

Advanced Options

Manage Service - Entry Form page (2 of 4)

Manage Service - Entry Form page (3 of 4)

Manage Service - Entry Form page (4 of 4)

See and <u>Chapter 13, "Managing Orders and Quotes," Creating Orders or Quotes, page 285.</u>

183

Line Summary

Line Action   Select an action to perform on the selected installed service.

Available line actions vary depending the setup of the product definition that is associated with the installed service, as well as the current status of the installed service so that no conflicting actions are displayed as valid actions. For example, if the installed service is currently in the suspended status, *Suspend* line action will not be available for selection even if it is enabled in setup because the action simply does not apply.

To enable actions for installed services of a product definition, select them on the Actions page of the product definition.

Reason   Select a reason for the selected line action. Each line action can be associated with zero or multiple reasons depending on the setup.

For example, the *Suspend* action is associated with these reasons: *Lost or Stolen,On Vacation,* and *Other Reason.*

Options   Displays relevant links based on the selected installed service, line action or reason, in an attempt to collect more information about associated selection. Some available options are:

Collect Lost/Stolen Details or *View Lost/Stolen Details:* Click to access the Enter Handset Details page to fill in information about the lost or stolen handset. This link appears when the *Lost or Stolen* reason is selected for the *Disconnect* or *Suspend* line action.

Collect Attributes: Click to access the Attributes for <product name> page and configure attributes for the product. This link appears when the selected line action is *Change.*

Configure Package or *Reconfigure Package:* Click to access the configuration session and change product configuration. This link appears when the selected line action is *Change.*

List Price and **Unit Price**   Displays the list one-time price and net one-time price of the corresponding installed service as specified from the installed product record.

For new product features or new products that are added to the service management orders, these prices come from a matching price list or the Product Price component because installed product records for them do not exist.

In most case, list and unit prices are not modifiable. An exception to this case is the system allows the unit price of a product to be editable if the corresponding line action is *New Order.*

Recurring Price and **Recurring Frequency**	Displays the net recurring price and frequency information of the installed service from its installed product record. The information is available, for example, after you have updated a product configuration in a change request.
	For new product features or new products that are added through service management orders, the recurring price comes from the price list or the Product Price component.
	Note. Manual price adjustments are not supported in service management.
Start Date and **End Date**	Displays the start and end dates of the installed service if the values are specified in the corresponding Installed Product record. These values appear in the Line Summary section when the selected line action is *Disconnect,Suspend,Renew,* or *Resume.*
	These values are displayed on the Manage Service - Line Details page if they are specified for the installed service on each order line.
Add Installed Product	Click to access the Manage Services - Select Installed Services page to select installed services on which services are performed.
Show Add Products	Click to enter new products to be purchased in the service management order. Upon submission, a separate, standard order is created to handle the ordering process for the selected product.
	This link appears after an installed service is selected for the order.

More Information on Suspension or Resumption of Services

Depending on the product definition, the system performs these actions to carry out the eventual resumption of suspended service:

• If the product definition indicates *Change Service Status* on a specified date, the suspended service status is automatically changed in the CRM system on that date and no further notification is sent to or expected from the external systems.

• If the product definition indicates *Wait for External System Notification,* the suspended service status is updated only after receiving the confirmation from the external system that the product is resumed.

• If the product definition indicates *Create Disconnect/Resume Order,* a new resume service order is automatically created and submitted by the CRM system to perform product resumption in CRM and other systems. The date that the resume order is created and submitted is calculated based on service resumption date and resume action lead time for the product.

For temporarily suspended services, choosing the *Change Resume Date* line action (if enabled in the product definition) allows for the modification of the scheduled resume date in the Start Date field that appears. Service management business projects *(Service Mgmt Cancel Service* and *Service Management Order BP)* will be executed to update the CRM system and notify the external systems if necessary.

Selecting Installed Services

Access the Manage Services - Select Installed Services page (click the Add Installed Product button on the Manage Service - Entry Form page).

Manage Services - Select Installed Services page

Note. In bulk service management orders, you select the action to perform *prior to* choosing the installed services.

Filter Installed Services List

Service, Account Name, and **Site Name**	Filter the list of installed services using these criteria. If the action is *Change,* you must select a Service.
View By	Select to define how the list is displayed.
Advanced Search	Click to display additional search filters: Activation Date and Contact Name.

Installed Service Tree

Services planned for modification are selected on the installed service hierarchy tree. You can select a whole sub-tree by selecting the check box next to a higher-level tree element.

On the hierarchy tree all services that have been added to the Selected Services grid will be grayed out.

Selected Services

>>	Click the right arrow button to copy the current selection to the Selected Service grid, which will hold the final list of recipient services.
<<	Select installed services on the target list and click the left arrow button to remove these services from the selected services list.
Clear All/Check All	Click this link to clear all the selections, or select all the services to be transferred to the bulk order.

Collecting Attributes

Access the Attributes for <service product name> page (click the Collect Attributes link on the Manage Service - Entry Form page).

Attributes for Wireless Service

Attributes

No valid Attributes found.

Cancel   Save   < Back   Next >

Attributes for <service product name> page

Once the service is defined and recipient installed services are selected, it is possible to configure attributes. You can define attribute values for all service features, package service features that constitute the modified service in Product Catalogue and have attributes defined.

These options are available for attributes that can be changed:

• *Change All:* Modify the attribute regardless of the current value.

• *Change Specified Values:* Modify the attribute only if the original value matches the criteria.

• *No Changes:* Do not make any changes to the attribute. This is the default value.

Configuring Packages

Access the Configure Package - Manage Services page (click the Configure Package link on the Manage Service - Entry Form page).

Configure Package - Manage Services page

This page lists the service features (established in the product definition of the selected installed service) that are available to the installed service.

Select

Select, for this change request, the features that you want to include in the product configuration. Features of the existing configuration are selected by default.

Note. For existing features that are required as part of the package (as specified in the product package definition), this field is selected by default and is unavailable for edits.

Existing Feature	Indicates (in green check mark) features that are currently selected in the product configuration prior to the change request. If this is the first time you configure the product, no existing features are selected.
	To remove a feature from the existing configuration, clear the corresponding Select field. If an existing feature is not selected, it means that it will be removed from the configuration when the change request is completed.
One-Time ChargeRecurring Charge and **Recurring Frequency**	Displays the list prices (both one-time and recurring) and recurring frequency of service features from the matching price list.
Finish	Click to save the product configuration and return to the Manage Service - Entry Form page.

Working with Bulk Service Management

This section provides an overview of bulk service management and discusses how to:

- Configure bulk service management.

- Set attributes for bulk service management.

- Create bulk service management orders.

- Select installed services.

- Collect attributes.

- Configure packages.

Understanding Bulk Service Management

Bulk Service Management is similar to the user experience utilized by Bulk Order Capture. The Installed Product Tree is used to navigate the billing account, organizational, or service hierarchy to select the services to be changed. Access the Installed Product Tree from Set Up CRM, Product Related, Installed Product, Set Up Tree and use the *BULKSMTREE* tree. Based on filters provided from service management, the Installed Product Tree selects services that are applicable for the requested change. The Service Management component supports the details of the service management action definition, and configuration. Once the service change is configured and specified, service management creates child orders for each target service. Each child order is validated by Holds processing and status is available at the bulk as well as at the child level.

Pages Used to Work With Bulk Service Management

Page Name	Definition Name	Navigation	Usage
Bulk Service Management Configuration	RO_BLK_CFG	Set Up CRM, Product Related, Order Capture, Bulk Service Management , Bulk Service Management Configuration	Specify actions that are available for managing bulk services for the setID. For actions that are only available to installed services with a certain status, specify the status along with the action as well. Define actions that change a service's status. Define actions that can be performed only on installed products with a specific status.
Attributes - Order Capture	RB_OBJ_ATTR_GRP	Set Up CRM, Common Definitions, Attributes, Object Type Attributes Select the *Order Capture* object type.	Select attributes that can be changed on bulk service management orders.
Manage Bulk Services - Entry Form	RO_FORM	Service Management, Bulk Maintain Services, Manage Bulk Services - Entry Form	Manage bulk service orders.
Manage Bulk Services - Select Installed Services	RO_INSSVC_TREE	Click the Select Installed Services button on the Manage Bulk Services - Entry Form page after selecting a bulk action.	Select installed services for the bulk service management order.
Attributes for <service product>	RO_ATTR_RUN_SEC	Click the Collect Attributes link on the Manage Bulk Services - Entry Form page.	Modify the attributes of the selected installed services.
Configure Package - Bulk Service Management	RO_MODIFY_SERV	Click the Configure Package link on the Manage Bulk Services - Entry Form page.	Configure the package of the selected installed service for the bulk order.

Configuring Bulk Service Management

Access the Bulk Service Management Configuration page (Set Up CRM, Product Related, Order Capture, Bulk Service Management, Bulk Service Management Configuration).

Bulk Service Management Configuration page

Line Actions that Change Service Status

Bulk service management configuration is setID based. Actions that are selected in this section become available as bulk actions for bulk service management orders that are created for associated business units. These actions appear as values of the Bulk Action field on the Manage Bulk Services page.

Line actions that only change the service status, as opposed to a reconfiguration or change of the service, will allow you to select different services from the Bulk Service Management installed service selection tree. For example, if you have DSL service, wireless service and landline phone service on your account, and you wish to disconnect all of these services, you may do this from a single bulk order by choosing the Disconnect action, and selecting these services from the installed service tree. Actions that only act upon a service's status will let you select different types of services on the bulk order. If you wanted to perform a Change action, however, since that does not act upon the service's status, you would be required to select all of the same type of services for the bulk order. The installed service selection tree would require that a service (such as Wireless Service) be selected before the tree is displayed.

Line Actions with Status Requirements

Actions specified here with their status requirements cause Bulk Service Management to filter the installed services shown in the selection tree to only those services with the selected Installed Product Status values. For example, you may want to ensure that a service's status is *Active* before you allow that service to be *Suspended.*

Setting Attributes for Bulk Service Management

Access the Attributes - Order Capture page (Set Up CRM, Common Definitions, Attributes, Object Type Attributes. Select the *Order Capture* object type).

Attributes - Order Capture page

| Allow Change | Select to allow change to specific attributes. If the attribute is not selected, it is not available for change. |

See Also

PeopleSoft CRM 9.1 Product and Item Management PeopleBook, "Setting Up Products"

PeopleSoft CRM 9.1 Automation and Configuration Tools PeopleBook, "Configuring Attributes," Setting Up Attributes

Creating Bulk Service Management Orders

Access the Manage Bulk Services - Entry Form page (Service Management, Bulk Maintain Services, Manage Bulk Services - Entry Form).

Manage Bulk Services - Entry Form page (1 of 2)

Manage Bulk Services - Entry Form page (2 of 2)

Customer and **Contact**	Select a sold to company and a contact for the bulk service management order. The selected company and contact are used to refine the list of installed services that appears after the bulk action is selected.
	The specified contact is the person that places the bulk order. Note that this contact will not be copied over to child orders when the Generate Orders button is clicked. On child orders, the contact from the corresponding installed service is used.
Bulk Action	Once the customer and the contact are identified, select an action that will be applied to all services later on selected in this order. The list of available actions is populated from the Line Actions that Change Service Status section on Bulk Service Management Configuration page for the corresponding setID.
Clear and Reselect Action	Click to delete the previously selected action (as well as installed services if selected) and choose another action. This link appears after a bulk action is selected for the first time.

To Contact	Specify the name of the new contact in which selected installed services will be updated.
	Note. This field will only be visible when using the bulk action of *Change Contact.*
From Account	Specify the account number for the services that you wish to have changed by the order. When selecting installed services for the order, only installed services belonging to this account will be displayed.
	Note. This field will only be visible when using the bulk action of *Change Account.*
To Account	The selected installed services of the order will be updated with this account number.
	Note. This field will only be visible when using the bulk action of *Change Account.*

Line Summary

Line Action	View all the actions selected by package configuration.
Options	Click Collect Attributes (if available) to access the Attributes page and configure attributes for the product.
	Click Reconfigure Package (if available) to access the Configuration page and change product configuration.
List Price, Unit Price, and Recurring Price	Bulk Service Management pricing is a sum of all child order pricing and will rely completely on their pricing summaries. The total will not be automatically recalculated on modifying child orders.
Add Installed Product	Click to access the Manage Bulk Services - Select Installed Services page to view and select from a list of available installed services on which the selected action can be performed.

Installed Products

This section displays the installed services to which the selected bulk action applies.

Note. This section is visible if the selected bulk action is either *Change Contact* or *Change Account.*

Child Orders

Each installed service is listed in the Child Orders section.

Note. Child orders do not apply to *Change Account* and *Change Contact* actions.

Installed Product ID	Click to view the installed product information. An installed product ID is created for each child order.
Service	The service that is being modified.
Order ID	IDs appear once the orders are generated for these services. If no changes are necessary for the service, an order is not generated, and *Not Applicable* appears in the Order ID column.
Status	If an order cannot be generated due to an error, the Order ID will not be displayed. Instead a link to a Note with error details will be displayed.
Refresh Child Order List	Click this link to update the Child Orders section with the Order ID.
Modify Selection	Click to return to the Manage Bulk Services - Select Installed Services page to reselect installed services for the order.
Submit ALL	Click to generate and submits child orders in one step.

Note. For orders with change account and change contact actions, clicking this button submits the *parent* orders (child orders do not apply) and initiates the corresponding business project (BULK_CHG_CNT or BULK_CHG_ACCT) that processes the request. For the change account action, if the new designated account is not associated with the current contact, that contact is then added as a member of the account in the process. The same is true for the change contact action, the new contact will be added to the current account if they're not already related.

The business project submits the child suborders for the selected installed services. All successfully submitted suborders will have business projects attached to them. For suborders that fail the hold validation, no business project will be created and their status will be set to *On Hold* and the appropriate hold will be attached to the order.

Generate Orders	After selecting and reviewing the target list of services, create the child orders. Click Generate Orders to launch a business project that will loop through the list of services and will attempt to create a modification order for each. You can still make changes to individual child orders before submission.

Modification to packages featuring *No Downgrade* will be validated during the child order generation process.

The system will try to apply changes specified on the bulk order onto each suborder by adding appropriate order lines:

- If it is a status change, the system will create a service line for the main service with Line Action set to the value specified on the bulk parent order. It is not necessary to test whether the operation is applicable to this particular service as you will only be able to select those services that are compliant with this operation and are of a appropriate status. For example, you can resume only Suspended services that have a Resume operation defined for them.

- If the action is Modify Service Features, Add/Remove Service Features, or Modify Attributes, the system will try to apply the changes as if you were selecting these operations on the regular Service Management order.

When applying the changes the system will perform the following validations:

- Package maximum and minimum components constraints

- No downgrade

If any of the validations fails, the order is not generated.

Selecting Installed Services

Access the Manage Bulk Services - Select Installed Services page (click the Select Installed Services button on the Manage Bulk Services - Entry Form page after selecting a bulk action).

Manage Bulk Services - Select Installed Services page

Note. For *change* actions, the installed service hierarchy is not populated when entering the page. Other action codes that perform a status change, such as *Renew* and *Suspend* do populate the service hierarchy upon entry to the page.

Click Search to present all installed services that belong to the selected customer and contact.

Filter Installed Services List

Service, Account Name, and **Site Name**	Filter the list of installed services using these criteria. If the action is *Change,* you must select a Service.
View By	Select to define how the list is displayed.
Advanced Search	Click to display additional search filters: Activation Date and Contact Name.

Installed Service Tree

Services planned for modification are selected on the installed service hierarchy tree. You can select a whole sub-tree by selecting the check box next to a higher-level tree element.

On the hierarchy tree all services that have been added to the Selected Services grid will be grayed out.

Selected Services

>>	Click the right arrow button to copy the current selection to the Selected Service grid, which will hold the final list of recipient services.
<<	Select installed services on the target list and click the left arrow button to remove these services from the selected services list.
Clear All/Check All	Click this link to clear all the selections, or select all the services to be transferred to the bulk order.

Collecting Attributes

Access the Attributes for <service product> page (click the Collect Attributes link on the Manage Bulk Services - Entry Form page).

Attributes for <service product> page

Fields that appear on the Attributes page can vary from one product to another, depending on the attribute setup. For example, you may set up the system to show the attribute fields such as *Anytime Minutes* or *Call Waiting* for cell phone plans but not for home appliances.

Once the service is defined and recipient installed services are selected, it is possible to configure attributes. You can define attribute values for all service features, package service features that constitute the modified service in Product Catalogue and have attributes defined. Attributes that are defined as non-modifiable on Bulk Service Management cannot be changed.

These options are available for attributes that can be changed:

* *Change All:* Modify the attribute regardless of the current value.

* *Change Specified Values:* Modify the attribute only if the original value matches the criteria.

* *No Changes:* Do not make any changes to the attribute. This is the default value.

Note. You cannot set values for attributes that are restricted from modification on bulk service management orders.

See Also

PeopleSoft CRM 9.1 Automation and Configuration Tools PeopleBook, "Configuring Attributes,"
Understanding Attributes

Configuring Packages

Access the Configure Package - Bulk Service Management page (click the Configure Package link on the
Manage Bulk Services - Entry Form page).

Configure Package - Bulk Service Management page (1 of 2)

Configure Package - Bulk Service Management page (2 of 2)

Action	Select an action for each of the service features. Values are:
	Do Not Change ensures that no changes are performed on the package.
	Apply Changes enables you to specify a target configuration for a package. If the package has *No Downgrade* list specified, the system will not prevent you from selecting the target package configuration. The child orders generation process responsibility will validate the changes and will not create orders violating this rule. For example, if you select *200 Anytime Minutes* from the Any Time Minutes section, select *Apply Changes* as the action for this section prior to saving the new configuration.
One Time Charge and **Recurring Charge**	Displays the list non-recurring price and recurring price of the corresponding service feature as specified in a matching price list or the Product Price component for the bulk service management order.
Recurring Frequency	Displays the recurring frequency of the product definition that is specified in the Price List component
Add	Select to add the feature to every installed service that does not have one.
Remove	Select to remove the feature from every installed service that has one.
Finish	Click to save the configuration and return to the main entry form.

Chapter 10

Using Order Capture and Service Management in the Communications Industry

This chapter provides overviews of order capture and service management in the communications industry, 3G wireless services and SIM management, mobile number portability, and lost and stolen handsets. It discusses how to:

- Set up product definitions for 3G wireless services.

- Manage 3G wireless services and SIM.

- Set up mobile number portability.

- Manage mobile number portability.

- Manage lost and stolen handsets.

- Manage prepaid services.

Understanding Order Capture and Service Management in the Communications Industry

This section discusses:

- 3G wireless services and SIM management.

- Mobile number portability.

- Phone number status update.

- Lost and stolen handset management.

- Prepaid service management.

- Split billing.

- Trial period functionality.

3G Wireless Services and SIM Management

PeopleSoft CRM provides the framework for supporting 3G wireless service and SIM card management. The framework enables you to:

- Model and order 3G service packages that consist of services, USIM (universal subscriber identity module, which is referred to as *SIM* on GSM networks), and handset products. Also, you can define product relationships among services, USIM, and handsets.

- Order new handsets to replace lost or stolen handsets.

- Use phone number management to support 3G wireless services such as voice, data and fax. This includes the ability to:

  See and *PeopleSoft Number Management 9.1 PeopleBook*, "Oracle's PeopleSoft CRM Number Management Preface."

  - Support selection of reserved numbers while ordering.

  - Capture and track external port-in numbers.

- Order pre-provisioned wireless services where the USIM and the MSISDN(s) are linked prior to sale.

- Order post-provisioned wireless services where the USIM and the MSISDN(s) are linked after sale.

- Support business processes required to sell and support 3G wireless services, including:

  - Ability to search customers by phone number on the 360 Degree View, as well as the Account and Installed Products components.

  - Ability to capture IMEI numbers for handsets already owned by customers.

  - Ability to swap handsets.

- Support bulk orders 3G wireless services.

- Support future dated orders for 3G services.

Mobile Number Portability

To support mobile number portability, PeopleSoft CRM enables you to:

- Create orders and quotes with port-in phone numbers.

- Prevent duplicate port-in requests.

- Cancel orders with port-in requests.

- Capture data for order lines with port-in requests for both US and EMEA regions.

- Provide temporary phone numbers for order lines with port-in requests.

Phone Number Status Update

When a customer places an order for a phone plan and a phone number is assigned to the order through number management, the status of the phone number is changed to *Reserved* and the number will not be available for future assignment as long as the status remains the same. Should the order get cancelled later in the process, the associated phone number needs to be released so that it can be reused and does not become another reserved yet unused number in the inventory.

To recycle unused phone numbers that emerge due to order cancellation, PeopleSoft CRM provides an application engine (AE) program that converts the status of all reserved phone numbers, which are associated with cancelled orders, quotes, and bulk orders, to *Available.* The process name is RBT_NMRSV_AE and it can be located under People Tools, Process Scheduler, Processes. Like any other AE programs, customers can determine how often this process should run to clean up reserved yet unused phone numbers based on their business needs.

Refer to the *Submitting and Scheduling Process Requests* chapter of the *PeopleTools 8.52: PeopleSoft Process Scheduler PeopleBook* for more information on how to schedule process requests.

Lost and Stolen Handset Management

To support lost and stolen handset management, PeopleSoft CRM enables you to:

• Handle customer reports of lost or stolen handsets and capture lost and stolen handset information.

• Suspend or disconnect services for lost or stolen handsets.

• Process replacement handset orders with the same service or with a change to service plans.

• Associate existing services with customer owned handsets.

• Cross sell or up sell new handsets while processing lost or stolen handset reports.

• Reactivate suspended services if lost handsets are found.

See and Chapter 9, "Working with PeopleSoft Service Management," page 171.

Prepaid Service Management

To support the ordering and management of prepaid 3G Services, PeopleSoft CRM enables you to:

• Model and order prepaid 3G service packages that consist of services, USIM and handset products.

  Also, you can define the relationship between services, USIM and handsets. A prepaid 3G service package is almost identical to any standard 3G service package, the only difference is that the account that is created for the customer is a prepaid account rather than a postpaid account.

• Set up recurring payments or one time payments.

  The prepaid account payment options can be changed at any time after the service is ordered by accessing the customer's account.

• Change features of prepaid services. In addition, a prepaid service can be suspended, resumed and disconnected.

- Find customer's accounts or services by phone number on the 360 Degree View, as well as the Account and Installed Products components.

- Provide support for unknown prepaid consumers.

- Convert prepaid services to standard 3G services.

See and Appendix A, "Order Capture Delivered Business Processes and Web Services," page 723. and *PeopleSoft Bill Presentment and Account Management 9.1 PeopleBook*, "Understanding Prepaid Accounts for Communication Service Providers."

Split Billing

To provide customers the flexibility they need to bill for communications products, services and packages, PeopleSoft CRM introduces the split billing functionality, which enables you to:

- Define *split billing* products, which can be associated with multiple billing account types for different kinds of charges.

- Capture orders for split billing products that can be paid by multiple customer billing accounts selected at the order line level.

- Pay for non-recurring and recurring charges in orders by billing account.

- View billing account details of split billing products in installed products.

Important! Split billing is delivered primarily to support the ordering of multilevel product bundles in the communications market (where setID is *COM01*). The functionality can also be used in splitting billing charges and assigning them to multiple accounts for non-multilevel product bundles. The only exception is that the part of the split billing functionality that is performed in configuration sessions is not supported for non-multilevel product bundles. Refer to this see reference for more information on the split billing functionality.

See and Chapter 24, "Working with Orders for Multilevel Product Bundles," Orders and Service Management, page 637.

Trial Period Functionality

PeopleSoft CRM supports the definition and use of trial periods in orders and service management orders for the communications solution. The trial period of an order starts when the order status is set to *Completed.* During this time, the customer can use the newly purchased product or service and cancel the purchase, if not satisfied, without penalty.

Important! The trial periods functionality is delivered primarily to support the ordering of multilevel product bundles in the communications market (where setID is *COM01*). It can also be extended to orders and service management orders for non-multilevel product bundles.

See and Chapter 24, "Working with Orders for Multilevel Product Bundles," Trial Period Enablement, page 653.

Understanding 3G Wireless Services and SIM Management

This section discusses:

- 3G wireless business processes.

- Holds.

- Service Management actions.

- Considerations for 3G wireless services.

3G Wireless Business Processes

The 3G market drives business process requirements in customer service, order capture, order management, and service management.

The primary areas of functionality are:

- Product data model.

  Provides the ability to support a multi-tier hierarchy of services and equipment, and the ability to indicate that specific services must be ordered through either postpaid or prepaid accounts.

  See and *PeopleSoft Bill Presentment and Account Management 9.1 PeopleBook*, "Understanding Prepaid Accounts for Communication Service Providers."

- Number management.

  Provides the ability to manage SIM cards, additional number types, and the relationship between service numbers (MSISDN) and SIM card.

  See and *PeopleSoft Number Management 9.1 PeopleBook*, "Working with Subscriber Identity Modules (SIM)."

- Ordering process.

  Provides the ability to support the ordering scenarios for 3G packages, which include 3G services, a SIM card and a phone.

  See and Chapter 10, "Using Order Capture and Service Management in the Communications Industry," Managing 3G Wireless Services and SIM, page 221.

- Service management.

  Provides the ability to support an n-tier hierarchy between services and equipments when entering service requests.

  See and Chapter 9, "Working with PeopleSoft Service Management," page 171.

Holds

The following holds support orders for the communications industry:

Hold	*Description*
Phone Number Required	This condition ensures that a phone number has been assigned to a service product that requires a phone number. This hold cannot be overridden and is applicable to *orders* only.
SIM Required	This condition ensures that a service product that requires a SIM has been associated to the SIM product.
Ensure Prepaid Order Validation	This condition ensures that the order containing a prepaid service is validated, meaning that there are no postpaid services on the same order and that prepaid service is enabled on the business unit.
Ensure Prepaid Product Validation	This condition ensures that the products on the order are consistent with the account type selected.
Prepaid to Postpaid Conversion Order	This condition only fires if the order is a conversion order that is converting a prepaid account to a postpaid account. It ensures that there is enough information on the order to perform the conversion.

The following holds support Service Management transactions for the communications industry:

Hold	*Description*
New Order Check	A *New Order* action cannot be combined with a *Cancel* or *Disconnect* action.
Phone Number Check	This condition checks if a phone number has been assigned to the service.
Action Check	This condition checks to make sure that the selected line action is applicable to the selected installed product based on its status. For example, no actions are allowed on installed products with the *Pending Port-In* status.
Prepaid Activation Details Validation	This hold ensures that the activation details are completed for the prepaid service that is being activated.

See Also

Service Management Actions

These new line actions are supported for 3G Services, lost or stolen features, and prepaid services in addition to existing actions such as *Suspend,Disconnect,* and *Resume:*

Action	*Description*
Activate	This action allows the selected installed products to be activated. It triggers the Activate BPEL process to send message to the provisioning or HLR system to activate the services. *Activate Service* allows you to assign a service phone number if a phone number has not yet been assigned.
	With Prepaid Services it ensures that the phone and SIM card were purchased and are ready for activation.
Change	This action allows the user to change the attributes, features, and phone numbers of selected installed products.
	A port-in request cannot be entered as part of change number. This action is not applicable to disconnected services.
Suspend and Change	This action suspends the selected installed service and changes the service plan. For example, a customer reports a lost phone handset and requests a change in the plan from 1000 Minutes Anytime to 500 Minutes Anytime. Using this action, the CSR can suspend the existing service and change the plan. The new plan will acquire the status of the parent service.
	Upon submitting the service management order with the *Suspend and Change* line action, a BPEL process is triggered, which performs the existing activities of *Suspend* and *Change* features along with additional steps pertaining to lost or stolen handsets.
Change Number	This action tracks the change to the existing phone number of the selected installed service. This action is not applicable to disconnected services. Upon submitting the Service Management Order, a BPEL process is triggered, which sends a message to the provisioning system about the change of the phone number.
	This action is not user-selectable. It is automatically assigned when a phone number is changed as part of *Change* or *Suspend and Change* action. The *Change* business process handles the activation of the new number, aging the old phone number, and managing the relationship of the old and the new phone number with the SIM card.
New Order	This action adds a new order from the current service management order. It supports the ordering of new replacement handsets for lost or stolen handsets. This action results in a new order associated to the current service management order. The shipping and billing information is entered on the order by navigating to the new order.
	This action is not user-selectable. This action is automatically added when replacement products are added to the service management order.

Action	Description
Charge	This action is used to track penalties or other charges captured through service management. A penalty can be incurred by cancelling a service. A new order will be created for this action. This action is not user-selectable.

See Also

Chapter 4, "Setting Up PeopleSoft Order Capture," Creating Line Actions, page 52

Considerations for 3G Wireless Services

Points to consider when implementing 3G wireless services:

*   Multiple 3G Services can be ordered and price rules can be defined to offer special prices.

*   Providers operating in multiple countries must have multiple instances of the databases for number management.

Understanding Mobile Number Portability

This section discusses:

*   Generating a service management order to control the port-in.

*   Issuing a PAC.

*   Canceling an order with a port-in request.

*   Porting-out a number.

Generating a Service Management Order to Control the Port-In

Submitting an order with a port-in request will generate a service management order to control the port-in.

The following steps describe the process to control a port-in:

1. Submit new order.

    Create a new order containing a port-in request and submit it.

2. Confirm porting details.

    Because the port-in details entered on the order may not be entirely accurate or sufficient to allow the port-in to occur, the system needs to confirm the details prior to shipping out a free phone, for example. At this point, no service management order is created yet. The system sends an EIP message out to the third-party system with the porting details and waits for validation. Once the details are validated, the order is submitted.

3. Create installed products.

    The installed products and services for this order are created before the service management order.

4. Create service management order.

    A service management order is created, which captures the customer information from the original order and adds the installed product created earlier to a line with the *Port-In Request* line action.

5. Link Related Actions.

    When the service management order is created, a related action link is placed on the original order, to reference the service management order. Additionally, a related action link is placed on the service management order that references the original order.

6. Submit service management order.

    The system submits the new service management order, which invokes the BPEL process to manage the porting process, as determined by the Action code entered for the service management order.

    See and Appendix A, "Order Capture Delivered Business Processes and Web Services," page 723.

7. Run the BPEL process.

    The Service Management BPEL process tracks the port-in through these steps:

    *   Firm order commitment received.

    *   Port date agreed to by both providers.

    *   Port-in complete.

8. Update status.

    After each process, the Service Management order line's status is updated to reflect the progress of the port-in request. This aids the CSR in informing the customer of the progress of the port-in. Additionally, the installed service status is updated to reflect the progress of the port-in. Following the *port-in complete* step, the original order's port-in line will be updated to the *Complete* status. The installed service also is updated with the port in date, once it is agreed upon by the third-party system.

Issuing a PAC (Port Authorization Code)

A customer who is switching wireless service to a new carrier may require a PAC from their existing carrier to make the switch.

To issue a PAC:

1. Select the wireless phone service in the customer's installed services.

2. Select the *PAC Request* action for this installed service. There is no charge for this order.

    The ability to choose a *PAC Request* action is controlled by the actions that are specified for the product definition of that installed service.

3. (Optional) Select a reason for requesting a PAC to help identify why customers are switching carriers.

4. Submit the order.

    If there is an outstanding PAC already for this customer's service that is issued within the last 30 days, the service management order will be put on hold.

5. Run the BPEL process.

    Order submission launches a business process to issue the PAC, and communicates this code to the appropriate third-party system. This transaction will not go to the billing system.

    The BPEL process completes these steps:

    *   PAC issued: Provided there is no reason to deny the PAC, the PAC is generated. The PAC consists of three letters, representing the Carrier, and six digits, which uniquely identify the individual port-out request.

        The PAC is generated from the automatic numbering system. The autonumber type is *PACD.*

    *   Installed product update: The PAC is valid for 30 days and is logged on the installed product along with the PAC expiration date.

    *   Correspondence: The system sends a written confirmation of a PAC to the customer. The correspondence is built using the delivered *PAC Request* template package.

    See and <u>Appendix A, "Order Capture Delivered Business Processes and Web Services," page 723.</u>

Canceling an Order with a Port-In Request

Both the port in cancellation setting at the business unit level and the order line status determine whether or not a port-in request can be cancelled.

If the order is in a cancelable status, such as *In Fulfillment,* the Cancel toolbar button appears. When clicked, the order status is set to *Cancelled* and all lines that were not complete or shipped are cancelled. Next, the *Order Maintenance* business project is launched to determine if any lines contained a port-in request. Since the initial port-in requests were created as their own service management orders, the background process instantiates a *Cancel* action on the service management order that was created to perform the port-in. The BPEL process that was launched by the original service management order terminates, and a message is sent to the third-party system to indicate that the port-in request was cancelled.

If the order contains an inventory item such as a phone that has already been shipped, a cancellation will not affect the shipped items. The business unit setting determines whether you can cancel this order once the order has shipped products.

If the wireless service is already active with a temporary number, a cancellation would typically result in an early termination penalty. Cancellations of this type need to be performed through service management so the penalty can be applied.

See Also

Porting-Out a Number

When a customer successfully ports in his phone number to a new carrier, the old service needs to be cancelled. This is called a port-out transaction and is executed automatically based on input from the third-party system. The CRM system receives a port-out notification from an external system, which identifies the phone number and customer information that was ported to the new carrier. Upon subscribing to the port-out message, the system creates a service management order with the *Disconnect* action for the service tied to the customer's ported phone number. A note record containing the information on the message received is added to the service management order. The disconnect order is submitted, and the business project which controls disconnects will fire.

The service operation for this port-out is RBT_PORTED_NUMBER.

See Also

Understanding Lost and Stolen Handsets

This section discusses:

*   Lost and stolen handsets processing.

*   Business flow.

*   Duplicate reports.

*   Handset identity validation.

*   Handset replacement.

Lost and Stolen Handset Processing

The service management framework provides these capabilities to support lost and stolen handset processing:

- Create lost or stolen service requests from various entry points:

  - 360 Degree View header action.

  - 360 Degree View dynamic grid action.

  - Service management component (select the *Lost or Stolen* reason for line actions such as *Disconnect* or *Suspend*).

- Prevent the creation of duplicate lost or stolen service requests for the same service and handset combination.

- Initiate service management actions to suspend, suspend/change, disconnect, or resume service and in the same transaction provide the ability to order a replacement handset, accessories, or a SIM.

- Capture important information regarding the lost or stolen handset within service management.

- Cross sell or up sell a new handset and accessories when customer does not request a new handset.

- Invoke the *Lost and Stolen* business process that will initiate activities such as blacklisting or whitelisting the IMEI (handset), lead creation, or email correspondence.

See Also

Business Flow

If a customer loses a wireless handset and report it to the communications provider, the communications provider then creates a service management order to capture information about the lost handset and to track the progress of the process that will follow.

To create a lost and stolen service management order:

1. Open a service management order and identify the customer.

2. Identify the installed service.

3. Select the line action (such as *Suspend,Suspend/Change,Disconnect* or *Resume*).

4. Select *Lost or Stolen* as the reason.

5. If the selected action is either *Suspend,Suspend/Change* or *Disconnect*, the Collect Lost/Stolen Details link is displayed. Click this link to open the Enter Handset Details page where you can enter all the necessary lost/stolen information. Click OK and save.

   Submission of the service management order triggers the processing to suspend or disconnect the service, send a black list message to EIR as well as create a lead or send emails, if appropriate.

6. If the selected action is *Resume,* the *Found Handset* reason is available, the Collect Lost/Stolen Details link will not be visible as the system does not collect lost information when resuming a service. Submission of the service management order triggers the processing to resume the service and send a white list message to EIR.

See and Appendix A, "Order Capture Delivered Business Processes and Web Services," Service Management Resume Service Process Flow, page 756.

If the handset has already been reported as lost or stolen, the system displays a message that the loss has been reported and opens the existing service management order.

Duplicate Reports

If the customer attempts to report a lost or stolen handset that has already been reported, the system generates a message that prevents the user from reporting the handset again.

The user will have either the option to drill into the service management order where the handset has already been reported lost or stolen to provide the customer with the current status of the order. Alternately, they can return to the 360-Degree View.

Handset Identity Validation

You can make administrative use of the IMEI in the following manner:

• The white list is composed of all number series of equipment identities that are permitted for use.

• The black list contains all equipment identities that belong to equipment that need to be barred.

The BPEL process that controls lost or stolen handsets publishes a message to either blacklist or white list the IMEI. If the IMEI, model number, and manufacturer information is not available, no message will be sent.

See and Appendix A, "Order Capture Delivered Business Processes and Web Services," Lost or Stolen Handset Process Flow, page 763.

Handset Replacement

PeopleSoft provides the functionality to handle these handset replacement scenarios:

• Order handset.

The customer requests a replacement handset with the same wireless service.

After the agent selects the installed service, the Show Add Products link appears, allowing the agent to add a new handset product. When the new handset is added to the line action, the agent can now link this handset to an existing wireless service by going to the Line Details page. In the Line Relationship section that appears for the handset product, a link called Relate to Customer's Installed Service is displayed. Clicking this link gives the agent a list of installed services that can be linked to the new handset. The agent then select the wireless service.

If a replacement handset is ordered during a lost or stolen service management order, a new relationship will be established between the replacement handset, new SIM, voice service, and the parent 3G wireless service package.

- Order SIM.

    The SIM is added to the order in the same way as a handset and is linked to the existing wireless service.

- Customer supplied handset.

    The customer wants use another handset they own with the existing wireless service. When the order is submitted, a service management order is created to suspend the service and a new order is created to process the unknown handset.

Reactivating Service

If the customer finds the missing handset and wants to reactivate the service, the user creates a new service management order and selects the *Resume* line action with the reason *Found Handset.* When the service management order is submitted, the Resume business process is invoked to whitelist the handset.

See and <u>Appendix A, "Order Capture Delivered Business Processes and Web Services," page 723.</u>

Common Elements Used in This Chapter

3G Wireless Networks (third generation wireless networks)	Third generation wireless networks. An International Telecommunications Union (ITU) specification for cellular communications technology, also called International Mobile Telecommunications-2000 (IMT-2000).
BPEL (business process execution language)	Controls process flows similar to CRM Business Projects.
EIR (equipment identity register)	A database that stores list of IMEI numbers.
GSM (global system for mobile communications)	A globally accepted standard for digital cellular communication.
HLR (home location register)	A database that contains semi-permanent mobile subscriber information for a wireless carriers' entire subscriber base. Stores permanent subscriber data such as service profile, location information and activity status. When an end-user is activated, their permanent data (SIM, IMSI, MSISDN and so on) is entered into the HLR.
IMEI (international mobile equipment identity)	Each GSM mobile phone has a unique identifier. This ID is used to track the phone but not necessarily the subscriber. The IMEI is completely independent of the international mobile subscriber identity (IMSI).
IMSI (international mobile subscriber identity)	The unique identifier for a subscriber. The IMSI is related to the SIM/USIM and is used to uniquely identify a subscriber to the network.
MNP (mobile number portability)	The industry agreed process by which a customer can switch from one network operator to another, within the same country, and take their existing mobile number with them.

MSISDN (mobile subscriber ISDN number)	Mobile phone number. The MSISDN is the dialable number that callers use to reach a mobile subscriber. Some phones can support multiple MSISDNs, for example, a U.S.-based MSISDN and a Canadian-based MSISDN. Callers dialing either number will reach the subscriber.
NPAC (number portability administration center)	Authority responsible for mobile number porting in the US and Canada.
PAC (port authorization code)	A code used by wireless carriers outside the US to authorize transferring a mobile number from one carrier to another. Its issued by the existing carrier, and required by the new carrier.
Port-In	The term given to the action of signing up for wireless service and using your existing mobile phone number.
SIM (subscriber identity module) or **USIM** (universal subscriber identity module)	The device that carries the subscriber information for a set of services owned by a subscriber. A SIM card can be inserted into any GSM phone or device (laptop, blackberry, and so on) to enable the services and billing for that subscriber. Service is not available without an active SIM card. Each SIM is assigned a unique number, which is known as the SIM number or ICCID (integrated circuit card identity).

Setting Up Product Definitions for 3G Wireless Services

This section discusses how to:

• Set up product definitions for 3G wireless services.

• Set up product categories for 3G wireless services.

• Set up product relationships for 3G wireless services.

Note. This section discusses page fields of the product data model that pertain only to 3G wireless services.

Pages Used to Set Up Product Definitions for 3G Wireless Services

Page Name	*Definition Name*	*Navigation*	*Usage*
Product Definition - Definition	PROD_DEFN	Products CRM, Product Definition, Product Definition - Definition	Define product definitions for 3G wireless services.
Product Category	PROD_CATEGORY	Products CRM, Product Category, Product Category	Define product categories for 3G wireless services.
Product Relationships	PROD_RELATIONS	Products CRM, Product Relationships, Product Relationships	Define product relationships for 3G wireless services.

Setting Up Product Definitions for 3G Wireless Services

Access the Product Definition - Definition page (Products CRM, Product Definition, Product Definition - Definition).

Product Definition - Definition page of a communications product (1 of 2)

Product Definition - Definition page of a communications product (2 of 2)

Billing Options

This section appears if the product type is *Standard Product,Service Product,* or *Product Package.*

See and Chapter 23, "Setting Up Multilevel Product Bundles," Setting Up Product Components, page 519.

Billing Account Details

This section appears if the Split Billing check box is selected in the Billing Options group box, indicating that charges that the corresponding product incurs can be paid using different billing accounts.

See and Chapter 23, "Setting Up Multilevel Product Bundles," Setting Up Product Components, page 519.

Communication

SIM Number required (Subscriber Identity Module number required)	Select to indicate if a SIM card is required and to associate the SIM with the service. A SIM is a smart card inserted into GSM phones that contain telephone account information. GSM is a wireless network standard in Europe. During the order process the system will check the existence of a SIM product and its association to product(s) that require SIM.
Phone Number required	Select to indicate if a phone number is required for the service to work. During the order process an overridable hold condition will be defined to check if a phone number is entered for the products/services that require a phone number.
	If this option is selected, you must also select a value for the Line Usage field.
Number Type	Select *Wireless Number* or *Wire line Number* to indicate the type of number required for the service.

Line Usage	Select a usage for the service. The valid values for usage are *Voice Line, Fax Line* or *Data Line.* The usage information defines the relationship between phone numbers assigned to the SIM based on usages, when the service is added to the order.
	Whenever Phone Number required is selected, the Line Usage value must be captured.

See Also

PeopleSoft CRM 9.1 Product and Item Management PeopleBook, "Setting Up Products," Defining Products

Setting Up Product Categories for 3G Wireless Services

Access the Product Category page (Products CRM, Product Category, Product Category).

Product Category page

The *SIM* category defines and tracks different SIM cards. The 3G USIM product belongs to the SIM category in the Product definition.

See Also

PeopleSoft CRM 9.1 Product and Item Management PeopleBook, "Setting Up Product Definitional Elements," Defining Product Categories

Setting Up Product Relationships for 3G Wireless Services

Access the Product Relationships page (Products CRM, Product Relationships, Product Relationships).

Product Relationships page

This relationship indicates that a 3G USIM is required whenever 3G voice service is added to the order. The 3G USIM will automatically be added to the order, when the service is added to the order. The services are associated to the 3G USIM and the 3G USIM is associated to the parent package service of *Voice,Fax* and *Data.* The Installed Products created for the 3G services, USIM and handsets reflect these relationships.

A single SIM can support one voice, one fax and one data service. Therefore, if the order contains one quantity each of voice, fax and data service, then there will be one 3G USIM product with quantity as one.

The *Child Of* relationship type is used to define the parent of the product and to define the Service to Service and Product to Service relationships.

See Also

PeopleSoft CRM 9.1 Product and Item Management PeopleBook, "Setting Up Products," Managing Product Relationships

Managing 3G Wireless Services and SIM

This section discusses how to:

- Use the search function.

- View SIM assignments.

- View SIM details.

Pages Used to Manage 3G Wireless Services and SIM

Page Name	Definition Name	Navigation	Usage
Orders and Quotes - Search	RO_SEARCH_UPDATE	Orders and Quotes, Search Orders and Quotes, Search	Search orders and quotes by service phone number or account number.
Order - Entry Form	RO_FORM	• Orders and Quotes, Add Order, Order - Entry Form • Orders and Quotes, Search Orders and Quotes, Order - Entry Form	Add or view an order with a SIM, and view or change numbers.
View SIM Details	RO_LINE_COM_SEC	Click the View SIM Details link on the Order - Entry Form page.	Add or view SIM details.

Using the Search Function

Access the Orders and Quotes - Search page (Orders and Quotes, Search Orders and Quotes, Search).

Orders and Quotes - Search page

You can search for communications-specific orders and quotes by:

• Service phone number.

• Account number.

• Source of *Storefront.*

This value implies that the storefront has physical products such as SIM and phones at their disposal to give to the customer with no shipping required.

Selection of this value means there will be no request sent to fulfillment system for shipping.

Viewing SIM Assignments

Access the Order - Entry Form page (Orders and Quotes, Add Order, Order - Entry Form).

Order - Entry Form page

Line Summary

| Product Description | An order line may have multiple quantities of products. Similarly, a package component may have multiple quantities. If the selected products require a Phone Number or attributes, there will be multiple lines in the Order with single quantity. This allows capturing of distinct attributes or phone number for each product. |

| Change Number | Click to access the Available Phone Numbers page to either select a new phone number or enter port-in phone number details. |

The system automatically assigns a phone number when you select a *voice, fax* or *data* service and return to the order. The Change Number link is displayed if a phone number is assigned and the order is not submitted. It allows you to change the assigned phone number. If a phone number is not yet assigned, the Assign Number link appears instead.

See and Chapter 10, "Using Order Capture and Service Management in the Communications Industry," Managing Mobile Number Portability, page 226 .

| Assign IMEI | Click to access the Assign IMEI page (RO_LINE_COM_SEC) to enter IMEI information. |

This link appears before the order is submitted.

| View IMEI Details | Click to access the View IMEI Details page to review SIM information. |

This link appears after the order is submitted.

Assign SIM	Click to access the Assign SIM page (RO_LINE_COM_SEC) to enter SIM information.
	This link appears before the order is submitted.
View SIM Details	Click to access the View SIM Details page to review SIM information.
	This link appears after the order is submitted.

Viewing SIM Details

Access the Order - View SIM Details page (click the View SIM Details link on the Order - Entry Form page).
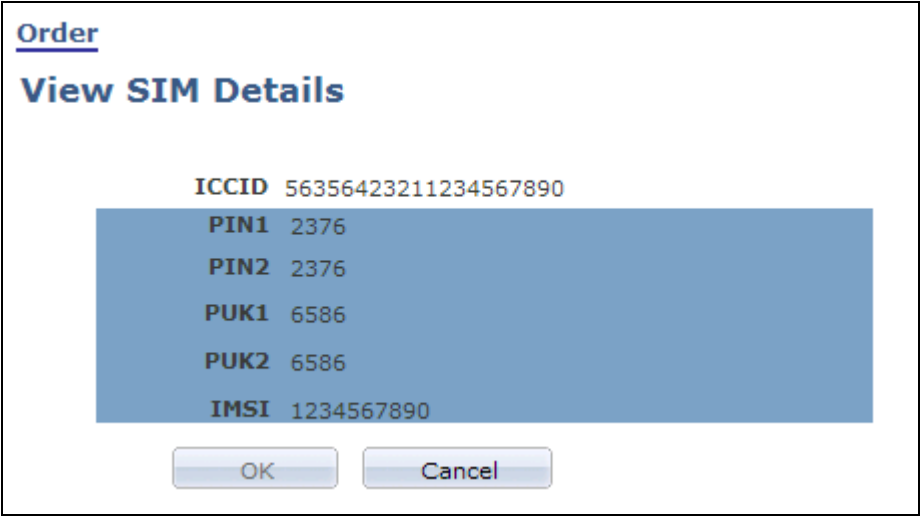
View SIM Details page

ICCID	Displays the integrated circuit card ID, which is the serial number of the SIM card.
PIN1 and **PIN2**	Displays the personal identity numbers that are needed for using the SIM card and accessing its data.
PUK1 and **PUK2**	Displays the PIN unblocking keys, which are required for unblocking PIN1 and PIN2 respectively.
	A GSM SIM card becomes disabled after three unsuccessful attempts to enter a correct PIN code.
IMSI	Displays the international mobile subscriber identity code, which is used to identify the subscriber and the corresponding subscription within the GSM network.

Setting Up Mobile Number Portability

This section discusses how to define default options for porting mobile numbers.

Page Used to Set Up Mobile Number Portability

Page Name	Definition Name	Navigation	Usage
Order Capture Definition - Communications	BUS_UNIT_RBT	Set Up CRM, Business Unit Related, Order Capture Definition, Communications	Define mobile number portability parameters for the communications business unit. Create a service provider list for wireless carriers.

Defining Default Options for Porting Mobile Numbers

Access the Order Capture Definition - Communications page (Set Up CRM, Business Unit Related, Order Capture Definition, Communications).

Parameters that are specific to porting mobile numbers are available in the Mobile Number Portability section. Enter the OCN (operating company number) in the Wireless Service Provides section as well.

See Also

Managing Mobile Number Portability

This section discusses how to:

*   Create an order with a port-in request.

*   Change phone numbers.

*   Provide port-in number details.

*   View port-in number details.

Pages Used to Manage Mobile Number Portability

Page Name	Definition Name	Navigation	Usage
Convergent Order - Entry Form	RO_FORM	Orders and Quotes, Add Order, Convergent Order - Entry Form	Enter an order for a port-in.
Available Phone Numbers	RO_LN_NUM_SRCH_SEC	Click the Change Number link on the Convergent Order - Entry Form page.	Access the Port-In Details page.
Port-In Details	RO_LINE_PORTIN_SEC	Click the Port-In Mobile Number link on the Available Phone Numbers page.	Enter port-in details.
Manage Service - Entry Form	RO_FORM	Service Management, View Service Management Order, Manage Service - Entry Form	View the Service Management order for the port-in.

Creating an Order with a Port-In Request

Access the Convergent Order - Entry Form page (Orders and Quotes, Add Order, Convergent Order - Entry Form).

Creating port-in requests on Convergent Order - Entry Form page (1 of 2)

Creating port-in requests on Convergent Order - Entry Form page (2 of 2)

Change Number   Click this link to access the Available Phone Numbers page to select a
                                    number available on the page or enter a port-in number details.

Submit	When you submit the order with a port-in request, the system validates the port-in details and confirms that the phone number(s) being ported in has not already been logged in the number management database. A port-in request for a phone number cannot include a phone number that is already in the database, unless the number is in *Ported-Out* or *Released* status. The order will go on Hold if the data is invalid. If the data is valid, the order is fulfilled and a service management order is created which initiates the port-in actions to get the number ported to the new carrier. The customer gets an email correspondence of the order details.

Changing Phone Numbers

Access the Available Phone Numbers page (click the Change Number link on the Order - Entry Form page).

Available Phone Numbers page

Port-In Mobile Number	Click to access the Port-In Details page to enter details needed for the port-in process.

Providing Port-In Number Details

Access the Port-In Details page (click the Port-In Mobile Number link on the Available Phone Numbers page).

Port-In Details page

Note. The PAC field is displayed above the Wireless Service Provider if the PAC Required field is selected at the business unit level.

Area Code and **Subscriber Number**	Enter the area code and the phone number to be ported-in. The system validates the phone number against the Number Management system to confirm that this phone number is valid for porting, that is, it is not already assigned in the database. If the number is found in the number management database, the status must be *Ported Out* or *Released,* otherwise the number will be rejected.
Wireless Service Provider	Select from the list populated from the Wireless Carriers by Business Unit data. The list is filtered by *Active* status.
External Website	Click this link to access the website for the wireless service provider.
	This field is only displayed if the business unit setting for the selected wireless service provider has a website URL listed, otherwise this field is hidden. The URL displayed will open in a new window, and could be used to allow for a method to validate the port-in details using the old service provider's website.

Validation Methods Available This field is controlled by the wireless service provider setup. If the provider setup page indicates that only *Automatic* validation is allowed, this field is read-only and will show Automatic validation. If the provider is not using Automatic validation, but instead allows either phone, fax or website, the field is displayed and required, and you must select the validation method used.

Contact Phone Enter a valid phone number for the customer.

Note. This should not be the number that is being ported in.

Request Date The date that the customer would like the porting to occur. The date will be defaulted based on the PAC days setting in the Business Unit. If this date falls on a Saturday or Sunday, it will be advanced to the following Monday. No limits will be enforced, other than this date must be >= current system date.

Account Number Enter the customer's account number.

Bill To Address Select a Bill To address.

National ID Some wireless providers may require the national ID (in the US, a Social Security ID). If the provider requires it, enter it here.

Password / PIN Some wireless providers may require a password to allow the port-in to occur. If needed, enter the password here.

Temporary Phone Number If the Assign Temp Number link is clicked, the temporary phone number will be displayed.

If the business unit setting indicates that the system never provides temporary numbers, this field will be hidden.

If the business unit setting indicates that a temporary number is optional, then a link is provided to assign a temporary number.

If the business unit setting indicates that the system should always assign a temporary number, then a message is displayed that the temporary number will be assigned when you click the OK button.

Assign Temp Number Click this link to assign a temporary phone number. The system displays the next available number in the pool.

Viewing Port-In Number Details

Access the Order - Entry Form page (Orders and Quotes, Add Order, Order - Entry Form).

Line	Line Action	Reason	Product Description	Options	List Price	Unit Price	Recurring Price	Recurring Frequency	
17	Change	Other R	3G Wireless Postpaid Package	Reconfigure Package	0.00	12.80	28.00		🗑
			Nokia 3360		0.00	0.00			
			Voice Mail		0.00	0.00	5.00	Monthly	
			3G Voice Services	Port:415/449-2236 View Port In Details	0.00	0.00			
			Caller ID		0.00	0.00	2.00	Monthly	
			3G USIM		0.00	0.00			

Viewing port-in numbers on the Order - Entry Form page

Line Summary

View Port In Details   Click this link to access the Port-In Details page where you can view the details or cancel the port-in.

Change Number   Click this link to access the Port-In Details page where you can change the port-in number or cancel the port-in.

Managing Lost and Stolen Handsets

This section discusses how to:

- Report a lost or stolen handset.

- Enter lost or stolen details.

Pages Used to Manage Lost and Stolen Handsets

Page Name	Definition Name	Navigation	Usage
Manage Service - Entry Form	RO_FORM	• Customer 360-Degree View, Search For Customer Select a customer on the Search For Customer page. On the 360-Degree View page that appears, select *Report a Lost or Stolen Handset* as an action. • Service Management, Maintain Service, Manage Service - Entry Form Select the *Disconnect, Suspend/Change* or *Suspend* action for a selected installed service and select *Lost or Stolen* as the reason.	Disconnect, suspend, suspend/change, or resume service for a lost or stolen handset.
Enter Handset Details	RBT_LOST_STOLEN	Click the Collect Lost/Stolen Detailsor the View Lost/Stolen Details link on the Manage Service - Entry Form page.	Enter information regarding the lost or stolen handset, lost/stolen report, and whether or not customer is ordering a new handset, SIM, or using another customer owned handset for the existing service.

Reporting a Lost or Stolen Handset

Access the Manage Service - Entry Form page (Service Management, Maintain Service, Manage Service - Entry Form. Select the *Disconnect,Suspend/Change*or *Suspend* action for a selected installed service and select *Lost or Stolen* as the reason).

Manage Service page (reporting a lost or stolen handset)

Line Action	Select *Disconnect,Suspend* or *Suspend/Change* to initiate the Lost or Stolen Handset process.
Reason	Select *Lost or Stolen.*
	Click the Collect Lost/Stolen Details link that appears to enter details about the handset.
Collect Lost/Stolen Details or View Lost/Stolen Details	Click the Enter Handset Details page to enter details for the lost or stolen handset.

Entering Lost and Stolen Details

Access the Enter Handset Details page (click the Collect Lost/Stolen Details or View Lost/Stolen Details link on the Manage Service - Entry Form page).

Enter Handset Details page

Product Information

Service Phone Number	Displays the installed service (for the voice service) number. The Service Phone Number will only display a phone number for the voice service.
Product Description	Displays the product description of the handset from the installed product record (by default). If the information is not available, the field is blank.
Manufacturer	The Manufacturer from the Installed Product. Defaults from the Installed Product, if available. If not available, the field is blank.
Model	The model number from the Installed Product. Defaults from the Installed Product, if available. If not available, the field is blank.

IMEI (International Mobile Equipment Identity)	The IMEI is a unique identifier used to track the handset. Defaults from the Installed Product if available, otherwise the field is blank. The IMEI number will always be 15 characters in length.
Status	The Installed Product Status. Defaults from the Installed Product if the handset is installed. If the handset is not installed then this field will be blank.

Lost or Stolen Information

Loss Date and **Time**	Informational fields to report the date and time that the customer first noticed that the handset was lost or stolen. Fields displayed side by side. Select the date from calendar and enter the time in the entry field.
Location of Loss	Informational field. Enter the location where the customer first noticed that the handset was lost or stolen.
Police Report Number	Informational field. Enter the Police Report number if the customer reported a stolen handset.
Report Date and **Time**	Informational fields if the customer reported a stolen handset. Select date from calendar and enter the time in the entry field.
Comments	Information field. Enter up to 256 characters of additional information regarding the lost or stolen handset.
Block Handset	Defaults to selected. If selected, then Manufacturer, Model, and IMEI will be sent to the EIR. The EIR requires this information to blacklist or whitelist a handset.

Order Information

Order Handset	Defaults to cleared. Select if customer wants to order a replacement handset.
	If Order Handset is selected, the Add Products and Services section on the Service Management Order will be expanded so that a new handset can be ordered.
Order SIM	Defaults to cleared. Select if customer wants to order a SIM.
	If Order SIM is selected, the Add Products and Services section on the Service Management Order will be expanded so that a new SIM can be ordered.
Customer Supplied Handset	Defaults to cleared. Select if customer is going to use another handset they own with the existing wireless service. If selected, a dynamic group box called Customer Supplied Handset will be displayed.

Customer Supplied Handset

This section appears if the Customer Supplied Handset field is selected.

Manufacturer	The Manufacturer from the Installed Product. The same list of values will be displayed here as the Installed Product Manufacturer field.
Model	The model number of the customer owned handset.
Serial ID	The serial ID of the customer owned handset.

Managing Prepaid Services

Refer to the these documentation for complete details on managing prepaid services.

See and *PeopleSoft Bill Presentment and Account Management 9.1 PeopleBook*, "Understanding Prepaid Accounts for Communication Service Providers." and *PeopleSoft Bill Presentment and Account Management 9.1 PeopleBook*, "Setting Up Prepaid Account Management." and *PeopleSoft Bill Presentment and Account Management 9.1 PeopleBook*, "Managing Accounts and Viewing Bills in the Communications and Energy Industries."

Chapter 11

Working with Future Dated Orders and Temporary Services

This chapter provides overviews of future dated orders and temporary services and discusses how to:

• Set up future dated orders and temporary services.

• Create future dated orders.

• Modify future dated orders.

Note. Future dating applies to orders for both products and services.

Understanding Future Dated Orders

Future order functionality enables a user to place an order or a service management request that will occur in the future. The future dated orders are queued in the CRM system and automatically resubmitted to fulfill the order or request. This approach improves performance by not submitting orders until they are due. The functionality of order queuing is set up at the business unit level. You can activate or deactivate the queuing functionality based on your business needs.

Order queuing functionality depends on the order scheduled fulfillment date. An order will be either qualified for immediate execution, that is, the business project will be initiated immediately or will be scheduled for execution in the future. After submitting the order with future scheduled fulfillment date, the system will validate the order and change order status to *Queued.* The business project will not be instantiated; instead the order execution date will be calculated based on the order scheduled fulfillment date and the ordered product's lead time. A separate process (QUEUED_ORDER_SUBMISSION) will run daily to find and submit all outstanding orders scheduled to be executed on current date. One scheduled fulfillment date will be allowed per order.

Note. If an order contains multiple order lines and each associated product has a different lead time, the longest product lead time will be used to calculate the scheduled fulfillment date for that order.

Future Dated Order Terminology

The following terms are applicable to future dated orders:

Term	Definition
Future Dated Order	A customer order or service modification request that will be effective on specified date in the future.
Scheduled Fulfillment Date	The date when future dated order should come into effect. Also known as the *Fulfill By* date field.
Earliest Fulfillment Date	The earliest date when the order can be fulfilled. This is calculated based on the ordered product's lead time. The Scheduled Fulfillment Date must not be before the Earliest Fulfillment Date otherwise the order is placed on hold and may be late.
Queued Order	A submitted and validated future dated order, put in the queue for automatic execution on future date.
Order Execution Date	The date when a future dated order should be executed to assure that all requested modifications will be effective on the scheduled fulfillment date. This date will be calculated based on Scheduled Fulfillment Date and maximum lead time for a products added to the order (for example, Order Execution Date = Scheduled Fulfillment Date – Maximum Lead Time for products that are added to the order).
Order Execution Time Frame	The period of time between order execution date and order scheduled fulfillment date. On order execution date the business project will be initiated and is assumed to be running until order scheduled fulfillment date.
Suspended Service	An installed product that is suspended with a date specifying when the product will be automatically reactivated. See and Chapter 9, "Working with PeopleSoft Service Management," Understanding Service Management Business Projects and Integration Points, page 175.

Understanding Temporary Services

An installed service that has an end date on the Manage Service - Line Details page is considered a temporary service. The service end date is stored along with the installed service and is used to validate a new service management order against scheduled product deactivation.

Depending on the product definition, the system performs these actions to carry out the eventual disconnection of the temporary service:

•   If the product definition indicates *Change Service Status* on a specified date, the installed product status is automatically changed in the CRM system by a background process on that date. No further notification is sent to or expected from the external systems.

•   If the product definition indicates *Wait for External Notification,* the installed service status is updated only after receiving confirmation from the external system that the requested product deactivation is fulfilled. If the notification is not received after the scheduled termination date is reached, it is considered an error.

- If the product definition indicates *Create Order for Change,* a new service disconnection order is automatically created and submitted by the CRM system to perform product disconnection in CRM and other systems. The date when the disconnection order is created and submitted is calculated based on service disconnection date and disconnect action lead time for a product.

Note. Depending on the available actions for the service, either a *Disconnect* action or a *Cancel* action is used to change the service status or create a disconnect/resume order.

For temporarily activated services, the line action *Change End Date* enables the modification of the scheduled end date. The Manage Service business project is executed to update the CRM system and notify the external systems if necessary.

Setting Up Future Dated Orders and Temporary Services

This section discusses how to:

- Enable use of future dated orders and temporary services at business unit level.

- Define lead time for products.

- Define lead time for product actions.

- Enable use of temporary services at product level.

Note. This section discusses page fields that pertain only to future dated order and temporary service functionality.

Pages Used to Set Up Future Dated Orders and Temporary Services

Page Name	Definition Name	Navigation	Usage
Order Capture Definition - Internal	BUS_UNIT_RO1	Set Up CRM, Business Unit Related, Order Capture Definition, Order Capture Definition - Internal	Specify whether to support future dated orders and service management requests.
Product Definition - Definition	PROD_DEFN	Products CRM, Product Definition, Product Definition - Definition	Define the lead time necessary to fulfill the order for a product.
Product Definition - Actions	RBT_PKG_ACTION	Products CRM, Product Definition, Product Definition - Actions	Define the lead time necessary to fulfill the action on the product.
Product Definition - Installed Product	PROD_INSTALL	Products CRM, Product Definition, Product Definition - Installed Product	Enable temporary installation of a product and define how the system will perform possible future deactivation of the installed product.

Enabling Use of Future Dated Orders and Temporary Services at Business Unit Level

Access the Order Capture Definition - Internal page (Set Up CRM, Business Unit Related, Order Capture Definition, Order Capture Definition - Internal).

Order Submission

Allow Future Dated Orders	Click to enable the business unit to create and manage orders and service management orders with fulfillment dates in the future.
Allow Temporary Services	Click to enable the business unit to create and manage service management orders with installed services that have end dates (temporary services).
Use Lead Time for Start Date	Click to set the system to calculate the start date of the service product that is added to an order using the lead time of the service product.
	Suppose that the lead time that is specified for a service product definition is 2 days. When this service product is added to an order on January 1, the start date of this service product, as displayed on the Line Details page, is January 3. The start date is calculated as:
	Start date of service product = current date + service product lead time

See Also

Defining Lead Time for Products

Access the Product Definition - Definition page (Products CRM, Product Definition, Product Definition - Definition).

If specified, the lead time is used to calculated the scheduled fulfillment date of the order. If no value is specified, zero lead time is assumed.

See and *PeopleSoft CRM 9.1 Product and Item Management PeopleBook*, "Setting Up Products," Defining Product Information. and

Defining Lead Time for Product Actions

Access the Product Definition - Actions page (Products CRM, Product Definition, Product Definition - Actions).

If specified, the action lead time is used to calculate the execution date of the action when it is selected in a service management order to perform on an installed service. If no value is specified, zero lead time is assumed.

See and *PeopleSoft CRM 9.1 Product and Item Management PeopleBook*, "Setting Up Products," Defining Product Actions. and <u>Chapter 11, "Working with Future Dated Orders and Temporary Services,"</u> <u>Understanding Future Dated Order Creation, page 245.</u>

Enabling Use of Temporary Services at Product Level

Access the Product Definition - Installed Product page (Products CRM, Product Definition, Product Definition - Installed Product).

Product Definition - Installed Product page

Temporary Services

This section appears if the product is of type *service.*

Allow Temporary Services	Click to allow the creation of service management orders using temporary services. When this field is selected, you can specify a future deactivation date (an end date) when creating new installed products.
	If you select an installed service on a service management order and it is a temporary service because it has an end date, the Temporary Service check box appears on the Manage Service - Line Details page for the corresponding order line.

External System   Select a value to designate how an external system will handle an automatic
                                 service disconnection or resumption when either a temporary service has
                                 come to its termination date, or when a service that is suspended with the
                                 Suspend/Resume action comes to its resumption date. When the temporary
                                 service is at its termination point, this information determines how CRM
                                 should handle the disconnect (or cancellation) of the temporary service.
                                 When the service reaches its resumption date, this information determines
                                 how the system should handle the resumption for the service. Options for
                                 the automatic disconnection (or cancellation) of the temporary product or
                                 automatic resumption of a service are:

- *Change Service Status*

  CRM automatically updates the product status on the specified date. No
  additional workflow is initiated within CRM nor notification from the
  external system expected. This option assumes the external system does
  not need additional notification and the information it received on the
  initial order is enough for the external system to respond accordingly.

- *Wait for External System Notification*

  CRM stores the information on the requested date for the installed
  product for validation purposes, but it does not update the installed
  product status until the confirmation from the external system is
  received. This option assumes the external system is driving the
  automatically expected change and will notify the CRM system on the
  specified date.

- *Create Disconnect/Resume Order*

  On the specified date a new Service Management order is automatically
  generated and executed by the system to either terminate or resume the
  service. This assumes the CRM system is driving and the external
  system needs to be notified of the expected change.

See and *PeopleSoft CRM 9.1 Product and Item Management PeopleBook*, "Tracking Installed Products,"
Defining Installed Product Rules for a Product.

Creating Future Dated Orders

This section provides an overview of future dated orders and discusses how to:

- Create future dated orders.

- Select effective dated addresses.

Note. This section discusses only those fields which are impacted by future dated order functionality. Refer to
the following chapters for detailed information on all fields found on these pages.

Understanding Future Dated Order Creation

This section discusses:

- Future dated orders.

- Future dated service management orders.

- Multiple future dated orders for the same service.

- Future dated bulk orders.

- Future dated bulk service management orders.

Future Dated Orders

Future dated order functionality allows you to create orders for service activation or product fulfillment in the future.

The Fulfill By date field triggers the future dating functionality. On order submit, the order execution date (date when the business project needs to be instantiated) will be calculated based on order scheduled fulfillment date and maximum lead time for products that are affected within the order.

- If the order execution date is in the past, the order will be put on hold. The CSR will be able to override the hold and submit the order taking into consideration the fact that order might be overdue.

- If the order execution date is the current date, the order will be submitted immediately.

- If the order execution date is in the future, the order status will be changed to *Queued* after successful validation, and the order will be scheduled for future execution.

The order will only be submitted if no holds are generated. Once an order is submitted it is queued for fulfillment/activation. At a later date, based on the time to deliver the product/service and the future date specified:

- The order configuration will be revalidated.

- The hold validation will be rerun.

- Correspondence will be generated as part of processing the business project to complete the order.

- The order will be processed for fulfillment or activation.

Only one order scheduled fulfillment date is allowed per order. The order line start dates are populated based on the order scheduled fulfillment date (or earliest fulfillment date if scheduled fulfillment date is not set) and are editable based on the Order Capture business unit setting for Line Dates Editable on Order. The shipment arrival date is editable, but on order submit the validation is performed to ensure that shipment arrival date is later than order scheduled fulfillment date. If the validation fails the order will be put on hold.

You can select a future dated shipment/billing/site address on the Address Book page. The Advanced Options link displays all customer address based on an effective date when the addresses are valid. The Address(es) effective as of date defaults to the Fulfill By date specified on the order. Upon order submission, the address effective date is validated against the order scheduled fulfillment date to assure there is no mismatch. If the validation fails, the order is put on hold. Possible holds are:

- Fulfill By date is before earliest fulfill by date.

- Future dated orders not enabled.

- Order revalidation after being queued.

- Shipment arrival date earlier than fulfill by date.

A process will be run daily to submit outstanding future dated orders scheduled for the current date. If the order execution date is current or earlier than the current date the order is submitted. The validation will be repeated to ensure the order is still valid. If the validation fails, the order will be put on hold. Otherwise the order status will be changed from *Queued* to *Submitted* and the business project initiates.

The process that is run daily is the Scheduled JobSet named *QUEUED_ORDER_SUBMISSION.* You must activate and schedule this process for the automatic processing of *Queued* orders to occur.

On submission by the Scheduled JobSet, the revalidation process repeats the hold validation that is currently performed on order submits. Additionally all effective dated order parameters will be validated against current date:

- Order contact.

- Shipment addresses.

- Shipment contacts.

- Billing addresses.

- Billing contact.

- Site address.

- Site contact.

- Order line product for active status.

See and <u>Chapter 13, "Managing Orders and Quotes," page 269.</u>

Future Dated Service Management Orders

Future dated service management order functionality works in the same way as order capture. The orders with future dates are queued by the system and automatically executed on the date estimated from the scheduled fulfillment date and affected product action lead time.

Only one scheduled fulfillment date is allowed per order. Start and end date fields on order line details page are visible, defaulted to the scheduled fulfillment date value or the earliest fulfillment date value if the scheduled fulfillment date is not set. These dates are editable based on the Order Capture business unit setting for the Line Dates Editable on Order field:

- *Change Features* – no dates visible on the order line details.

- *Disconnect Service* – end date populated based on the scheduled fulfillment date.

- *Suspend Service* – start date populated based on the scheduled fulfillment date; end date not visible.

- *Suspend/Resume Service* – start date populated based on the scheduled fulfillment date; end date is editable and must be filled in by the user.

- *Resume Service* – start date populated based on the scheduled fulfillment date.

The process that is run daily to resubmit simple orders will also handle service management orders. It is run daily to submit outstanding future dated orders scheduled for the current date. If the order execution date is current or earlier than the current date the order will be submitted. The validation will be repeated to ensure the order is still valid. If the validation fails, the order will be put on hold. Otherwise the order status will be changed from *Queued* to *Submitted* and the business project will initiate.

The process that is run daily is the Scheduled JobSet named *QUEUED_ORDER_SUBMISSION* and must be activated and on a schedule for the automatic processing of *Queued* orders to occur.

On submission by the Scheduled JobSet, the revalidation process will repeat the hold validation that is currently performed on order submits. In addition, the service structure will be re-validated to confirm that the service order is still viable in the context of any service changes that could have occurred in the lag time between order capture and the order execution date. The min/max components, product relationships, and order line actions will be validated against the current service base. The validation will fail if:

- The number of components doesn't match the minimum or maximum value specified for the package.

- The product prerequisite is missing.

- The order is for the removal of an already removed product.

- The order is for the addition of an already added product.

- The order is for the suspension of an already suspended product.

- The order is for the resumption of an already resumed product.

See and <u>Chapter 9, "Working with PeopleSoft Service Management," page 171.</u>

Multiple Future Dated Orders for the Same Service

You can create a future dated order for a service when there are already outstanding future dated service management orders against the service. Future dated orders are scheduled for future processing and executed on the calculated order execution date. Only one order for the same service can be processed at the same time. If another order is being processed on the order execution date, it will be omitted and put on hold. Orders will be executed one after another based on order execution date (not scheduled fulfillment date).

When creating a new service management order for a service or number of services, the list of all outstanding queued orders for these services is displayed. Instead of proceeding with the new order, you will be able to select and maintain the existing order.

A new link called Display All Queued Orders for Selected Services is displayed on the order form to users to find all currently queued orders for the selected services. The list is dynamically generated, so only current information is provided.

If there are other outstanding orders already queued for the same service, the validation check that is performed on order submit will ensure that order execution time frames do not overlap. If the validation fails, the order will be put on hold. Possible holds are:

- Fulfill By date is before earliest fulfill by date.

- Service disconnect or suspend before queued order.

- Order execution time frames overlap.

- Queued orders with installed products.

- Order revalidation after being queued.

- Validate start and end dates on Service Management.

Future Dated Bulk Orders

You can create a bulk order for future dated service activation or product fulfillment. The order is captured immediately; child orders are generated; submitted, and queued by the system for future processing.

Once child orders have been created from the bulk order, the scheduled fulfillment dates of the individual orders may be modified between the time the orders are generated and the time that they are submitted for processing.

The scheduled fulfillment date is copied from the parent bulk order onto each generated child order. If the scheduled fulfillment date is a future date, the child orders will be processed as future dated orders on order submission, and the child order will be queued if necessary.

See and <u>Chapter 14, "Working with Bulk Orders," page 343.</u>

Future Dated Bulk Service Management Orders

You can create a bulk service management order for future dated service activation or product fulfillment. The order is captured immediately; child orders are generated; submitted, and queued by the system for future processing.

Once child orders have been created from the bulk order, the scheduled fulfillment dates of the individual orders may be modified between the time the orders are generated and the time that they are submitted for processing.

If any child orders generated from the bulk service modification have pre-existing future dated service orders pending against them, those orders will be put on hold and must be reviewed by a CSR before they can be processed.

The scheduled fulfillment date is copied from the parent bulk service management order onto each generated child order. If the scheduled fulfillment date is a future date, the child orders will be processed as future dated orders on order submission and the child order will be queued if necessary.

Pages Used to Create Future Dated Orders

Page Name	Definition Name	Navigation	Usage
Order - Entry Form	RO_FORM	Orders and Quotes, Add Order, Order - Entry Form	Create an order for future dated service activation or product fulfillment. The order is captured immediately, submitted, and queued by the system for future processing.

Page Name	Definition Name	Navigation	Usage
Address Book	RX_ADR_SEL_ADDRESS	Click the View Addresses button on Order - Entry Form page.	View effective dated addresses.

Creating a Future Dated Order

Access the Order - Entry Form page (Orders and Quotes, Add Order, Order - Entry Form).

Order - Entry Form page for a queued order

Order Status	Displays a queued status upon submission, if the Fulfill By date of the order is a future date.
Fulfill By	Displays a date in the future to queue the order for future processing.
	Prior to order submission, this field is blank by default. This field is not required on save, but it is required on order submit. If you do not explicitly specify this date before order submission, the order is scheduled for immediate execution.
Earliest	Displays the earliest date when the order can be fulfilled. It is based on the products' lead times from the order (current date + product's lead time).
	If the Fulfill by is the current date, the Earliest field is not displayed.

Selecting Effective Dated Addresses

Access the Address Book page (click the View Addresses button on Order - Entry Form page).

Address Book page

Address(es) effective as of	The system defaults to the date selected in the Fulfill By field. If no date is selected in Fulfill By field, the system assume the order will be submitted immediately and does not show the Address(es) effective as of field.
Select	Click to use the associated address as the billing or shipping address for the order.
Add Address	Click to create a new address for use (billing, shipping, or both) in the order.

Modifying Future Dated Orders

This section discusses how to:

• Modify future dated orders.

• View change history for future dated orders.

Note. This section discusses page fields that pertains to future dated order functionality.

Pages Used to Modify Future Dated Orders

Page Name	Definition Name	Navigation	Usage

Order - Entry Form
 	
Manage Service - Entry Form
	RO_FORM	• Orders and Quotes, Search Orders and Quotes
		
		  Enter a status of *Queued* and click the Search button.
		
		• Service Management, View Service Management Order
		
		  Enter a status of *Queued* and click the Search button.
			Access a queued order for order maintenance.

Manage Service - History Order - History	RO_HISTORY	• Service Management, View Service Management Order, Manage Service - History • Orders and Quotes, Search Orders and Quotes, Order - History	View the audit trail of all order changes.

Modifying Future Dated Orders

Access the Order - Entry Form page (Orders and Quotes, Search Orders and Quotes. Enter a status of *Queued* and click the Search button).

Order - Entry Form page of a queued order on maintenance mode

This screenshot shows an example of a queued order that is currently in maintenance mode.
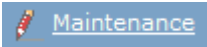
Click to switch the order to the maintenance mode, in which all applicable sections become editable. When the order is resubmitted after maintenance is completed, all holds (if identified) need to be resolved before the updates are applied to the queued order. No copy is made of the order like in order maintenance, changes to the queued order are applied directly to the order when all holds are lifted.

Note. When the order is submitted, any changes that were made to the order is logged on the History page.

See Also

Viewing Change History for Future Dated Orders

Access the Order - History page (Orders and Quotes, Search Orders and Quotes, Order - History).

Order - History page for a queued order

See Also

Chapter 12

Working with Subscription Management

This chapter provides an overview of subscription management and discusses how to:

- Set up subscription management.

- Manage subscription products.

Understanding Subscription Management

Subscription management enables order capture agents, reps, and managers to record orders and quotes and to perform service management against subscription based products and have these transactions fulfilled and billed.

Subscription management contains four major components:

- Defining subscriptions.

  Prior to offering subscriptions, pricing and product managers define the subscription functionality. This includes setting up subscription terms, schedules, subscription products, and subscription pricing. Order capture administrators set up order cancellation reason codes that are used to track cancellations in service management.

- Recording customer subscriptions.

  When customers and order capture users capture orders for subscription products, they have the ability to specify the length of the subscription and the installment-billing schedule. An installed service is created and used to track the new subscription.

- Managing customer subscriptions.

  Customers may wish to cancel, change, suspend, or resume a subscription that they previously established with the enterprise. Management of the subscriptions is simplified so that an order capture user can manage multiple subscriptions for a single customer within one transaction. If a customer cancels a subscription, the reason is tracked for better analysis of lost business. The installed service is updated to reflect the service management related change.

- Billing customer subscriptions.

  Customers are billed based on the subscriptions that they receive, the length of those subscriptions, and the interval that they have specified. Integration with the Transaction Billing Processor (TBP) is required for automatic billing; out of the box this is set up in core order capture, but not necessarily in the verticals since they assume a different billing integration.

Setting Up Subscription Management

This section provides an overview of subscription management setup and discusses how to define subscription terms.

To set up subscription management, use the Subscription Terms (PROD_SUBSCRIPT) component.

Understanding Subscription Management Setup

Successful implementation of subscription management functionality depends on several setup steps:

• Define schedules.

Define the schedules that your enterprise offers customers for subscriptions. This is required setup to support the ability to take orders and quotes for subscriptions. Schedules leverage the existing billing schedule setup that is used in CRM Financials and Supply Chain Management. The data is maintained in CRM through a one-way synchronization with FIN/SCM.

See (FSCM) *PeopleSoft Application Fundamentals 9.1 PeopleBook,* "Defining Financials and Supply Chain Management Common Definitions"

• Define subscription terms.

• Define reason codes.

Reason codes expand on the hold denial codes in the setup workbench. Reason codes use the *Cancellation Reason* type to denote cancellation reasons.

See and <u>Chapter 4, "Setting Up PeopleSoft Order Capture," Setting Up Order Capture Tables, page 40.</u>

• Activate the subscription hold.

For subscription products, the Order Capture Administrator activates subscription hold SUBSCR that is defined out of the box. This hold includes checks for:

• Subscription start date that is past or missing.

• Subscription term missing with subscription product on order.

• Subscription schedule missing with subscription product on order.

• Configure order capture business units.

The order capture administrator can configure subscriptions ordering for an Order Capture business unit. A default schedule and subscription term can be specified at the business-unit level.

See and <u>Chapter 3, "Defining Order Capture Business Units," page 17.</u>

- Define subscription products.

  The product manager defines subscription products that customers can order. This is required setup for the ability to take orders and quotes for subscriptions. The process uses a product type of *Subscription* and a display template for subscription products called PROD_DEFN_SUB. When the subscription is created, the UOM is automatically created as *Each.*

  Packages can contain subscription products. Packages with subscription products should be priced at the component level only.

  Since SCM static packages cannot contain any *service* type products, subscriptions are only included in lightly configured packages.

  See and <u>Chapter 5, "Understanding Product, Pricing, Proration, and Catalogs," page 91.</u>

- Define subscription pricing.

  The pricing manager defines pricing rules for subscription products using new pricing keys for schedule, subscription term, and subscription type product. The process follows the existing pricing rule setup procedures, with the new ability to define pricing rules based on the schedule chosen by the customer, and by the length of the subscription term defined by the customer at time of placing an order or quote for the subscription product

  Using the marketing application, you can define basic price rules using only the customer, product, and offer keys. Subscription management pricing keys are not accessible directly in the Marketing application. If you need to edit a price rule that was created from marketing, you can use the Price Rule page to modify the condition to include additional price keys that could not be populated in marketing.

  Note. Although you can use subscription products in promotions, you cannot create promotions that include the subscription term as part of the promotion.

  See and *PeopleSoft Enterprise Pricer 9.1 for CRM PeopleBook*, "Creating Price Rules."

Pages Used to Set Up Subscription Management

Page Name	Definition Name	Navigation	Usage
Schedules	SCHEDULE	Set Up Financials/Supply Chain, Common Definitions, Calendars/Schedules, Schedules	Create schedules for billing frequency. CRM allows another billing opportunity on the Account page with the One Time Payment feature available to the customer service representative. **Note.** Refer to the *Setting Up Schedules* section in the *Defining Financials and Supply Chain Management Common Definitions* chapter of the (FSCM) *PeopleSoft Application Fundamentals 9.1 PeopleBook* for more information on the Schedules page.
Subscription Terms	SUBSCRIPT	Products CRM, Subscription Terms, Subscription Terms	Define the subscription terms offered for the product.
Reason Codes	RO_DEFN_HLD_DEN	Set Up CRM, Product Related, Order Capture, Setup Workbench Click the Reason Codes link on the Capture Setup Tables Workbench page.	Define, for tracking purposes, the reasons that customers cancel subscriptions.
Hold Codes	RO_DEFN_HLD	Set Up CRM, Product Related, Order Capture, Setup Workbench Click the Hold Codes link on the Capture Setup Tables Workbench page.	Activate subscription holds delivered by PeopleSoft.
Order Capture Definition - Internal	BUS_UNIT_RO1	Set Up CRM, Business Unit Related, Order Capture Definition, Order Capture Definition - Internal	Specify defaults in the business unit for subscription ordering.
Product Definition - Definition	PROD_DEFN	Products CRM, Product Definition, Product Definition - Definition	Define subscription products.

Page Name	Definition Name	Navigation	Usage
Conditions	EOEP_CONDITION	Pricing Configuration, Price Rule, Conditions	Define pricing rules for subscription products using pricing keys for schedule, subscription term, and subscription type product.

Defining Subscription Terms

Access the Subscription Terms page (Products CRM, Subscription Terms, Subscription Terms).

Subscription Terms page

The term is used as the length of time for the subscription being ordered. It should be used in conjunction with the product list price to determine pricing for the subscription.

Duration	Enter the number to apply to the duration frequency.
Frequency	Select the frequency to apply to the numeric duration, such as months or years. Combined with the Duration this determines the length of time for the subscription.

Creating a Subscription Order

This section provides an overview of subscription orders and discusses how to create a subscription order.

See Also

Understanding Subscription Orders

This table provides details on subscription order processes:

Process	Detail	Reference
Browse and search catalog	The flow for the order capture representative or self-service user browsing and searching the catalog is identical for subscription and non-subscription products. Subscription products must be configured to display in the internal catalog.	See and <u>Chapter 5, "Understanding Product, Pricing, Proration, and Catalogs," Catalog Setup, page 99.</u>
View submitted orders	The flow for the order capture representative or self-service user viewing submitted orders is identical for subscription and non-subscription products. Subscription Term,Schedule, and Start Date are displayed as read-only.	See and <u>Chapter 13, "Managing Orders and Quotes," Creating Orders or Quotes, page 285.</u>
Create subscription quote	The flow to create a subscription quote is the same as the flow for subscription orders.	See and <u>Chapter 13, "Managing Orders and Quotes," Entering Orders or Quotes, page 287.</u>
Convert subscription quote to order	The flow for the order capture user converting subscription orders to quotes is identical for subscription and non-subscription products. Converted orders are placed on hold if the subscription start date is in the past. Self-service users can convert quotes created internally with subscription products to orders.	See and <u>Chapter 13, "Managing Orders and Quotes," Creating Orders or Quotes, page 285.</u>
Convert lead or opportunity to quote or order	Sales users can capture leads and opportunities that contain subscription products. The lead or opportunity pages do not require Subscription Term or Schedule to be specified. The sales user creates a lead or opportunity adding subscription and non-subscription products to the proposal. When the sales user is ready to create an order or a quote, they do so from the Propose tab. The order or quote is created and the customer and product detail is copied. The subscription term, schedule, and start date must be specified prior to the quote or order being submitted. Orders and quotes with subscription products created from leads or opportunities are handled identically for subscription and non-subscription products.	See and *PeopleSoft Sales 9.1 PeopleBook*, "Managing Sales Leads and Opportunities."

Process	Detail	Reference
Create order through TeleSales	TeleSales users can create an order by populating products from a telesales branch script. Subscription products are supported through TeleSales, however the attributes of schedule, subscription term, and start date are populated on the order when the telesales user is transferred there.	See and *PeopleSoft CRM 9.1 Marketing Applications PeopleBook*, "Using PeopleSoft TeleSales."

Page Used to Create a Subscription Order

Page Name	Definition Name	Navigation	Usage
Order - Entry Form	RO_FORM	Orders and Quotes, Add Order, Order - Entry Form	Create a subscription order.

Creating a Subscription Order

Access the Order - Entry Form page (Orders and Quotes, Add Order, Order - Entry Form).

Order - Entry Form page of a subscription order (1 of 3)

Order - Entry Form page of a subscription order (2 of 3)

Order - Entry Form page of a subscription order (3 of 3)

Note. This section discusses page fields that are specific to subscription management.

Fulfill By   Select the start date for the subscription. The system populates the Start
                                        Date in the order line with this date. If the date is in the future, the order
                                        might be queued after it is submitted. If queued, the order is automatically
                                        submitted and fulfilled in the background at a later date.

These fields appear only for subscription products. You can add subscription and non-subscription products
to the same order.

Subscription Term	Select the length of time the subscription will run. If you selected a default value for this business unit, the value will automatically appear. If no default is defined, or the default value from the business unit has become inactive, the subscription term is left blank on the order.
Start Date and **End Date**	The Start Date is populated from the Fulfill By field. The end date is calculated by adding the subscription term to the start date. The start or end dates cannot be manually overridden.
Schedule	Select the schedule for the bill payment frequency. If you selected a default value for this business unit, the value will automatically appear. *One Time Charge* is available for use with subscriptions. If no default is defined, or the default value from the business unit is inactive, the billing Schedule is left blank on the order.

See Also

Managing Subscriptions

This section provides an overview of subscription management and discusses manage subscriptions.

Understanding Subscription Management

During the business process that is triggered upon submission of a subscription order , an installed service is created and the customer is billed.

This table provides details on the processes that are part of subscription management:

Process	*Details*	*Reference*
Maintain subscriptions	Enterprise users manage subscriptions on behalf of the customer through service management. The enterprise user can make changes to, cancel, suspend, and resume existing customer subscriptions.	See and Chapter 9, "Working with PeopleSoft Service Management," Managing Services, page 180.
Create installed service	An installed service is created for each subscription product entered on the order and the customer's installed product history is updated. The installed service history of the creation and any changes that have been made to the service are visible.	See and *PeopleSoft CRM 9.1 Product and Item Management PeopleBook*, "Tracking Installed Products."

Process	Details	Reference
Maintain installed service	Installed service maintenance for single or multiple service management lines is handled through a business project. The installed service becomes inactive at the end of the customer's term. To inactivate expired subscriptions, the system checks for installed services that have end dates in the past and cancels them. The customer's installed service is updated for every subscription product that is maintained. and the installed product history is updated.	See and *PeopleSoft CRM 9.1 Product and Item Management PeopleBook*, "Tracking Installed Products."
Bill the customer	The system generates the customer's bills based on the schedule and subscription term that are specified on the order. The system handles any updates that are required to the customer's bill. For example, if the customer's bill is impacted by changes that have been made to the installed subscription such as cancel, suspend, or resume, then a billing adjustment (debit or credit) is made for the customer. The billing process is handled through the business project interface to the Transaction Billing Processor (TBP). If a customer cancels a subscription that was not paid with a one time schedule, the system generates credit for any paid portion of the subscription that was not received by the customer and cancels any future bills. If a customer cancels a subscription that is paid with a one time schedule, no automatic credit is given.	See and Chapter 8, "Integrating with Fulfillment and Billing Systems," Integrating with Billing Systems, page 169.

Page Used to Manage Subscriptions

Page Name	Definition Name	Navigation	Usage
Manage Service - Entry Form	RO_FORM	• Service Management, Maintain Service, Manage Service, Manage Service - Entry Form • Service Management, Maintain Service, View Service Management Order, Manage Service - Entry Form	Cancel, suspend, resume, and view existing customer subscriptions.

Managing Subscriptions

Access the Manage Service - Entry Form page (Service Management, Maintain Service, Manage Service, Manage Service - Entry Form).

Manage Service - Entry Form page of a subscription service (1 of 2)

Manage Service - Entry Form page of a subscription service (2 of 2)

Line Action	Select a service management action.
	If you select *Cancel,* the Reason column appears. The current date is set in the End Date field as the date of the cancellation. Depending on business unit settings this date might be read only. Use the Fulfill By date in the order header, if the date automatically populated is not what you want.
	If you select *Suspend Service,* select a Fulfill By date to set the date of the suspension. Depending on business unit settings theStart Date may be read only. Use the Fulfill By date in the order header, if the date automatically populated is not what you want.
	If you select *Resume Service,* select a Fulfill By date to set the date of the resumption. Depending on business unit settings the Start Date may be read only. Use the Fulfill By date in the order header, if the date automatically populated is not what you want.

See Also

Chapter 9, "Working with PeopleSoft Service Management," Managing Services, page 180

Chapter 13

Managing Orders and Quotes

This chapter provides an overview of Order Capture and discusses how to:

* Personalize Order Capture.

* Create orders or quotes.

* Configure products.

* Enter shipping, payment, and billing information.

* View price adjustments.

* Add notes.

* View summaries.

* Manage holds.

* Maintain orders.

* View related actions.

* View history.

Understanding Order Capture

This section lists common elements and discusses:

* Order Capture functionality.

* Hotkeys.

* Order Capture access.

* Delivered User IDs and User Roles.

* Correspondence generation.

* Customer Data Hub (CDH) impact on Order Capture.

Common Elements Used in This Chapter

Functional buttons in the header and footer toolbars and on each Order component page are available to the customer service representative (CSR).

Functional Buttons

The following buttons and links provide one-click functionality for Order Capture:

Submit	Click to save and submit the order or quote for processing.
Save	Click to save the order or quote in its current state.
(validate)	Click to validate the quote or order and fire all the hold conditions. Use this button to do hold checking without actually submitting the order.
(upsell)	This appears if a marketing campaign is associated with the consumer or company that has been identified on the quote or order, and there is an upsell possibility.
(convert to bulk)	Click to change the current order to a bulk order. Bulk orders are used as a template to create multiple orders.
	Note. The button is only available for orders.
(add quote or add order)	Click to initiate a new quote or order.
(search)	Click to access the quote and order search page.
(cancel)	Click to cancel the current quote or order. The cancel function is only available when edits are allowed.
	Note. This button is not available to engagement services.
(refresh)	Click to refresh the view for the current page. This also refreshes the view of an *Open* or *In Process* order that is in the fulfillment cycle with a live status update if the integration point is enabled.
(copy to quote or convert to order)	Click to copy an order to a new quote or convert a quote to an order. The label of this button becomes *Convert to Order* for quotes. This button is available to orders and quotes that have been submitted.
	Note. You cannot convert expired quotes to orders. Only quotes with an expiration date in the future can be converted to an order.

(clone)	Click to clone the current order or quote and create a copy of the current instance.
	Note. This button is not available to engagement services.
(maintenance or revise quote)	Click to switch the order (queued or submitted) to the maintenance mode, in which the entire order is editable again. For quotes, the label of this button becomes *Revise Quote*.
	This button is available to orders and quotes that have been submitted.
	Note. Maintenance is only allowed during certain circumstances once the order is submitted based on the order processing. Future dated (queued) orders are maintainable.
(correspond)	Click to activate print or email correspondence.
(360-degree view)	Click to launch the 360-degree viewer.
Personalize	Click to access the Personalize Toolbar page, where you can:

- Select which buttons to display.
- Organize the order of the buttons.
- Select to display or hide the buttons and text.

Display-Only Text in the Header Toolbar

Order Capture displays the following identifiers in the toolbar:

Order ID/Quote ID	Order Capture sequentially generates order and quote IDs based on Automatic Numbering options or by an ID drawn from the Capture Type Workbench setup.
Order/Quote Status	Order Capture delivers many different statuses including: *Open,Pending, Submitted,Hold,Complete,Queued,* or *Canceled.*
	Note. You can add or modify statuses that are applicable to your business process in the Setup Workbench.
Customer	This is a Sold To company or Sold To consumer.
Customer Value	This is a configurable data element from the Customer Data Model that displays a specific customer demographic.
	See and *PeopleSoft CRM 9.1 Business Object Management PeopleBook*, "Defining Company Business Objects."
Contact	This is a sold to contact for the company or consumer.

Credit Rating   Displays the customer's credit rating based on what is available in the
                                           Customer Data Model.

See Also

Order Capture Functionality

The following graphic identifies the functionality available to the Order Capture CSR:
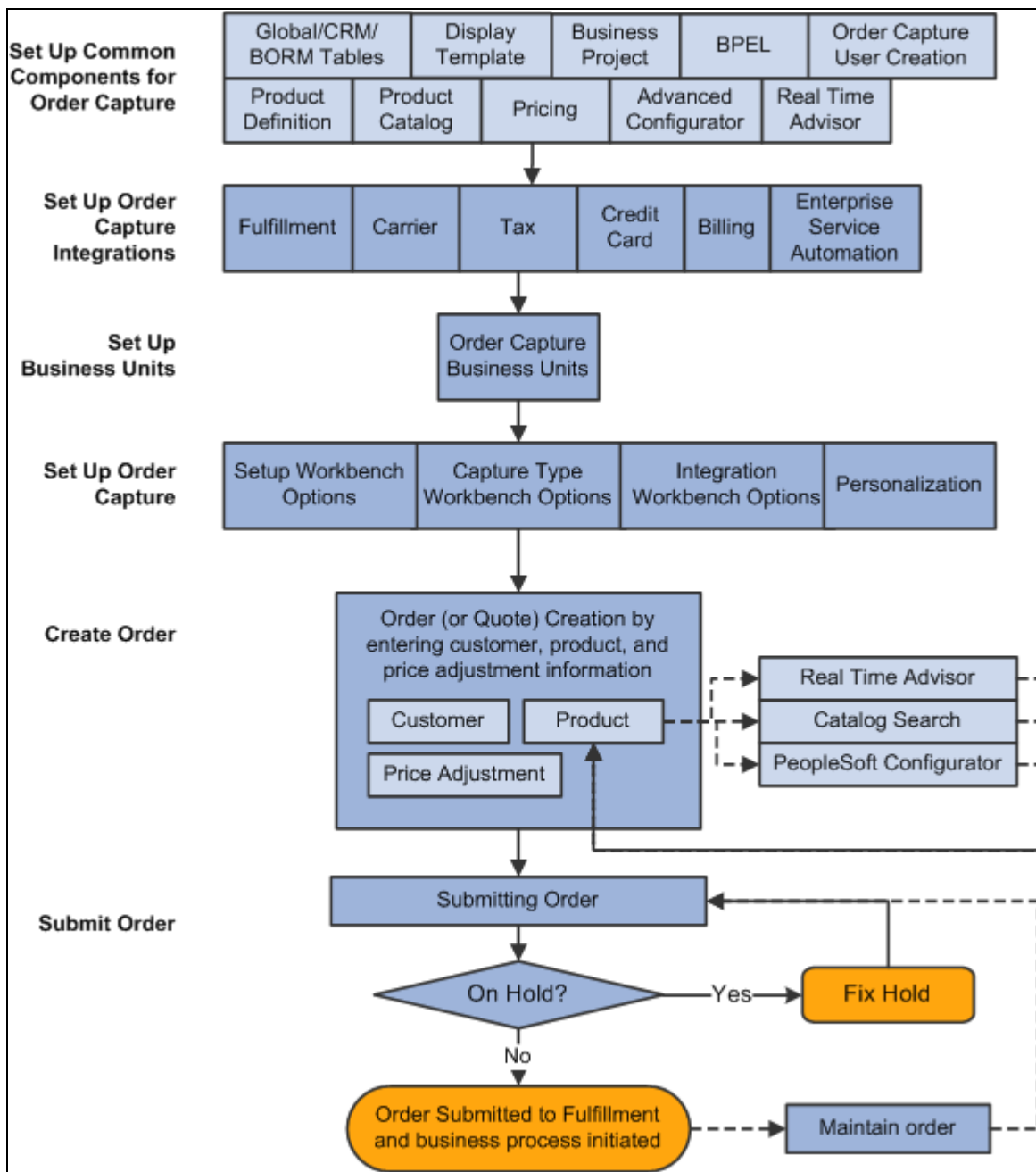
Lifecycle of orders, from creation, submission, to fulfillment

Order Capture is designed to enable easy order management for the CSR. The Order Capture system seeks to maximize system resources so as to minimize the CSR's energies. For example, Order Capture:

- Delivers pages that facilitate rapid order capture.

- Provides icons, hotkeys, and tab ordering to reduce the number of keystrokes and mouse clicks.

- Limits the number of page refreshes (or server trips) so that there is minimal waiting time, if any.

- Defaults known information whenever possible.

- Utilizes a header toolbar that contains functional icons and pertinent display-only order information.

- Provides personalization capabilities to the CSR, whereby the CSR or system administrator can define the preferred means of data entry of product information into the order.

- Enables the CSR to easily personalize orders and quotes.

Split Billing

To provide customers the flexibility they need to bill for communications products, services and packages, PeopleSoft CRM introduces the split billing functionality, which enables you to capture orders for split billing products that can be paid for by multiple customer billing accounts.

Refer to the see reference for more information on the split billing functionality.

Important! Split billing is delivered primarily to support the ordering of multilevel product bundles in the communications market (where setID is *COM01*). The functionality can also be used in splitting billing charges and assigning them to multiple accounts for non-multilevel product bundles. The only exception is that the part of the split billing functionality that is performed in configuration sessions is not supported for non-multilevel product bundles. Refer to this see reference for more information on the split billing functionality.

See and <u>Chapter 24, "Working with Orders for Multilevel Product Bundles," Split Billing Products, page 637.</u>

Hotkeys

Order Capture simplifies the order entry process by providing the following hotkeys at the header level and the line level. Use these hotkeys for header level activities:

Hotkey Combination	Action
Alt + 1	Save
Alt + 0	Refresh
Alt + U	Upsell
Alt + V	Convert
Alt + C	Clone
Alt + M	Maintain
Alt + A	Add Product
Alt + S	Update Mode

Order Capture Access

You can create or view orders and quotes using various queues.

Direct Navigation

A CSR can access Order Capture directly by selecting *Orders and Quotes* on the left hand navigation of the CRM system. Available options are:

- Add Quote.

  Create a new quote. This option takes you directly to the quote form for quick and direct access.

- Add Order.

  Create an new order. This option takes you directly to the order form for quick and direct access.

- Add Bulk Order.

  Create a bulk order. This option takes you directly to the bulk order form and allows you to select multiple recipients that will receive an order.

- Search Orders and Quotes.

  Search to find an existing order or quote. This option provides direct access to a search component to find an existing order or quote. From there, you can find the orders that you are looking for and access those orders for inquiry or maintenance purposes.

- Find Products.

  Search or browse for a specific product within a specific catalog or across all catalogs.

From PeopleSoft Sales

Sales representatives can navigate to quote or order capture from the Products section of the Leads or Opportunities page in the Sales application. They can specify a product and then navigate directly to the Entry Form within Order Capture. Customer and product information relevant to Order Capture then pre-populates from the lead or opportunity to the corresponding order and quote entry fields.

From the 360-Degree View

You can add orders and add quotes from the Customer 360 Degree View. After selecting the action, the system transfers to the corresponding order or quote entry form along with customer information that was collected in the 360 Degree View.

You can click the View All link in the Orders folder or the Quotes folder of the Activities section to view these information of orders or quotes for the selected customer:

- Order ID/Quote ID.

- Order/quote status.

- Date of order/quote creation.

Click the order or quote ID to transfer directly to the corresponding component.

From CTI Integration

In a call center setting where the PeopleSoft CTI Integration is in place, the Order Capture application launches order records on agents' workstations based on order IDs that caller enter into an interactive voice response (IVR) phone system.

See and *PeopleSoft CRM 9.1 Multichannel Applications PeopleBook*, "Configuring CTI," Understanding CTI.

Additional Access

Order Capture functionality is also accessible from:

- PeopleSoft Active Analytics Framework actions.

- PeopleSoft Marketing.

- PeopleSoft Real Time Advisor.

Delivered User IDs and User Roles

Order Capture delivers the following users and roles:

User ID	Role Name	Role Description	Access
OCADMIN	Order Capture Admin	Administrator	All Order Capture functionality, including the ability to set up Order Capture but not the ability to remove holds.
OCMGR	Order Capture Manager	Manager	All Order Capture functionality, including the ability to remove holds but not the ability to set up Order Capture.
OCREP	Order Capture Rep	CSR (Customer Service Representative)	All Order Capture functionality, except: • The ability to remove holds placed on orders. • The ability set up Order Capture.

You can adopt the users and roles that Order Capture delivers, or modify them to suit your business needs.

Note. To modify permissions for the delivered user roles, navigate to PeopleTools, Security, Permissions & Roles, Roles.

See Also

PeopleSoft CRM 9.1 Application Fundamentals PeopleBook, "Setting Up Security and User Preferences"

Cross Selling Agreements with Products

Order Capture applications support the cross-sell and up-sell of products in orders and quotes. When a product is added to an order, an icon appears if a cross-sell or up-sell opportunity is available. CSRs can add cross-sell or up-sell products to orders easily with a click of a button.

In the communications industry, a common cross-sell scenario is offering a service agreement to a customer who has ordered a phone product or service that the agreement covers. To make service agreements available for ordering in Order Capture applications, they need to be presented as products in the product data model in a type that the model supports, which is *service agreement.*

Note. You can define a service agreement product manually from the Product Definition (PROD_DEFN) component with reference to an agreement template, or automatically from the Agreement Template (RF_AGREETEMP) component if templates are set to be available for ordering. For service agreement products, the Site Required option is always enabled, which means that a site must be selected on any given order that has service agreement products. The scope for agreement templates that are available for ordering is always set to *Site.*

A service agreement appears as a cross-sell opportunity of a phone product in orders and quotes after a relationship between the two has been developed in the Product Relationships component. When the phone product is added to an order, a visual icon is displayed on the order line, indicating that a cross-sell or up-sell opportunity is available. Clicking the icon takes you to the line details of the phone product with a section that lists all the products (belonging to catalogs or not) that are related to the phone product, including the service agreement. To purchase any list product, simply click one button to add it to the order.

After an order is submitted, a business project or business process instance is triggered to perform a shortlist of tasks. If the order includes a service agreement product, the instance creates a new agreement for keeping a record of the duration, services, entitlements and installed products that it covers, as well as an installed product of type *agreement* for performing service requests on the agreement.

Example: Cross-selling an Agreement for a Phone Product

This example presents the setup steps needed for supporting a cross-sell of a phone replacement agreement when a particular phone model is being ordered, followed by a simple runtime cross-sell ordering process, which results in the creation of a new agreement and installed products for the phone and agreement products.

1. Create an agreement template (for example, *PHONEREPLACEMENTPLAN*) and set it to be available for ordering.

   After the template is saved, verify that a product definition with the name *PHONEREPLACEMENTPLAN* is generated automatically, referencing the template.

2. Relate the agreement product to a standard product or a package to which it covers, in this case a phone product called *Nokia 3360.* Establish this product relationship from the *Nokia 3360* product definition.

   The setup is completed.

3. Create an order and add *Nokia 3360* to it.

   An Upsell icon appears next to the order line of the phone product, indicating that a cross-sell or up-sell opportunity is available for the corresponding product. Click to access the product's line details.

4. The *PHONEREPLACEMENTPLAN* agreement is presented in Cross/Up Sell Opportunities section.

5. Click the Add to Order button to add the agreement to the order. Submit the order.

After all the hold items are resolved and the order submitted successfully, a business process or business project (based on the tool the system is set up to use) is triggered to perform a list of post-submission tasks, which include, but not limited to:

*   Creation of a new agreement for the agreement product. The agreement records the duration, site, service(s) and installed product(s) that it covers.

*   Creation of an installed product for the agreement product (as well as for the phone product). Use this installed product to perform service requests, such as renewing, suspending or cancelling the agreement.

    When you submit a service request to renew or cancel the service agreement (through the installed product of that agreement), the end date and the status of the agreement gets updated accordingly. In another case where a service request is submitted to suspend the agreement, it is the installed product of the associated phone product that is impacted, not the agreement itself. As a result, the status of the installed product is changed to a suspension status.

See Also

Correspondence Generation

Correspondence can be generated automatically and manually:

*   Automatic correspondence is initiated at the point of order or quote submission.

*   Manual correspondence is initiated when the Correspond toolbar button is clicked.

Upon order or quote submission, Order Capture sends automatic email based on the MCF type setup for order confirmation, quote confirmation and order change. A related object is created for each automatic acknowledgement of a correspondence and is displayed on the Related Actions page for the order or quote. Related actions are not created for manual correspondence.

To create an ad-hoc correspondence, a CSR can click the Correspond toolbar button to access the Create Correspondence page where template based correspondence can be prepared to send to pre-populated recipients through different communication channels, either email or print. Order Capture delivers a list of templates that can be used for composing a correspondence.

You can add attachments to the text message and you can also schedule its exact delivery. After a correspondence is sent, the system automatically creates an interaction on the 360-Degree View for the associated contact.

Note. Before creating a correspondence, make sure that a contact is available on the entry form. The system pre-populates the Recipients field of the correspondence request with the contact defined for the order.

This table lists the correspondence templates that the Order Capture application supports (template package usage is set to *Order Capture*):

Template Name	Channel	Description of Action
Order Maintenance	Email and Print	Emails a text of order maintenance with the order number, customer name, status, order change details, products, billing and shipping information. Prints a PDF, RTF, or Word document version of order maintenance with the same details as in the email.
Order Confirmation	Email and Print	Emails an order confirmation with the order number, customer name, status, products, billing and shipping information. Prints a PDF, RTF, or Word document version of order confirmation with the same details as in the email.
Quote Confirmation	Email and Print	Emails a text of quote confirmation with quote number, customer name, status, products, billing and shipping information. Prints a PDF, RTF, or Word document version of quote confirmation with the same details as in the email.
Order Status	Email	The order inquiry application service in ERMS uses this template to respond to structured email with the status of the order.
Sales Quote Proposal	Email and Print	Emails the quote with an email cover letter, and an attachment of the quote. The quote details contain quote number, expiration date, and product details. Prints a PDF, RTF, or Word document version of the quote, and the quote with the same details as in the email.
Order Confirmation Agreement	Email and Print	Emails an order confirmation with the order number, customer name, status, order details, agreement details, billing and shipping information. Prints a PDF, RTF, or Word document version of order confirmation with the same details as in the email.
Svc Mgmt Order Confirmation	Email and Print	Emails an service management order confirmation with the order number, customer name, status, order details, billing and shipping information. Prints a PDF, RTF, or Word document version of order confirmation with the same details as in the email.
Svc Mgmt Lost Stolen Handset	Email	Emails a promotional message to a customer (who has recently reported a lost or stolen handset) to upsell a handset replacement.

Template Name	Channel	Description of Action
Svc Mgmt Lost Stolen Wireless	Email	Emails a promotional message to a customer (who has recently reported a lost or stolen handset) to upsell a wireless package deal.
PAC Request	Email and Print	Emails a PAC request order confirmation with the order number, customer name, status, order and account details. Prints a PDF, RTF, or Word document version of order confirmation with the same details as in the email.

See Also

PeopleSoft CRM 9.1 Automation and Configuration Tools PeopleBook, "Correspondence Management"

Customer Data Hub (CDH) Impact on Order Capture

If the customer has licensed CDH, Business Object (BO) Search pages will have a user check box option to use the *Smart Search* feature. Users will also be able to use Smart Search from Quick Create pages. If potential matches are found during Quick Create, they will appear on the Potential Duplicates page region with a match score that shows the likelihood of the match being a duplicate. Users can then select two or more potential duplicates and submit them for merge evaluation from the BO Search pages.

Components Using Smart Search

These Order Capture components use the Smart Search functionality:

• Order.

• Quote.

• Insurance Quote.

• Bulk Orders.

• Maintain Service (for general service requests).

• Start/Stop Service (energy industry-specific).

• Product Application (financial services industry-specific).

Note. These components are variations of the RO_FORM component.

Customer Merges

Merge routines handle customer merges for the following transactions/components:

- Order/Quote.

- Bulk Order.

- Billing Account/Account.

- Churn Action History.

CDH Impact on Additional Order Capture Features

The following areas in Order Capture are impacted by CDH:

- Audit History.

  History of the customer updates will be maintained for Orders, Quotes, Number History, and Account Audit History.

- Catalog Security.

  After a customer merge, access to catalogs will be updated to reflect the updated customer information.

- Pricing.

  In the event of a BO merge, the *Price List Identifier* and *Price Rule Identifier* fields are updated to reflect the merge-to BO ID.

- Advisor.

  Advisor maintains a session history by customer. After a BO merge, the session table will be updated to reflect the merge-to BO ID.

See Also

PeopleSoft CRM 9.1 Business Object Management PeopleBook, "Understanding Customer Data Hub Integration"

Personalizing Order Capture

This section provides an overview of personalization and discusses how to:

- Choose order entry form personalizations.

- Change the default entry form values.

- Configure search criteria.

Understanding Personalization

You can personalize defaults to make your experience with Order Capture as efficient and as user-friendly as possible. PeopleSoft provides the personalization feature that enables you to change the defaults for the most commonly used functions within Order Capture.

Note. Order Capture also delivers powerful workbench functionality whereby you create application class sets that modify Order Capture settings to best suit your business processes.

See Also

Chapter 4, "Setting Up PeopleSoft Order Capture," Understanding Order Capture Setup, page 37

My Oracle Support, PeopleSoft CRM Red Paper - Understanding Application Classes in PeopleSoft Order Capture and PeopleSoft Order Capture Self Service

Pages Used to Personalize Order Capture

Page Name	Definition Name	Navigation	Usage
Personalizations	PSUSERSELFPRSNL	My Personalizations, Personalizations	Choose order entry form personalizations.
Option Category: General Options	PSUSERSELFPRSNL	Click the Personalize User Options button for the *General Options* category on the Personalizations page.	Change the default entry form values or restore category defaults. Override any of six defaults for Order Capture.

Choosing Order Entry Form Personalizations

Access the Personalizations page (My Personalizations, Personalizations).

Personalizations page

Personalize User Options   Click to access the settings for the personalization category. For Order
                                     Capture, relevant settings are in the General Options personalization
                                     category.

Restore Defaults   Click to restore default settings for all categories.

Changing the Default Entry Form Values

Access the Option Category: General Options page (click the Personalize User Options button for the
General Options category on the Personalizations page).

Option Category: General Options page

Personalizations

This section lets you view the default value or override the default value of the available personalization options.

Product, Units, Quantity Order	Choose a preferred sequence for using the Add Product(s) functionality on the main Entry Form. This allows you to change how you enter multiple products at one time.
Product Entry Option	Specify whether you want Order Capture to search by *Product Description First* or *Product ID First.* Use this to improve performance by setting the value you normally use to search for products.
Product Search Option	Specify whether you want Order Capture to search by finding an exact match first or to show all possible results. Use this to improve performance.

Product Separator	Identify a product line separator. The Add Product(s) field on the Entry Form has powerful processing functionality contained within it. It allows for the insertion of a special character to divide product lines. For example, you can define this as a colon or semicolon, and then during order entry, you could enter two separate sets of product information.
	Note. PeopleSoft system-delivered data specifies a semicolon.
UOM/Qty Separator (unit of measure/quantity separator)	Identify a UOM/Qty separator. The Add Product(s) field on the Entry Form allows for the insertion of a special character to divide information for multiple product lines. For example, you could add two cases of product 10003 by entering *10003:2:cs.* This would then populate an order line with two cases of product 10003, and would save you time.
	Note. PeopleSoft system-delivered data specifies a colon.
Order Capture Business Unit	Specify your default business unit. If you regularly use a particular business unit, then specifying that business unit in this field saves time during order and quote entry.

Configuring Search Criteria

Order Capture searches are quite extensive and enable you to find existing orders or quotes in a variety of ways. You can use multiple search criteria to narrow your search for existing orders or quotes. Once you identify the criteria by which you most often search for orders and quotes, you can personalize the Order Capture search pages and save that personalization. The next time that your search page launches, you will work from the personalized search page that you have created.

Note. If there is more than one result for a search, the results can be distinguished by different criteria, including Customer, Date Created, Status, and Source.

See Also

PeopleSoft CRM 9.1 Automation and Configuration Tools PeopleBook, "Configuring Search Pages," Understanding the Configurable Search

Creating Orders or Quotes

This section discusses how to:

* Enter orders or quotes.

* Get product recommendations.

* View or modify line details.

* View or modify line details for service agreements.

Pages Used to Create Orders or Quotes

Page Name	Definition Name	Navigation	Usage
Quote - Entry Form, Order - Entry Form	RO_FORM	• Orders and Quotes, Add Order, Order - Entry Form • Orders and Quotes, Add Quote, Quote - Entry Form • Orders and Quotes, Search Orders and Quotes, Order - Entry Form • Orders and Quotes, Search Orders and Quotes, Quote - Entry Form	Create a new order or quote by entering order details and adding products to the order lines.
Submit Confirmation	RO_SUBMIT_CONFIRM	Click the Submit button on the Quote - Entry Form or Order - Entry Form page.	View a summary of the order or quote.
Order - Line Details, Quote - Line Details	RO_CAPTURELINE_DTL	• Orders and Quotes, Add Order, Order - Line Details • Orders and Quotes, Add Quote, Quote - Line Details • Orders and Quotes, Search Orders and Quotes, Order - Line Details • Orders and Quotes, Search Orders and Quotes, Quote - Line Details	**Note.** Information appears on this page only after a customer and product have been added to the order or quote. View up-sell or cross-sell opportunities, and check product availability. You can edit line details such as unit of measure, order quantity, unit price, and promotion code. You can also allow partial shipment for this product or create a temporary service if enabled on the product.

Page Name	Definition Name	Navigation	Usage
Product Advisor List	RO_LISTDISP_SEC	Click the Get Recommendations link on the Quote - Entry Form or Order - Entry Form page.	**Note.** This page returns dialogs that are associated with the selected customer. A message returns if the customer does not associate with any dialogs. Select a catalog from the list of catalogs available. You can then launch Advisor dialogs that are associated to the catalog.
Check Availability and Pricing	RO_FORM	• Click the Check Availability link on the Order - Line Details or the Quote - Line Details page. • Click the Check Availability link on the Order - Entry Form page: Availability tab or the Quote - Entry Form page: Availability tab.	Create partial shipments, add promotion codes, or view pricing details for order lines.

Entering Orders or Quotes

Access the Order - Entry Form page (Orders and Quotes, Add Order, Order - Entry Form).

Order - Entry Form page (1 of 4)

Order - Entry Form page (2 of 4)

Order - Entry Form page (3 of 4)

Order - Entry Form page (4 of 4)

Credit Rating	Display-only field that is associated with the customer and defaults from the customer data model.

Customer

When you initially access this page, the Customer,First Name, and Last Name fields are enterable. After you enter or select a customer, the Customer and Contact fields appear.

Customer
- Enter the name of the customer.

- Click to access the Company - Summary page to view information about the customer. Order Capture opens a new window to access the Customer Data Model.

You can create a new customer directly from the Entry Form page using the Quick Create functionality. To create a new customer:

1. Enter a customer name.

2. Click Search to access the Search For Sold To Customer page.

3. From the Select Action field, select one of the following:

   - *Create Company.*

   - *Create Company With Contact.*

   - *Create Company With Site.*

   - *Create Consumer.*

   - *Create Consumer With Contact.*

4. Click Go to access the page that you selected.

5. Populate all fields associated with a customer from on the Quick Create page.

6. Click Save to save the information for the new customer.

See and *PeopleSoft CRM 9.1 Business Object Management PeopleBook*, "Working with Predefined Business Object Search and Quick Create Data."

Contact

The primary Sold To contact defaults here. You can change the contact to any valid Sold To contact associated with this customer for this transaction by selecting from the prompt.

Note. If the customer is a company, a Sold To contact is required. A consumer does not require a Sold To contact. Orders or quotes that do not have a contact when one is required are automatically placed on hold.

🔍 (search for contact)

Click to access the Search For Contact Of [company] page to view, select, or add contacts for the company.

If you wish to select a new customer and contact, click the Search Again link that is available. The current customer information will be erased from the order.

Account   Displays, if available, a billing account for the selected customer.

                                           A billing account is used for billing recurring charges, which are common in services, such as wireless service plans or magazine subscriptions.

                                           If the customer has multiple accounts, the first one on the list (in the Account Number field of the Recurring Billing Summary section) is used as default. If you select a different account, the system automatically updates the value that is displayed here in this field.

Partner

This section appears if it is set to be displayed through the display template framework. As delivered, the Partner section is enabled in CORE_ORDER and CORE_QUOTE display templates to store partner information if applicable.

Company   Enter the name of the partner company for which the order is created.

                                           If you enter a partial company name, click the Search button to find possible matches in the system. Selecting a company may populate the Contact field if the company is associated with one contact.

                                           After a partner company and contact are selected, the Clear button and Search Again link appear.

Clear   Click to remove values from the Company and Contact fields, which allows you to perform new partner company search.

Search Again   Click to look for a new partner company and remove all partner information that was entered previously.

Order Details

This section appears on the Order - Entry Form page and is similar to the Quote Details section on the Quote - Entry Form page. Fields that are discussed in this section are applicable to both orders and quotes.

Note. Some of the fields may not show depending on template settings and additional fields may show based on the template or the product added to the order such as a service or a subscription.

Business Unit	Select a business unit to use for this order or quote.
	Based on the tableset control setup, this field may appear as a read only field with one designated business unit, or a drop-down list box where users can select a business unit from the list for the order or quote. The system locates the default business unit (by taking the Order Capture unit that is specified on the User Preferences page for the user who logged on, or by identifying the default business unit that is specified in the Order Capture Definition component if the former is unavailable). If more than one business unit in the system have their RO_01 (order capture setup tables) record group associated with the same setID as the default business unit, all these business units are then listed in this field. Otherwise, only the default business unit appears in this field and it is not editable.
	See and *PeopleSoft CRM 9.1 Application Fundamentals PeopleBook*, "Working with Business Units and TableSet Controls."

| **Status** | Displays the status of the order or quote. |
| | Common statuses are: |

- *Open:* the order is still being created.

- *Submitted:* the order has been submitted.

- *On Hold:* there was a problem when the order was submitted.

- *In Fulfillment:* the order is being processed.

- *Complete:* the order is finished (fulfilled).

| **Promotion** | Select a code that uniquely identifies the promotional offer, if applicable. Products assigned to this promotion will then display a promotional price, rather than their regular price. |

Note. This field involves integration to PeopleSoft Marketing, which relies upon the pricing engine to establish promotional pricing. Under certain circumstances, this field may automatically populate, for instance when an AAF Action that uses a Marketing Wave and Advisor is used to add a product to the order.

See and *PeopleSoft CRM 9.1 Marketing Applications PeopleBook*, "Creating Campaigns and Activities."

See and *PeopleSoft Enterprise Pricer 9.1 for CRM PeopleBook*, "Oracle's PeopleSoft Enterprise Pricer for CRM Preface."

| **Priority** | Priorities appear by default from the Order Capture Business Unit. You can change the priority for the order or quote to *Urgent,High,Medium,* or *Low*. |

Note. There is no extra processing logic associated with priorities. Priorities may be changed from the Setup Workbench.

Fulfill By

Enter the date that the order needs to be fulfilled. This field is empty by default and a value is optional as long as the order is not yet submitted. The Fulfill By date will automatically be populated by the order upon submittal. By default, it's the same as the Earliest date that is calculated by the system and it can be updated manually.

Note. The fulfill by date should not be a past date or a date that is earlier than the date that is specified in the Earliest field (if available), otherwise the order will be put on hold.

An order is referred to as a future dated order if its fulfill by date is a date in the future. A future dated order would be queued until the date when the order should be fulfilled.

Earliest

Displays the date that the order can be fulfilled at the earliest.

This field will appear if any of the products on the order has a defined lead time on its product definition. The system uses this formula to calculate the earliest fulfillment date:

Order created date + Product lead time

Show Details or **Hide Details**

Click to view or hide additional details about the order.

Description

Enter a description for the order if needed.

Source

Identify the source of the order or quote as either *CTI, Fax,Phone, Self Service,* or *Supply Chain.*

Note. Source types may be changed in the Setup Workbench.

Sub Source

Select the sub source of the order to indicate the origin from where the order is created. Available sub source values are based on the selected source. The default value of this field is specified in the definition of the associated order capture business unit.

Sub sources are established in the Order Capture Workbench.

Price As Of

(Optional) Enter the order date that Enterprise Pricer will use in the pricing process.

If a date is specified as the price as of date, it is used to match the start and end dates of price lists and price rules for retrieving list, recurring prices as well as price adjustments.

Date Created

The system populates the date when the order is created.

You can enter a date in the future or in the past.

Currency

Select the currency to use for the order or quote. This defaults based on the business unit.

Total Price

Indicates the total price of the order as it stands with the currently added products and the discounts applied.

Quote Details

This section appears, replacing the Order Details section, when you access the Quote - Entry Form page. Page elements that appear in both the Quote Details and Order Details sections are described above in the Order Details section.

Quote Details section of the Quote - Entry Form page

Order Capture displays these additional page elements for quotes.

Due Date	Enter the date due for the quote. Due Date can be used if the customer has requested pricing information by a certain date, or if the quote is part of a request for quote (RFQ) that is due by a certain time. A default date may populate this field if specified during business unit setup.
Expire Date	Enter the expiration date for the quote. A default date may populate this field if specified during business unit setup.
Revision	Displays the total number of times the quote has been revised.
Confidence % (confidence percentage)	Order Capture provides this field so that PeopleSoft Sales can populate its relevant data in the quote. The value amount is transferred from an opportunity if populated on the opportunity.

Line Summary: Products

This section lists products that are added to the order in individual lines.

In addition to adding new products to or removing them from the order, you can also:

• Update order line information, such as product UOM, order quantity and prices as available.

• Perform options that are available to existing products, such as configuring products and adding attributes.

Additional order line information is available on the Order - Line Details page.

See and <u>Chapter 13, "Managing Orders and Quotes," Viewing or Modifying Line Details, page 304.</u>

After you add a product to the order, additional buttons and options appear as appropriate. For product services with recurring charges, the associated recurring price and frequency are displayed as well.

Line	Product Description	Product ID	*UOM	Order Quantity	Options	List Price	Unit Price		
2	Mountain Pack	10068	Each ▼	1.0000		249.00	249.00	🔲	🗑
3	Camping Package	13001	Each ▼	1.0000	🎁 Configure Package	1000.00	1000.00	🔲	🗑

Line Summary: Products section of the Order - Entry Form page showing one-time and recurring (if applicable) prices after adjustment

🔲 (upsell)	Click to view an up-sell or cross-sell opportunity. The up-sell alert appears on the order line if there is an upsell or cross-sell opportunity associated with the product.
🎁 (configure product) and 🎁 (reconfigure product)	Click to invoke a configuration session to select the configuration setting for the product. If the product has already been configured, the name of the link is changed to *Reconfigure Product.* Product configuration is supported in Order Capture applications with an integration to Advanced Configurator or Oracle Configurator. Lightly Configurator is used as default if none of these product configurators are available. See and Chapter 13, "Managing Orders and Quotes," Configuring Products, page 311. See and Chapter 7, "Integrating Product Configuration," page 119.
📋 (collect attributes)	Click to add configurable product attributes to an order or quote line. Always specify the attribute value for products with required attributes. See and *PeopleSoft CRM 9.1 Product and Item Management PeopleBook*, "Setting Up Products," Defining Product Attributes.
List Price	Displays the list price of the product as defined in the matching price list or the Product Price component (if matching price list is unavailable), which is the default option for displaying initial product list prices on orders that is set at the business unit level. It is the base price that the system uses for calculating price adjustments and the total price of the order line.
	Note. Administrators can specify how product list prices are derived and displayed on orders initially at the business unit level. By default, it is set to be handled by the pricing engine, which displays the list price from a matching price list, or the list price from the Product Price component if no matching price list is found.

Unit Price	Displays the net price of the product, which can be the same as the list price, or different from the list price in the case when price adjustments are applied (manually by CSRs or by price rules).
	Product Unit Price = Product List Price + (applicable price adjustments)
	This value is modifiable. If you want to override the list price in the order line, specify the new price in the Unit Price field.
Recurring Price	Displays, if applicable, the net recurring price of the product. This value is identical to the recurring list price if there are no applicable price adjustments as a result of a manual discount or surcharge, price rule adjustment, or both.
	You can manually override the recurring price in this field if necessary.
	Note. For product packages, only the recurring price at the package level can be overridden manually. While recurring prices at the package component level are not modifiable in this section, manual recurring price adjustment can still be performed in the Line Details page. As for product packages that are set to be priced at the component level, the recurring price is the sum of the adjusted recurring prices of the components.
Recurring Frequency	Displays, if applicable, the frequency for applying the recurring charge on the product, as defined in the price list or the Product Price component.

For orders and quotes that are communications-specific, additional options and links are available.

See and <u>Chapter 10, "Using Order Capture and Service Management in the Communications Industry," page 203.</u>

Line Summary: Pricing Adjustments

Select the Pricing Adjustments tab to enter discounts or surcharges for order lines.

Line Summary: Pricing Adjustments section of the Order - Entry Form page

Total Price	Displays the subtotal of the corresponding order line.
	Total Price = Unit Price x Order Quantity

Net Recurring Price	Displays, if applicable, the most current recurring price of the product used in the corresponding order line.
Discount	Displays, if available, the last available discount amount that has applied to the product list price of the corresponding order line.
Promotion Code	Select a promotion code for the line. If you add a product to the order line using the promotion code, the associated promotion code populates this field.

If an activity is direct/telesales with an Order Capture integration, the Offer/Promotion Code of the activity will default to both the Order Details Promotion Code and the Line Detail Pricing Adjustment Promotion Code.

If you have a promotion code, you must use capture level pricing instead of line level pricing.

Note. This field differs from the field on the Header only in that you can specify a product promotion for a specific line. |
Adjustment	Enter the amount of the adjustment you want to apply to this order line. You can choose to enter either a percentage or an actual currency amount. Select *Percent* or *Amount* in the next field to decide whether the number you enter here will be a percentage of the price, or a static currency adjustment.
Pct/Amt (percent/amount)	Identifies the adjustment field as an exact *Amount* or a *Percentage.*
Adjustment Type	Select whether the price adjustment is a *Discount* or a *Surcharge.*
Apply	Click to apply the discount or surcharge to the order line. The system updates the Total Price and Discount fields of the order line.
More...	Click to access the Price Adjustments page to view the price adjustments that have been applied to the order line currently (both manual and price rule adjustments). You have the choice to delete pricing adjustments if the order has not been submitted.

See and <u>Chapter 13, "Managing Orders and Quotes," Viewing or Modifying Line Details, page 304.</u>

Line Summary: Availability

Select the Availability tab to check product availability and specify shipment preference.

Line Summary: Availability section of the Order - Entry Form page

Availability   Click the Check Availability link to conduct a real-time availability check.
                                    An integration with the PeopleSoft SCM or a third-party inventory system
                                    should be up and running for this link to be operative.

                                    If successful, the process returns a numerical count of the remaining
                                    number of products in stock for those products that you have selected. If the
                                    response fails to return (for example, integration issue or system down, this
                                    link is renamed to *Availability Check Failed.*

                                    This link is applicable to tangible products.

Partials   Select to allow partial shipment of the order line.

                                    This option is applicable to tangible products.

Product Entry

Add products to orders using any of these methods:

•   Enter the product ID or description manually and click the Add button.

•   Search for the product from catalogs.

•   Invoke a session to get recommendation from PeopleSoft Advisor.

Product Entry section of the Order - Entry Form page

Add Product(s)   Enter the product ID or a description to search for a product, service, or product package. The system retrieves all the products that you have requested and enters each product on a new line. You can enter more than one product at a time by separating the product IDs or descriptions with semicolons. Be sure to leave no spaces between the IDs or descriptions. This field contains processing logic so that you do not need to enter exact information. Partial matches retrieve the Product Search Results Page, which lists all of the closest matches.

Note. This field is also equipped with Personalization capability. A CSR's preferences for product selection can be configured so that a variety of input techniques can be used.

Search or Browse Catalog   Click to view catalogs that are associated with this business unit. You can make selections from available catalogs and compare products or services. You can then add product selections directly to the order form.

Get Recommendations   Click to access PeopleSoft Advisor. PeopleSoft Advisor presents you with a question and answer dialog session, where your answers to specific questions will lead to a list of recommendations.

Note. PeopleSoft Advisor is associated to a data model, so that it can retrieve products. In this case the PeopleSoft CRM product data model, which includes automatic filtering based on the catalog definitions, is the data model that PeopleSoft Advisor uses.

See and <u>Chapter 13, "Managing Orders and Quotes," Getting Product Recommendations, page 302.</u>

Get Product Promotions   Select to access the Products Promotions page to view the promotions that are defined in Marketing for the customer.

If the customer only qualifies for one offer, then the order is populated with that offer code. If the customer qualifies for multiple offers, the offer codes are available in a pull-down in the Order so that the user can select the appropriate one.

Shipping Summary

Use this section to enter shipping information.

See and <u>Chapter 13, "Managing Orders and Quotes," Entering Shipping, Payment, and Billing Information, page 314.</u>

Installation Site

This section appears if one of these conditions is met:

• Any product added to this order has the Site Required option selected on the Installed Product page of its product definition.

• The *NOSITE* hold is enabled for this capture type (for example, order, quote, or service management) and business unit combination.

Hold processing is defined using the Capture Type Workbench. For each setID that is used by the order capture applications, you specify, per capture type, a list of hold validations that the system fires when CSRs submit forms of that capture type. For example, if this hold is enabled for the *SHARE* setID and the *order* capture type, for any order of which its business unit is associated with this setID, the system performs a check and places a hold on the order if a site is missing at time of submission.

By default, the NOSITE hold is disabled in system delivered setIDs.

```
Installation Site
         Site Apex Systems- Site1            [icon]       *Contact  Mary Lewis                    [v]
      Address  2050 Gateway Place San Jose, CA 95110 United States           Advanced Options
```

Installation Site section of the Order - Entry Form page

[icon] (select site)	Click to select the site and address or to add a site address. After you select a site, Order Capture displays the site name, which you can then click on to access the Site page in the Customer Data Model.
	Note. This icon appears only when a product requires one, as defined in the product data model or if the *No Site Hold* option is active.
	See and *PeopleSoft CRM 9.1 Product and Item Management PeopleBook*, "Tracking Installed Products," Defining Creation and Update Rules for Installed Products.
Contact	Select a site contact for the customer.
	Note. Select *Add/Select More Contacts* to access the Address Book - Select Contact page to select or add a contact.
	Contact displays only when a product requires one, as defined in the product data model or if the No Site Hold option is active.
Address	Displays the primary address associated with the site appears here.
	Note. Address displays only when a product requires one, as defined in the product data model or if the No Site Hold option is active.
	See and *PeopleSoft CRM 9.1 Product and Item Management PeopleBook*, "Tracking Installed Products," How Installed Products Are Created and Updated.

Advanced Options	Click to view the Lines for this Destination section under the Advanced Shipping section.

Both the Shipping Summary and Installation Site (if available) sections are combined and renamed the Advanced Shipping section. CSRs choose to work with the advanced mode of the form typically when there is a need to split shipments, in which case the installation sites would likely to be different for each shipment.

The Lines for this Destination section shows all products tied to the shipment. You can split a shipment so that certain lines are:

- Shipped to a different address.

- Shipped using a different shipping method.

- Assigned to a different site.

- Assigned a different requested date.

Note. You cannot split the quantity on a single line into multiple shipments. You must create two lines with the appropriate quantity so that you can specify a unique shipping address, shipping method, and date for each shipment.

See and

Billing Summary

Use this section to manage payment information.

See and

Totals

Use this section to view and update the order total.

Totals			
	Customize | Find |	First 1-4 of 4 Last	
Description		**Amount**	**Currency**
One Time Charges		1,249.00	
Discount		0.00	
Surcharge		0.00	
Total One Time Charges		**1,249.00**	USD
Update Total			

Totals section of the Order - Entry Form page

The system computes and displays the order total based on the price order option that is specified at the business unit level. Depending on the average size of orders and the number of orders an organization gets for a period of time, administrators can decide the best approach to show updated order pricing without causing negative impact to system performance. For example, for organizations that process large orders (containing over 100 order lines), administrators can choose to update order pricing only when users click the Update Total button, as opposed to when users add new order lines.

One Time Charges	Lists the total one-time charges of the order.
<Recurring Frequency>	Lists the total recurring charges of the order by recurring frequency.
Surcharge and **Discount**	Displays the order-level pricing adjustments.
Taxes and **VAT**	Order Capture integrates with Taxware, Vertex, and WorldTax to calculate VAT and other taxes.
	Make sure that your tax integration options for Order Capture are set up on the Business Unit Definition page and tax provider page prior to using the functionality at runtime.
	Note. To display VAT, you must define World Tax as your Tax Vendor when you created your Order Capture business unit. You can test all of your third-party integrations on the business unit definition page.
Update Total and **Total One Time Charges**	Click to manually invoke the pricing engine and any third-party calculations such as VAT, taxes, and shipping, and update the total amount charged to this order or quote. This is then reflected in Total One Time Charges.

See Also

PeopleSoft CRM 9.1 Business Object Management PeopleBook, "Defining Tax Exempt Certificate Information for Companies, Consumers and Sites"

Getting Product Recommendations

Access the Product Advisor List page (click the Get Recommendations link on the Quote - Entry Form or Order - Entry Form page).

Product Advisor List page

You can leverage PeopleSoft Real-Time Advisor to engage the buyer with questions and return recommendations. When you click the Get Recommendations link, it launches a question and answer dialog session. When you click the Get Recommendations link, the system displays the Product Advisor List page that lists catalogs, each of which is associated with a Real-Time Advisor dialog. Select a catalog to invoke its associated dialog, like this example:

Introduction page of an advisor dialog for fridge recommendations

The dialog is a series of pages that contain questions and answers. Answers do not provide a static response from PeopleSoft Real-Time Advisor. Instead, the buyers responses determine the user segment that they are placed in, as well as the predefined weightings that are applied. If you choose to walk the buyer through the dialog, a recommendation for a product, service, or solution will be presented at the end of the dialog. You can also force a recommendation by clicking the Recommend button.

Click Exit to return to the calling application, which in this case is Order Capture.

Note. Displaying the debug information is an optional feature of PeopleSoft Real-Time Advisor. To turn the debug information off, refer to the Advisor Workbench documentation in the *PeopleSoft Real-Time Advisor 9.1 PeopleBook.* There is a Business Unit setting that can enable the debug information to show during the Advisor run.

See Also

PeopleSoft Real-Time Advisor 9.1 PeopleBook, "Setting Up Real-Time Advisor Dialogs"

PeopleSoft Real-Time Advisor 9.1 PeopleBook, "Defining Display Templates"

Viewing or Modifying Line Details

Access the Order - Line Details page (Orders and Quotes, Add Order, Order - Line Details).

Order - Line Details page for a standard product (1 of 2)

Manual Price Adjustments

Adjustment	[ ]	Pct/Amt	Percent ▼	Adjustment Type	Discount ▼
Replace/Cascade	Replace Manual Adjustments ▼			Adjustment Target	Apply to this order line ▼
Adjustment for	One-time Charges ▼			Recurrence	

[Apply Adjustment]

Configuration and Attributes

🎒 Camping Package	1@ 1000.00/EA
⬜ 4 Season Convertible Tent	1@ 0.00/EA
⬜ Ice Chest, 20 Qt.	2@ 0.00/EA
⬜ Air Bed with Pump	1@ 0.00/EA
⬜ Adult Day Pack	1@ 0.00/EA
⬜ Culinary Package	1@ 0.00/EA
⬜ Single Outdoor Cooker	1@ 0.00/EA
⬜ BackPacker Cook Set, 2 Person	1@ 0.00/EA
⬜ Aluminum Pots/Pans	1@ 0.00/EA
⬜ Titanium Fork/Spoon Set	1@ 0.00/EA

Order - Line Details page for a standard product (2 of 2)

This page provides detailed information for each product ordered on each order line. Available information includes pricing, cross-sell and up-sell opportunities, configuration setting and attributes and so on. You can apply manual adjustments on the one-time and recurring prices of the order as well.

Line Details

For service products supporting both one-time and recurring pricing, this section displays the list prices and net prices (as pricing adjustments are applied).

Line Details section of the Order - Line Details page for a service product showing one-time and recurring price adjustments

(add note)	Click to access the Notes and Attachments page. The cursor is automatically placed on the Summary line so that you can write your note immediately. When a note is attached, the icon becomes dotted.
Unit of Measure	Select the product's unit of measure for use in the order. You can specify the units of measure for products on the Product Unit of Measure component. For subscription products, the unit of measure is always *EACH*.
Order Qty (order quantity)	Specify the quantity of the product to be ordered. For subscription products, the order quantity is always *1*.
Availability	Click to return an exact numerical count of the remaining number of products in stock.

Note. Order Capture uses the SCM_PROD_AVAIL integration point to make a call to PeopleSoft Supply Chain Management to determine product availability. PeopleSoft Supply Chain Management returns an exact numerical count of available products. If you are using a third-party product for order fulfillment, you can use this integration point. It provides the ability to transform the integration point message to the appropriate format using the PeopleTools Integration broker.

If the availability check cannot be processed successfully, because the integration is inactive, the system is not responsive and so on, this link is renamed to *Availability Check Failed.*

Unit Price	Displays the new net price of the product in the order line. A unit price is calculated by applying price adjustments to the list price of product.
	A price adjustment can be:
	• Automatic, which is performed by the pricing engine in the background when applicable price rules are identified.
	• Manual, which includes modifying the price value in the field (a manual price override), or applying a discount or surcharge in the Manual Price Adjustments section (a manual adjustment).
View Adjustments	Click to access the Price Adjustments page to view any price adjustments that have been applied to the order line and the respective adjustment methods (for example, *manual price override, manual adjustment,* or *Summed Pro-rated Order Adjustments)* as well as the price rules used in the process.
Promotion Code	See and Chapter 13, "Managing Orders and Quotes," Entering Orders or Quotes, page 287.
Agreement Code	See and Chapter 13, "Managing Orders and Quotes," Viewing or Modifying Line Details for Service Agreements, page 309.
Partial Shipments	Select *Single Shipment* not to allow partial shipments.
	Select *Ship as Items Available* to allow partial shipments.
Start Date and **End Date**	Displays the length of the product of the order line, which is a service product or a service agreement. The system uses the current date as the start date, and calculates the end date using the duration that is specified in the associated product definition. For service agreements, the duration comes from the associated agreement template.
	These fields are displayed in order lines for service products and service agreements.
Total Price	Displays the one-time price total of the order line, which is the result of multiplying the unit price by the order quantity.
Recurring List Price	Displays the product's recurring base price, if applicable, which is retrieved, by the pricing engine, either from a matching price list or the Product Price component. This is the default option for displaying initial product list prices on orders that is set at the business unit level).
Recurring Price and **Net Recurring Price**	Displays the recurring price, which is the net recurring price multiplied by quantity, and the net recurring price, which is the result of applying valid adjustments to the recurring list price.
List Price	Displays the product's one-time list price, which is retrieved either from a matching price list or the Product Price component (this is the default option for displaying initial product list prices on orders that is set at the business unit level).

Discount Taken and **Discount Percentage**	Displays the discount (in actual amount and in percentage) that is applied to the one-time price of the specified target (this order line or the entire order), if available. For example, if you apply a $1 discount to a product of list price $25, the value of discount taken is $1.00 and the discount percentage 4 (which stands for 4 percent).
Minimum Price	Displays the product's minimum price as defined on the Product Unit of Measure page.
Duration	Displays the length of the service product, as specified in the associated product definition.
	This field is visible if the type of the product in the order line is *service.*
Lead Time	Displays, if available, the lead time that is defined in the product definition.
	The system uses this value to calculate the earliest order fulfillment date.

Manual Price Adjustments

Validation checks are in place to make sure that total discounts or surcharges imposed on orders are within limits. Functional options are set up to limit the amount of discounts and surcharges that functional group users can apply. So when an order capture user (a customer support representative or an administrator who is also a functional group user) places an order with price adjustment, the system retrieves the maximum surcharge and discount amount allowed and compares the values with the pending surcharges and discounts. The order is put on hold if the pending amount exceeds the hold limit permitted to the user.

Adjustment	Enter the amount of the adjustment you want to apply to this order line. You can choose to enter either a percentage discount or an actual currency discount. Select *Percent* or *Amount* in the Pct/Amt field to decide whether the number you enter here will be a percentage of the price, or a static currency adjustment.
Pct/Amt (percent/amount)	Identifies the adjustment field as an exact *Amount* or a *Percentage.*
Replace/Cascade	*Cascade Manual Adjustment* adds this price adjustment to all existing adjustments, whereas *Replace Manual Adjustments* replaces any manual adjustments with the current discount being applied.
Adjustment for	Specify the charge type to which the manual adjustment applies.
	Values are:
	One-time Charges. By default, manual adjustments apply to one-time charges.
	Recurring Charges.
	Note. Manual price adjustments for one-time and recurring charges are not supported in service management.
Adjustment Type	Select *Discount* or *Surcharge.*

Adjustment Target	You can target the discount for the current line that you are looking at, in which case you select *Apply to this order line,* or you can apply the discount to the whole order, by choosing *Apply to entire order.*

Note. Price adjustments for recurring charges are supported only at the order line level, not the order level.

Recurrence	Enter the number of times that the manual adjustment to the recurring charge of the order line can be applied.

This value is applicable to adjustments that are offered for a specific time period for recurring charges. |
| **Apply Adjustment** | Click to apply the manual price adjustment to the order line. The system updates values of the Total Price,Unit Price and Discount fields accordingly. |

Cross/Up Sell Opportunities

This section lists the product definitions that are associated with the ordered product in the Product Relationship component.

(add to order)	Click to add the corresponding product to the order.
(replace)	Click to replace the ordered product of this line detail with the product corresponding to this icon.
(compare)	Click to view the comparison between the ordered product of this line detail and the product corresponding to this icon.

Configuration and Attributes

This section provides a detailed list of the options selected for the configured product. Configuration details appear in a list with corresponding product ID, description and price. Attributes that are captured during the product configuration session also appear in this section.

Note. You can control the level of detail that displays here. To control display options, you can navigate to Schemas-Display options in the Configurator setup.

If a product is defined in the product data model as requiring configurable attributes, the Collect Attributes link appears when the product is added. You can also view the attribute and attribute values that are captured using this link for the product.

See and <u>Chapter 7, "Integrating Product Configuration," Executing Product Configuration Sessions At Runtime, page 144.</u>

Viewing or Modifying Line Details for Service Agreements

Access the Order - Line Details page (Orders and Quotes, Add Order, Order - Line Details).

Order - Line Details page for an agreement product

This screenshot displays the line details of a service agreement product that was added as a cross-sell opportunity of the *PHONEREPLACEPLAN* product. The difference between a line details section for a service agreement product and a standard product is minimal; the section for service agreement products has these additional fields and section:

Agreement Code	Displays the value of *NEXT* by default. When an agreement product is added to an order, a new agreement gets created after the order is completed. By leaving the *NEXT* value as is, the system assigns the next available ID to the new agreement.
	You can also select an existing agreement to provide coverage for products that are being ordered or already owned by the customer.
Start Date and **End Date**	Indicates the duration of the agreement. The system uses the current date as the start date, and calculates the end date by adding the duration of the associated agreement template to the start date.
	If an existing agreement is used, the end date is the same as the end date of the existing agreement.
Duration	Displays the length of the service agreement as defined by the start and end dates.

Include Customer's Installed Products	Click to access the Customer's Installed Products page to select additional installed products to provide coverage for on the order. If the customer has any installed products eligible for coverage by the agreement product, Order Capture displays them in the Selected Covered Products section.
Create Installed Product	Click to access the Installed Product page to create an installed product to add to the Select Covered Products section.
Include Ordered Products	Click to expand the Select Covered Products section and add products that are currently selected on this order to be covered by the agreement product of the order line item.
	For example, if you have selected a "24-month damage protection product agreement" on an order line and you have another three mobile phones on it that can be covered by the agreement, these three mobile phones are displayed on the Select Covered Products section when you click this link. You can then select or deselect the products you want the agreement to cover.
Relate to Customer's Installed Service	Click to select installed services from the list to link to the product of the current order line item. This is typically used in situations where customers request to replace handsets with the same wireless service.
	See and Chapter 10, "Using Order Capture and Service Management in the Communications Industry," Handset Replacement, page 215.
Relate to Line on Order	Click to access the Select Product for Line Relationship page to select products from other line items of the same order to add to the Line Relationship section.

Select Covered Products

This section displays a list of products (which are added to the order) that can be covered by the agreement product.

Include in Agreement	Select to associate multiple ordered products to one service agreement.
	If multiple products on the order are eligible for coverage by the same service agreement product based on the agreement template definition, they are displayed in the Select Covered Products section. If selected, the ordering process includes them in the coverage and cost of the purchased agreement.
	In an example where a service agreement is added to an order as a cross-sell opportunity of another standard product, the system automatically selects the Include in Agreement field for that standard product.

Configuring Products

This section discusses how to:

- Configure products using Oracle Configurator.

- Configure products using PeopleSoft Advanced Configurator.

- Configure products using Lightly Configurator.

Pages Used to Configure Products

Page Name	Definition Name	Navigation	Usage
<product configuration session>	CFG_HTML_SEC	• Orders and Quotes, Add Order, Order - Entry Form Click the Configure Product or Reconfigure Product link of a product on the Order - Entry Form: Products page. • Orders and Quotes, Add Quote, Quote - Entry Form Click the Configure Product or Reconfigure Product link of a product on the Quote - Entry Form: Products page.	Configure products using PeopleSoft Advanced Configurator.
<configure dynamic product >	CP_DYNAMIC_PANEL	• Orders and Quotes, Add Order, Order - Entry Form Click the Configure Package link next to a package product on the Order - Entry Form: Products page. • Orders and Quotes, Add Quote, Quote - Entry Form Click the Configure Package link of a package product on the Quote - Entry Form: Products page.	Create a dynamic package from within Order Capture.

Configuring Products Using Oracle Configurator

See and Chapter 7, "Integrating Product Configuration," Configuring Product Details Using Oracle Configurator, page 145.

Configuring Products Using PeopleSoft Advanced Configurator

See and Chapter 7, "Integrating Product Configuration," Configuring Product Details Using Advanced Configurator, page 147.

Configuring Products Using Lightly Configurator

Access the <configure dynamic product > page (click the Configure Package link of a package product on the Order - Entry Form: Products page).

<configure dynamic product > page

Configured product packages are established using these components: Product Definition and Package Components.

In product definition, you specify the schema or model used to present the configuration options and details.

In a package component definition, you specify the maximum and minimum number of optional or required components that a customer can select, and specify (for each component) the maximum and minimum quantity that a customer can order.

See Also

PeopleSoft CRM 9.1 Product and Item Management PeopleBook, "Setting Up Products," Defining Product Information

PeopleSoft CRM 9.1 Product and Item Management PeopleBook, "Setting Up Products," Defining Product Packages

Entering Shipping, Payment, and Billing Information

This section discusses how to:

- Enter shipping information.

- Manage billing information.

Pages Used to Enter Shipping, Payment, and Billing Information

Page Name	Definition Name	Navigation	Usage
Order - Entry Form (Advanced Shipping section), Quote - Entry Form (Advanced Shipping section)	RO_FORM	• Click the Advanced Option link on the Order - Entry Form page. • Click the Advanced Option link on the Quote - Entry Form page.	Enter shipping information.

Page Name	Definition Name	Navigation	Usage
Order - Entry Form (Billing Summary section), Quote - Entry Form (Billing Summary section)	RO_FORM	• Orders and Quotes, Add Order, Order - Entry Form • Orders and Quotes, Add Quote, Quote - Entry Form • Orders and Quotes, Search Orders and Quotes, Order- Entry Form • Orders and Quotes, Search Orders and Quotes, Quote - Entry Form	Manage payment information and add a new billing account, if applicable.
Order - [mode] Credit Card	RO_CREDITCARD_SEC	Click the Edit link in the Billing Summary section of the Order - Entry Form page.	Add or edit credit card information for billing purposes.

Entering Shipping Information

Access the Order - Entry Form page: Advanced Shipping section (click the Advanced Option link on the Order - Entry Form page).

Advanced Shipping section of the Order - Entry Form page

Clicking the Advanced Options link combines the Shipping Summary and Installation Site sections to become the Advanced Shipping section. CSRs choose to work with the advanced mode of the form typically when there is a need to split shipments, in which case the installation sites would likely to be different for each shipment.

If the Installation Site section is not displayed in the basic mode, it'll be hidden in the advanced mode as well.

Customer	Displays the customer who the order will be shipped to. Click to access the Company page in the Customer Data Model.
🔍 (lookup customer)	Click to select a different ship to customer.
Contact	Select a shipping contact for the customer.
	Note. Select *Add/Select More Contacts* to access the Address Book - Select Contact page to select or add a contact. When adding a new contact, you can indicate the new contact as a one-time contact by checking the "One Use Only (not a permanent address or contact)" on the Address Book - Create New Address page.
Address	Select a shipping address for the customer.
	Note. Select *Add/Select More Addresses* or click the View Addresses button to access the Address Book - Select Address page to select or add a shipping address. When adding a new address, you can indicate the new address as a one-time address by selecting One Use Only (not a permanent address or contact) on the Address Book - Create New Address page.
Shipping Method	Select a carrier service. Applicable carriers that are to be used by the system are set up in CARRIER_TBL.
	See and Chapter 4, "Setting Up PeopleSoft Order Capture," Setting Up Freight Integration, page 84.
Arrival Date	Select the requested arrival date for the product(s) being shipped. If the order is a future dated order, the shipping Arrival Date must be after the Fulfill By date, otherwise the order will go on hold.
Description	Enter any additional information about the shipment.
Tax Exempt	Select if the shipment is exempt from taxes. If selected, Order Capture displays the Exemption Certificate field where you select a tax exemption certificate.
📇 (select site)	Click to select the site and address or to add a site address. After you select a site, Order Capture displays the site name, which you can then click on to access the Site page in the Customer Data Model.
	Note. Select Site appears only when a product requires one, as defined in the product data model or if the *No Site Hold* option is active.
	See and *PeopleSoft CRM 9.1 Product and Item Management PeopleBook*, "Tracking Installed Products," Defining Creation and Update Rules for Installed Products.

Contact	Select a site contact for the customer.
	Note. Select *Add/Select More Contacts* to access the Address Book - Select Contact page to select or add a contact.
	Contact displays only when a product requires one, as defined in the product data model or if the No Site Hold option is active.
Address	The primary address associated with the site appears here.
	Note. Address displays only when a product requires one, as defined in the product data model or if the No Site Hold option is active.
	See and *PeopleSoft CRM 9.1 Product and Item Management PeopleBook*, "Tracking Installed Products," How Installed Products Are Created and Updated.

Lines for this Destination

This section shows all products tied to the shipment. You can split a shipment so that certain lines are:

* Shipped to a different address.

* Shipped using a different shipping method.

* Assigned to a different site.

* Assigned a different requested date.

Note. You cannot split the quantity on a single line into multiple shipments. You must create two lines with the appropriate quantity so that you can specify a unique shipping address, shipping method, and date for each shipment.

Split	Select a line to split the order into multiple shipment.
Move to Another Shipment	After you select a line, click to split a line to create multiple shipments.
Combine with Previous Shipment	Click to combine the shipment with the previous shipment. This button appears after you split a shipment
Basic Options or **Advanced Options**	Click to view or hide details about the shipment.

Managing Billing Information

Access the Order - Entry Form page: Billing Summary section (Orders and Quotes, Add Order, Order - Entry Form).

Billing Summary section of the Order - Entry Form page

Note. For orders that are created for the communications market (delivered business unit: *COM01*), this section is modified and renamed Nonrecurring Billing Summary to capture the payment method for one-time charges. A separate section called Recurring Billing Summary appears to capture the payment method for recurring charges.

Bill To	Select where the ordered products are to be billed, to the partner or the customer.
	Note. This field appears if the Partner Commerce products is installed and a partner company is selected for the order.
	See and *PeopleSoft CRM 9.1 Application Fundamentals PeopleBook*, "Setting Up General Options."
Products are for Resell	Select to indicate that ordered products are for resell purposes.
	This option is used in several order capture EIPs, as well as in some of the holds in the application to drive business logic (for example, if the products are for resell, the check on the presence of an installation site on the order entry form may not be necessary at save time.)
	Note. This field appears if the Partner Commerce products is installed and a partner company is selected for the order.
	See and *PeopleSoft CRM 9.1 Application Fundamentals PeopleBook*, "Setting Up General Options."
Customer	Displays the customer who the order will be billed to. Click the link to access the Company page in the Customer Data Model to view customer detail.

🔍   Click the Lookup Customer button to select a different bill-to customer, if available. The system displays additional companies that are specified in the Send Bills To section of on the Company - Summary: Purchasing Info page. These companies have a *Billed To* relationship with the sold-to customer, which is either the one that appears on the order header, or the one that is currently selected in the Related Customer section of the order (in case of a convergent order that can include more than one customer for package migration purposes).

     See and *PeopleSoft CRM 9.1 Business Object Management PeopleBook*, "Defining Purchasing Options for Companies, Consumers, and Sites," Entering Purchasing Detail.

     See and

Contact   Select a billing contact for the customer.

> **Note.** Select *Add/Select More Contacts* to access the Address Book - Select Contact page to select or add a contact. When adding a new contact, you can indicate the new contact as a one-time contact by checking the "One Use Only (not a permanent address or contact)" on the Address Book - Create New Address page.

Address   Select a billing address for the customer.

> **Note.** Select *Add/Select More Addresses* or click the View Addresses button to access the Address Book - Select Address page to select or add a billing address. When adding a new address, you can indicate the new address as a one-time address by checking the "One Use Only (not a permanent address or contact)" on the Address Book - Create New Address page.

PO Number (post office number)   Enter the purchase order number, if one exists for the customer.

PO Received (post office received)   Select this check box if a purchase order has been received.

> **Note.** This functionality is designed solely for auditing purposes. There is no attached business logic.

Invoice   Select this payment option if you want to issue an invoice to the customer.

Payment Terms   Select terms of payment if *Invoice* is selected as the payment method. This field is unavailable for edit if invoice is not the selected payment method.

Credit Card   Select this payment option if you want to charge the customer using a credit card.

Credit Card (drop-down list)　　Select an existing credit card from available values or add a new credit card.

> **Note.** The credit card is attached to the bill to contact or consumer in the customer data model.

Edit　　Click to access the Order - [mode] Credit Card page to add new or edit existing credit card information for the customer.

> **Note.** When you add new or edit existing credit card information, you can select the Save on File option to save the information in the Customer Data Model.

Verification Number　　Enter the card verification code of the selected credit card (a 3-digit or 4-digit number). After you enter the number for the first time and tab out of this field, the system masks the entered number automatically and displays it in the form of XXX.

This field becomes required if the Credit Card Verification Number Required option is selected on the General Options page.

The system deletes the verification number permanently from the database after the order is submitted and the credit card authorization process is completed (whether passed or failed), or if the order is being canceled.

For future dated orders, their verification numbers are stored in the database, and will be removed when the fulfill by date is reached *AND* the orders are submitted.

Billing Account and **Account Number**　　Select this payment option if you want to charge the order payment to a billing account of the bill-to customer selected in this section. Then, select an existing account of the customer in the Account Number field. Available values can include both prepaid and postpaid accounts of the customer. Refer to the see reference (the *Specifying Shipping and Billing Information* section) for more information on the billing account payment option.

This option is used in the Communications solution where customers use billing accounts to make payments and view usage, and becomes available if the communications setup option to allow the use of billing accounts to pay for nonrecurring charges is enabled. Refer to the see reference (the *Orders and Service Management* section) for more information on communications setup options.

See and <u>Chapter 24, "Working with Orders for Multilevel Product Bundles," Line Summary, page 675.</u> and <u>Chapter 24, "Working with Orders for Multilevel Product Bundles," Orders and Service Management, page 637</u><u>.</u>

Recurring Billing Summary

The Recurring Billing Summary section appears for orders that are created for the COM01 setID as delivered. Accounts are mainly used for recurring charges and are utilized extensively for communications-specific orders.

Recurring Billing Summary section of the Order - Entry Form page

When a new billing account is created through the Order Capture business process, the *BillTo* customer is added to the billing account with a *Manager* role.

You can use an existing account for the order entry, or create a new one, if required for order processing.

Customer	Displays the customer who the order will be billed to.
Contact	Select a contact for the bill-to customer.
Existing Account and **Account Number**	Select to bill this recurring payment to an existing service account of the selected bill-to customer, and select the actual billing account number. Available values include both prepaid and postpaid accounts of the customer.
New Account	Select to bill this recurring payment to a new service account to be created for the selected bill-to customer, then select the type of account, either *individual,sponsored,subordinate* or *prepaid*.
Address	Select a billing address for the newly created account. You can either select a predefined bill-to address of the customer, or create a new address for the new account.
	It is option for prepaid account creation.
Individual Account	Select to create a new account that is unrelated to other accounts.
Invoice	Select *invoice* as the payment method.

New Credit Card	Select an existing credit card or add a new credit card.
	Note. The credit card is attached to the bill to contact or consumer in the customer data model.

Sponsored Account and **Account Number**

Select if there is a parent account that assumes billing responsibility for this new account. Select the parent account ID in the adjacent Account Number field.

Subordinate Account and **Account Number**

Select if there is a parent account that assumes billing responsibility for this new account. Choose the parent account ID in the adjacent Account Number field.

Prepaid Account

Only available when a prepaid service product has been added to the order. This option will create a prepaid account which means funds need to be added to the account before the service is available for use.

See and *PeopleSoft Bill Presentment and Account Management 9.1 PeopleBook*, "Understanding Prepaid Accounts for Communication Service Providers."

Reuse New Account

Select if you want to use the new account, which is currently marked for creation in another order for the same bill-to customer selected in this section, as the account for paying recurring charges. This option does not appear if the system does not currently have a new account request for the same bill-to customer.

See Also

PeopleSoft Bill Presentment and Account Management 9.1 PeopleBook, "Managing Accounts and Viewing Bills in the Communications and Energy Industries," Managing Accounts

Viewing Price Adjustments

This section discusses how to view price adjustment details.

Page Used to View Price Adjustments

Page Name	Definition Name	Navigation	Usage
Price Adjustments	RO_CAPTURELINE_ADJ	Click the View Adjustments link on the Order - Line Details page.	View details of the price changes that you made. You can view the pricing details for Line Adjustments, Summed and Manual Adjustments, and Order Adjustments.

Viewing Price Adjustment Details

Access the Price Adjustments page (click the View Adjustments link on the Order - Line Details page).

Price Adjustments page showing price adjustments (manual) on one-time prices

Configuration and Attributes

This section displays the basic information of the product that is associated with the order line currently being viewed. In addition to the product ID and unit of measure, it shows the product's one-time list price, recurring list price, as well as the final net prices (for both one-time and recurring) after pricing adjustments are applied.

Note that only line level adjustments, not order level adjustments, are reflected in the final unit price and final recurring price values in this section.

Line Adjustments - Rule Tab

This grid displays all of the adjustments applied by the system, including the price rules that are being applied to the lines.

Recurring Flag	Indicates (if selected) that the corresponding price rule is specific to recurring price.
Price	Displays the net one-time price if the corresponding price rule applies to one-time price..
Net Recurring Price	Displays the adjusted recurring price if the corresponding price rule applies to recurring price.
Recurrence	Displays the number of times that the recurring price will be adjusted by the corresponding recurring price rule.

For adjustments that are summed, the price and the recurring price are displayed as zero and the summed value is displayed in the Summed and Manual Adjustments section.

Line Adjustments - Formula Tab

Information on this tab provides more detail about the rules that are being applied.

Line Adjustments - Pricing Keys Tab

Information on this tab lists the identifiers which indicate where the Price Rule condition was met.

Summed and Manual Adjustments

This grid displays the summed and manual adjustments that were applied to the lines for both one-time and recurring prices. It is a manual adjustment if a percentage or an amount of discount or surcharge is applied to the list price (one-time or recurring). It is a price override if the net price (one-time or recurring) is being updated in the field directly.

Order Adjustments

This grid displays the one-time price adjustments that have been applied for the total order.

Adding and Viewing Notes and Attachments

This section discusses how to add or view notes and attachments.

See Also

PeopleSoft CRM 9.1 Application Fundamentals PeopleBook, "Working with Notes and Attachments"

Page Used to Add or View Notes and Attachments

Page Name	Definition Name	Navigation	Usage
Order - Notes Quote - Notes	RO_NOTE	• Orders and Quotes, Add Order, Order - Notes • Orders and Quotes, Add Quote, Quote - Notes • Orders and Quotes, Search Orders and Quotes, Order - Notes • Orders and Quotes, Search Orders and Quotes, Quote - Notes	Add or review notes or attachments for the order or quote.

Adding or Viewing Notes or Attachments

Access the Order - Notes page (Orders and Quotes, Add Order, Order - Notes).

Order - Notes page (1 of 2)

Order - Notes page (2 of 2)

Notes Summary

This section displays a summary of notes.

Subject and Details	Displays a short and long description of the note contents.
Add Note	Click to add a note for the order.

Add a Note or Note Details

Note Type	Select either *Billing Notes,Comment,Customer Call,Customer Web,Pricing Note,Production Configuration,Research,Sales Note* or *Shipping Notes* as the type of note.
Visibility	Select *Everywhere* or *Internal Only.* If you select *Everywhere,* users of all self service applications, including Order Capture Self Service will be able to view the note. If you select *Internal Only,* notes will only be viewable to the CSR.

Attachments

Attachment	Click to view an existing attachment.
Apply Note	After entering information, click to apply the note to the order or order line or to the quote or quote line.

Add an Attachment   Click to add an attachment. Order Capture opens a new page for you to
                               browse the network to locate and attach a file to the note.

Managing Holds

This section provides an overview of holds and discusses how to view the hold summary.

See and <u>Chapter 10, "Using Order Capture and Service Management in the Communications Industry," page 203.</u>

Understanding Holds

Hold validations fire automatically as soon as you submit an order or quote. When an order or quote needs to be put on hold, the Holds page is displayed with the list of hold items that apply. The status of the order or quote changes to *Hold Order* and the submission cannot continue unless all holds are lifted. There are a variety of reasons as to why your order or quote will be placed on hold. There are also several ways in which you can resolve the problem.

These are some of the hold codes that are delivered in Order Capture:

Hold Code	Explanation
Anonymous Customer Hold	Hold is triggered if the customer specified is setup as an anonymous Business Object. Use this hold when the fulfillment system does not support anonymous Customers.
Configuration Hold	Hold is triggered if a line has a configured product and it is not configured when capture is submitted.
Exceed Corporate Credit Limit	Hold is triggered if the customer has exceeded the credit limit range as specified on the Customer and Business Unit.
Credit Card Hold	Hold is triggered if the customer is paying by credit card, and the authorization fails.
Currency Conversion Not Possible	Hold is triggered if there is no currency conversion available for the pricing engine.
Exceeds Maximum Order Qty	Hold is triggered if the quantity on the line exceeds the maximum order quantity.
Under Minimum Quantity	Hold is triggered if the quantity on the line falls below the minimum order quantity.

Hold Code	*Explanation*
Below Minimum Selling Price	Hold is triggered if the quantity on the line falls below the minimum selling price.
No Bill To Contact	Hold is triggered if the bill to contact is missing.
No Bill To Customer	Hold is triggered if the bill to customer is missing.
No Product Package Components	Hold is triggered if the line has a product that is a package, and no package components have been chosen.
No Capture Lines	Hold is triggered if the order or quote has no lines.
No Ship To Customer	Hold is triggered if the ship to customer is missing.
No Ship To Contact	Hold is triggered if the ship to contact is missing.
No Sold To Contact	Hold is triggered if the sold to contact is missing.
Product Catalog Violation	Hold is triggered if the product on the line is not in the customer's catalog.
Product Increment Violation	Hold is triggered if the line quantity is not a multiple of the increment defined on the product definition.
Product Prerequisite Violation	Hold is triggered if the product on the line has prerequisites that are not installed, or not on the current capture.
Price List Not Found	Hold is triggered if there is no price list found by the pricing engine.
Line Site Contact Required	Hold is triggered if a product requires a site, and a Site Contact is not one specified.
Line Site Required	Hold is triggered if a product requires a site, and there is not one specified.
Freight Calculation Hold	Hold is triggered if the calculation of freight charges by the third-party system fails.
Invalid Start / End Dates Hold	Hold is triggered when the start date or end date is missing or invalid for service products.

Hold Code	*Explanation*
Subscription Holds	Subscription Holds ensure valid order data for a Subscription. Order Due date is set and is today or in the future, Subscription Term and Schedule are set.
Future Dated Orders not enabled Hold	Hold is triggered if a Fulfill By date is set and Future Dated Orders are not enabled on the Business Unit.
Order Re-Validation Failed	Hold is triggered if order fails revalidation on order execution date during the submit attempt. This may occur if the products on the order are no longer active.
Fulfill By date is before Earliest Fulfill By date	Hold is triggered if the order execution date is before the earliest date the order can be fulfilled. The Earliest Fulfill By date calculated based on the Lead times of the products on the order.
Shipment Arrival Date Earlier then Order Due Date	Hold is triggered if user specified the shipment arrival date prior to the order due date. The shipment may arrive late.
Order Execution Time Frames Overlapping	Hold is triggered if the estimated order execution time frame (the period of time between order execution and order due dates) is overlapping with the same period for another already queued order.
Service Disconnection Scheduled before Order Due Date	Hold is triggered if the submitted manage service order is due for a date when the service is already scheduled to be disconnected (already queued disconnection order; temporarily activated service) or there are other queued Manage Service orders due for a date later then the due date of the currently submitted Disconnect Service order.
Service Suspend scheduled before Order Due Date	Hold is triggered if the submitted manage service order is due for a date when the service is already scheduled to be suspended (already queued suspend service order) or there are other queued Manage Service orders due for a date later then the due date of the currently submitted Suspend Service order.
Discount percent over limit (for one-time charge)	Hold is triggered if the total discount on the one-time price of a product is more than what the agent can apply. This hold code is applicable only to any discounts applied by price rules. **Note.** A separate hold code is available to limiting the maximum total discount on the one-time price of a product that the agent can apply manually, not through price rules.

Hold Code	Explanation
Recurring Discount percent over limit	Hold is triggered if the total discount on recurring price of a product is more than what the agent can apply. This hold code is applicable to any discounts applied by price rules. **Note.** A separate hold code is available to limiting the maximum total discount on the recurring price of a product that the agent can apply manually, not through price rules.
Price Surcharge Limit Reached (for one-time charge)	Hold is triggered when the surcharge percent on the one-time price of a product is more than what the user is allowed to apply.
Recurring Price Surcharge Limit Reached	Hold is triggered when the surcharge percent on the recurring price of a product is more than what the user is allowed to apply.

Note. Holds can be easily added for specific business processing. You can extend hold processing by creating your own hold codes. This is a simple configuration task in the Order Capture Setup and Capture Type workbenches.

Pages Used to Manage Holds

Page Name	Definition Name	Navigation	Usage
Order - Holds: Hold Summary, Quote - Holds: Hold Summary	RO_HOLD	• Orders and Quotes, Add Quote, Order - Holds • Orders and Quotes, Add Order, Quote - Holds • Orders and Quotes, Search Orders and Quotes, Order - Holds • Orders and Quotes, Search Orders and Quotes, Quote - Holds	View holds on the order or quote.

Page Name	Definition Name	Navigation	Usage
Order - Holds: Hold Details, Quote - Holds: Hold Details	RO_HOLD	• Click the Hold Details link on the Order - Holds page. • Click the Hold Details link on the Quote - Holds page.	View hold details and override the hold, if necessary.

Viewing the Hold Summary

Access the Order - Holds: Hold Summary page (click the Hold Summary link on the Order - Holds page).

Order - Holds: Hold Summary page

Hold   Displays the description of the hold code.

Hold Status   Displays the hold status. You can change the hold status if your user security allows you to override it.

                          If you select *Override Hold* you can add a note to explain why the hold was overridden.

Message   Displays the explanation of the hold.

Pending Action By   List PeopleSoft roles that can override a specific hold code.

Viewing Details or Removing Holds

Access the Order - Holds: Hold Details page (click the Hold Details link on the Order - Holds page).

Order - Holds: Hold Details page

Hold   Short explanation of the reason for the hold.

Related Line   Line number for the offending product(s).

Hold Status	Current status of the hold. This is a display-only field for regular users, such as most customer service contacts. However, users with manager-level permissions can select one of the following statuses:

           • *Requires Action:* This selection indicates that action needs to happen. The system defaults to this status when the hold is created.

           • *In Process:* This selection indicates that the hold still needs to be addressed and some action is taking place in relation to the hold.

           • *Override Hold:* Select to ignore the hold and pass it. For example, you have a minimum price violation but are willing to allow the lower price for this order or quote. When this status is set, the system will no longer check the hold condition. When a hold is overridden, a note and reason can be assigned explaining why the hold was overridden.

           • *Passed:* This indicates that the hold has passed. The CSR can manually set this status, or the system will set this status when the order or quote has been submitted, and the condition has passed. When this status is set, the system will still check the hold condition, and set to *Requires Action* if the condition fails.

> **Note.** A manager with the correct set of permissions can override the hold by placing the hold in *Override Hold* status and resubmitting the order or quote.

Status Date	Indicates the date the Hold status last changed.
Failed Value	This is the value that is causing the Hold Reason.
Pass Value	This is the value that is required to remove the hold.

Maintaining Orders

This section provides an overview of order maintenance.

Understanding Order Maintenance

Order maintenance and quote revisioning are triggered by the same toolbar button. This button allows changes to order data based upon configurable rules defined in the Capture Type Workbench. These rules determine the status of the order, and order lines, and will allow changes to certain data elements based upon this status.

To understand order maintenance, consider both the header statuses and the line statuses that are delivered out of the box, and how they map to the PeopleSoft Supply Chain Management fulfillment system. An order for example cannot be changed if has been shipped, or if the fulfillment system has not acknowledged its existence. In this overview section are two tables: one explains Order Capture header statuses and the second shows how line statuses in CRM map to PeopleSoft Supply Chain Management.

Header Statuses

Here are the delivered header statuses that can be displayed on the Entry Form:

Header Status	*Description*
2000 (In Fulfillment)	The order is in the process of fulfillment. Quotes cannot have a status of *In Process* since quotes are not part of fulfillment.
9000 (Hold)	There is an open hold on the order, based on hold conditions.
3500 (Fulfillment Hold)	The Fulfillment system has placed a hold on the order.
1500 (Partial Hold)	The Fulfillment system has placed a hold on some products on the order.
6000 (Complete)	The order has gone through the fulfillment process. It has been shipped, or installed depending upon whether it is a tangible product or a service. **Important!** Once an order is set to *Complete,* the ordering process is considered finished and cannot be reversed.
1 (Canceled)	The order or quote has been canceled and no further action on this order or quote is necessary.
950 (Queued)	The order or quote has been created for a future date and is queued for later automatic submittal.
5000 (Expired)	The quote date has passed so the quote has expired.
500 (New)	The order or quote is new and has not been submitted.
1000 (Submitted)	The order or quote has been submitted for processing.

See and <u>Chapter 4, "Setting Up PeopleSoft Order Capture," Defining Header Statuses, page 51.</u>

Line Statuses

The following table shows the delivered line status mappings between Order Capture and PeopleSoft SCM:

SCM Line Status	*CRM Line Status*	*CRM Line Partial Status*
B (Backordered)	2000 (Backordered)	2100 (Partially Backordered)

SCM Line Status	CRM Line Status	CRM Line Partial Status
C (Closed)	6000 (Shipped)	6100 (Partially Shipped)
CMTD	1050 (Sold)	1050 (Sold)
DENY (Deny)	1060 (Lost)	1060 (Lost)
DRAF (Draft)	1010 (Draft)	1010 (Draft)
H (On Hold)	3500 (Fulfillment Hold) **Note.** Holds that originate in CRM have the status, 9000. This is to differentiate a Hold that originated in CRM (status 9000), from a Hold that originated in SCM.	3500 (Fulfillment Hold)
I	5700 (Billed)	5750 (Partially Billed)
J	5750 (Partially Billed)	5750 (Partially Billed)
K (Picked)	5000 (Picked)	5100 (Partially Picked)
L	5100 (Partially Picked)	5100 (Partially Picked)
O (In Fulfillment)	4000 (In Fulfillment)	4100 (Partially In Fulfillment)
P (Pending)	3000 (Pending)	3100 (Partially Pending)
Q (Requisitioned)	4500 (Requisitioned)	4600 (Partially Requisitioned)
RDY (Ready)	1030 (Priced)	1030 (Priced)
S (Shipped)	6000 (Shipped)	6100 (Partially Shipped)
T	6100 (Partially Shipped)	6100 (Partially Shipped)
U (Purchased)	5500 (Purchased)	5600 (Partially Purchased)

SCM Line Status	CRM Line Status	CRM Line Partial Status
V	3700 (Reserved)	3750 (Partially Reserved)
W	3750 (Partially Reserved)	3750 (Partially Reserved)
X (Canceled)	1 (Canceled)	1 (Canceled)

See and <u>Chapter 4, "Setting Up PeopleSoft Order Capture," Defining Line Status Mappings, page 81.</u>

Allowable Maintenance

For the purposes of an integration with PeopleSoft Supply Chain Management, Order Capture allows you to maintain orders where the header status is at least *Submitted* (1000) and not yet *Complete* (6000). Order Capture allows order maintenance out of the box, where PeopleSoft Supply Chain Management is the fulfillment system under the following conditions:

*   If the header status is greater than *Submitted* (1000) but less than *Complete* (6000).

*   If the line status is less than *Open* (1000), line configurations and attributes can be changed.

*   If the line status is less than *In Fulfillment* (4000), line customer information can be changed.

*   If the line status is less than *In Fulfillment* (4000), line pricing data can be changed.

Since an order with header status of *Queued* has not yet been submitted to back end processing, it is queued for later automatic submittal, a Queued order can be maintained. No change order is required if a Queued order is maintained, since no order has yet been sent to the fulfillment system.

Order Capture delivers integration points that support a realtime check into inventory to determine if the changes can be made based on the fulfillment status of the order. Additionally, all of the necessary integration points are delivered to pass the changed data to fulfillment in order to process the change request.

See and <u>Chapter 8, "Integrating with Fulfillment and Billing Systems," Understanding Fulfillment Integration, page 151.</u>

You can add products to an order or quote, change an order or quote, change the dates for a quote, and so on. With related actions, the system keeps a record of and links to the original quote or order, so that you can maintain a history of how the quote or order progressed. Both the revisioned quote and the original quote may be used and both remain in open status. This allows you to offer different revisions of the products and pricing to your customers, and allows the CSR (or sales representative) to order from either of the quotes. Only the revisioned order can be used once changes have been made to the order.

When order maintenance is complete, various order capture pages reflect the change activity. Upon order submission, not only is a new business project fired, the Related Actions page updated, but the History page is also updated to track those changes.

Note. Changes to a quote are through the quote revisioning process. Creating a quote revision copies the instance of the quote to a new quote, and increments the revision number. This enables you to modify the quote as required.

See Also

Viewing Related Actions

This section discusses how to:

- View related actions.

- Work with business projects.

Pages Used to View Related Actions

Page Name	*Definition Name*	*Navigation*	*Usage*
Order - Related Actions, Quote - Related Actions	RO_ASSOCIATION	• Orders and Quotes, Add Order, Order - Related Actions • Orders and Quotes, Add Quote, Quote - Related Actions • Orders and Quotes, Search Orders and Quotes, Order - Related Actions • Orders and Quotes, Search Orders and Quotes, Quote - Related Actions	View related actions for orders and quotes.

Viewing Related Actions

Access the Order - Related Actions page (Orders and Quotes, Add Orders, Order - Related Actions).

Order - Related Actions page

This screenshot shows the Related Actions page of a convergent order:

Convergent Order - Related Actions page with an initiated business process

This page enables CSRs to view related actions for the order. A related object is data, such as a business project, that is associated with the order or quote. This data can reside in another PeopleSoft CRM application.

Related Actions

                               Click the View Details button to open the related object in a new browser window.

Type   This is the type of related action. Related actions include, but not limited to, business projects, product upsells, correspondence, and so on.

Business Process Instances

If an integration to Oracle BPEL Process Manager is enabled, Order Capture can initiate BPEL business processes that are developed for communications-specific orders. For example, when you submit a convergent order for a communications service, the *Convergent Order BPEL Process* is fired immediately and the initiated instance is listed in this section. You can click the service operation link to view the current status of the business process instance on the Business Process Monitor page.

See and *PeopleSoft CRM 9.1 Automation and Configuration Tools PeopleBook*, "Understanding Business Process Management."

See and *PeopleSoft CRM 9.1 Automation and Configuration Tools PeopleBook*, "Working with the Business Process Monitor," Monitoring Business Processes.

See and <u>Appendix A, "Order Capture Delivered Business Processes and Web Services," page 723.</u>

Working with Business Projects

Business projects help organize process flow and are invaluable in tracing the order change activity. Order Capture business projects, including Order, Quote, and Order Maintenance business projects, are discussed in detail in a preceding chapter.

See Also

<u>Chapter 6, "Working with Order Capture Business Projects," page 101</u>

Viewing History

This section discusses how to view history details.

Page Used to View History

Page Name	Definition Name	Navigation	Usage
Order - History Quote - History	RO_HISTORY	• Orders and Quotes, Add Order, Order - History • Orders and Quotes, Add Quote, Quote - History • Orders and Quotes, Search Orders and Quotes, Order - History • Orders and Quotes, Search Orders and Quotes, Quote - History	For orders and quotes: • View a history of change activity. • View interaction history. • View complete history of activity.

Viewing History Details

Access the Order - History page (Orders and Quotes, Search Orders and Quotes, Order - History).

Order - History page

Each capture type is associated with a list of audit events for which history log is to be captured when those events occur at runtime. The Change History section lists any of those events that happened during the life of the order.

The Interaction History section displays the summary information of all interactions that have been created for the order.

Chapter 14

Working with Bulk Orders

This chapter provides an overview of bulk order enablement, and discusses how to:

* Implement bulk order functionality.

* Create bulk orders.

Understanding Bulk Order Enablement

Bulk order functionality allows a customer service representative (CSR) to place single orders for multiple recipients as part of a single transaction. For example, a department manager in a company may want to order twenty office phones, one for each of their direct reports, and have each phone shipped directly to their employee. They can now perform this function using bulk order creation without having to enter separate orders for each recipient.

Note. Subsequent to order submission, Order Capture creates orders for each of the recipients. These orders can later be maintained and fulfilled individually.

Bulk ordering allows you to perform the following tasks in Order Capture:

* Create bulk orders directly from the main CRM menu navigation.

* Take orders for multiple recipients within an organization. These selections are based on the Relationship Hierarchy for a customer.

* Specify more than one order (create multiple orders) per recipient.

* Create a master order that is associated to numerous recipient orders, and view a summary of all recipient orders associated with a master order.

* Copy attribute and configuration information from the master bulk order to recipient orders.

* Apply discounts (pricing rules) at the master order level.

* Perform hold processing and validation routines normally associated with simple orders.

    Note. Bulk order uses a hold condition where recipients have not been specified for the recipient orders.

* Default account information for customers selected in the communications industry.

CDH Smart Search and Customer Merge

If CDH integration is activated, the search page for bulk orders displays an option to use the Smart Search feature. Users will also be able to use Smart Search from Quick Create pages. If potential matches are found, they appear on the Potential Duplicates page region with a match score that shows the likelihood of the match being a duplicate. They can then select two or more potential duplicates and submit them for merge evaluation from the BO Search pages.

Merge routines are used to handle customer merges for bulk order transactions.

Implementing Bulk Ordering

This section discusses how to:

- Define bulk order business unit options.

- View or edit bulk order header statuses.

- View or edit bulk order hold codes.

- Enabling bulk order hold processing.

Pages Used to Implement Bulk Ordering

Page Name	Definition Name	Navigation	Usage
Order Capture Definition - Internal	BUS_UNIT_RO1	Set Up CRM, Business Unit Related, Order Capture Definition, Order Capture Definition - Internal	Define bulk ordering defaults for your business unit in the Bulk Order group box.
Capture Setup Tables - Header Statuses Workbench	RO_DEFN_HDSTAT	Set Up CRM, Product Related, Order Capture, Setup Workbench, Capture Setup Tables Workbench Click the Header Statuses link on the Capture Setup Tables Workbench page.	View or edit bulk order header statuses.
Capture Setup Tables - Hold Codes Workbench	RO_DEFN_HOLD	Set Up CRM, Product Related, Order Capture, Setup Workbench, Capture Setup Tables Workbench Click the Hold Codes link on the Capture Setup Tables Workbench page.	View or edit bulk order hold codes.

Page Name	Definition Name	Navigation	Usage
Type Definition - Hold Processing Workbench	RO_TYPE_HOLD	Set Up CRM, Product Related, Order Capture, Capture Type Workbench, Type Definition Workbench Click the Hold Processing link on the Type Definition Workbench page.	Enable the bulk order holds for a capture type, such as order or quote.

Defining Bulk Order Business Unit Options

Access the Order Capture Definition - Internal page (Set Up CRM, Business Unit Related, Order Capture Definition, Order Capture Definition - Internal).

Order Capture Definition - Internal page: Bulk Order section

Bulk Order

On the Order Capture Definition page you will plug in relationship views for both consumers and organizations. Your master order/recipient order relationships are determined by the relationships you have established in the Relationship Viewer. Therefore, you must first define your relationship views in Set Up CRM, Common Definitions, Customer, Configure Relationship Views.

Consumer Hierarchy	Select a relationship view for a single consumer, or contact. This will determine all of the possible bulk order recipients at runtime by automatically populating all of the child relationships for the parent chosen here.
Organization Hierarchy	Select a relationship view for the company, or organization. When the end user enters a company name, it will prompt against the table you select here to determine the child relationships available.
Multiple Orders Per Recipient	Select this check box if you want to allow single recipients to receive more than one order. An Order field appears on the runtime page, allowing you to enter the number of orders you want to specify per recipient.

Viewing or Editing Bulk Order Header Statuses

Access the Capture Setup Tables - Header Statuses Workbench page (Set Up CRM, Product Related, Order Capture, Setup Workbench, Capture Setup Tables Workbench. Click the Header Statuses link on the Capture Setup Tables Workbench page).

Capture Setup Tables - Header Statuses Workbench page

There are two statuses specifically for bulk orders: *Generating,* and *Generated.*

Generating	Change the Description name or select the Allow Manual Change to Status check box to allow the CSR to manually change the header status during bulk order entry.
	This header status indicates that Order Capture is in the process of generating recipient orders. This status appears when the CSR clicks the Generate Bulk Order or Submit Order buttons on the Summary page.
Generated	The Generated status indicates that the recipient orders have been generated.

Viewing or Editing Bulk Order Hold Codes

Access the Capture Setup Tables - Hold Codes Workbench page (Set Up CRM, Product Related, Order Capture, Setup Workbench, Capture Setup Tables Workbench. Click the Hold Codes link on the Capture Setup Tables Workbench page).

Capture Setup Tables - Hold Codes Workbench page

There are two holds for bulk orders. These are:

1. *No Recipients Selected*

   The *NRECI* hold code applies to any bulk orders where no recipients have been defined.

2. *No Recipient Accounts*

   In communications-specific transactions, the *NRACTS* hold code causes a hold on the bulk order if no recipient accounts have been selected for billing purposes.

Enabling Bulk Order Hold Processing

Access the Type Definition - Hold Processing Workbench page (Set Up CRM, Product Related, Order Capture, Capture Type Workbench, Type Definition Workbench. Click the Hold Processing link on the Type Definition Workbench page).

Type Definition - Hold Processing Workbench page

Select the Enabled check box to activate either of the two bulk order hold codes on the Hold Processing page.

Creating Bulk Orders

This section provides an overview of bulk order creation, and discusses how to:

- View and edit bulk order business projects.

- Create bulk orders.

- Select child order recipients.

- Select recipient accounts.

Understanding Bulk Order Creation

Customer Sales Representatives (CSRs) create bulk orders in one of two ways:

- Create a simple order and then convert the order to a bulk order.

   (convert to bulk order)   Click to convert a simple order to a bulk order.

- The menu option, Add Bulk Order, is accessible from the primary CRM navigation, Orders and Quotes, Add Bulk Order. When CSRs click this menu option, they will go to the Entry Form page in Order Capture. However, the interface displays a new section appropriate for entering bulk ordering information.

Pages Used to Create Bulk Orders

Page Name	*Definition Name*	*Navigation*	*Usage*
Business Project	RC_BUS_PROCESS	Set Up CRM, Common Definitions, Business Projects, Business Project	View the business projects for bulk orders.
Bulk Order - Entry Form	RO_FORM	• Orders and Quotes, Add Bulk Order, Bulk Order - Entry Form • Orders and Quotes, Search Orders and Quotes Select *Yes* to the Bulk Order search field and select a bulk order from the search result.	Create a bulk order.
Hierarchal View for Customer	RO_BULK_CUST_SEC	Click the Select Multiple Recipients link (after selecting a customer) on the Bulk Order - Entry Form page.	Select multiple recipients for the bulk order.
Select Account Per Recipient	RO_FORM_ASEL_SEC	Click the Select Recipient Accounts link on the Bulk Order - Entry Form page.	Select an account for each recipient to which recurring charges apply.

Viewing and Editing Bulk Order Business Projects

Access the Business Project page (Set Up CRM, Common Definitions, Business Projects, Business Project).

Business Project page (for submitting bulk orders)

Business Project page (for generating bulk orders)

PeopleSoft delivers two business projects for bulk orders:

- Submit Bulk Child Orders business project (BULK_ORD_SUBMIT)

  This business project both generates and submits all recipient orders for processing.

- Bulk Order Generation business project (BULK_ORDER_GEN)

  This business project generates recipient orders from the list of recipients on the bulk order. It is invoked when you click the Generate Bulk Order button on the Entry Form. Note that unlike the other business project, it does not submit the recipient orders for processing.

- Bulk Change of Contact business project (BULK_CHG_CNT)

  This business project updates the contact of selected installed services to the new one provided in the bulk order.

- Bulk Change of Account business project (BULK_CHG_ACCT)

  This business project updates the account number of selected installed services to the new one provided in the bulk order.

Creating Bulk Orders

Access the Bulk Order - Entry Form page (Orders and Quotes, Add Bulk Order, Bulk Order - Entry Form).

Bulk Order - Entry Form page (1 of 4)

Bulk Order - Entry Form page (2 of 4)

Bulk Order - Entry Form page (3 of 4)

Bulk Order - Entry Form page (4 of 4)

Note. This section describes fields and options that are specific to bulk ordering use.

See and <u>Chapter 13, "Managing Orders and Quotes," Creating Orders or Quotes, page 285.</u>

Customer

Select Multiple Recipients	Click to access the Hierarchal View for Customer page and select all the child recipients for the bulk order. Be sure to first select a customer and contact prior to select child recipients.

See and <u>Chapter 14, "Working with Bulk Orders," Selecting Child Order Recipients, page 354.</u> |

Shipping Summary and Nonrecurring Billing Summary

Ship To Option and **Bill To Option**	Select to either use the default address (specified on the Address field) or the recipient's address as the ship to or bill to address.

Recurring Billing Summary

The system uses different interfaces to capture recurring billing information for bulk orders and standard orders. The version used for bulk orders is streamlined; fields that are used for standard order but do not apply to bulk orders are hidden.

Select Recipient Accounts	Click to access Select Account Per Recipient page to choose an account for each recipient to apply recurring charges.
	See and <u>Chapter 14, "Working with Bulk Orders," Selecting Recipient Accounts, page 356.</u>

Recipient Orders

This section lists the child orders (one for each selected recipient) that will be created for the parent bulk order. If child orders are already generated, the order IDs and order statuses are listed accordingly. If the status of any child orders has been updated, it gets reflected in this section when the bulk order is refreshed.

Note. If you are integrating to PeopleSoft Order Management (SCM), you must define a Sold To relationship for companies and their contacts in the relationship hierarchy, otherwise recipient orders go on *Hold.* You can inactivate the *Hold* condition from the Capture Type workbench. The same hold condition principle applies for both Bill To and Ship To relationships.

Product Summary

This section lists the products the are added to the bulk order and their summary information, including product description, ID, unit of measure, total quantity and price.

Generate Recipient Orders	Click to create recipient orders without submitting them for processing. These then become *New* recipient orders. You may want to use this option if you want to navigate to a specific order and change it.
	Note. After generating recipient orders, but prior to submitting them, CSRs can edit the recipient orders and all of the changes are applied.
Submit Recipient Orders	Click to create (if not done already) and submit all recipient orders for processing.

Selecting Child Order Recipients

Access the Hierarchal View for Customer page (click the Select Multiple Recipients link, after selecting a customer, on the Bulk Order - Entry Form page).

Hierarchal View for Customer page

Based on relationship views, you can select the child recipients for the bulk order. The Filter field allows you to narrow your search results with specific name parameters, thereby restricting the search results.

Customer Hierarchy

From the tree view that appears, select the contacts you want to add to the bulk order as recipients. Click the Add Selections to Order button to add selected contacts to the Recipients section on the right.

Recipients

Orders	If the option to allow multiple orders to be created for each recipient is enabled at the business unit level, the Orders column appears. The system populates the value of 1 as the default number of order to create for each listed recipient; you can update this value as necessary.
	Once all recipients have been selected, return to the main order entry form page to save or submit the bulk order.

Selecting Recipient Accounts

Access the Select Account Per Recipient page (click the Select Recipient Accounts link on the Bulk Order - Entry Form page).

Select Account Per Recipient page

Use this page to select an account for each recipient to which recurring charges, if any, will be applied.

Type and **Account**	Select the type of the account to add. Values are:
	Existing Account: Select to choose from a list of active accounts that are associated with the customer.
	New Individual Account: Select to add a new individual account for the recipient. The payment method for the new accounts is *Invoice.* You need to access the Account component to change payment method.
	New Sponsored Account: Select to choose an active sponsoring account of the customer in the Account field.
	New Subordinate Account: Select to choose an active parent account of the customer in the Account field.
Save Account Selections	Click to save the account information for use in the bulk order.

Chapter 15

Understanding Order Capture Integration with PeopleSoft Policy and Claims Presentment and PeopleSoft Banking Transactions

This chapter discusses:

- Integration functionality.

- Order Capture integration with Policy and Claims Presentment.

- Order Capture integration with Banking Transactions.

Integration Functionality

Integration of the best features from Order Capture and PeopleSoft industry solutions provides users different ways to apply for products or quotes. There are two entry points: the Find Products and Order Capture components. Order Capture integrates with a configurator product and it is used to collect information for product applications and quotes. PeopleSoft takes this functionality one step further by enhancing the component configurations available in the user interface for the Order Capture application.

This integration provides these capabilities:

- Provision of different entry points for users to access the components that are used for creating product applications and quotes.

- The ability to collect information for product applications and quotes using the product configurator.

- The ability to track the progress of product applications and quotes, as well as supporting the re-quoting process.

- The ability to interact with external systems to obtain real-time quotes and store the information in the CRM database.

- The ability to track an application or quote that resulted in creation of an account or policy.

- The ability for partners to request a quote.

- Enhanced Order Capture user interface which provides flexible configurable options through the display template framework.

See Also

Order Capture Integration with Policy and Claims Presentment

This section discusses the business process model used to integrate Order Capture and Policy and Claims Presentment.

Policy and Claims Presentment Business Process Model

There are two methods for initiating a quote application that are available to customer service representatives (CSRs):

• 360-Degree View.

• The Insurance Quote component.

    This is variation of the RO_CAPTURE component.

The CSR also has two methods of viewing or resuming an incomplete quote application: Identify the customer and select Incomplete Quote from the 360 - Degree View, or navigate to Search Quotes and Orders and search for the incomplete quote by customer name or quote reference number.

The created quotes and policies are displayed on the 360-Degree View of the customer regardless of what method is used. Each quote goes through various transition stages and displays a status.

The following table describes the various status values of a quote application:

Status	*Description*
NEW	The status of Quote is *NEW* when CSR clicks on Create Quote and before selecting a product.
INCOMPLETE	A Quote is *Incomplete* when all the needed information for obtaining a Quote is not available.
SUBMITTED FOR QUOTE	This state implies that a request is sent to an external system to get a price for the configured quote. A quote is set to this state when Get Price is clicked.
QUOTED	This state implies a quote is obtained from an external system, but not yet purchased by the customer. A quote is set to this state upon receiving a price from the external system.
QUOTE ACCEPTED	This state implies that a customer has accepted the quote and is willing to purchase. The quote information is sent to external system for policy creation. Quote is set to this state when Buy is clicked.

Status	Description
EXPIRED	This state implies a Quote is expired as of expiration date. This state can be achieved by manually expiring the Quotes or a batch process expiring the Quotes.
APPROVED	This state implies that the request for Policy creation is processed by the external system and a Policy is created in CRM system. This status will be set by the inbound asynchronous integration point. Also, it implies that a Quote is converted to Application.
REJECTED	This state implies that the request for policy creation is rejected by the external system. This status will be set by the inbound asynchronous integration point.

360 - Degree View Search Page

The customer must be identified clearly with the proper role. The CSR can choose to either search and browse a catalog, or select Create Quote. If the catalog path is chosen, the underlying Order Capture records are created using Component Interface, and one of the methods to collect information is initiated. If Create Quote is selected, the CSR is transferred to the Order Capture component. The actions associated with the selected product are evaluated to determine if a quote can be offered on the product.

See and *PeopleSoft CRM 9.1 Industry Application Fundamentals PeopleBook*, "Understanding the 360-Degree View for Industries," Transactions in the 360-Degree View.

Insurance Quote

From the Insurance Quote component, the CSR or a partner can choose to identify the customer or create a quote for an anonymous customer.

Products can be selected in the following ways:

*   Enter the product and click the Add button.

*   Search and browse the catalog.

*   Select a promotion to add a product and click the Add button.

*   Get a recommendation from an advisor session.

When an insurance product is selected, the corresponding product configuration session is initiated, which collects information needed for the system to generate quotes. After the session is completed, the configuration details appears on the entry form. The Get Quote link appears and you can reconfigure the insurance product if necessary.

See Also

PeopleSoft Policy and Claims Presentment 9.1 PeopleBook, "Understanding Policies and Claims"

Order Capture Integration with Banking Transactions

This section discusses the business process model used to integrate Order Capture with the Banking Transactions.

Banking Transactions Business Process Model

The same two methods for initiating a quote application in Policy and Claims Presentment are available to customer service representatives (CSRs) using banking transactions:

• 360-Degree View.

• The Product Application component.

  This is variation of the RO_CAPTURE component.

Various industries have different business processes, for example, banking transactions initiate applications for products, whereas the policy and claims presentment business process initiates applications for quotes.

Warning! Policy and claims presentment users apply for quote applications. Banking transaction users apply for product applications.

The CSR also has two methods of viewing or resuming an incomplete quote application: Identify the customer and select Incomplete Application from the 360-Degree View, or navigate to Search Quotes and Orders and search for the incomplete application by customer name or application reference number.

The created applications are displayed on the 360-Degree View of the customer regardless of what method is used. Each application goes through various transition stages and displays a status accordingly.

The following table describes the various Status values of a product application:

Status	Description
NEW	The status is *NEW* when CSR clicks on Apply Product and before collecting any information.
INCOMPLETE	An application is *Incomplete* when all the needed information to complete the application is not available. Upon selecting Save for Later, the application is marked incomplete.
SUBMITTED	This state implies that the information is sent to external system for Account creation. An Application is set to this state when Submit toolbar button is clicked.
EXPIRED	This state is when the application for the product has *Expired*.
APPROVED	This state implies that the request for account creation is processed by the external system and an account is created in CRM system. This status will be set by the inbound asynchronous integration point.

Status	Description
REJECTED	This state implies that the request for Account creation is rejected by the external system. This status will be set by the inbound asynchronous integration point.

360-Degree View Search Page

The customer must be identified clearly with the proper role. The CSR can choose to either search and browse a catalog, or select Apply Product. If the catalog path is chosen, the underlying Order Capture records are created using Component Interface (CI), and one of the methods to collect information is initiated. If Apply Product is selected, the CSR is transferred to the Order Capture component. The product actions determine if a quote is required for the selected product.

See and *PeopleSoft CRM 9.1 Industry Application Fundamentals PeopleBook*, "Understanding the 360-Degree View for Industries," Transactions in the 360-Degree View.

Product Application

Users of banking transactions use the Product Application component for applying product applications. Both the Product Application and the Insurance Quote components are variations of the RO_ORDER component, which are configured through the display template framework. After selecting a product in the Product Application component, you complete the application process using the configurator product in place, which can be the Advanced Configurator or Oracle Configurator. You can submit the product application after sufficient information is collected during the configuration session.

See Also

PeopleSoft Bill Presentment and Account Management 9.1 PeopleBook, "Understanding Account and Billing Management"

Order Capture Self-Service for Banking Transactions and Policy and Claims Presentment

The high-level functions provided by this integration are:

*   Ability to clone a quote that is associated with the policy and launch configurator sessions with all known values.

*   Ability to search for and view product applications or quotes.

*   Ability for guest users to search and browse catalogs.

    In order to apply for a product, the user has to either sign in using an existing account or register.

*   Ability to create quotes for incomplete applications, with status marked *Incomplete.*

    Note. There is no quoting process for banking transactions. All information is collected before account creation. There are no additional questions asked upon final submission.

See and *PeopleSoft Policy and Claims Presentment 9.1 PeopleBook*, "Working with Policy and Claims Presentment Self-Service," Understanding Policy and Claims Presentment Self-Service. and *PeopleSoft Banking Transactions 9.1 PeopleBook*, "Working with PeopleSoft Banking Transactions for Self-Service."

Chapter 16

Working with PeopleSoft Proposal Management

This chapter provides an overview of the PeopleSoft Proposal Management integration and integration points and discusses how to:

- Set up PeopleSoft Proposal Management integration in Order Capture.

- Use PeopleSoft Proposal Management in Order Capture.

Understanding PeopleSoft Proposal Management Integration

PeopleSoft Proposal Management is part of a suite of Enterprise Service Automation (ESA) applications, within PeopleSoft Financial Management Solutions' product line. PeopleSoft CRM has the ability to send PeopleSoft Proposal Management information when an engagement service product is included in a quote. This occurs if the quote originates from a PeopleSoft Sales lead or opportunity, or if the quote is entered directly on the Order Capture Entry Form. Integration points between Order Capture and PeopleSoft Proposal Management are synchronous in order to receive the proposal and version IDs assigned when a proposal is created.

You can also receive pricing information when an engagement is fulfilled in PeopleSoft Proposal Management. Updates are made to prices on the quote and on the lead or opportunity. PeopleSoft CRM workflow informs the sales representative that the lead or opportunity has been updated. Status updates are transmitted between PeopleSoft Sales and the Proposal Management system when a lead or opportunity or quote is sold or lost. This again occurs through the Order Capture application.

Organizations must make informed decisions about which opportunities to pursue based on estimated cost and potential revenue. In addition, each opportunity may have several different scenarios for its completion, each with its own estimated costs. At any point in your business cycle, your organization may be faced with service-related opportunities. Customers using Order Capture can initiate service-based proposals from within Order Capture through an interface with PeopleSoft Proposal Management. For opportunities requiring manual entry, you can create and price multiple service-based proposals.

Engagement services are tracked as service-type products in the PeopleSoft CRM Product Data Model. Sales users can add these product types to a lead or opportunity. The price is pulled from the list price and sales users can override it with an initial price. When the lead or opportunity is converted to a quote and the quote is submitted, a message is sent from Order Capture to PeopleSoft Proposal Management with the necessary information for the engagement to be priced. A proposal is created for each product line sent to PeopleSoft Proposal Management.

Order Capture's integration to PeopleSoft Proposal Management allows your organization to perform all of the following activities:

- Generate multiple proposal versions to find the situation that best fits your business needs. Once a proposal is finalized, you can use the data you have already entered for that proposal to create contracts and projects in PeopleSoft Contracts and PeopleSoft Project Costing, assuming you have purchased those Enterprise Service Automation application modules.

- Pursue an initiative or engagement service contract that has not yet been accepted.

- Create and edit proposals, copy proposals, customize rates, view all current proposals, configure a list to view only selected proposals, view overall proposal cost and billing information, and store and view relevant files such as requests for proposals and terms and conditions.

- Create versions of a project that could possibly be done in different ways. This highlights cost differences between completing an assignment in a very short time frame using many resources, and completing the same assignment in a longer time frame with fewer resources. You can then look at the problem from different angles and choose the most practical solution.

- Develop and administer project proposals to better expedite closure of business opportunities, and reuse proposal versions for future engagements.

Understanding Integration Points

Proposal integration consists of two application messages:

- OC_ESA_PROPOSAL

  When a quote is submitted for an engagement-type service in Order Capture, Order Capture sends the proposal request message, OC_ESA_PROPOSAL, to PeopleSoft Proposal Management.

- OC_ESA_PROPOSAL_RESPONSE

  In response to this message, PeopleSoft Proposal Management sends the message, OC_ESA_PROPOSAL_RESPONSE, to Order Capture to return the Capture ID, Proposal ID, and Version ID.

  Note. The OC_ESA_PROPOSAL_RESPONSE application message contains the record in which to receive the response data; the name of this record is ESA_OC_RESPONSE.

The system sends these fields from Order Capture to PeopleSoft Proposal Management:

Source: Order Capture		*Target: PeopleSoft Proposal Management*	
Record	*Field*	*Record*	*Field*
RO_HEADER	CAPTURE_ID	GM_PROPOSAL	CAPTURE_ID
BUS_UNIT_TBL_RO	BUSINESS_UNIT_ESA	GM_PROPOSAL	BUSINESS_UNIT
RO_LINE	PRODUCT_ID	GM_PROPOSAL	PRODUCT_ID
PROD_ITEM	DESCR	GM_PROPOSAL	PRODUCT_DESCR

Source: Order Capture		Target: PeopleSoft Proposal Management	
RO_LINE	PRICE	GM_PROPOSAL	PRICE
RO_LINE	CURRENCY_CD	GM_PROPOSAL	CURRENCY_CD
RO_NOTE	DESCRLONG	GM_PROP_COMMENT	DESCRLONG
RB_INT_CUST_ADS	CUST_ID	GM_PROPOSAL	CUST_ID
RSF_OPPORTUNITY or RSF_LEAD **Note.** System uses either record depending on if the quote has a lead or an opportunity attached.	SALES_USER_NAME	GM_PROPOSAL	SALESREP_NAME
Note. System uses PeopleCode to retrieve phone and extension information. Not a direct read of a record.	CC_PHONE_EXTENSION	GM_PROPOSAL	CC_PHONE_EXTENSION
Note. System uses PeopleCode to retrieve email address information. Not a direct read of a record.	EMAIL_ADDR	GM_PROPOSAL	EMAIL_ADDR
RO_ASSOCIATION	PROPOSAL_ID	GM_PROPOSAL	PROPOSAL_ID
RO_ASSOCIATION	VERSION_ID	GM_PROPOSAL	VERSION_ID
RO_HEADER	QUOTE_EXPIRE_DT	GM_PROPOSAL	DUE_DATE
RO_HEADER	DESCR50	GM_PROPOSAL	PROPOSAL_TITLE
RO_HEADER	CAPTURE_DATE	GM_PROPOSAL	BEGIN_DT
RO_HEADER	QUOTE_DUE_DATE	GM_PROPOSAL	END_DT

In response to the first message, the system sends these fields from PeopleSoft Proposal Management to Order Capture:

Source: PeopleSoft Proposal Management		Target: Order Capture	
Record	*Field*	*Record*	*Field*
ESA_OC_RSPN	PROPOSAL_ID	RO_ASSOCIATION	PROPOSAL_ID
ESA_OC_RSPN	VERSION_ID	RO_ASSOCIATION	VERSION_ID
ESA_OC_RSPN	CAPTURE_ID	RO_ASSOCIATION	CAPTURE_ID
ESA_OC_RSPN	BUSINESS_UNIT	RO_ASSOCIATION	ASSOC_BUS_UNIT
ESA_OC_RSPN	MESSAGE_TEXT	N/A	N/A

Note. The system uses the MESSAGE_TEXT field to log error messages if any errors occur when the proposal is being created or updated.

PeopleSoft Proposal Management uses the customer number to query the customer table for customer name and current contact information. When PeopleSoft Proposal Management receives the message, the following occurs:

- If the proposal ID is blank, the system creates a new proposal.

- If the proposal ID is not blank, the system updates the existing proposal.

- If a quote has expired, you can revise it on the Entry Form in Order Capture.

  This creates a new quote with a new capture ID. The system then passes the proposal ID to PeopleSoft Proposal Management from the original quote. PeopleSoft Proposal Management checks if the proposal has been closed out (proposal status equals *Canceled*). If it has, the system reopens the proposal for pricing (and the proposal status is updated to *Draft*).

Quote Integration

Once pricing information is completed in PeopleSoft Proposal Management, the application message, ESA_PROPOSAL_PRICE, sends pricing information back to Order Capture. This occurs when a user clicks the Set To Ready button on the Maintain Proposal page in PeopleSoft Proposal Management. After the system sends the message to Order Capture, the selected proposal version is locked and uneditable.

The system sends these fields from PeopleSoft Proposal Management to Order Capture:

Source: PeopleSoft Proposal Management		Target: Order Capture	
Record	*Field*	*Record*	*Field*
GM_PROPOSAL	PROPOSAL_ID	RO_ASSOCIATION	PROPOSAL_ID
GM_PROPOSAL	VERSION_ID	RO_ASSOCIATION	VERSION_ID
GM_PROPOSAL	BUSINESS_UNIT	RO_HEADER	BUSINESS_UNIT
GM_PROPOSAL	TOTAL_BUDGET_AMT	RO_LINE	PRICE
GM_PROP_COMMENT	DESCRLONG	RO_NOTE	DESCRLONG

Note. PeopleSoft Proposal Management sends note descriptions to Order Capture, but Order Capture does not update them.

PeopleSoft Sales Integration

The system triggers the Order Capture application message, OC_ESA_PROPOSAL_STATUS, in the following situations:

• When a sales lead or opportunity is lost or sold.

• When the direct quote or order is sold.

• When the quote is cancelled (either manually, or from the quote expiring).

• When the quote needs to be repriced.

When PeopleSoft Proposal Management receives the message, it updates the corresponding proposal version with either the *Draft,Denied,* or *Committed* status, which is based on the contents of the message.

The system sends these fields from Order Capture to PeopleSoft Proposal Management:

Source: Order Capture		Target: PeopleSoft Proposal Management	
Record	*Field*	*Record*	*Field*
RO_ASSOCIATION	PROPOSAL_ID	GM_PROPOSAL	PROPOSAL_ID
RO_ASSOCIATION	VERSION_ID	GM_PROPOSAL	VERSION_ID
RO_ESA_BU	BUSINESS_UNIT_ESA	GM_PROPOSAL	BUSINESS_UNIT
RO_HEADER	CAPTURE_ID	GM_PROPOSAL	CAPTURE_ID
RO_LINE.STATUS	STATUS_CODE	GM_PROPOSAL	SUBMIT_STATUS

Source: Order Capture		Target: PeopleSoft Proposal Management	
RO_NOTE	DESCRLONG	GM_PROP_COMMENT	DESCRLONG

When PeopleSoft Proposal Management receives the message, the following occurs:

• If the order capture line status is *Lost,* the system updates the proposal status to *Denied.*

• If the order capture line status is *Sold,* the system updates the proposal status to *Committed.*

• If the order is expired, the system updates the proposal status to *Canceled.*

• If the order capture line status is *Negotiate,* the system updates the proposal status to *Draft* and enables repricing for the related proposal version.

• If the status is *Ready* when a user selects a proposal, the system locks the proposal version and prevents editing.

Quote Status Mappings

The table below shows how quote statuses map between Order Capture and PeopleSoft Proposal Management:

Order Capture Status	PeopleSoft Proposal Management Status
Draft	Draft
Priced	Ready
Negotiate	Draft
Lost	Denied
Sold	Committed
Canceled	Canceled

Setting Up PeopleSoft Proposal Management Integration

This section provides an overview of setup for the proposal management integration and discusses how to:

• Define engagement service products in the CRM system.

• Select a PeopleSoft Proposal Management business unit.

• View or edit Setup Workbench options.

• View or edit Integration Workbench options.

- View or edit the PeopleSoft Proposal Management business project.

- Activate Proposal Management integration messages.

- Run process scheduler.

Understanding Setup for Proposal Management Integration

First define your engagement service product in the CRM product definition. The Engagement Services check box appears on the Product Definition pages for your primary application.

Next select the PeopleSoft Proposal Management business unit with which Order Capture integrates. Then we have added Proposal Management-specific settings to the Order Capture workbenches, allowing you some flexibility in how you set up certain essential operations. Two Order Capture workbench pages help control the available line statuses for quotes. The values that are displayed in the drop-down list box depend on the current line status. The first page defines the status types. One type is used for the engagement services products. The other delivered type is *Default,* which is used if the product is not an engagement product. You can view and edit the business project, *Proposal Management BP,* that has been created for the integration. Finally, you will need to activate the PeopleSoft Proposal Management integration messages to begin to take advantage of this functionality.

Pages Used to Set Up PeopleSoft Proposal Management Integration

Page Name	*Definition Name*	*Navigation*	*Usage*
Product Definition - Definition	PROD_DEFN	Products CRM, Product Definition, Product Definition - Definition	Define engagement service-type products.
Order Capture Definition - Internal	BUS_UNIT_RO1	Set Up CRM, Business Unit Related, Order Capture Definition, Order Capture Definition - Internal	Map the Order Capture business unit to the corresponding business unit in PeopleSoft Proposal Management.
Capture Setup Tables - Header Statuses Workbench	RO_DEFN_HDSTAT	Set Up CRM, Product Related, Order Capture, Setup Workbench Click the Header Statuses link on the Capture Setup Tables Workbench page.	View or edit the *Expired* header status for PeopleSoft Proposal Management integration.
Capture Setup Tables - Line Statuses Workbench	RO_DEFN_LNSTAT	Set Up CRM, Product Related, Order Capture, Setup Workbench Click the Line Statuses link on the Capture Setup Tables Workbench page.	View or edit engagement service line statuses.

Page Name	Definition Name	Navigation	Usage
Capture Setup Tables - Line Status Types Workbench	RO_DEFN_LS_TYPE	Set Up CRM, Product Related, Order Capture, Setup Workbench Click the Line Status Types link on the Capture Setup Tables Workbench page.	View or edit engagement service line status types.
Capture Setup Tables - Line Statuses DropDown Workbench	RO_DEFN_LNPRMPT	Set Up CRM, Product Related, Order Capture, Setup Workbench Click the Line Statuses DropDown link on the Capture Setup Tables Workbench page.	Control or view the drop-down list values available for your engagement service products.
Integration Definitions - Line Status Mappings Workbench	RO_DEFN_LNSTMAP	Set Up CRM, Product Related, Order Capture, Integration Workbench Click the Line Status Mappings link on the Integration Definitions Workbench page.	View or edit line status mappings between Order Capture and PeopleSoft Proposal Management.
Type Definition - Business Process Conditions Workbench	RO_TYPE_BPEVENT	Set Up CRM, Product Related, Order Capture, Capture Type Workbench Click the Business Process Conditions link on the Type Definition Workbench page.	View or edit the PeopleSoft Proposal Management business project, *Engagement Service BP* .

Defining Engagement Service Products for PeopleSoft CRM

Access the Product Definition - Definition page (Products CRM, Product Definition, Product Definition - Definition).

Product Definition - Definition page of an engagement service

Select a product type of *Engagement Service* to access the Product Definition - Definition page.

Note. The list price will represent a baseline price, and the Enterprise Pricer pricing engine will not be invoked for engagement services.

Selecting a PeopleSoft Proposal Management Business Unit

Access the Order Capture Definition - Internal page (Set Up CRM, Business Unit Related, Order Capture Definition, Order Capture Definition - Internal).

Order Capture Definition - Internal page of a proposal management business unit

Proposal Management   Select the PeopleSoft Proposal Management business unit which you want to integrate with Order Capture.

Viewing or Editing Setup Workbench Options

There are several Order Capture Setup Workbench changes for this integration:

- Header Statuses.

- Line Statuses.

- Line Status Types.

- Line Status DropDown.

Header Statuses

Access the Capture Setup Tables - Header Statuses Workbench page (Set Up CRM, Product Related, Order Capture, Setup Workbench. Click the Header Statuses link on the Capture Setup Tables Workbench page).

Capture Setup Tables - Header Statuses Workbench page

We have added one new header status to the existing list of headers statuses for Order Capture.

Since a quote has an expiration date, a batch job examines the quote expiration dates and assigns any expired quotes a new header status of *Expired,* or whatever you choose to call it here.

Note. This action also triggers an integration point to update any associated proposals in the PeopleSoft Proposal Management system to *Canceled.* The exception to this rule is, that if any other quote that is not expired has a reference to the same proposal ID, it will not be cancelled in PeopleSoft Proposal Management. If an *Expired* quote is revised, the line status for the engagement status will be reset to *Draft* and a message is automatically sent to PeopleSoft Proposal Management.

Line Statuses

Access the Capture Setup Tables - Line Statuses Workbench page (Set Up CRM, Product Related, Order Capture, Setup Workbench. Click the Line Statuses link on the Capture Setup Tables Workbench page).

Capture Setup Tables - Line Statuses Workbench page

There are six line statuses for engagement services. These line statuses appear on the Entry Form page, and they map to corresponding statuses in PeopleSoft Proposal Management. You can edit the names of these statuses on this page.

Line Status Types

Access the Capture Setup Tables - Line Status Types Workbench page (Set Up CRM, Product Related, Order Capture, Setup Workbench. Click the Line Status Types link on the Capture Setup Tables Workbench page).

Capture Setup Tables - Line Status Types Workbench page

The values displayed in the dropdown for the quote lines will depend on the line status. This page defines the status types. The *Engagement Service* line status type is used for engagement services products, whereas the *Default* line status type is used for any product that is not flagged as an engagement service product.

Line Statuses DropDown

Access the Capture Setup Tables - Line Statuses DropDown Workbench page (Set Up CRM, Product Related, Order Capture, Setup Workbench. Click the Line Statuses DropDown link on the Capture Setup Tables Workbench page).

Capture Setup Tables - Line Statuses DropDown Workbench page

What you define as your available status types on the Line Statuses page determines what you see on this page. Since we deliver *Engagement Service* and *Default,* you can specify alternative status values for each of these two types.

Viewing or Editing Integration Workbench Options

Access the Integration Definitions - Line Status Mappings Workbench page (Set Up CRM, Product Related, Order Capture, Integration Workbench. Click the Line Status Mappings link on the Integration Definitions Workbench page).

Integration Definitions - Line Status Mappings Workbench page

Line Status Mappings are used because the Proposal Management uses alpha-numeric status values, such as *CMTD* and *DENY,* whereas CRM Order Capture uses numeric status values. This mapping between the status values ensures that the integration points can communicate status information correctly.

Viewing or Editing the PeopleSoft Proposal Management Business Project

Access the Type Definition - Business Process Conditions Workbench page (Set Up CRM, Product Related, Order Capture, Capture Type Workbench. Click the Business Process Conditions Workbench link on the Type Definition Workbench page).

Type Definition - Business Process Conditions Workbench page

This business project consists of an application engine program, RO_ESA_PUB. The process runs if all of the following conditions apply: the application message, OC_ESA_PROPOSAL is active, the business project is active, and the business project event is set up and active. If no quote lines contain engagement service products, the program exits without calling any integrations. As with all Order Capture business projects, you can view the status of the business project on the Related Objects page.

Activating PeopleSoft Proposal Management Integration Messages

To activate integration between Order Capture and PeopleSoft Proposal Management, you must activate these messages at the message level.

- OC_ESA_PROPOSAL

- OC_ESA_PROPOSAL_RESPONSE

- ESA_PROPOSAL_PRICE

- OC_ESA_PROPOSAL_STATUS

Running Process Scheduler

A PeopleTools Process Scheduler job is in place that sets the status of quotes to *Expired* when the Quote Expire Date is less than the current system date. The quote line status values do not change, but the quote's header status is updated. If the quote contains an engagement service product for which a proposal has been created, it will send the OC_ESA_PROPOSAL_STATUS message to PeopleSoft Proposal Management with a *Canceled* status, provided that no other quotes linked to this same proposal have expired.

To run this new job, navigate to PeopleTools , Process Scheduler, Schedule JobSet Definitions. You can schedule the process to run based on a Recurrence Name, or you can select the Run Now button to run the process immediately.

Using PeopleSoft Proposal Management in Order Capture

This section explains the basic functionality available in Order Capture, and shows new views available for line details and summary.

PeopleSoft Proposal Management creates a proposal for each quote line that contains an engagement service. Engagement products may not be added directly to an order, but instead must be created on a quote. This allows the communication of the pricing information from PeopleSoft Proposal Management, and it allows the negotiation process to begin when a price is not acceptable to the customer. Once the price received from PeopleSoft Proposal Management is acceptable, the quote can be converted to an order, and the engagement service will change to a status of *Sold,* and be fulfilled. Only engagements with a status of *Priced* are copied over to the new order. For a quote line that contains an engagement service, the following all apply at runtime:

- Unit price is equal to the list price of the product, and this is changeable.

- Order quantity is equal to one.

- Unit of measure is equal to the default unit of measure for the product.

- Line price is protected and the pricing engine is not invoked for engagement services. The line can still be used by the pricing engine to give discounts to other lines or to the entire order.

- Drill-down capability is added to the Related Objects page. This allows the CSR to view all of the specific details of the engagement in PeopleSoft Proposal Management.

Line Details for Engagement Services Prior to Submission to PeopleSoft Proposal Management

Select an engagement service product and add it to the quote line.

Line Summary								
Products	**Pricing Adjustments**	**Availability**						
Line	Product Description	Product ID	Order Quantity	List Price	Unit Price			
1	Engagement Service	700001	1.0000	50.00	50.00			

Quote - Entry Form page (prior to submission to PeopleSoft Proposal Management

You cannot change unit of measure or order quantity for engagement service-type products.

Line Details for Engagement Services After Submission to PeopleSoft Proposal Management

Submit the engagement service quote to PeopleSoft Proposal Management.

Quote - Entry Form page (post submission to PeopleSoft Proposal Management)

When a quote for an engagement service has been submitted to PeopleSoft Proposal Management, it is priced. The correct unit price now defaults in. At this point, you have two options:

- Convert the quote to an order, which marks the engagement service as being *Sold.*

- Revise the quote if the price is not acceptable to the customer, by setting the status to *Negotiate.* In this scenario, a message is automatically returned to PeopleSoft Proposal Management. They can then change their status to *Draft,* and can consider changing the price once more.

  To perform this operation, click the Revise Quote (red crayon) icon on the Entry Form toolbar. On the quote copy, you can edit the quote lines, manually changing the status to *Negotiate.* Then you submit the quote once again. Order Capture sends its status EIP, OC_ESA_PROPOSAL_STATUS, and requests that this proposal go into *Draft* status. The same process occurs and PeopleSoft Proposal Management reprices the engagement.

  Note. Theoretically, a CSR or sales representative can go through the negotiation paradigm indefinitely. The final outcome may be to revise the quote and set status to *Lost,* where the customer has failed to agree to the terms of the offer.

Note. PeopleSoft Sales allows sales representatives to initiate a quote for an engagement from a lead or opportunity. The sales representative can go to that lead or opportunity to view the price on the engagement service product. PeopleSoft Sales information is continually updated by Order Capture, and it displays the same information that you find on the Entry Form in Order Capture.

Business Project for Proposals

Access the Quote - Related Actions page (Orders and Quotes, Search Orders and Quotes, Quote - Related Actions).

Quote

Search | Previous | Clone | Revise Quote | Add Quote | Refresh | >>   Personalize

Quote ID CRQ0307025   Quote Status Submitted Quote
Customer Adventure 54   Customer Value Gold ★★★★
Contact Karen Jacobsen   Credit Rating 0

Entry Form | Line Details | Holds | Notes | Related Actions | History

Go To Select One...

Related Actions

		Type	Description
1		Business Project	Order Capture Quote BP - 20360 - Complete
2		Business Project	ESA Integration BP - 20361 - Complete
3		Proposal	CON000000000079 for product 700001 on line 1
4		Quote	CRQ0307026/Revision: 1/Status: New
5		Correspondence	Correspondence cca67dc5946a11de9a6bd10eceac84a78189

Business Process Instances

🗘 Refresh Instance List

Related Business Processes

Service Operation

No instance is available.

Business Processes not initiated

Service Operation

No instance is available.

Quote - Related Actions page with an ESA integration business project

When you access the ESA Integration BP business project details on the Business Project Status page, the proposal ID is displayed (when the business project is completed) and you can access the actual proposal using the link that is provided.

Chapter 17

Working with Interactive Reports for Order Capture

This chapter provides an overview of PeopleSoft CRM interactive reports and discusses how to:

*   Set up interactive reports for Order Capture.

*   Use interactive reports for Order Capture.

Understanding CRM Interactive Reports

PeopleSoft CRM interactive reports are dynamic and interactive analytic reports. Interactive reports enable you to view and organize data in a wide variety of ways, which provides a more intensive overview of your collaborative selling activity.

You can better manage your sales solution activities by using interactive reports for Order Capture.

In Order Capture interactive reports, you can move around data elements on a report and instantly view the report using different dimensions. You can filter interactive reports data by selecting a single value for any dimension. You can also limit the interactive report so that it displays orders or quotes for one customer only. Looking at reports from different angles and perspectives affords an opportunity to gather valuable information about your business.

Interactive reports can be saved, exported to Microsoft Excel, or printed as hard copies. While you can be interactive with interactive reports by moving around data elements (dimensions), the changes that you make on the reports do not affect the PeopleSoft CRM database where the data originated.

Order Capture Interactive Reports

CRM Order Capture delivers four interactive reports:

*   Order Revenue (for a single business unit).

*   Order Metrics (for a single business unit).

*   Enterprise Order Revenue (for all business units).

*   Enterprise Order Metrics (for all business units).

Enterprise reports can analyze data across the enterprise or by specific business unit. Regular reports are restricted to individual business units. Depending upon the role assigned, users have access to either the two enterprise interactive reports or the two regular interactive reports.

Note. If a user has access to the two enterprise interactive reports, then that user can view analytics for specific business units as well as the entire enterprise.

Access to interactive reports in Order Capture is determined by user role. It is therefore possible to restrict access to enterprise-wide interactive report information. Review the following table for a list of interactive reports that can be launched by each predefined Order Capture role:

Role	Enterprise Order Revenue	Enterprise Order Metrics	Order Revenue for Single Business Unit	Order Metrics for Single Business Unit
OCADMIN	No	No	No	No
OCMGR	Yes	Yes	Yes	Yes
OCREP	No	No	No	No

Setup for Interactive Reports for Order Capture

The four interactive reports for Order Capture are set up using Analytic Calculation Engine components. Setup is detailed in the *PeopleTools 8.52: Analytic Calculation Engine PeopleBook.*

Setup includes specifying the model definition, query definition, and data source definition for each of the following:

- CR_RO_ORD_METRICS_BU (Order Metrics for a single business unit).

- CR_RO_ORD_REVENUE_BU (Order Revenue for a single business unit).

- CR_RO_ORD_METRICS (Enterprise Order Metrics for all business units).

- CR_RO_ORD_REVENUE (Enterprise Order Revenue for all business units).

Note. The Query Definition page does not require any changes during installation. However, the Model Definitions page requires updates at installation before you can run an Order Capture interactive report. Use the Model Definitions page to define the interactive reports server name as well as other locations that the runtime uses to launch interactive reports.

See Also

PeopleSoft CRM 9.1 Application Fundamentals PeopleBook, "Using Interactive Reports"

Using Interactive Reports for Order Capture

This section provides an overview of the delivered Order Capture interactive reports.

When you access a interactive report directly from the menu navigation, a run control page appears. Enter the report criteria on this page. Default values for all fields are based on the run control that you last used; if you do not need to change the criteria, one click takes you to the interactive report. Alternatively, you can select a different run control (which updates the default values for the other fields), or you can directly edit the criteria fields.

Profiles are stored by user, which means that users who repeatedly use the same criteria can enter that criteria once. The run control criteria (all fields except the run control name) are shared across all Order Capture interactive reports. This means that when a run control is created while running a single Order Capture interactive report, it is still available for all other interactive reports.

Dimensions

Interactive Reports are a combination of *Dimensions* and *Data Cubes.* Dimensions are static categories by which you group data, whereas the data cubes show the actual statistics. You can personalize the look of a interactive report by dragging and dropping the dimensions. Following are the available dimensions for Order Capture interactive reports:

Currency	Choose the type of currency. You can view only a single currency at a time from within an interactive report. All orders and quotes are captured in the base currency. To see all orders or quotes that were captured in U.S. dollars, select *USD* as the currency, and the orders will be converted into U.S. dollars. To see all of the orders and quotes captured in euros, select *Euros* as the currency.
Business Unit	Select all business units, or choose a specific business unit.
Source	Select all capture sources, or select a single capture source such as *Phone.*
Months	Select the month for which you want to view data. To view all of the data, select *All Months.*
Region	Select the geographic region. This is the region associated with the Sold To customer. This may not be defined for all orders and quotes, so a unique selection of *Not Specified* is used to show the data associated with orders and quotes without a region defined for the Sold To customer.
Capture Type	Select either *All Captures,Order,* or *Quote.* To view orders only, select *Order.* To view quotes only, select *Quotes.* Select *All Capture Types* to see both orders and quotes.
Capture Status	Select the status of the orders or quotes, for example, *All, Canceled, Hold*, *Open,* or *Pending.*

Pages Used to Run Interactive Reports for Order Capture

Page Name	Definition Name	Navigation	Usage
Existing Run Control - Order Revenue	RO_BAM_REVBU_UPD	Orders and Quotes, Interactive Reports, Order Revenue Select an existing run control or add a new run control for the Order Revenue interactive report. Click the Launch Interactive Report button on the Existing Run Control page.	Launch the Order Revenue interactive report and view revenue information for a specific business unit.
Existing Run Control - Order Metrics	RO_BAM_METBU_UPD	Orders and Quotes, Interactive Reports, Order Metrics Select an existing run control or add a new run control for the Order Metrics interactive report. Click the Launch Interactive Report button on the Existing Run Control page.	Launch the Order Metrics interactive report and view metrics for a specific business unit.
Existing Run Control - Enterprise Order Revenue	RO_BAM_REV_UPD	Orders and Quotes, Interactive Reports, Enterprise Order Revenue Select an existing run control or add a new run control for the Enterprise Order Revenue interactive report. Click the Launch Interactive Report button on the Existing Run Control page.	Launch the Enterprise Order Revenue interactive report. You can select values and adjust dimensions to give an overall view of the enterprise. You can also view revenue information by business unit.
Existing Run Control - Enterprise Order Metrics	RO_BAM_MET_UPD	Orders and Quotes, Interactive Reports, Enterprise Order Metrics Select an existing run control or add a new run control for the Enterprise Order Metrics interactive report. Click the Launch Interactive Report button on the Existing Run Control page.	Launch the Enterprise Order Metrics interactive report. You can select values and adjust dimensions to give an overall view of the enterprise. You can also view metrics by business unit.

Using the Order Revenue Interactive Report

Access the Existing Run Control - Order Revenue page (Orders and Quotes, Interactive Reports, Order Revenue. Click the Launch Interactive Report button on the Existing Run Control page).

Note. Use the run control criteria of *Start Date* and *End Date* to access this interactive report.

Existing Run Control - Order Revenue page

Note. The data elements (cubes) on this page are common to both Enterprise Order Revenue (for multiple business units) and Order Revenue for a single business unit.

Number of Quotes/Orders	Displays the total number of orders and quotes captured by the system for the dimensions currently selected.
Order/Quote Revenue	Displays the total value of the captures, in the selected currency for the dimensions currently selected.
Quotes Converted to Orders	Displays the total number of quotes converted to orders for the dimensions currently selected.

% Quotes Converted to Orders	Displays the total number of quotes converted to orders divided by the total number of quotes for the dimensions currently selected.

Using the Order Metrics Interactive Report

Access the Existing Run Control - Order Metrics page (Orders and Quotes, Interactive Reports, Order Metrics. Click the Launch Interactive Report button on the Existing Run Control page).

Note. Use the run control criteria of *Start Date* and *End Date* to access this interactive report.

Existing Run Control - Order Metrics page

Note. The following data elements (cubes) are common to both the Enterprise Order Metrics interactive report (for multiple business units) and Order Metrics interactive report (for a single business unit).

Number of Orders/Quotes	Displays the total number of orders and quotes captured by the system for the dimensions currently selected.

Average Revenue per Order/Quote	Displays the average price of captured orders: the cumulative total revenue amount of all captures divided by the cumulative number of captures for the current dimensions.
Average Discount per Order/Quote	Displays the average discount applied to your orders. The average discount per capture is the cumulative total price minus the cumulative net price divided by the cumulative number of captures for the current dimensions.
Average Lines per Order/Quote	Displays the average lines per capture: the cumulative total of all capture lines divided by the cumulative number of captures for selected dimensions.

Using the Enterprise Order Revenue Interactive Report

Access the Existing Run Control - Enterprise Order Revenue page (Orders and Quotes, Interactive Reports, Enterprise Order Revenue. Select an existing run control or add a new run control for the Enterprise Order Revenue interactive report. Click the Launch Interactive Report button on the Existing Run Control page).

Note. Use the run control criteria of *Start Date* and *End Date* to access this interactive report.

Existing Run Control - Enterprise Order Revenue page

The Enterprise Order Revenue interactive report offers the same view as the Order Revenue interactive report, but the Enterprise Order Revenue interactive report shows the data across all business units.

Using the Enterprise Order Metrics Interactive Report

Access the Existing Run Control - Enterprise Order Metrics page (Orders and Quotes, Interactive Reports, Enterprise Order Metrics. Select an existing run control or add a new run control for the Enterprise Order Metrics interactive report. Click the Launch Interactive Report button on the Existing Run Control page).

Note. Use the run control criteria of *Start Date* and *End Date* to access this interactive report.

Existing Run Control - Enterprise Order Metrics page

The Enterprise Order Metrics interactive report offers the same view as the Order Metrics interactive report, but the Enterprise Order Metrics interactive report shows the data across all business units.

Part 3

PeopleSoft Order Capture Self Service

Chapter 18

Defining Order Capture Self-Service Business Units

This chapter provides overviews of PeopleSoft business units and Order Capture Self-Service business units and discusses how to define Order Capture Self-Service business units.

Understanding PeopleSoft Business Units

A business unit is an operational subset of your organization. Each business unit has its own way of storing information and each business unit possesses its own processing guidelines. You can use one business unit for all cases, or you can divide your operations based on whatever criteria makes the most sense. For example, you could create business units for different product lines or regions.

Note. PeopleSoft implementation personnel can also help you define the appropriate business unit structure.

Define PeopleSoft business units in this order:

1. Define global PeopleSoft business units, if you run multiple PeopleSoft applications.

2. Define PeopleSoft Customer Relationship Management (PeopleSoft CRM) business units.

3. Define Order Capture Self-Service business units.

4. Link PeopleSoft business units and PeopleSoft CRM business units to Order Capture Self-Service.

Note. Before you create multiple Order Capture business units, be sure that you understand the concept of *TableSet controls,* the mechanism used to determine valid values for fields on transactional pages.

See *PeopleTools 8.52: PeopleSoft Application Designer Developer's Guide*

Understanding Order Capture Self-Service Business Units

Order Capture Self Service business units provide the necessary defaults that enable self-service transactions, such as order creation and order tracking.

Note. Where applicable, business unit definition records must be synchronized across all systems. Business unit definitions created in PeopleSoft CRM are available in PeopleSoft Supply Chain Management. For fulfillment purposes, PeopleSoft Order Management and PeopleSoft Inventory business unit definitions must also be made available to PeopleSoft CRM. To synchronize business unit records across your business enterprise, use the business unit enterprise integration point.

See Also

PeopleSoft CRM 9.1 Business Object Management PeopleBook, "Managing Enterprise Integration for PeopleSoft CRM"

Defining Order Capture Self-Service Business Units

This section discusses how to create an Order Capture Self-Service business unit.

See Also

Page Used to Define Order Capture Self-Service Business Units

Page Name	Definition Name	Navigation	Usage
Order Capture Definition - Self Service	BUS_UNIT_RO2	Set Up CRM, Business Unit Related, Order Capture Definition, Order Capture Definition - Self Service	Establish valid credit cards, carriers, ship to countries, and other business unit defaults for Order Capture Self-Service.

Creating an Order Capture Self-Service Business Unit

Access the Order Capture Definition - Self Service page (Set Up CRM, Business Unit Related, Order Capture Definition, Order Capture Definition - Self Service).

Order Capture Definition - Self Service page (1 of 2)

Order Capture Definition - Self Service page (2 of 2)

Use the Internal tab to create Order Capture business units to which you can associate the self-service options.

See and <u>Chapter 3, "Defining Order Capture Business Units," Creating Order Capture Business Units, page 19.</u>

Self Service

Source	Enter a code that identifies the source of the order. Every order generated in Order Capture Self-Service contains the source code that you define here.
	Note. If you use both Order Capture and Order Capture Self-Service, this allows you to differentiate orders that were captured by way of the web channel from orders entered by a customer sales representative or sales representative within your organization.
Sub Source (default self service sub source)	Select a sub source code that further classifies the source of the order. The system makes sub source codes available based on the selected source code. See and Chapter 4, "Setting Up PeopleSoft Order Capture," Defining Sub Source Mappings, page 62.
Telephone and **Email Address**	Enter a telephone number and email address. The default values entered here are displayed to users when viewing the status of their orders. For example, as a consequence, self-service users might see the following: "If you have questions, contact us at email@message.com or call us at 1 800 555 5252."
	Note. For credit card authorization purposes, CyberSource requires a telephone number and an email address. To guarantee processing, PeopleSoft CRM submits these defaults to CyberSource when an email or phone number was not defined for the person for whom an order was created.
Quick Entry Fields	Enter the number of blank rows available by default when users select the Quick Order Entry option.
Review Days	Enter the number of default days that you want to make viewable to users when they first view order and quote status.
Advisor Dialog	Select from your predefined advisor dialogs for the recommendations section of the Find Products page.
Recommendation Template ID	Select a template for the business unit level that determines your desired format or customer requirements for the display of recommendation information on self-service pages.
Show Phone Country Code	Select this check box to display country codes in the phone numbers within the address book.
Add a New Note	Select this check box to be able to add notes and attachments to the order in Order Capture Self-Service. If you clear the check box, you are unable to add notes to the order.

Use Accounts	Select this check box to display the additional payment option of *Accounts* in the billing payment section of the order. If you clear the check box, this billing payment subtab will not appear on the order.
Show Partner Contact Details	Click this check box to display information that can be made available on the self-service pages about products if the order is taken by a partner company.
Show Recommendation	Select this check box to enable recommendations to customers for a current product choice. Recommendations are determined by the product recommendation functionality that is a part of the Find Products page. The functionality uses any existing defined advisor dialog to make recommendations. This is done in real time and the self-service user does not have to answer any questions at the time. The results are based on previous advisor sessions and customer details as defined in the advisor dialog.

Valid Cards, Valid Carriers, Valid Ship To Countries

Define your valid credit cards, valid carriers, and valid ship to countries in the appropriate section on this page. Identify the default carrier in the Valid Carriers group box. Values will then be available for selection in the appropriate drop-down list box at runtime.

Chapter 19

Setting Up Order Capture Self-Service

This chapter provides a list of steps required to set up Order Capture Self Service. Since most of this involves setting up options that are also required for Order Capture, we have referenced that documentation here using direct links.

Once you have defined self-service business units, Order Capture Self-Service requires that you set up each of the following, in the order listed:

* Products.

* Pricing.

* Catalogs.

* Order Capture Setup Workbench options.

* Order Capture Type Workbench options.

* Order Capture Integration Workbench options.

* Carrier definitions.

* Credit cards.

* Tax provider options.

* Consumer and business registration.

* Anonymous user access (guest user access).

Note. Each of these setup elements is explained in detail in the following sections.

See Also

PeopleSoft CRM 9.1 Product and Item Management PeopleBook, "Setting Up Products"

PeopleSoft Enterprise Pricer 9.1 for CRM PeopleBook

PeopleSoft CRM 9.1 Product and Item Management PeopleBook, "Creating Catalogs"

Chapter 4, "Setting Up PeopleSoft Order Capture," Setting Up Order Capture Tables, page 40

Chapter 4, "Setting Up PeopleSoft Order Capture," Defining Order and Quote Processing, page 65

Chapter 4, "Setting Up PeopleSoft Order Capture," Defining Integrations and Mappings, page 78

Chapter 4, "Setting Up PeopleSoft Order Capture," Setting Up Freight Integration, page 84

Chapter 4, "Setting Up PeopleSoft Order Capture," Setting Up Credit Card Integration, page 83

Chapter 4, "Setting Up PeopleSoft Order Capture," Defining Tax Installation Options, page 88

PeopleSoft CRM 9.1 Application Fundamentals PeopleBook, "Setting Up Customer Self-Service"

PeopleSoft CRM 9.1 Application Fundamentals PeopleBook, "Setting Up Security and User Preferences," Implementing Self-Service Security

Chapter 20

Working With Order Capture Self Service

This chapter provides an overview of Order Capture Self Service, delivered user ID and user role identification, and discusses how to:

- Select products.

- Use Quick Entry.

- Use the shopping cart.

- Manage checkout.

- View order or quote status.

Understanding Order Capture Self Service

Order Capture Self Service delivers an intuitive interface that allows consumer users, company representatives, and brokers to easily create and manage the web channel. Order Capture Self Service synchronizes with Order Capture to allow self service users to track all orders, whether created by a customer service representative, an agent through the call center, or by themselves through the web.

Order Capture Self Service works in conjunction with the following CRM features, some of which are common to all self service applications, and others that specifically complement Order Capture Self Service:

- Security elements, including definition of user roles and associated permissions.

- Address book.

- Sign in.

- Registration.

- Profile maintenance.

- Contact Us and Chat.

- Attributes.

- Product catalog.

- Search Catalog.

- PeopleSoft Advisor.

- PeopleSoft Configurator.

Note. Functionality that is common to both Order Capture and Order Capture Self Service, such as integration with order fulfillment, pricing, freight, and tax integration, is documented in previous chapters of the this book.

See Also

PeopleSoft Real-Time Advisor 9.1 PeopleBook, "Oracle's PeopleSoft CRM Real-Time Advisor Preface"

PeopleSoft Advanced Configurator 9.1 PeopleBook, "Oracle's PeopleSoft CRM Advanced Configurator Preface"

Understanding Delivered User ID, User Role Identification, and Password Creation

This table shows the users and roles that Order Capture Self Service delivers. You can adopt these particular users and roles, or you can modify them to better suit your business needs.

Note. To modify permissions for these delivered user roles, navigate to PeopleTools, Security, Permissions & Roles, Roles.

User ID	Role Name	Role Description	Access
GUEST	Guest	An anonymous user that accesses the web channel.	Guests have access to the Sign In & Registration, Products and Services, Catalog Search, Shopping Cart, and Site Selection pages.
CPSS, CPSS2	Consumer	A consumer that represents him- or herself.	Consumers have guest privileges without the sign-in (and registration) options. They also have access to the Customer Care, Order Status, Quote Status, Profile Maintenance, and Contact Us pages.
CPCUST, CPCUST2	Customer	A customer represents a single customer.	Customers have all consumer privileges as well as quick entry privileges.

User ID	Role Name	Role Description	Access
CPBRKR, CPBRKR2	Broker	A broker represents multiple customers.	Brokers have all customer privileges plus customer selection privileges. Customer selection privileges allow brokers to select the customer that they want to represent for a particular session.

Note. User IDs that end with a *2* are associated with the *CRM01* setID.

Setting Password Expiration and Changing Passwords

To set the internal self-service password expiration date to one other than the external date, navigate to Set Up CRM, Security, Self-Service, User Registration.

The password expiration options are accessed in the Password Security Policies group box of the User Registration page. The options enable you to setup your password expiration policy. For example, the internal passwords might be set to expire every 60 days while the setting for the external passwords might be set to never expire. In the Password Security Policies group box a password can be set to never expire by selecting the Password Never Expires radio button, or the password can be set to expire by selecting the Password Expires radio button and entering the number of days until expiration in the associated field. A password expiration date is calculated based on the last password change date as determined from the tools PSOPRDEFN table.

When the password expires and you click the Sign In button on the Sign In page, you are presented with the Change Password page. Here you enter your old password, your new password and enter the new password again to confirm it. Click the Save button or if it becomes necessary, you can cancel and return to the sign in page.

Self-Service Pages

Order Capture Self Service delivers these customer-facing pages for self-service order creation and management. They are enabled by the Order Capture Self Service product as part of the PeopleSoft CRM Portal Pack:

- Find Products page (RX_PROD_SRCH)

- Shopping Cart page (RE_CART)

- Order Status page (RE_ORDER_SRCH)

- Quote Status page (RE_QUOTE_SRCH)

- Contact Us (WC_CONTACT_US)

- Product Registration page (RF_PROD_REG_SRCH)

Selecting Products

This section discusses how to:

- Find products.

- Choose a product.

- View product details.

- Compare products.

- Launch PeopleSoft Advisor.

Note. The navigation paths for pages that are discussed in this section are valid only in the self-service application.

Pages Used to Select Products

Page Name	Definition Name	Navigation	Usage
Find Products	RX_PROD_SRCH	Find Products, Find Products	Search a particular catalog or browse all catalogs, get advice on products.
Browse Catalog	RB_CATALOG	Click a catalog link on the Find Products page.	View and select a product.
Product Details	RB_PROD_DTL	Click a product link on the Browse Catalog page.	View product details, select a quantity, change units of measure, and add the product to the shopping cart.
Product Comparison	RB_CATALOG	On the Browse Catalog page, select the Compare check box of up to three products. Click the Add to Compare Pad button and then the Compared Selected button.	Compare as many as three products. **Note.** Some functionality for the Compare Pad will differ based on your installation.
<Advisor dialog>	RAD_ADVISOR _RUN	• Click the Get Advice link on the Find Products page. • Click the Need help choosing a product ? link on the Browse Catalog page.	Launch the PeopleSoft Advisor, answer the questions in the dialog presented and receive a personalized recommendation.

Finding Products

Access the Find Products page (Find Products, Find Products).

Find Products page (1 of 2)
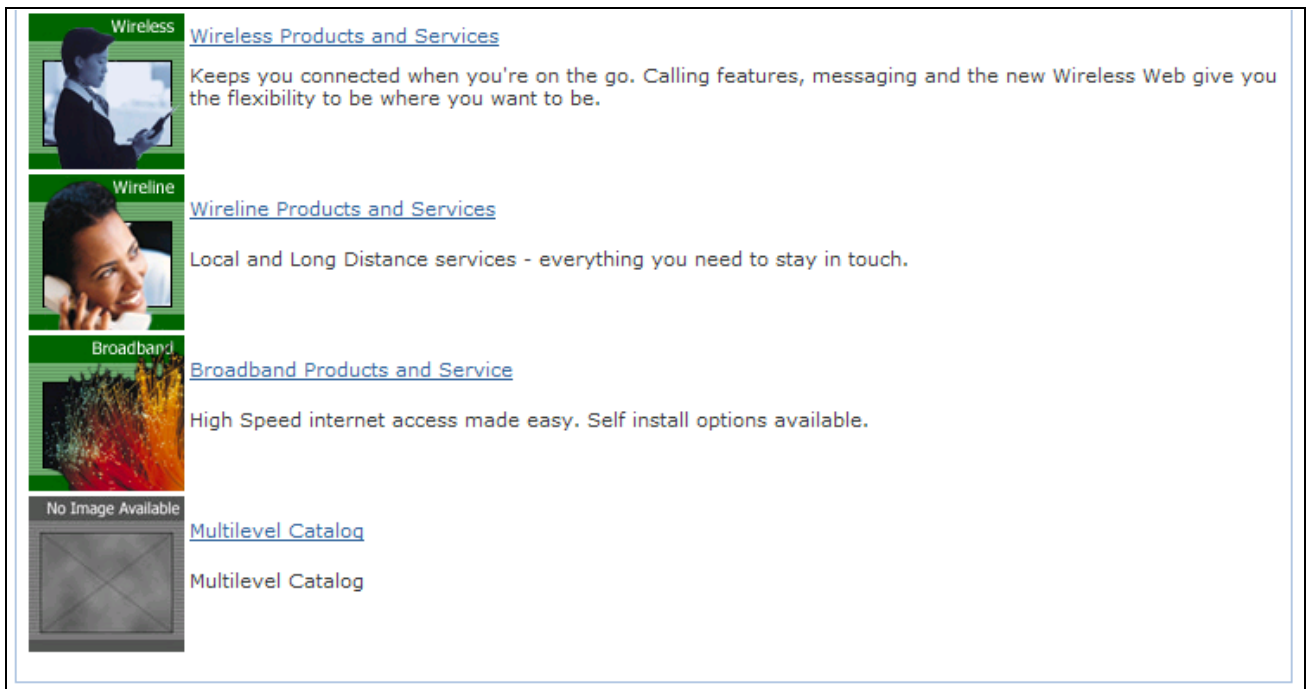
Find Products page (2 of 2)

This page provides several methods to find products.

- Click the Get Advice link when you are unsure of the product or type of product that you need. The system will guide you in selecting the appropriate item through an Real-Time Advisor dialog consisting of a series of questions and answers.

- The system can display recommended products based on your prior ordering activity.

- Select and search a particular catalog. When you have enough information to provide definitive search criteria, use the Advanced Search link to search on keys such as keywords, brand name, description, and product ID.

- Select catalog links to browse listed catalogs.

Choosing a Product

Access the Browse Catalog page (click a catalog link on the Find Products page).
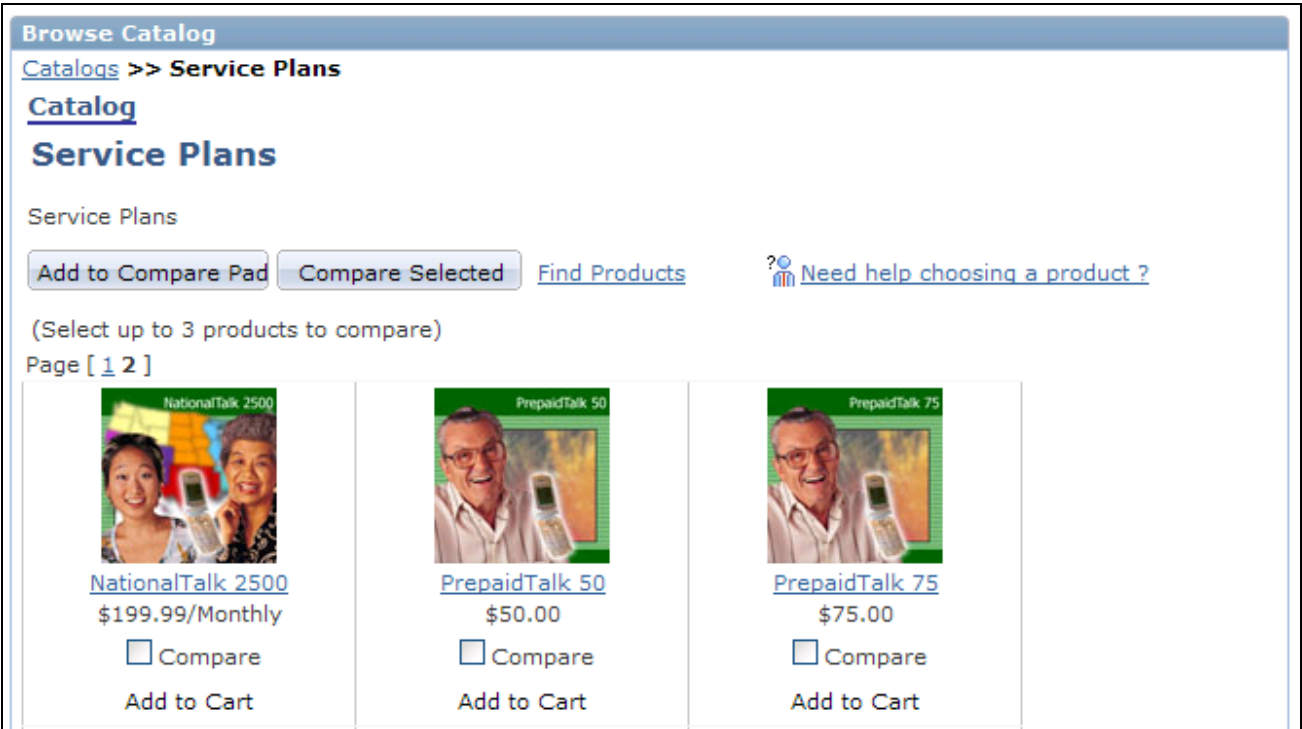
Browse Catalog page (1 of 2)
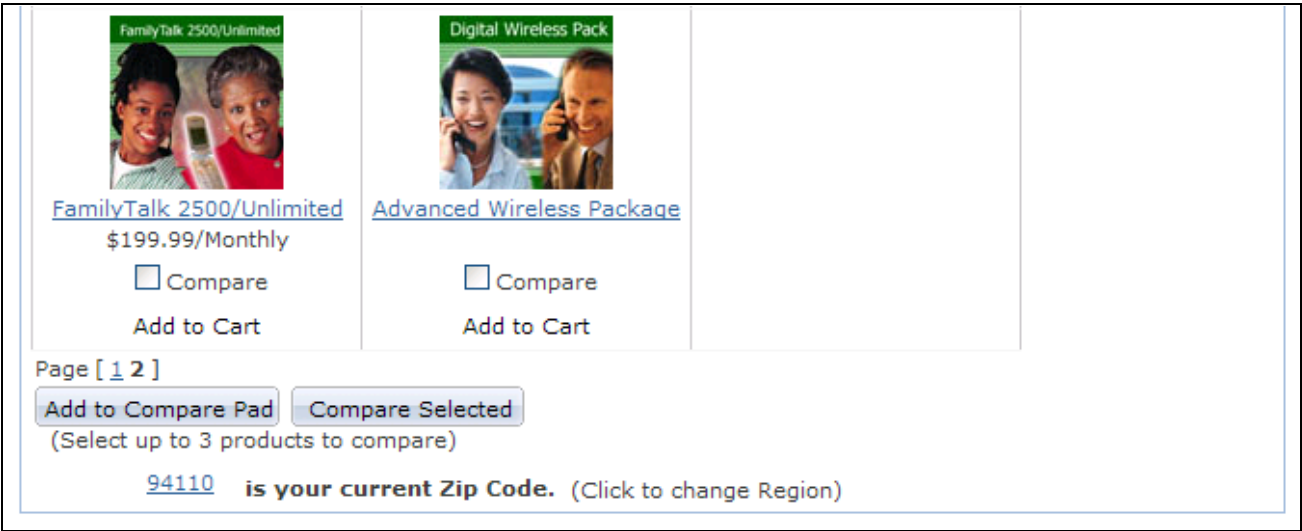
Browse Catalog page (2 of 2)

Recommended Product   The system can highlight various products and distinguish them as recommended products in the various catalogs.

However, you can click any product link to access its Product Details page. For example, if you click the Prepaid Talk 50 product link, you can access the Product Details page for this product to view the product description.

Need help choosing a product?	Click to launch PeopleSoft Real-Time Advisor, which displays a form with questions about your product requirements, then returns product recommendations based on your answers.
Compare	Select check boxes for up to three products for product comparison.
Add to Compare Pad	Click to add the selected products awaiting to be compared.
Compare Selected	Click to display the attributes of up to three products side-by-side in the compare pad. The compare pad content is determined by a display template that is set up for the product catalogs. Some functionality for the Compare Pad will differ based on your installation.
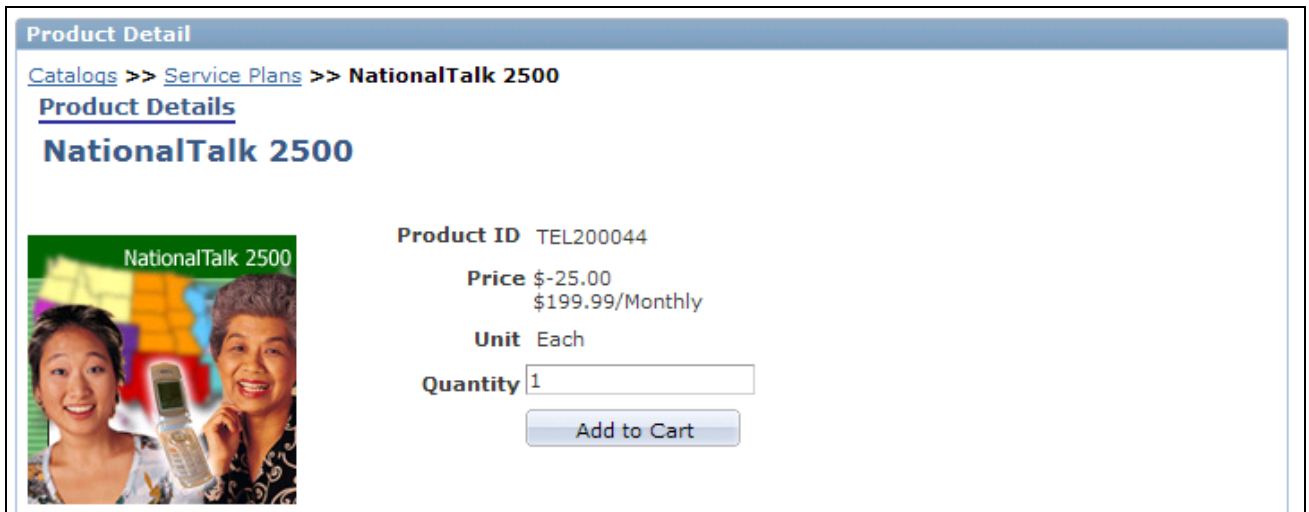
Viewing Product Details

Access the Product Details page (click a product link on the Browse Catalog page).

Product Details page (1 of 2)

Product Description

Ideal for those who travel often and/or make calls outside of their local area. Includes 2,500 anytime minutes. Enjoy no roaming or long distance charges.

Cellular Service Plans

Attribute Name	Attribute Value
Plan Type	National
Anytime Minutes	2,500
Off-peak Minutes	None
Caller ID	Yes
3-way Calling	Yes
Wireless Web	Yes
Voicemail	Yes
Call Waiting	Yes
Text Messaging	Yes
Cancellation Fee	150
Additional Minutes	0.3

Product Details page (2 of 2)

Add to Cart	Add the product to your shopping cart.
Agreements for this product and **Enhance this product with these additions**	Click, if available, to display links for additional item information, such as preventive maintenance, service agreements, and enhancements for the selected product. Click the item links for more information.
The next step up from this product	Select this link, if available, to display products that are considered a step up from the product you are currently considering—perhaps for quality, size, or capacity.

Note. You can access Product Details from several pages, including the Catalog, Shopping Cart, Checkout, and Order/Quote Status pages.

Comparing Products

Access the Product Comparison page (on the Browse Catalog page, select the Compare check box of up to three products. Click the Add to Compare Pad button and then the Compared Selected button).

Browse Catalog

Catalog
Product Comparison

You may select products from one of our catalogs.

Side by Side Comparison

	NationalTalk 2500	FamilyTalk 2500/Unlimited
	NationalTalk 2500	FamilyTalk 2500/Unlimited
Price	$-25.00	$-25.00
Product Description	Ideal for those who travel often and/or make calls outside of their local area. Includes 2,500 anytime minutes. Enjoy no roaming or long distance charges.	Unlimited calling between plan members on one shared account while in the shared calling area. Supports 4 shared lines. Includes 2,500 anytime minutes and unlimited night and weekend minutes for use by anyone on the account.
Unit of Measure	Each	Each
	Details	Details
	Remove	Remove
Cellular Service Plans		
Plan Type	National	Family/Shared
Anytime Minutes	2,500	2,500

Product Comparison page

Details	Click to access the Product Details page to view the product's description and additional details.
Remove	Click to remove a product from the current comparison. In order to facilitate cross catalog comparisons, products stay on the compare pad until they are removed.
Return to Catalog	Click to return to the catalog to add additional products to the comparison. The compare pad can display up to three products in a comparison. Remove any products that should no longer be compared.

Launching PeopleSoft Real-Time Advisor

Access the <Advisor dialog> page (click the Get Advice link on the Find Products page).
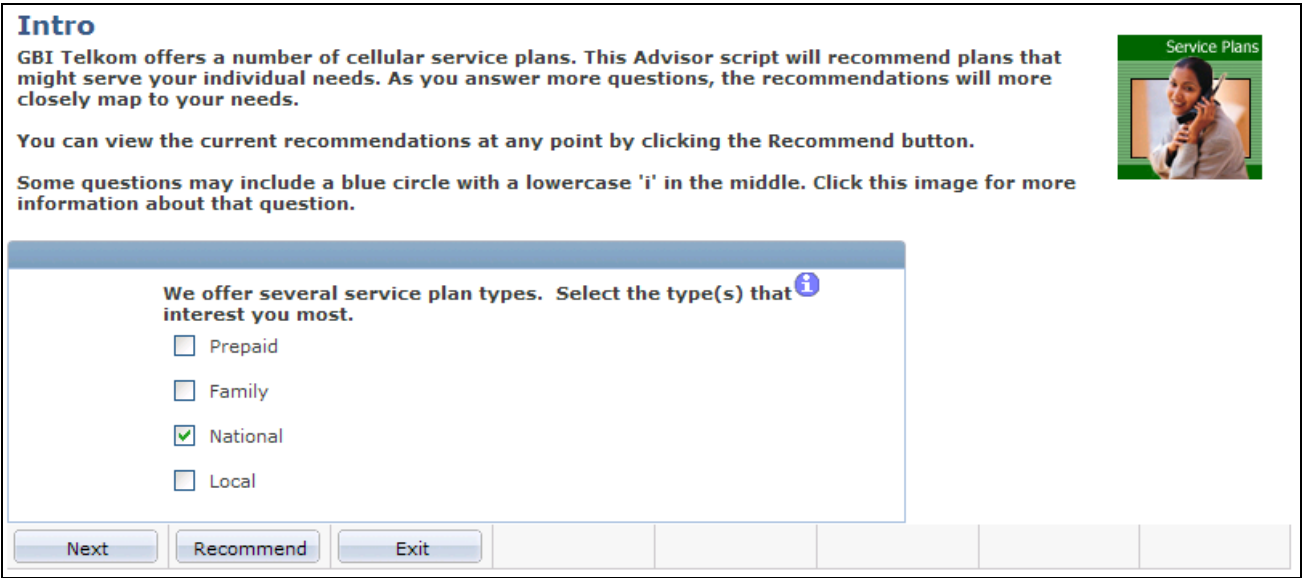
<Advisor dialog> page

Next   After selecting or entering your applicable response, click to move to the
                                                      next dialog in the series of the advisor's questions.

Recommend   Click to access the list of product recommendations that the Advisor
                                                      generated based on your answers to the advisor dialog.

Exit   Click to leave the current dialog session.

Recommendations

Select the Recommend button on the <Advisor dialog> page.

Recommendations
Here is a list of the service plans that best meet your cellular needs based on the information you have provided thus far. You can view the details of a particular recommendation by clicking on the link.

Recommendations			Customize	
Compare	Description	Details	Score
☐	NationalTalk 250	Cellular Service Plans: TEL200040 NationalTalk 250 Anytime Minutes: 250 Night and Weekend Minutes: None Contract Length: 1 Cancellation Fee: 150 Additional Minute Charge: 0.4 Long Distance Charges: 0 Roaming Charges: 0 List Price: $25.00 Cellular Service Plans: TEL200041 NationalTalk 500 Anytime Minutes: 500 Night and Weekend Minutes: None	100

Compare Selected

Back   Next   Exit

PeopleSoft Advisor – Recommendations page

Score   The system displays suitable products with scores based on how well these products fit your responses to the advisor's questions.

Using the Quick Order Entry

This section provides an overview of the quick order entry and discusses how to add products to orders quickly.

Understanding the Quick Order Entry

There are two ways to add products to the shopping cart: from the Product Details page or from the Quick Order Entry page. The Quick Order Entry page is intended for users who are familiar with the products and the product IDs that they order; it delivers a simple form to support speedy entry of product information.

Page Used to Add Products to Orders Quickly

Page Name	Definition Name	Navigation	Usage
Quick Order Entry	RE_QUICK_ENTRY	Quick Order Entry, Quick Order Entry	Create orders or quotes rapidly when you are familiar with the product and already know the product ID.

Adding Products to Orders Quickly

Access the Quick Order Entry page (Quick Order Entry, Quick Order Entry).

Quick Order Entry page

Product ID	Enter the product ID.
Quantity	Enter a quantity. If you do not select a quantity, the system assigns the default quantity *1*.
Units	Enter either the unit of measurement (UOM) code (such as *ea.*) or the UOM description (such as *each*).
Notes	Add notes, which appear for the specified product when you access the shopping cart.

Using the Shopping Cart

This section provides an overview of the shopping cart and discusses how to:

- Work from within the shopping cart.

- Delete products from the shopping cart.

Understanding the Shopping Cart

The shopping cart displays all of the products that you select for an order or quote. You can perform these operations from the Shopping Cart page:

- Update quantity and recalculate price.

- Configure products or packages.

- Remove products.

- Proceed to checkout.

Page Used to Access the Shopping Cart

Page Name	Definition Name	Navigation	Usage
Shopping Cart	RE_CART	• Shopping Cart, Shopping Cart • Click the Add to Cart button after adding products on the Quick Order Entry page. • Find Products, Find Products Select a catalog on the Find Products page and then select products on the Browse Catalog page. Click the Add to Cart button. • Click the Change Order link on the Checkout - Shipping and Payment page.	View the contents of the shopping cart, and then proceed to checkout.

Working from Within the Shopping Cart

Access the Shopping Cart page (Shopping Cart, Shopping Cart).

Shopping Cart page

Click the product's name to view product details.

Add an Agreement to this Product	Click if you choose to add available agreements, such as a consulting, preventive maintenance, or service agreement for a selected product. Because it is often crucial that certain agreements be ordered with the initial purchase of a product, this is a second opportunity to choose agreements. This option is first presented on the Product Details page.
Qty (quantity)	Update the quantity of a product. Click the Recalculate button to determine new total charges.
Delete	Click this link to remove the line item from the shopping cart. Click the Recalculate button to determine new total charges.
	Note. Deleting a product also deletes its associated agreements. However, Enhancements are not automatically deleted. Delete them individually using the Delete link on the Shopping Cart page.

(options)	Click to select options for a product that is set up as a dynamic package with various options that you must choose, such as when a product must be custom-built. When you have configured the product with its various options, the system calculates a composite price. This icon is not available or applicable to all products.
	See and *PeopleSoft CRM 9.1 Product and Item Management PeopleBook*, "Setting Up Products," Defining Product Packages.
(configure)	Click to launch a dedicated product configuration application for the product. This application allows the configuration of complex products that have multiple sets of options that vary dynamically as the customer makes selections. This icon is displayed only when applicable and is not available for all products.
	See *Oracle CZ Implementation Guide* and *PeopleSoft Advanced Configurator 9.1 PeopleBook*
Recalculate	Click to update the price after changes to your selections, such as increasing or reducing the quantity of a product or after removing a product.
Checkout	Proceed to checkout.
Continue Shopping	Return to the catalog to select additional or different products. When you click the Continue Shopping button, the system retains the contents of your shopping cart.

Note. When you have a configurable product or package in the shopping cart, it must be configured before you proceed to checkout. If a product has required attributes, you must specify the attribute value before you can proceed to checkout.

Managing Checkout

This section discusses how to:

• Manage shipping, product, and payment options from the Checkout page.

• Handle multiple shipments.

• Access and change product attributes.

• Receive an order or quote confirmation.

• Change a submitted order derived from a quote.

Pages Used to Manage Checkout

Page Name	Definition Name	Navigation	Usage
Checkout - Shipping and Payment	RE_SUMMARY	Click the Checkout button on the Shopping Cart page.	Enter and modify shipping, product, and payment information. CRM Portal Pack must be installed to display the Checkout page.
Multiple Shipments	RE_DESTINATION	Click the Multiple Shipments button on the Checkout - Shipping and Payment page.	Create more than one shipment destination for the order. **Note.** This button appears if you have more than one line in the Product Information section.
Checkout - Notes & Attachments	RE_NOTE_SUMMARY	Click the Notes and Attachments Summary link on the Checkout - Shipping and Payment page.	Displays a list of notes and attachments associated with the order.
Attributes	RE_ATTR_RUNTIME	Click the Attributes link of a product line (if available) on the Checkout - Shipping and Payment page.	Enter product attributes where attributes are allowed for a product.
Order Confirmation, Quote Confirmation	RE_STATUS	Click the Submit Order button or the Save as Quote button on the Checkout - Shipping and Payment page.	Send the completed order or quote to the enterprise system for processing and, in the case of an order, fulfillment. The system displays a confirmation message if the submission is successful.
Order Change	RX_PROCEED_CONFIRM	Click the Change Order link (from a quote) on the Checkout - Shipping and Payment page.	Change an order that was derived from a quote. When you change an order, all special pricing for quotes is lost.

Managing Shipping, Product, and Payment Options from the Checkout Page

Access the Checkout - Shipping and Payment page (click the Checkout button on the Shopping Cart page).

Checkout - Shipping and Payment page (1 of 4)

Checkout - Shipping and Payment page (2 of 4)

Checkout page - Shipping and Payment (3 of 4)

Checkout page - Shipping and Payment (4 of 4)

Submit Order	Click to submit the order for processing. You receive an order confirmation.
Save as Quote	Click to save as a quote. You receive a quote confirmation.
Change Order	Click to return to the shopping cart and make changes.

Service or Shipment

This section lists the default shipping address of the self-service user. You can select another existing shipping address or create a new one for the order.

Change Address	Click the link to add new or select another shipping address.

Multiple Shipments   Click to access the Multiple Shipments page and send the products contained in the order to different locations or by way of different shipping methods. This assumes that there is more than one product. To create multiple shipments for the same product, enter the product and appropriate quantity into the cart twice.

Shipping Options

Shipping Method   Choose a preferred carrier from the drop-down list. Valid shipping methods are specified on the Self Service page at the business unit level.

Requested Arrival Date   Enter a date you wish the shipment to arrive, if applicable. This field is optional.

Single Shipment   Select to prevent partial shipments of this order.

Ship as Items Available   Select to allow partial shipments.

                                Note. Partial shipments may increase freight charges.

Product Information

This section lists the products that are added to the order. Click a product link to view product details. On the Product Details page, you can change quantity or view or configure a configurable product, or view and change attributes for a product with attributes.

Total Charges

This section lists the current billable charges of the order. If you add or remove products from the order and you want to make sure that the charges are updated, click the Recalculate button to refresh the total charge of the order.

Invoice Payment Info, Account Payment Information and Credit Card Payment Info

A self-service user can decide which of the available payment methods to use for the order. The system determines the different payment methods that are available to the user based on the defined customer as well as the preferred payment method that is established on the customer's or consumer's record.

Enter a customer purchase order number if you are paying by invoice. Enter an account number if you are ordering a service that can be billed to a service account, such as a cable television account. Enter credit card information if you plan to pay by credit card.

Note. A self service user is required to enter either the invoice or the credit card information each time an order is placed. After the order is submitted, the payment information, together with other order-specific information, is viewable in the Order Status component.

Verification Number	Enter the credit card verification number. This field becomes required if the Credit Card Verification Number Required option is selected on the General Options page.
	After the order is saved, the verification number is masked and unavailable for review. This number is deleted automatically from the system after the authorization of the credit card transaction is completed (passed or failed).
? (what's a verification number)	Click to see an example of where a verification number can be found on a credit card.

Billing Address Information

This section lists the default billing address of the self-service user. You can select another existing billing address or create a new one for the order by clicking the Change Address link.

Order Note

This section lets you enter any note you want to add for the corresponding order.

Handling Multiple Shipments

Access the Multiple Shipments page (click the Multiple Shipments button on the Checkout - Shipping and Payment page).

If there are two or more order lines in the shopping cart, you can divide shipments.

To divide shipments:

1. Select the product that you want to designate for a separate shipment on the Multiple Shipments page.

2. Click the New Shipment button to request a new shipment.

Note. You cannot split a single line consisting of more than one quantity of a single item into two shipments. Also, you cannot ship components of a single package separately.

Accessing and Changing Product Attributes

Access the Attributes page (click the Attributes link of a product line (if available) on the Checkout - Shipping and Payment page).

If available for that product, access the Attributes page by clicking on the Attributes icon next to a product.

Fields on the Attributes page are dynamic. You define the attributes that are necessary for the products that you sell. Attributes are an optional feature. Attribute groups allow you to associate a different set of attributes to different sets of products.

See Also

PeopleSoft CRM 9.1 Product and Item Management PeopleBook, "Setting Up Products," Defining Product Attributes

Receiving an Order or Quote Confirmation

Access the Order Confirmation page or the Quote Confirmation page (click the Submit Order button or the Save as Quote button on the Checkout - Shipping and Payment page).

Quote Confirmation page (1 of 2)

Total Charges	
Billable Charges	
Subtotal	$25.00 USD
Discount	$0.00 USD
Surcharge	$0.00 USD

Total	$25.00 USD
Additional Charges	
Monthly	$29.99 USD

Account Payment Information

Account used for order charges.

Account ID 100250070

Billing Address Information

Billing Address

Ted Pepper
23819 Anover Way
Sacramento, CA 94588
United States

Quote Confirmation page (2 of 2)

Notes and Attachments Summary	Click to view any notes and attachments that are created for the corresponding quote.
Product Information	Click the product link to return to the Product Detail page where you can click the Order Again button to place another order or click theReturn to Order Status button to access the Order Details page again.

Changing a Submitted Order Derived from a Quote

Access the Checkout - Order Change page (click the Change Order link (from a quote) on the Checkout - Shipping and Payment page).

Checkout

Order Change

Warning: Making changes to your quote can result in the entire order being re-priced.

[Yes - Proceed]   [No - Do Not Proceed]

Checkout - Order Change page

Yes - Proceed	Click this button to proceed in making changes to an order that has been submitted from a quote.

Note. Making changes in an order submitted from a quote can result in the entire order being repriced.

Viewing Order or Quote Status

This section discusses how to:

- Search for orders.

- View order details.

- Search for quotes.

- View quote details.

- Convert a quote to an order.

- Track orders.

Pages Used to View Order or Quote Status

Page Name	Definition Name	Navigation	Usage
Order Status	RE_ORD_SEARCH	Order Status, Order Status	Search for orders in the system.
Order Status - Order Details	RE_STATUS	Click an order link on the Order Status page.	View line information for orders. You can also copy this order to the shopping cart.
Quote Status	RE_QUO_SEARCH	Quote Status, Quote Status	Search for quotes in the system.
Order Status - Quote Details	RE_STATUS	Click an quote link on the Quote Status page.	View line information for quotes. You can also convert this quote to an order.

Searching for Orders

Access the Order Status page (Order Status, Order Status).

Order Status page

Note. Either the Order Status or the Quote Status page becomes available when you click the Advanced Search link.

Contact Us information is associated with the business unit. You can modify it or remove it from display during setup.

Search	Click to search by date.
Advanced Search	Click the Advanced Search link to search for orders by date, order ID, customer PO, and order status.

Order Status   Search for orders using advanced search by entering one of these order status conditions:

- Cancelled

- Complete

- Expired

- Generating

> **Note.** This status indicates that the Business Project is in the process of creating the individual orders. Only a *master* bulk order can have this status.

- Hold

- In Fulfillment

> **Note.** *In Fulfillment* status indicates an order that is being processed to be shipped or provisioned.

- New

- Partial Hold

- Submitted

Order ID   Click the order link to access the Order Details page.

Viewing Order Details

Access the Order Status - Order Details page (click an order link on the Order Status page).

Order Status - Order Details page

Note. To view order details for orders that originated externally, an external link must be defined on the Order Capture Setup Workbench.

Order ID   Displays the PeopleSoft Order number or quote number.

Status   Displays the current status of the order or quote.

Shipment   Displays shipment information and links for tracking orders. When you click the Track Shipment link, you transfer to the shipment provider, where you can view the status of your packages.

Note. Information is available only for orders that have a shipment and a PRO_NUMBER defined to a web site, such as for United Parcel Service (UPS) or Federal Express (FEDEX).

Product   Click the product link to view product details.

Note. Depending on the fulfillment system with which your system integrates, products or packages within packages may display their statuses individually and not as a package.

Order Again	Click to copy this order to the shopping cart.
	Note. Your original order does not change.

Searching for Quotes

Access the Quote Status page (Quote Status, Quote Status).

Quote Status page

Quote Due Date	Displays the date on which the quote must be captured before the quote automatically expires.
Expiration Date	Displays the date after which the quote is no longer valid.

Note. Advanced search criteria for *quote* status are slightly different from advanced search criteria for *order* status in that the criteria can entail quote due date and expiration date parameters.

Viewing Quote Details

Access the Quote Status - Quote Details page (click an quote link on the Quote Status page).

Click a quote link in the Quotes section to view quote details.

Converting a Quote to an Order

Access the Quote Status - Quote Details page (click an quote link on the Quote Status page).

Click the Submit as Order button on the Quote Details page to convert a quote to an order. You can add or remove products prior to conversion, but this causes the quote to lose its special pricing (if applied) and be repriced. Once you click the Submit as Order button, shipping and payment options are available on the checkout page and you can select shipping options, such as multiple shipments. You can also change the shipping destination, as well. Submitted quotes become Open orders.

Tracking Orders

Access the Order Status - Order Details page (click an order link on the Order Status page).

For a particular order, access the Order Status - Order Details page from the Order Status page, then click the Order Tracking link that is a uniform resource locator (URL) to the third-party system. You can see the status of your packages. This link only appears when URL links for tracking are set up in advance.

Important! You can use the Order Status page to link to an order fulfillment system with the keys for that order. When you click the link, a fulfillment page appears that provides order status details. For example, a link to the PeopleSoft Order Management order status page provides real-time status from that particular fulfillment system.

Part 4

PeopleSoft Order Capture and Service Management for Multilevel Product Bundles

Chapter 21
Understanding Multilevel Product Bundles

Chapter 22
Understanding Multilevel Product Bundle Integration

Chapter 23
Setting Up Multilevel Product Bundles

Chapter 24
Working with Orders for Multilevel Product Bundles

Chapter 21

Understanding Multilevel Product Bundles

This chapter discusses an overview of multilevel product bundles and lists common elements.

Multilevel Product Bundles

Multilevel product bundles are N-level product packages that can be purchased through orders and quotes and serviced through service management orders. From orders, agents configure product bundles in product configuration sessions that are orchestrated by the Advanced Configurator. Within configuration sessions, agents perform a number of actions, such as selecting product components to include in bundles and entering product attributes in new orders, changing service features and modifying attributes for multilevel installed products in service management orders, transferring components from one bundle to another in convergent orders, and so on. The multilevel product bundle framework supports the definition of rules, which are executed during configuration sessions to:

* (configuration rule) Perform additional actions to multilevel product bundles, for example, automatically add another product to the bundle because it is a prerequisite of a product currently selected in the bundle.

  Configuration rules define actions that are performed during the configuration session when the specified rule conditions are met.

* (validation rule) Validate the configuration of multilevel product bundles.

  Validation rules define conditions that multilevel product bundles in the configuration session need to meet to consider this configuration valid and complete. Depending on rule severity (error or warning), the configuration status is set to *invalid* or *valid with warning* due to validation rule violation.

Only orders with valid product configurations can be submitted for fulfillment. An exception to this rule is when agents resume or suspend multilevel installed products in service management orders, which does not trigger the initiation of configuration sessions.

New features as well as enhancements are developed in various applications and components to support the flexible modeling, ordering and service management of multilevel product bundles. They are categorized into these areas:

* Product data model.

* Orders, quotes and service management orders.

* Installed products.

* Advanced Configurator.

* Service migration.

- Family and tribe offers.

- Commitments.

- Split billing.

Important! As delivered, the multilevel product bundle feature is enabled for the communications solution. All the data that is needed to support this functionality, such as display templates, product relations codes, capture type information, validation rules and so on, is designed and made available to the communications industry (setID: COM01). Because there is no hardcoded logic that limits this feature only to the communications solution, the use of multilevel product bundles can potentially be extended to other areas in the CRM system with customizations.

Important! The multilevel product bundle feature is not supported in bulk orders, bulk service management orders, temporary services and the Order Capture self service application.

See Also

Product Data Model

To support the modelling of multilevel product bundles:

- The Multilevel Component Type component is created and is used to define the blueprints for building hierarchical product packages. In a multilevel component type definition, you specify the different component type levels and sublevels that are allowed in a bundle as well as their properties.

  A component type can be commercial or functional. *Commercial* components are used to build commercial offers. *Functional* components are used to model functional products or services that are directly related to commercial components, which sell to customers.

- The Product Definition component is enhanced to allow for the creation of multilevel product bundles and components. Multilevel bundle components can only be included in multilevel product hierarchies; similarly, multilevel product hierarchies cannot contain non-multilevel product components.

- A new framework is built to enable the setup of complex configuration rules for multilevel product bundles. It delivers a set of predefined rule types to support the definition of various configuration constraints for products and product attributes that need to be validated during the ordering and service management processes.

  These rules do not apply to non-multilevel product bundles.

- New product relationships are delivered for multilevel product bundles. These new relationships are either defined on the Product Relationships component, or are rule-based, which means that the associations between product components are established dynamically, based on configuration rules, during the configuration sessions that occur in ordering and service management processes.

  Product relationships, if configured, can be maintained between installed products for service management purposes.

See Also

Orders, Quotes and Service Management Orders

To facilitate the ordering and service management of multilevel product bundles:

- A tight integration with the Advanced Configurator is established to allow users build complex and valid multilevel product bundles in orders, quotes and service management orders based on predefined rules.

- A new capture type called *convergent order* is developed to support the ordering of new multilevel product bundles and service management of installed products to occur simultaneously within a single product configuration session.

- The order line details section is enhanced to display information that is captured from the configuration session, which includes, but not limited to, attribute values, configuration status, and relationships between products that are selected in the bundle (which are shown in the form of product links).

See Also

Installed Products

To support service management for multilevel product bundles, the Installed Products component is enhanced to store and display information of multilevel product bundles (installed for customers) and links that is necessary for entering and processing service requests.

Installed multilevel product bundles are also viewable and searchable for customers on the 360-Degree View.

See Also

PeopleSoft CRM 9.1 Product and Item Management PeopleBook, "Tracking Installed Products," Understanding Multilevel Installed Products

Advanced Configurator

PeopleSoft Order Capture integrates with Advanced Configurator to provide streamline product configuration capabilities for multilevel product bundles. Instead of using the current approach for configuring products, which is developing a new model and GUI (graphic user interface) solution for each configurable product package that is available for sale or service management, Advanced Configurator adopts a new mechanism to support multilevel product bundle configurations. Using just one generic model and GUI solution, Advanced Configurator presents configuration sessions, applies constraints on product selections and display, and performs validations on configuration sessions based on applicable configuration and validation rules. With this approach, product catalog is maintained in just one location (in the PeopleSoft system); Advanced Configurator renders any given multilevel product structure based on its product hierarchy that is defined in a PeopleSoft product catalog.

Important! The ordering and service management of multilevel product bundles only works with the integration with Advanced Configurator and is not supported by other configurator applications, such as the Oracle Configurator.

See Also

Service Migration

Service migration extends the multilevel product bundle functionality by enabling the removal, reparenting, or transformation (replacing one product with another) of multilevel product components (new or installed) within or across product packages using convergent orders.

Supported migration scenarios include:

*   Transfer of functional components between different commercial offers in a single multilevel product bundle.

*   Transfer of commercial components between different parents (commercial components) in a single multilevel product bundle.

*   Transfer of functional components between different commercial offers across different multilevel product bundles, where multilevel product bundles can belong to either the same or different customers.

*   Transfer of commercial components between different parents (commercial components) across different multilevel product bundles, where multilevel product bundles can belong to either the same or different customers.

Migration actions are used for specifying all the details involved in migrating multilevel product components within or across multilevel product bundles.

See Also

Family and Tribe Offers

Family and tribe offers are bundle offerings for groups of customers. Individual customers within any given group share resources (for example, shared mobile minutes or shared phone directory) provided by their bundle offer and they sign up for the services as a group at a reduced price. From the communications service provider's perspective, these bundle offers attract customers in groups and lower customers' tendency to churn because of the lowered service fee.

Family and tribe offers are both commercial offers (with different product structures) that are dedicated for group of users. They are ordered by one customer (the offer holder) and can be used by multiple customers (offer members). Offer holder and offer members constitute a group of users that mutually benefit from the offer.

Depending on the offer definition there can be different commercial restrictions specifying the minimum and maximum number of members allowed and which of the member's services can be related to the group offer. Commercial conditions defined for the offer can also restrict maximum number of operations (for example, adding or removing an offer member) that are allowed within a given period of time.

To support family and tribe offers in the multilevel product bundle framework:

•   The Product Definition component enables the definition of offers that consist of multiple shared services. From the product definition, you can specify the operation counter that can be used for defining various commercial restrictions on group or shared offer operations.

•   The rule framework allows for the setup of commercial and functional relies on and relies from rules to apply configuration restrictions needed for family and tribe offers.

•   The Order component captures the information of family and tribe offers from configuration sessions for display on the Entry Form and Line Details pages and for fulfillment purposes. Their configurations are subject to evaluation by applicable validation rules.

•   Information of installed products for family and tribe offers and their links are displayed in both the Installed Product component and Customer 360-Degree View for user reference.

See Also

Commitments

The multilevel product bundle framework supports the creation of commitments in the ordering process. A commitment is an agreement between a customer and a communications service provider (CSP), which specifies a period of time during which any of the products and services that it covers cannot be terminated. It is another approach a CSP can adopt to lower customers' propensity to change to a different provider as a violation to an active commitment results in a penalty fee.

Commitments are defined in the CRM system as a type of products. At runtime, a commitment is added by the system to a configuration session if a product that is associated with the commitment in a commitment triggering rule is selected in the session. The selection of a commitment invokes its associated commitment covering rule, which automatically selects other products that the commitment covers as defined in the rule. Upon the submission of the configuration, information of the added commitment, together with the products it covers, is displayed in the order with visual indicators showing the commitment relationship.

See Also

Split Billing

Split billing provides flexibility in defining product billing options and capturing recurring and nonrecurring billing details on orders. The feature supports a number of enhancements, which includes:

*   The definition of *split billing* products, which can be billed in any given order by multiple billing accounts.

*   The selection of billing account to pay for nonrecurring order charges.

*   The selection of multiple billing accounts for split billing products at the order line level.

*   The selection of billing account which belongs to a related customer of the Sold To customer to pay for nonrecurring and recurring order charges.

*   The change of billing accounts for installed products through service management orders.

*   The display of billing account information in installed products and 360-Degree View.

*   The display of split billing information of installed product in CRM billing accounts.

See Also

Common Terms Used in This Part

Atomic Offer

A system-delivered multilevel component type. It:

- Is defined as a commercial component in the product definition.

- Is the *sellable* view of a single product or service.

- Is the lowest-level commercial component in a multilevel product bundle hierarchy and is linked to a functional component it sells through the *Sells* relationship.

See Commercial Component

Bill To Customer

A customer who is responsible for the nonrecurring or recurring charge to which it is assigned once the order is fulfilled.

See Sold To Customer

Billing Account

When a CRM account is created for a customer, an asynchronous process sends a message to the billing system (a PeopleSoft system or an external system) to create a billing account. When finished, the billing account number is returned and stored in the CRM system and referred to as the billing account number for that customer.

See CRM Account

Bundling Type

A group offer property that specifies how group offer members are related to offers in the product definition. Two bundling types are available:

- Individual – all members are linked to a single instance of the shared service that is sold by the group offer.

- Dedicated – each member is linked to a separate, dedicated instance of the shared service that is sold by the group offer.

Catalog element

A product element at any level within a multilevel product bundle. It is also referred to as *multilevel product component* or *product component* in this documentation.

Commercial Component	A commercial component represents a sellable unit in a multilevel product bundle that is used to sell a functional component. A functional component can be linked to and sold by different commercial components.

As delivered, the multilevel product bundle framework supports these types of commercial components:

- Contract: Top-level commercial component in a multilevel product bundle hierarchy. Descendants include plays, offers, and atomic offers.

- Play: Immediate descendant of the contract. It is the second level commercial component in a multilevel product bundle hierarchy and represents a line of business (for example, broadband internet, voice, or cable TV). Descendants include offers and atomic offers.

- Offer: Immediate descendant of plays. It is the third level commercial component in a multilevel product bundle hierarchy and an offer can have other offers and atomic offers as its descendants.

- Atomic Offer: Immediate descendant of offers. It is the lowest level commercial component in a multilevel product bundle hierarchy and is linked to a functional component that it sells.

Commercial Offer	A synonym of the term *Atomic Offer.*

See Atomic Offer

Commitment Contract	A CRM component that displays commitment-related information such as its start and end dates, duration, and the list of products that it covers. A commitment contract is created after an order (which includes a commitment product) is set to completed.

Commitment Product	A type of product definition that represents sellable commitments. Commitment products are added to configuration sessions automatically upon the selection of products that are specified in commitment triggering rules. Upon the selection of commitment products in configuration sessions, the products that they cover, as identified in commitment covering rules, are added to the sessions automatically.

Commits link	A product link that is created in configuration sessions between an installed product and an installed commitment indicating the existence of an active commitment a customer has installed as a trade-off for bonus products or services.

Complex Group Offer	A group offer that sells multiple shared services, which can be:

- Multiple shared services of the same type (for example, each member receives a separate pool of resources and is linked with a separate instance of a shared service).

- Multiple different shared services (for example, *shared minutes* and *shared SMS* are bundled into a one group offer and sold as a package).

Configuration Rule   A type of rule that defines additional actions (for example, automatic selection of another product) that are performed during the configuration of multilevel product bundles if the rule conditions are met.

Configured Product   A product package that is configured using supported configurator products: PeopleSoft Advanced Configurator or PeopleSoft Sales Configurator.

Multilevel product bundles are configured products that are configurable using PeopleSoft Advanced Configurator.

Contract   A system-delivered multilevel component type. It is:

- A top-level commercial component in a multilevel product bundle hierarchy.

- Used for grouping plays, offers and atomic offers.

In this documentation, terms *top-level multilevel product component,top-level component* and *contract* are used interchangeably.

Controller   An application in the PeopleSoft Advanced Configurator that functions as the configuration manager. At a high level, it:

- Accepts configuration requests from orders.

- Initializes configuration sessions (for example, restoring data from installed products, restoring configurations that are stored in orders, and retrieving eligibility criteria for sessions.

- Initializes validations in PeopleSoft Advanced Configurator.

- Provides product catalog configuration to the GUI solution in PeopleSoft Advanced Configurator.

- Processes configuration actions.

- Executes validation rules in PeopleSoft Advanced Configurator.

- Submits configuration operations to orders.

Convergent Order   A type of order that is used to capture new orders and service management orders for multilevel product bundles and validate product configurations in a single session.

Upon order submission, a convergent order is either converted to a service management (SM) or a simple (SO) order, or child orders are generated for it to be fulfilled.

CRM Account   It is a billing account representation that is created in PeopleSoft CRM.

See Billing Account.

Current Element   A product or service with a sale start date that is earlier than or equal to the product selling date on the order and a sale end date in the future. This element is currently available for sale.

Default Trial Period Duration Same as the minimum trial period duration. The system defaults the minimum trial period duration for any new order in the Trial Duration field based on the channel and sub-channel selected. The customer service representative (CSR) can increase the value but cannot decrease it below the defined trial duration for the specified source and sub-source on the order.

External Component See External Service

External Group Offer Member A member of a group offer that has a service provided by another communication service provider.

External Service A product definition that represents a service offered by a third-party service provider. It is primarily referenced in commercial relies on and functional relies on configuration rule definitions to specify configuration constraints for external services, which might be members of group offers. It can also be referenced in commercial restriction on attribute values rule definitions.

External services are not referenced in multilevel product bundles as package components like commercial components, and they are not tracked as installed products.

Family Offer A group offer in which all members benefits from a single pool (for example, a common pool of free minutes for all offer members to be used when calling other group members).

Functional Component A functional component represents a service (a non-tangible product) or a product (a physical good) as perceived by the customer. Functional components are not sellable units; they are configured and sold through one or more commercial offers. The *Sells* product relationship is used to bind a commercial atomic offer with functional component it sells. After order fulfillment, the *Sells* installed link is created to store the link information between the installed product for the commercial component and the installed product for the functional component.

Future Element A product or service with its sale start and end dates in the future with reference to the product selling date on the order. This element can be configured currently but is only available for sale in the future.

Global Cardinality See Maximum Group Quantity, Minimum Group Quantity, and Local Cardinality

Group Offer A commercial offer which is dedicated for a group of users. A group offer is ordered by one customer (the offer holder) and may be associated with other customers (offer members). The offer holder and offer members form a group of users who mutually benefit from the offer.

Family offers and tribe offers are both types of group offers; they are different in terms of how the resources of the offer are shared between members of the offer.

See Family Offer and Tribe Offer

Group Offer Holder	The customer who owns the group offer.
Group Offer Member	The customer who doesn't own the offer, but is associated with the group offer and uses offer resources.
Installed Contract	An installed product that is created for a fulfilled multilevel product bundle (also referred to as *contract*).
Installed Link	A product link between two related installed products or services. For example, if a commercial component is related to a functional component through the Sells relation, a Sells installed link is created for the installed products (created for the commercial and functional components) after the fulfillment of the order.
Lightly Configured Package	A product packages that is configured using the Lightly Configurator.
Local Cardinality	See Maximum Quantity, Minimum Quantity, and Global Cardinality

Maximum Group Quantity and **Minimum Group Quantity**

Minimum group quantity and maximum group quantity are used in rule definitions to specify the minimum and maximum numbers of products (specified within the current group) allowed in an order for the corresponding group definition (either for left hand side or right hand side) to be evaluated to TRUE.

Suppose that a rule definition has this left hand side group definition:

*   Products selected for this group: Product A, Product B and Product C

*   Minimum group quantity: 2

*   Maximum group quantity: 10

This group-level condition of the left hand side (LHS) group is evaluated to TRUE for an order if the total count of Product A, Product B, Product C selected in the order is greater than 1 and smaller than 11.

These fields are used in several rule types, including:

*   Commercial Prerequisite

*   Commercial Incompatibility

*   Commercial Relies From

*   Commercial Relies On

*   Functional Relies From

*   Functional Relies On

*   Functional Incompatibility

These group-level quantities are evaluated independently for each group for every rule instance that is invoked.

| **Maximum Quantity** and **Minimum Quantity** | Minimum quantity and maximum quantity are used in rule definitions to specify the minimum and maximum numbers of any given product allowed in an order for the corresponding product-level condition within a group definition to be evaluated to TRUE. |

Suppose that a rule definition has these products selected for a left hand side group definition:

- Product A; maximum quantity = 2 and minimum quantity =1

- Product B; maximum quantity = 4 and minimum quantity =3

- Product C; maximum quantity = 6 and minimum quantity =4

This product-level condition of the left hand side group is evaluated to TRUE for an order if all of the following requirements are met:

1. Total count of Product A in the order is greater than 0 and smaller than 3.

2. Total count of Product B in the order is greater than 2 and smaller than 5.

3. Total count of Product C in the order is greater than 3 and smaller than 7.

These fields are used in several rule types, including:

- Commercial Prerequisite

- Commercial Incompatibility

- Commercial Relies From

- Commercial Relies On

- Functional Relies From

- Functional Relies On

- Functional Incompatibility

These product-level quantities are evaluated independently for each product component for each rule instance that is invoked (that is, different rule instances might specify different local cardinalities for the same component).

| **Minimum Trial Period Duration** | This duration is the minimum trial period duration, in days, that must be allowed legally, while placing an order through different channels. |

| **Migration** | Refers to the execution of actions in configuration sessions that result in the removal of product components, reparenting of product components or a change of product offers (removal of a product component and addition of another product component in its place). |

Migration Action

A definition in the system that specifies all the details involved in migrating one or more multilevel product components within or across contracts. In this definition, you identify:

- Source product from which the migration occurs.

- Target product to which the migration occurs.

- Context within which the source component must be present in order for the migration action to be applicable. The context can be specific contracts or any contract in the system.

- Context within which the target component resides as a result of the migration. The context can be specific contracts or any contract in the system.

- (optional) Other migration actions to be included, if applicable.

When the migration request is submitted in the configuration session, the information of the operation is sent back to the convergent order for display. For example, if you look at the line details of a source atomic offer that is being transformed to a new component in the target product hierarchy, you can see that its *Child Of* link and *Sells* link are set to be removed, and a migration link to the new target component is set to be created. And if you look at the line details of the target component, you see that new *Child Of, Sells* and *Migration* links are set to be created when the order is completed.

Multi-branching

A feature that allows the same commercial component (that is, the same offer) to be placed under more than one branch of a single contract.

Multi-branching is not supported for multilevel product bundles.

Multilevel Component Type

Represents the *role* of a product component in the multilevel product bundle structure.

System-delivered multilevel component types are:

- Contract

- Play

- Offer

- Atomic Offer

- Functional Component

- External Service

Multilevel Installed Product

Refers to multilevel product bundle instances that are purchased and installed. They are called multilevel installed products generically in this documentation and they can contain both installed products and installed services.

Multilevel Product Component	A product definition that is a part of a multilevel product bundle structure and is assigned with one of the multilevel component types.
Non-tangible product	A product definition of type *service* that is delivered to customers.
Offer	A system-delivered multilevel component type. It: • Is defined as a commercial component in the product definition. • Is used for grouping atomic offers. • Is used for grouping other offers into manageable commercial, functional or display categories.
Order Completion Date	Refers to the date when all the order lines are processed completely. The services may or may not be activated by the order completion date. See Trial Period Start Date and Trial Period End Date
Past Element	A product or service with sale start and end dates in the past with reference to the product selling date on the order. This element is not available for sale.
Play	A system-delivered multilevel component type. It: • Is defined as a commercial component in the product definition. • Is used for grouping offers and atomic offers. • Represents a line of business or primary access.
Product Link	An object that relates two product instances together. The multilevel product bundle feature supports a number of product links, such as *relies on,child of,brings and removes,committed,migration*, and *brings on creation.* Links have different behavior and meanings depending on the type as well as the perspective (source product or target product) from which the linkage is being viewed. For example: • Relies on: used to bind two products that are functionally dependent. Target product is a functional prerequisite for source product. This link is used to enable validation of *relies on* rules in configuration sessions. • Brings and removes: used to bind two products when the target product is automatically added to the configuration due to the selection of the source product and the subsequent execution of a *brings and removes* rule that involves these two products. Depending on the nature of product links, they can be established between two installed products (for example, *relies on* and *sells* links) for service management purposes, though some only persist in the ordering process (for example, the *brings on creation* link) and unavailable for installed products.

Product Selling Date	The date on an order that is used by the system:

- As reference for executing all rules that are associated with multilevel product bundles on that order.

- To determine the availability of products (for ordering) based on selling periods.

Relies On link	A product link that is created in a configuration session between two functional components to establish functional dependence between them (that is, target product is a functional prerequisite of the source product).

A *Relies On* link is used to enable the validation of *Relies On* rules *(Relies On* rule validation checks if a required *Relies On* link has been established between functional components) and is stored as an installed link after order fulfillment is completed.

Reparenting	Changing the parent of a commercial component. Reparenting results in the disconnection of the *Child of* link to the old commercial parent and creation of a new *Child of* link to the new commercial parent without disconnecting the services.

Rule Product Group   Rule product group is used in rule definitions to specify groups of products and conditions for these products at the product level and at the group level.

Examples of conditions defined at the product level are:

• Rule product status

• Minimum and maximum quantities for product

• Product scope (rule scope)

Products can be accounted to the group only if all conditions defined at the product level are met.

Examples of conditions defined at the group level are the minimum and maximum group quantities (that is, total count of components belonging to the group).

During the evaluation of rule conditions, each condition is assessed and resolved to either TRUE or FALSE. Group condition is resolved to TRUE only if all conditions defined at the product level within that group and conditions defined at the group level are met.

Rule group are used in these rule types:

• Commercial Prerequisite

• Commercial Incompatibility

• Commercial Relies From

• Commercial Relies On

• Functional Relies On

• Functional Relies From

• Functional Incompatibility

Rule Product Status A rule product status is used to enable a more precise definition of rule conditions by specifying the status that products should be in for the product-level condition to be evaluated to TRUE. System-delivered rule product statuses are:

- New

- Active

- New/Active (New or Active)

- Removed

Rule product status that is used for rule evaluations is dependent not only on the installed product status, but also on the action selected on the product in the configuration session.

For example, if the product statuses of a left hand side rule condition are:

- Product A (New)

- Product B (Active)

- Product C (New/Active)

- Product D (Removed)

The left hand side rule condition is evaluated to TRUE only if all of the these product-level conditions are met:

- Product A is not yet installed and has been selected in the configuration session to be added.

- Product B is in an installed product and exists in the current product configuration.

- Product C is either not installed yet (but has been selected in the configuration session to be added), or is already installed (and not in the process of being removed from the current configuration).

- Product D is already installed and has been selected in the configuration session to be removed.

Rule Reference Scope

Rule reference scope is used to specify the left hand side context for rule execution. It is relevant only when the left hand side rule condition enables more than one product. Rule reference scope applies to these rule types:

* Commercial Prerequisite

* Commercial Incompatibility

* Functional Incompatibility

* Commitment Triggering

Available rule reference scopes are:

* Direct Parent

  Direct parent becomes the default value if no other value is specified.

* Play

* Contract

* Instance

Here is an example. Suppose that the rule reference scope is defined as *play* and the left hand side rule condition sentence is defined as *Product A AND Product B.* In this scenario, the left hand side rule condition is evaluated to TRUE and the rule is executed *only* if products A and B are found *under the same play*; the rule is not executed if these products are found under the same contract but under different plays.

Rule Scope	Rule scope is used to specify the right hand side context for rule execution; it is defined for each product used in the right hand side condition for these rule types:

- Brings On Creation

- Brings and Removes

- Commercial Prerequisite

- Commercial Incompatibility

- Commercial Relies From

- Commercial Relies On

- Functional Incompatibility

- Functional Relies From

- Functional Relies On

- Functional Incompatibility between Attribute Values

Available rule scopes are:

- Direct Parent

- Play

- Contract

- Same Customer

- Other Customer

- External Service

  This value appears if the corresponding product is an external service.

Rule scope has to be equal to or wider than the rule reference scope. In other words, if the rule reference scope is defined as *Play,* then the rule scope has to take one of these values: *Play,* or *Contract.*

Here is an example. Suppose that the rule reference scope is defined as *Play* and the right hand side condition is defined as *Play* for Product A, then:

- The right hand side rule condition is evaluated to TRUE *only* if Product A is found under the same play where the left hand side rule condition has been evaluated to TRUE.

- The right hand side rule condition is evaluated FALSE if Product A is found under the same contract but under a different play than the one where the left hand side rule condition has been evaluated to TRUE.

Selling End Date	The last date a catalog element can be sold.
Sales Period	The time period in which a catalog element is available for sale.

Selling Start Date   The date from which a catalog element can be sold.

Selling Period   The duration during which a product or service is available for sale. The selling period of a product package is defined by the Start Date and the End Date fields on the Package Components page, whereas the selling period of a product component within a package is defined by the Effective Date and Obsolete Date fields on the Package Components page. A product is said to have a valid selling period if the current date falls within its selling period, or if its selling period is some time in the future.

Sells link   A product link that is created in configuration sessions between a commercial product component and a functional product component which was sold by this commercial product component. The functional component that is sold by the commercial component is automatically selected in the configuration based on the *Sells* product relationship. One atomic offer is linked to one functional component, and one functional component can be linked (therefore sold) by multiple atomic offers. The *Sells* link is stored as an installed link after the order fulfillment is completed.

Simple Group Offer   A group offer selling a single shared service that is shared among all group offer members.

Sold To Customer   A customer who becomes the owner of the order line product once the order is fulfilled.

                               See Bill To Customer

Split Billing Product   A product that can be paid by multiple billing accounts.

Source Contract   A contract from which a product component is migrated. The same contract can serve as both the source and the target contracts if the migration takes place within a single contract.

Tangible product   Is a product that has a physical representation as opposed to non-tangible products, which are services.

Target Contract   A contract to which a product component is migrated. The migrated product component becomes part of the target contract after the completion of the transfer, or migration. The same contract can serve as both the source and the target contracts if the migration takes place within a single contract.

Top-level Component   The first-level parent component in a multilevel product bundle that does not have a parent. A multilevel product hierarchy or structure always starts with a commercial component in a multilevel component type that is marked as *top level*.

Transferring component	Transferring of a *commercial* component means disconnecting the *Child Of* relationship with the old parent of the commercial component and creating a new one with the new parent. Sometimes, a component can be transferred within the same contract or to another contract and it still has the same parent. An example is the reparenting of a commercial offer to another play in the same contract, and this offer contains atomic offers. In this case, atomic offers are transferred to the new play with their parent, and their Child Of product links to the current parent remains intact.
	Transferring of a *functional* component means disconnecting the *Sells* relationship or installed link with the old commercial offer and creating a new one with the new commercial offer.
Trial Period End Date	Trial Period End Date = Order Completion Date + Trial Duration specified in the order.
Trial Period Start Date	Trial Period Start Date = Order Completion Date
Tribe Offer	A group offer in which each member benefits from individual pool of resource (for example, each member have a separate pool of free minutes to be used when making calls to other group members).
	See Bundling Type
Validation Rule	A rule with conditions that multilevel product bundle configurations triggering it must meet in order for the configurations to be considered valid and complete. Depending on the specified rule severity, if a configuration is in violation of a validation rule, its configuration status is set to *Invalid* or *Valid with Warnings*.

Chapter 22

Understanding Multilevel Product Bundle Integration

This chapter provides an overview of the integration between PeopleSoft Order Capture, Configurator Controller, and Advanced Configurator to support multilevel products, and discusses how to:

* Configure integration parameters for the Configurator Controller component

* Map Order Capture Active Analytic Framework (AAF) terms to Configurator Controller counting functions

Understanding Multilevel Product Bundle Integration

An agent creating a multilevel product bundle order can click the Configure icon on the Order page and access a new application, called *Configurator Controller,* to perform a number of product configuration actions, such as add or delete product components to include in bundles, enter product attributes in new orders, change service features and modify attributes for multilevel installed products in service management orders. The Configurator Controller application functions as the configuration manager for multilevel product bundles and is responsible for the initialization and management of the configuration session.

The Configurator Controller application:

* Accepts configuration requests from orders.

* Initializes configuration sessions.

    For example, Configurator Controller retrieves data from installed products and configurations that are stored in orders.

* Provides product catalog configuration to the user interface solution.

* Processes configuration actions.

* Initializes and executes validation rules store in the Advanced Configuration application.

* Submits configuration operations to orders.

Note. Before you can initiate configuration sessions for multilevel product bundles, you must first configure integration parameters for the Configurator Controller application.

Logical Diagram of the Integration Architecture

The configuration process for multilevel product bundle orders requires the Configurator Controller application to manage the exchange of data between the Order Capture and Advanced Configurator applications.
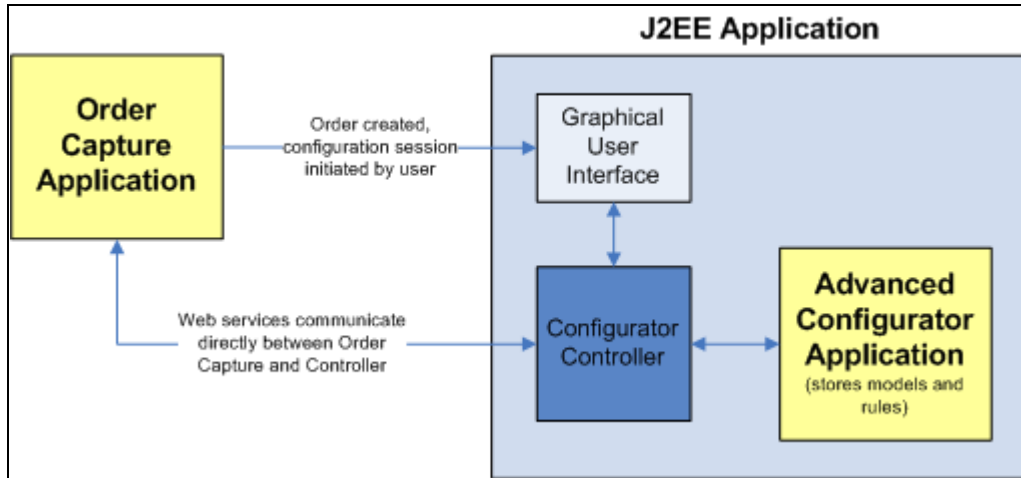
Logical Diagram of the Integration Architecture

The Configurator Controller application manages input from the graphical user interface, configuration sessions, web service requests, and configuration rule logic originating from the Advanced Configurator application. The Advanced Configurator application stores configuration rules and template models required to execute and evaluate the rules.

For more information about PeopleSoft delivered configuration rules, please use the see reference to review Understanding Configuration Rules.

See and <u>Chapter 23, "Setting Up Multilevel Product Bundles," Understanding Configuration Rules, page 479.</u>

Logical Diagram of Configurator Controller Java Objects

The following diagram describes the java objects that comprise the Configurator Controller application and the accompanying APIs.
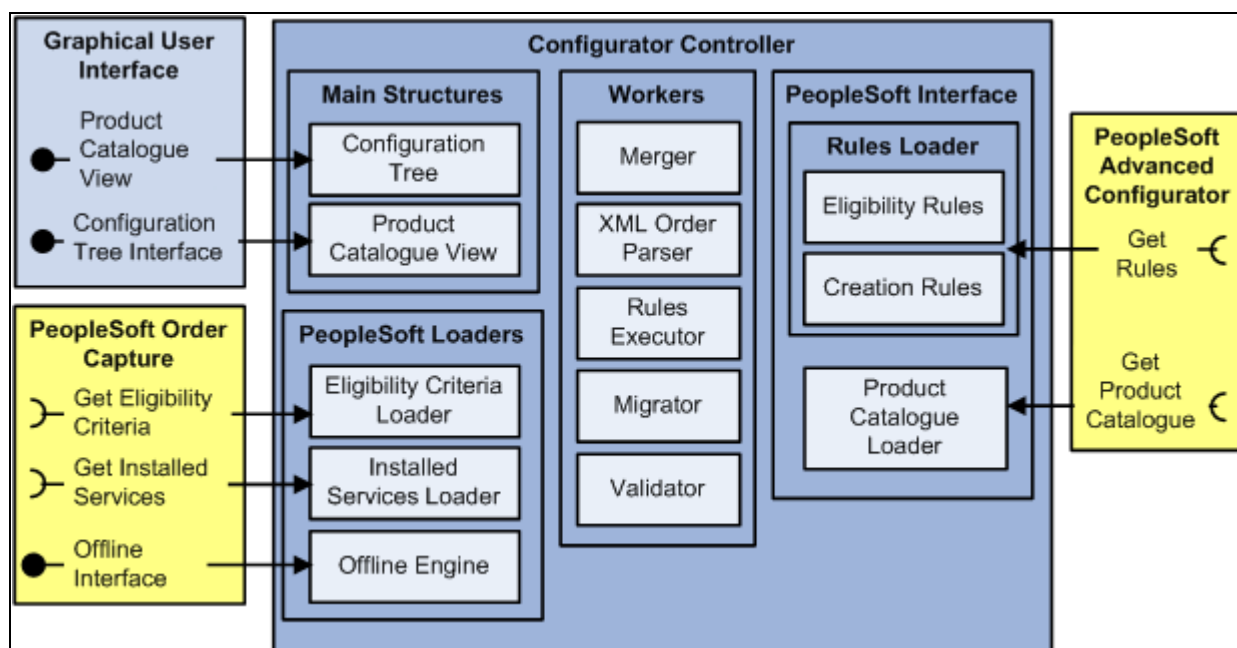
Logical Diagram of the Configurator Controller Java Objects

Java Object	*Description*
Configuration Tree	This object stores session specific order configuration.
Creation Rules	This object defines how the Configuration Tree is built during a configuration session. Each atomic operation may trigger some additional action defined by configuration rules. Rules are loaded only once during the initialization of Configurator Controller.
Eligibility Criteria Loader	This object invokes a web service to retrieve eligibility criteria data for a given customer, which are used during evaluation of Eligibility Criteria Rules.
Eligibility Rules	This object provides a Product Catalogue View of the Product Catalogue Tree during configuration. Eligibility Rules configuration is loaded only once during the initialization of Configurator Controller used later to create Product Catalogue View for the customers.
Installed Services Loader	This object retrieves installed product configuration data using its associated web service.
Merger	This object creates the Configuration Tree based on service order configuration and installed product configuration extracted from PeopleSoft Order Capture.
Migrator	As part of the package migrations functionality, this object enables product reparenting of the Configuration Tree, where a product or products are migrated to a different location within the Configuration Tree structure. See and Chapter 23, "Setting Up Multilevel Product Bundles," Setting Up Migration Actions, page 532.

Java Object	*Description*
Offline Engine	This object enables a user to use the Configurator Controller application in offline mode for order revalidation purposes.
Product Catalogue View	This object provides a hierarchical view of the Product Catalogue Tree for a given customer and session.
Product Catalogue Loader	This object serves as the repository for product catalogue configuration for the Configurator Controller application. Configurator Controller builds its own structure Product Catalogue Tree, which is accessible to all sessions that act as a cache. The Product Catalogue Tree, along with gathered session data, is seen as Product Catalogue View.
Rules Executor	This object executes configuration rules stored in the Advanced Configurator application, such as the Brings On Creation rule.
Validator	This object verifies contract configuration against validation rules and parses the validation result to set a validation status: Validated, Validated with warnings, or Validated with errors.
XML Order Parser	This object parses the XML order configuration received from the Peoplesoft Order Capture application.

Understanding Design Time Integration and Product Catalogue Synchronization

For multilevel product bundle configuration to function properly, product catalogue data (which consists of multilevel product bundle rule definitions) must be synchronized between Order Capture definitions and Advanced Configurator models. The Order Capture application contains configurator data structures, which are a set of database records designed to store all products and rules data required by the Configurator Controller application. The configurator data structures act as a staging area for product catalogue data after the data is transformed and exported from Order Capture records and before they are loaded into generic models.

The product catalogue synchronization process consists of the following steps:

1. Product Catalogue data is transformed and exported from the configurator data structures in the Order Capture application into Advanced Configurator models.

    Only active rules, multilevel product bundle components, and related rules definitions data are exported.

2. Advanced Configurator model compilation extracts product catalogue data and deploys it.

Note. Product catalogue data is synchronized in asynchronous mode.

Data Transformation and Export

During data transformation and export, the *Product Catalogue Export* batch process transforms product catalogue data to facilitate the model compilation process and to optimize the Configurator Controller run time operations:

* Product attributes are assigned to products based on the attributes matching criteria stored in object type attributes definitions.

   All logic is included in the batch process resulting in a simple mapping between products and attributes without any additional logic.

* Product definitions are extended with dedicated flags that indicate which specific presentation or rules logic need to be applied, for example, relies on links and brings on creation rules.

You should run the Product Catalogue Export batch process whenever you add new or update existing product catalogue definitions in the Order Capture application. When you run the batch process it provides messages to the Process Scheduler log, which indicate whether the process completed successfully.

You can run the batch process in validation only mode, but doing so only determines whether the product catalogue is valid using a product catalogue integrity check, there are no staging table transformations.

Model Compilation & Deployment

Using the Configurator Administration console, you must manually recompile all models after a new version of Product Catalogue is exported. Product Catalog information is loaded into generic Advanced Configurator models when they are recompiled.

All selection points in generic Advanced Configurator models based on the product definitions data are defined as external selection points (for example, populated based on the SQL queries from Configurator data base structures).

Use the following reference for more information on the Configurator Administration console.

See and *PeopleSoft Advanced Configurator 9.1 PeopleBook*, "Using Administration Tools," Administration Console.

Note. PeopleSoft provides a lock flag in the Advanced Configurator data structures that controls the execution of the Product Export Batch Process.

If you set the flag to Y, the process does not run and the product catalogue data is not updated (overwritten) in the Advanced Configurator data structures.

If you set the flag to N, the process runs and the product catalogue data is updated in the Advanced Configurator data structures.

The default for the lock flag is N, and you cannot modify the flag using PeopleSoft user interface pages.

Understanding Run-Time Integration and Validation

During run time the Configurator Controller component:

- Initiates the configuration session for multilevel product bundles.

- Retrieves and processes all data from Order Capture data structures to complete configuration of multilevel product bundles.

- Queries models to retrieve product information necessary to perform configuration session operations.

  Information loaded into models will be also used by Configurator Controller to execute validation rules.

- Validates the configuration session for multilevel product bundles when an order is submitted.

  Depending on validation results, the order is either put on hold or sent to fulfillment.

The following diagram depicts the run time integration between the Order Capture, Configurator Controller, and Advanced Configurator applications, and the sequence in which data flows between the applications.
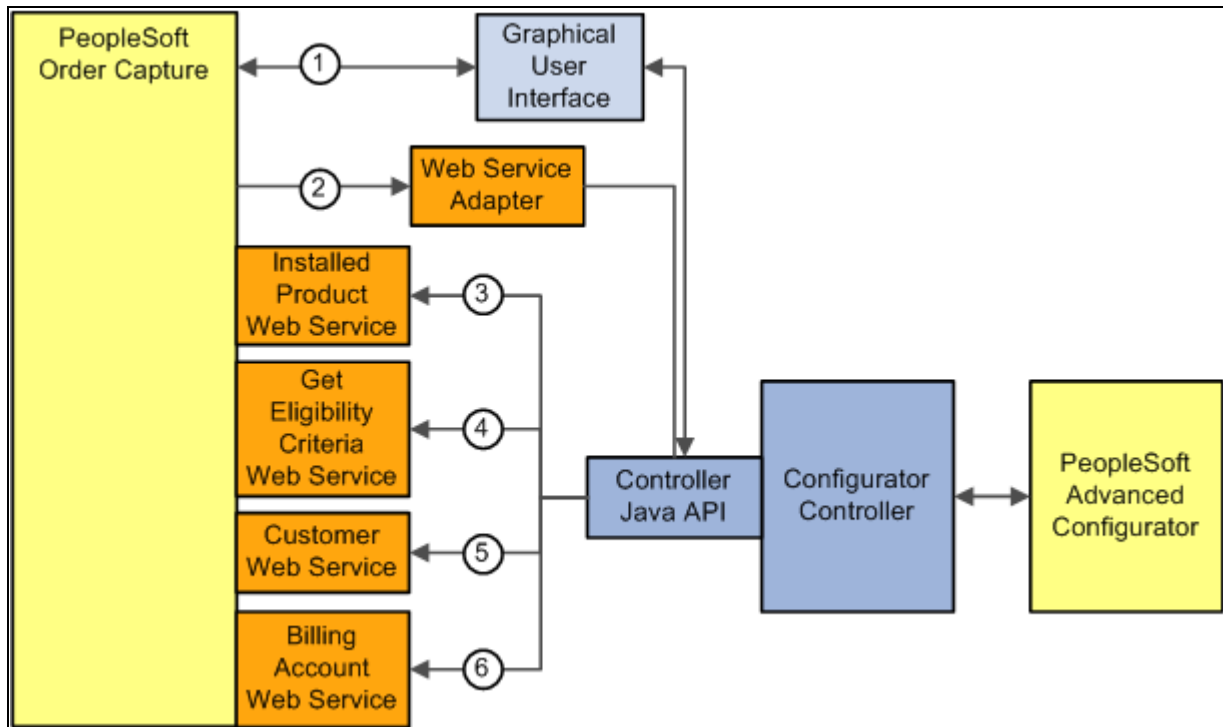
Run time integration between the Order Capture and Advanced Configurator applications

The following web services retrieve Order Capture data:

- Installed product

  - Create installed product

  - Get installed product

  - Search installed product

  - Update installed product

- Get eligibility criteria

- Customer

    - Get customer

    - Get related customer

- Billing account

    - Get billing account

    - Search billing account

Note. The Order Capture application supports all previous integration models.

Delivered Web Services for Multilevel Product Bundles

A web service is a standards-based web application that can be used to interact with other internet applications over a network. It is a standard way of exposing some operation or group of operations so external clients can make use of them. To facilitate the integration of multilevel product bundles, PeopleSoft delivers the following web services.

Installed Product

This web service accepts the HTTP SOAP synchronous requests from the Advanced Configurator application and retrieves information on installed multilevel products. This web service also initializes the configuration session and retrieves current information from installed products during configuration session, when it is necessary to create the installed link to the multilevel component that is beyond the scope of the current configuration session (for example, a component that belongs to different Multilevel Contract that is not being configured within the current configuration session).

Service Operation	Operation Type	Request Message	Response Message
Create Installed Product (RF_INST_PROD_CREATE)	Synchronous	RF_INST_PROD_CREATE_REQ.V1	F_INST_PROD_CREATE_RES.V1
Get Installed Product (RF_INST_PROD_ML_GET)	Synchronous	RF_INST_PROD_GET_ML_REQ.V1	RF_INST_PROD_GET_ML_RES.V1
Search Installed Product (RF_INST_PROD_ML_SEARCH)	Synchronous	RF_INST_PROD_SEARCH_ML_REQ.V1	RF_INST_PROD_SEARCH_ML_RES.V1
Update Installed Product (RF_INST_PROD_UPDATE)	Synchronous	RF_INST_PROD_UPDATE_REQ.V1	RF_INST_PROD_UPDATE_RES.V1

Get Eligibility Criteria

This web service accepts the HTTP SOAP synchronous requests from the Configurator Controller application and retrieves current information on all user and customer eligibility criteria necessary to evaluate eligibility rules. The configuration session initialization calls the Get Eligibility Criteria web service.

Service Operation	Operation Type	Request Message	Response Message
Get Eligibility Criteria (GET_ELIGIBILITY_CRITERIA)	Synchronous	RF_ELIGIBILITY_GET_REQ.V1	RF_ELIGIBILITY_GET_RES.V1

Customer

These web services accept the HTTP SOAP synchronous requests from the Controller application. During configuration initialization, the Controller application uses these web services to retrieve the active Bill-To Customers for all the distinct Sold-To customers associated with the top-level products. The Configurator Controller invokes the web services when you enable the customer level split billing flag, which enables you to select billing accounts that belong to other customers. These web service execute once per Configurator Controller session for each Sold-To customer.

Service Operation	Operation Type	Request Message	Response Message
Get customer (RB_CUSTOMER_GET_CUSTOMER)	Synchronous	RB_CUSTOMER_GET_CUST_REQ.VERSION_2	RB_CUSTOMER_GET_CUST_RES.V1
Get related customer (RB_CUSTOMER_GET_REL_CUSTOMER)	Synchronous	RB_GET_RELATED_CUSTOMERS.VERSION_1	RB_REL_CUSTOMER_INFO.VERSION_1

Billing Account

These web services are called from the Order Capture and Configurator Controller applications. These web services search or retrieve active or pending activation billing accounts associated with either the sold-to or bill-to customer and return prepaid and postpaid type billing accounts for the specified customer.

Service Operation	Operation Type	Request Message	Response Message
Get billing account (RBT_ACCOUNT_GET_ACCOUNT)	Synchronous	RBT_ACCOUNT_GET_ACCOUNT_REQ.VERSION_1	RBT_ACCOUNT_GET_ACCOUNT.VERSION_1
Search billing account (RBT_ACCOUNT_SEARCH_ACCOUNT)	Synchronous	RBT_ACCOUNT_SRCH_ACCOUNT_REQ.VERSION_1	RBT_ACCOUNT_SCH_ACCOUNT.VERSION_1

Offline Validation

This web service accepts the HTTP SOAP synchronous request from the Configurator Controller application and passes to Advanced Configurator all the order data necessary to revalidate configuration saved on the order without launching Configurator GUI solution. The validation results are returned to the ordering application and stored on the order.

Service Operation	Operation Type	Request Message	Response Message	Fault Message
Offline Validation (VERIFY29925)	Synchronous	ORDER_REQ.V1	ORDER_RESP.V1	M241714906.V1

Configuring Integration Parameters for the Configurator Controller Component

To define error codes, use the Error Codes Setup component. Use the CFG_ERR_CODE component interface to load data into the tables for this component.

Before you initiate a configuration session for multilevel product bundles, you must configure integration parameters for the Configurator Controller component, which serves as the configuration manager.

PeopleSoft delivers the following set up pages to configure integration parameters for the Configurator Controller component:

• Multilevel Configurator Setup page

  Use this page to configure user interface and validation service nodes, debugging, and configuration session settings.

• Error Codes Setup page

  Use this page to configure validation error codes and messages shared between the Order Capture and Advanced Configurator applications.

  The configuration error messages dictionary is used to associate an Advanced Configurator error code with an Order Capture message catalogue entry. Message catalogue entries associated with configuration error codes are used in Order Capture to display configuration status information based on data returned from the configuration session. Message catalogue entries associated with configuration error codes are exported to the Advanced Configurator Application together with Product Catalogue export to enable displaying of error message in the configuration session.

• Export Product Definitions page

  Use this page to set up execution parameters for the Product Catalog Export process.

Pages Used to Configure Integration Parameters for the Configurator Controller Component

Page Name	Definition Name	Navigation	Usage
Multilevel Configurator Setup page	APC_CFG_SETUP	Set Up CRM, Product Related, Advanced Configurator, Installation, Multilevel Configurator Setup	Use this page to configure user interface and validation service nodes, debugging, and configuration session settings.
Error Codes Setup page	CFG_ERROR_CODES	Set Up CRM, Product Related, Advanced Configurator, Error Codes Setup	Use this page to configure validation error codes and messages shared between the Order Capture and Advanced Configurator applications.
Export Product Definitions page	APC_RUN_EXPORT	Set Up CRM, Product Related, Advanced Configurator, Export Configuration, Export Product Definitions	Use this page to set up execution parameters for the Product Catalog Export process.

Configuring Integration Nodes, Debugging, and Configuration Session Settings

Access the Multilevel Configurator Setup page (Set Up CRM, Product Related, Advanced Configurator, Installation, Multilevel Configurator Setup).

Multilevel Configurator Setup page

Integration Broker Setup

User Interface	Select a user interface node you want to use to integrate the configurator server with the Order Capture application.
	This node specifies appropriate parameters needed to launch an online configuration session.
	To access the appropriate node definition you can navigate to the PeopleTools Nodes page: People Tools, Integration Broker, Integration Setup, Nodes.
Validation Service Node	Select a validation service node you want to use to launch offline validation of a configuration session.
	To access the appropriate node definition you can navigate to the PeopleTools Nodes page: People Tools, Integration Broker, Integration Setup, Nodes.

Configurator Debug Information

Debug

Select *On* to enable configuration session debugging in the Advanced Configurator application.

When you turn debugging on, raw configuration details are displayed in XML format at runtime. Specifically, this means that when you have completed your configuration session, you are presented with two pages prior to returning to the application that invoked PeopleSoft Advanced Configurator. These two pages contain an XML request and an XML response. The XML request page displays the XML data that was sent to the configurator server to retrieve information about the configuration; the XML response page displays the XML data that was returned by the configurator server.

This is a useful tool for debugging your schemas because you can quickly verify that XML configuration details are being returned from the calling application just as you would like them to be. When you turn debugging off (default), you do not see the two XML pages prior to returning to the calling application from your configuration session.

The Configurator Solution Tester also enables this request and response XML to be displayed, as well as providing further debugging options.

Session Settings

Max top-level products allowed

Enter the maximum number of top level products that can be loaded into the Advanced Configurator application during a configuration session.

Modified

Displays the user and time associated with the most recent modification of the page.

See Also

Configuring Validation Error Codes and Messages

Access the Error Codes Setup page (Set Up CRM, Product Related, Advanced Configurator, Error Codes Setup).

Error Codes Setup page

Error Code	Specify an error code to associate with the message catalogue entry.
Message Set Number	Select the message set you want to associate with the message catalogue entry.
Message Number	Select a message number you want to associate with the message catalogue entry.
Message Text	Displays the error message text associated with the message you selected for the Message Number field.
Add Error Message	Click to add a new validation error code.

Note. PeopleSoft delivered error codes should not be modified.

Delivered Error Messages

PeopleSoft delivers the following error messages.

Rule Name	Error Code
Commercial Incompatibility	100 – logical expression broken
Commercial Prerequisite	100 – logical expression broken

Rule Name	Error Code
Commercial Relies on	100 – logical expression broken
	101 – reverse cardinality broken
Functional Relies On	100 – logical expression broken
	101 – reverse cardinality broken
Functional incompatibility	100 – logical expression broken
Shared offer rule	100 – logical expression broken
	101 – reverse cardinality broken
Packaging Rule (PR)	200 – incompatible child
	201 – local cardinality broken
	202 – global cardinality broken
Attribute packaging	300 – incompatible attribute
	301 – required attribute missing
	302 – attribute has wrong value or no value
Sells	400 – incompatible functional product
	401 – functional product missing
Commercial Eligibility	500 – eligibility rule broken
Commercial restriction on attribute values	600 – wrong value
Commercial restriction on attribute format	700 – wrong value format
Functional restriction on attribute values / format	800 – wrong value
	801 – wrong format
Commitments	900 – no required commitment
	901 – commitment have incorrect products assigned

Rule Name	Error Code
	902 – The product marked to be disconnected has an active commitment assigned to one of his children

Configuring the Product Catalog Export Process

Access the Export Product Definitions page (Set Up CRM, Product Related, Advanced Configurator, Export Configuration, Export Product Definitions).

Export Product Definitions page

Run Control Details

Process Frequency   Select the frequency you want the Product Catalog Export process to run.

Process Once - the process is executed once and then the frequency defaults to don't run.

Always Process - the process is executed each time the background process initiates.

Don't Run - the process will not execute.

Request ID   Enter a request identification for the Product Catalog Export process request.

Description   Enter a description for this process request.

General Options

Include Obsolete Definitions   Select this check box to include obsolete product definitions in the product
                                     catalogue export process.

                                     For example, if you have phased out a product but wish to support
                                     customers who still use the product, you would select this option so that the
                                     product would be contained in the product catalogue within the Advanced
                                     Configurator application.

                                     Obsolete product definitions are those having an end date less than the last
                                     extraction date.

Run in Validation Mode   Select this option if you only want to run the validation routine and not the
                                     product catalogue export process.

                                     This process validates the product catalogue for data integrity and reports
                                     there are validation errors.

Mapping Order Capture AAF Terms to Configurator Controller Counting Functions

To define modification types, use the Define Modification Type component. Use the
RB_MOD_TYPE_DFN_CP component interface to load data into the tables for this component.

Before you begin to set up group offers, which use Order Capture modification count type Active Analytics
Framework (AAF) terms to calculate operations, you must map Order Capture AAF terms to Configurator
Controller counting functions.

Refer to *PeopleSoft 9.1 PeopleBook: Active Analytics Framework* for more information about AAF
components and how to set them up.

Page Used to Map Order Capture AAF Terms to Configurator Controller Functions

Page Name	Definition Name	Navigation	Usage
Define Modification Type	RB_MOD_TYPE_DEFN	Set Up CRM, Product Related, Advanced Configurator, Define Modification Type	Use this page to map Order Capture AAF terms to Configurator Controller counting functions.

Defining Modification Type

Access the Define Modification Type page (Set Up CRM, Product Related, Advanced Configurator, Define
Modification Type).

Define Modification Type page

SetID

Displays the SetID associated with the mapping.

Modification Type ID

Displays modification type ID associated with the mapping.

Short Description

Enter a short description for the mapping.

Long Description

Enter a long description for the mapping.

Status

Select a status for the mapping.

Term Name

Select the AAF term you want to map to a Configurator Controller counting function.

Configuration Count Function

Enter the Configurator Controller counting function you want to map to the selected AAF term.

Chapter 23

Setting Up Multilevel Product Bundles

This chapter provides overviews of multilevel product bundles, configuration rules, and discusses how to:

- Set up multilevel product bundles.

- Set up migration actions.

- Set up configuration rules for multilevel product bundles.

Understanding Multilevel Product Bundles

This section discusses:

- Product relationships for multilevel product bundles.

- Multilevel product bundle modeling.

- Export of multilevel product bundle, rule and migration action definitions.

- Commitment products.

- Split billing products.

Product Relationships for Multilevel Product Bundles

New product relationships are introduced to support the ordering and service management of multilevel product bundles. While some of the product relationships are established between multilevel product components using the Product Relationships component, others are rule-based, which means that relationships are established between products dynamically based on configuration rules that apply during the ordering or service management process.

After order fulfillment processes complete, some product relationships can be carried over and maintained between installed product instances for information purposes. The link information is particularly useful in service management scenarios where, for example, installed products with *brings and removes* relationships are involved. Suppose that a user creates a service management order wanting to remove an installed product, and it is the source installed product of a relationship. Because of the presence of the installed link, the system (Advanced Configurator) removes the target installed product of this relationship automatically from the configuration session along with the source product.

The system delivers these product relationships for use in multilevel product bundles:

- Brings on creation

  This product relationship is rule-based and is established between product A (commercial) to product B (commercial) in a configuration session by a *brings on creation* rule. The rule adds product B (target) in the configuration automatically upon the selection of product A (source) and links these two products together through the brings on relationship—product A *brings on* product B.

- Child Of

  This product relationship is established between product A (commercial) to product B (commercial) in the Package Components component. When product A is added as a component to a multilevel package where product B is the parent, these two products are automatically linked through the child of relationship—product A is the *child of* product B.

- Brings and removes

  This product relationship is rule-based and is established between product A (commercial) to product B (commercial) in a configuration session by a *brings and removes* rule. The rule adds product B (target) in the configuration automatically upon the selection of product A (source) and links these two products together through the brings and removes relationship—product A brings and removes product B.

  The source and target products of a brings and removes relationship are coupled throughout their entire product lifecycles. After order fulfillment completes, an installed link that represents the relationship is maintained between installed products for service management purposes. When the source product of a brings and removes relationship is set to be removed in a service management order, its associated target product is removed from the configuration as well.

- Relies on

  This product relationship is established between product A to product B in a configuration session, marking a dependence between the two (the target product is the prerequisite of the source product, or the target product uses the resources provided by the source product).

  Each functional product must have a relies on relationship with another functional product in order for any applicable functional relies on rule to be triggered.

  After order fulfillment completes, an installed link that represents the relationship of installed products A and B is maintained.

- Sells

  This product relationship is established between product A (commercial) and product B (functional) in the Product Relationships component. Product A is typically a commercial offer that sells product B, a functional component that is not sellable.

  After order fulfillment completes, an installed link that represents the relationship of installed products A and B is maintained.

- Owner

  This is not a product-to-product relationship, instead it is a relationship between an installed product and the customer that owns it, and it is displayed in the Line Relationship section of the Line Details page in a convergent order when the installed product is undergoing a migration from one multilevel contract to another (contracts are owned by different customers). In the section, two lines appear for the owner relation: one to remove the association with the current owner and the other one to create a relationship with the new owner.

- Billed to

    Similar to the *owner* relationship, the *billed to* relationship is established between an installed product and a billing account, which is displayed in the Line Relationship section of the Line Details page in a convergent order when the installed product is undergoing a migration from one contract to another and a different billing account is used. In the section, two line appear for the bill to relation: one to remove the association with the current billing account and the other one to create a relationship with the new billing account.

- Migration

    This product relationship is established between the source component and its mapped target component as a result of a migration and it is displayed in the Line Relationship section of the convergent order after the migration request is submitted in the configuration session. From the source component's perspective, a link is added with a *Migrates to* relationship pointing to the target component. From the target component's perspective, a migration type link with a *Migrated from* relationship is added pointing to the source component.

- Committed

    This product relationship links together a commitment product and a product that is covers. It is rule-based and is established between product A (commercial) to product B (commercial) in a configuration session by a *commitment triggering* rule. The rule adds product B (a commitment product) in the configuration automatically upon the selection of product A (a product covered by the commitment product) and links these two products together through the committed relationship. From the commitment product's perspective, it is a *commits* relationship pointing to its covered product; for the covered product, it is a *Is Committed* one pointing to the commitment product.

    After order fulfillment completes, an installed link that represents the relationship of installed products A and B is maintained.

- Brings Commitment

    This product relationship links together two commercial components, which are the scope object of the triggering product and the commitment product, as a result of the execution of a *commitment triggering* rule. Each commitment triggering rule is associated with a reference scope. At runtime, the execution of the rule adds the corresponding commitment product to the configuration session and assigns it to any of its covering products that can be found within the specified reference scope in the session.

    For example, if the reference scope is *direct parent,* a *brings commitment* relationship is established between the commitment product and the direct parent of the products that are being covered by the commitment product.

    From the commitment product's perspective, it is a *brings commitment* relationship pointing to a scope object of covered product to which it assigns; for the scope object, it is a *Covers because of* one pointing to the commitment product.

    This linkage is useful in cases where a triggering product is deselected from the configuration session and its commitment product is no longer required to be selected in the session. With the help of this product relationship, the system knows which commitment product to remove.

- Commitment Scope

  This product relationship is rule-based and is established between product A (commercial) to product B (commercial) in a configuration session by a *commitment covering* rule to support scope object tracking in the installed product. The rule creates a *commitment scope* link between the installed product of its scope object (product A) and the installed commitment product (product B).

  For example, if the reference scope is *direct parent,* a *commitment scope* relationship is established between the installed commitment and the direct parent of the products that are being covered by the commitment product.

  From the installed commitment's perspective, it is a *Is scoped by* relationship pointing to the scope object; for the scope object, it is a *Tracks scope for* one pointing to the installed commitment.

  An installed link is established to connect each installed commitment with its corresponding commercial component that is used as the scope object for the commitment covering rule evaluation. The system uses this link type for commitment validation purposes in future service management orders.

See Also

PeopleSoft CRM 9.1 Product and Item Management PeopleBook, "Setting Up Product Definitional Elements," Setting Up Product Relationship Codes

Multilevel Product Bundle Modeling

Once all the definitional components for building multilevel product bundles are in place, you can create multilevel product bundles using the steps that are illustrated in this diagram:

See and *PeopleSoft CRM 9.1 Product and Item Management PeopleBook*, "Setting Up Product Definitional Elements," Creating Product Definitional Elements.
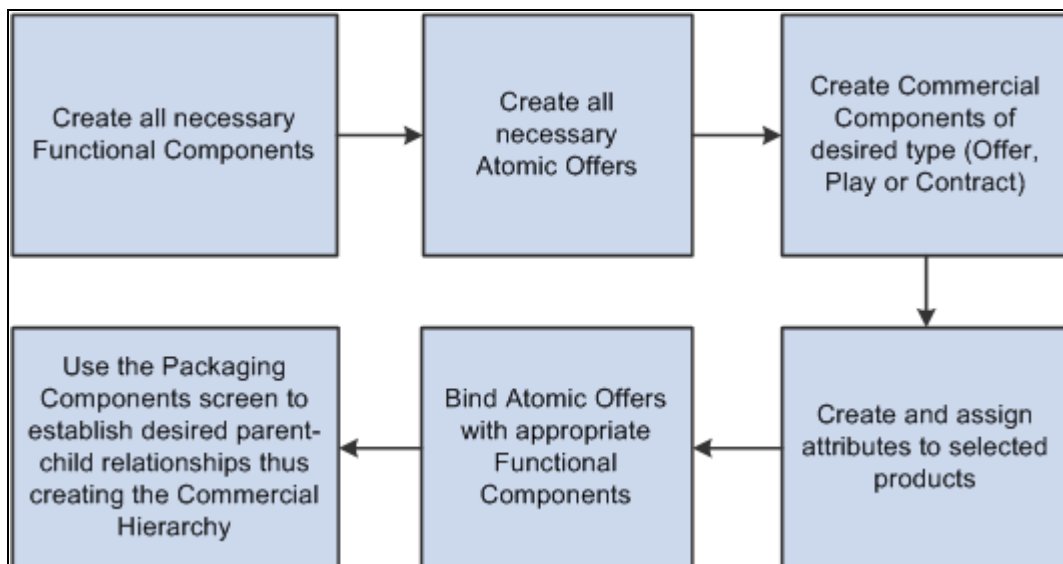
Process flow for creating multilevel product bundles, which starts from creating all functional and commercial components needed in the bundle, to associating lowest-level commercial components with functional components using the "Sells" relationship, and linking all commercial components hierarchically into a bundle structure

To create multilevel product bundles:

1. Create all functional components needed for the bundle using the Product Definition component.

   See and Chapter 23, "Setting Up Multilevel Product Bundles," Setting Up Product Components, page 519 .

2. Create all atomic offers (lowest level commercial components) needed for the bundle using the Product Definition component.

   See and Chapter 23, "Setting Up Multilevel Product Bundles," Setting Up Product Components, page 519 .

3. Create the *Sells* relationship between atomic offers and appropriate functional components using the Product Relationships component.

   See and *PeopleSoft CRM 9.1 Product and Item Management PeopleBook*, "Setting Up Products," Managing Product Relationships.

4. Create other higher level commercial components (for example, contract, plays, and offers) needed for the bundle using the Product Definition component.

   See and Chapter 23, "Setting Up Multilevel Product Bundles," Setting Up Product Components, page 519 .

5. Build the multilevel product bundle by associating all commercial components in a hierarchical fashion using the Package Components page.

   See and Chapter 23, "Setting Up Multilevel Product Bundles," Setting Up Multilevel Product Packages, page 530.

Refer to the *Setting Up Product Definitional Elements* chapter for more information on definitional elements that pertain to multilevel product bundles, such as multilevel component types and multilevel structure assignments.

See Also

PeopleSoft CRM 9.1 Product and Item Management PeopleBook, "Setting Up Product Definitional Elements," Creating Product Definitional Elements

Export of Multilevel Product Bundle, Rule and Migration Action Definitions

PeopleSoft CRM is the master reference of multilevel product bundle, rule and migration action definitions. For product configurations to be done in a more accurate fashion, this data needs to be exported to the Configurator application data structures to make it available for use by Advanced Configurator generic models as frequent as it is updated.

The CRM system delivers a batch process that synchronizes data between the CRM system and PeopleSoft Advanced Product Configurator models in an asynchronous mode. The process, when executed, transforms and exports product catalog data to Configurator application data structures. Visual Modeler compiles the generic template model, which is then sent to the Configurator server for deployment.

When this process is run, it exports:

- Active rule definitions, including future dated ones.

  Obsolete rules can also be exported based on the batch process setup. Obsolete rule definitions are not subject to exportation if they are currently being used in validations.

  Important! As the removal of product catalog information that is exported to Advanced Configurator may result in configuration errors if the information is referenced in existing orders and installed products, it is recommended that inactive definition in product catalog be exported to avoid potential configuration errors.

- Attributes of the *Configurator* object type, regardless of start and end dates. For attributes that are expired, they are handled in configuration sessions based on their individual expiration handling setting (which is specified in the Attributes - Configurator page).

- Multilevel product packages and their components, regardless of start and end dates.

  Expired product packages and components are not displayed in configuration sessions and cannot be fulfilled by orders. However, it is still possible to modify or remove such product if it is already installed.

  See and Chapter 24, "Working with Orders for Multilevel Product Bundles," Understanding Selling Periods for Multilevel Product Bundles and Components, page 655.

- Prior to exporting a migration action, the system performs the same integrity checks that occur when migration actions are saved.

  See and Chapter 24, "Working with Orders for Multilevel Product Bundles," Understanding Package Migration Requests, page 611. and Chapter 22, "Understanding Multilevel Product Bundle Integration," Understanding Design Time Integration and Product Catalogue Synchronization, page 456.

The batch process also performs a series of integrity checks to ensure that the structure of product catalogue definition being exported is both complete and consistent. These checks are in place to make sure that:

- Multilevel product bundles are built with adherence to the bundle structure and properties that are set in the Multilevel Component Types component.

- Each multilevel product bundle component belonging to the commercial type that is set to link to functional component is in fact associated with a functional component through the *Sells* relationship. A commercial component can be linked to only one functional component, and the relationship does not base on any date-specific condition.

  As delivered, only commercial components of the *Atomic Offer* type can be linked to functional components.

- A commercial component cannot be included more than once in a single multilevel product bundle; it can, however, be referenced in multiple product bundles.

- The Installability option is set properly for related package components based on these rules:

  - The *Contract* type component can be set to not installable only if all its plays are also not installable.

  - The *Play* type component can be set to not installable only if all its commercial products are also not installable.

  - For each atomic offer and functional component pair that is linked by the *Sells* relationship, both components must have the same setting, that is, either installable or not installable.

  - The lowest installable level of a commercial hierarchy, as delivered, is *Atomic Offer.*

- No attributes that use automatic retrieval rules (not supported in the Advanced Configurator) are specified for the *Configurator* object type.

Note that the integrity checks mentioned above do not apply to rule definitions, and they do not perform tasks to make sure that the updated version of product catalogue data is in fact compatible with existing installed products in the system. It is the administrator's responsibility to maintain the compatibility between the newer product catalogue data and existing installed products.

Integrity checks are performed prior to exporting commitment products and rules to Configurator application data structures for product configuration purposes.

See and <u>Chapter 24, "Working with Orders for Multilevel Product Bundles," Product Catalog Export of Commitment Products and Rules, page 652.</u> and <u>Chapter 22, "Understanding Multilevel Product Bundle Integration," Understanding Design Time Integration and Product Catalogue Synchronization, page 456.</u>

Commitment Products

A commitment product represents a commitment (a contract between a vendor and a customer), which is assigned to other products or services purchased by customers to specify a time period during which the cancellation of such products and services can lead to penalty payment. It:

- Is associated with a commitment covering rule, which defines a list of products that need its commitment coverage and the duration of the commitment.

  The automatic selection of a commitment product triggers the evaluation of the commitment covering rule that is created for the commitment product, which, if rule conditions are met, results in the assignment of the commitment product to instances of its covered products that are available in the configuration session.

- Gets exported to Advanced Configurator along with commitment rules for use in product configurations.

- Can be added to configuration sessions automatically through the execution of a commitment triggering rule.

  Important! Commitment products can only be added in configuration sessions as a result of the execution of commitment triggering rules. Logic is in place to prevent commitment products from being added manually to orders, such as by entering the product name or ID or from the catalog search.

- Is stored as an installed commitment after order fulfillment for service management purposes.

  Installed links are established between the installed commitment and installed products that are covered by the installed commitment.

During configuration sessions, agents cannot alter the commitment such as adding or removing its covered products, or renewing the duration of commitment for any given covered product unless they are given permission to do so. You can use eligibility rule to specify actions that can be performed on commitment products.

Note. Commitment products must be in active status in order to be referenced in commitment rules and to be available for selection in configuration sessions.

See and <u>Chapter 24, "Working with Orders for Multilevel Product Bundles," Commitment Configuration Rules, page 647.</u>

Split Billing Products

Split billing product definitions represent billable products that are associated with more than one billing account for different billing purposes. The split billing functionality is only available in the ordering process to products that are split billing-enabled. In a split billing product definition, you can specify a number of billing account types that can be used to pay for charges of the product. For each billing account type that is listed, you can identify its purpose, which is a description that is displayed in orders and installed products at runtime to show the type of charges that the billing account handles.

For a product to be split billing-enabled, the Billing Account Selectable option must first be selected to indicate that the product is billable. Then, select the Split Billing option and add billing accounts that can be used to pay for the split billing product. A split billing product can be associated with both prepaid and postpaid accounts; a product package can contain a mix of product components that are associated with both types of accounts. However, beware that the system does not allow the selection of both prepaid and postpaid accounts in a single order. When that happens, the validation check that executes upon order submission puts a hold on this order.

Note. As delivered, setup fields that are related to split billing are available to product definitions that are created for the communications solution (setID=COM01) through display templates.

See Also

Understanding Configuration Rules

This section discusses:

- Commercial eligibility rules.

- Brings on creation rules.

- Brings and removes rules.

- Commercial incompatibility rules.

- Commercial incompatibility rules for attribute values.

- Commercial restriction rules for attribute values.

- Commercial prerequisite rules.

- Commercial relies on rules.

- Commercial relies from rules.

- Functional incompatibility rules.

- Functional incompatibility rules for attribute values.

- Functional relies on rules.

- Functional relies from rules.

- Commitment triggering and covering rules.

PeopleSoft CRM delivers a number of configuration and validation rules for multilevel product bundles. These rules enable the definition of various configuration constraints for products and product attributes that need to be validated during order capture and service management configuration sessions.

Commercial Eligibility Rules

Commercial eligibility rules can be used to restrict the display of data and the availability of actions on products, relies on links, service migrations, commitments and product attributes in configuration sessions based on rule conditions. Rule conditions are built using a combination of these criteria: source, sub-source, user and customer criteria that are represented in AAF (Active Analytics Framework) terms.

When a configuration session is initiated from an order or service management order, Advanced Configurator retrieves needed information from the order, specifically:

- Source and sub-source values, which the Order Capture application passes directly to the session.

- User and customer criteria values, which the Configurator controller program retrieves from the CRM system using web services, as well as the customer ID and user ID pertaining to the order, which is provided by the Order Capture application.

The controller program evaluates retrieved criteria values against active rule conditions. A rule is deemed applicable if all of its conditions are met.

After the initiation process is completed and appropriate rules applied, the Configurator GUI solution presents the configuration session with all rule-based configuration restrictions in place. These restrictions can be one or more of these items:

- Hiding of a product or disallowing the addition or removal of a product.

- Disallowing the creation or removal of relies on links between products.

- Disallowing migration actions for products.

- Hiding a product attribute or disabling attribute update.

- Hiding actions that can be performed on a commitment type product, adding or removing covered products from a commitment product, and restricting the duration options that are available to the commitment product.

Important! The delivered Configurator GUI solution is a sample one and it does not cover all the possible configuration scenarios for multilevel product bundles. The CRM system provides APIs to handle product configurations that the sample GUI solution does not support.

Additionally, eligibility rules can be set up to perform validations on configuration sessions based on rule definition. For example, suppose that the *Product non-eligible* setting is selected for a product in a commercial eligibility rule (which means that the product cannot be added during configuration sessions). At runtime, if you select to add that product in a session after all the configuration restrictions of the rule have applied, the system would invalidate the configuration because of the selection of a product that cannot be added to the configuration. The status of the configuration becomes *Invalid* or *Valid with warnings,* depending on the severity that is specified for the rule.

Elements of Rule and Validation Result

The Commercial Eligibility Rule is comprised of the following elements:

- Rule type, not including logical expressions

- Rule date

- Product

The Commercial Eligibility Rule is invalid when the eligibility criteria associated with the contract matches the criteria from the rule.

The validation process uses one of the following operators associated with a rule to help determine its validity:

- Equal

- Not Equal

- Is Empty

- Is Not Empty

- In List

- Not In List

Commercial Eligibility Rule - Example

This section provides a sample commercial eligibility rule definition and explains how the rule impacts a configuration session when applied.

This table shows the details of the sample rule definition:

Rule Details		
Rule Type	Commercial Eligibility	
Rule Status	Active	
Rule Start Date	05/27/2008	
Rule End Date	12/31/2099	
Rule Severity	Error	
Rule Conditions		
Source	equals	Store
Sub-Source	Is in list	Partner 1; Partner 2
Terms		
Term Name	**Operator**	**Expected Value**
Country	equals	Poland

A sample commercial eligibility rule definition (1 of 3)

Product Rule Actions				
Product ID	Product Actions			
	Product Non-Eligible	Hide Product	Product No Add	Product No Remove
TEL000093 'Internet Access' (Atomic Offer)	Y	N	Y	Y
Relies On Link Actions				
Source Product ID		Restrict Remove	To	
TEL000093 'Internet Access' (Atomic Offer)		Y	All Targets	
Migration Actions				
(no migration action restriction in this example)				

A sample commercial eligibility rule definition (2 of 3)

Attribute Rule Actions				
No	1 of 1			
Product ID	TEL000055 'Internet Access Contract' (Contract)			
Attribute Name	Hide Attribute	Attribute no Change		
ATTR005	Y	N		
Commitment Product Actions				
Product ID	Commitment Product Actions			
	Cancel Penalty	Deny Renew/ Extend	Shorten Duration	Add/Remove Product
TEL000039 'CMT 4 Xtra Adv Con' (commitment product)	N	N	Y	N
Commitment Duration Options Exclusion	Include: 6, 12, 24 (months); Exclude: 36 (months)			

A sample commercial eligibility rule definition (3 of 3)

At runtime, when a user creates an order (or service management order) and initiates a configuration session, all active rules are being evaluated, including this sample rule that is valid between May 27, 2008 and December 31, 2099 if the product selling date of the order falls within this time frame. The order meets all the rule conditions if the order source is *Store* from either *Partner 1* or *Partner 2,* and the order is for a customer in *Poland.* Here is what the user can see and perform on the configuration session after the sample rule is applied:

- User can see product *TEL000093* but cannot add or remove this product in the session.

- User can add links originating from the functional component that is sold as product *TEL000093* but cannot remove these links.

- User cannot see the attribute *ATTR0005.*

- User can manually (free-text) change the duration of an existing commitment product *TEL000039.*

- User can choose between 6, 12, and 24 months as the duration for the TEL000039 commitment product in the configuration session; the 36 month option (specified in the commitment covering rule for TEL000039 with the other three options) is unavailable for selection.

If this restriction is violated in the session, the session becomes invalidated.

At the end, the system updates the status of the configuration based on the result of the evaluation:

- *Valid*: submitted configuration does not violate any rules; order can be processed.

- *Valid with warnings*: submitted configuration violates some rules and this status is issued based on the specified rule severity *(Warning)*; order can be processed.

- *Invalid:* submitted configuration violates some rules and this status is issued based on the specified rule severity *(Error)*; order cannot be processed.

See Also

Chapter 23, "Setting Up Multilevel Product Bundles," Setting Up Commercial Eligibility Rules, page 547

Brings On Creation Rules

Brings on creation rules enable the automatic addition of commercial products (target products) in configuration sessions upon the selection of their associated products (source products) that triggered the rules.

In a brings on creation rule, the relationship between the source product (also known as the left hand side product) and target products (also known as the right hand side products) are coupled together until order fulfillment is completed. Specifically, the selection of the left hand side product in a configuration session of a new order automatically adds the right hand side products to the session, and the removal of the left hand side product causes the removal of its right hand side products as well, as long as the order has not been fulfilled. When the order is successfully fulfilled and installed products created for products of both sides, the removal of the left hand side installed product in a service management order *does not* cause the removal of its right hand side installed products. In other words, they are independent entities in the service management phase.

The system creates links between the left hand side product and its right hand side products after order fulfillment. These *brings on creation* links persist only in orders for the purpose of restoring configuration sessions and as delivered, they are not stored as installed links.

Elements of Rule

The Brings On Creation Rule is comprised of the following elements:

- Rule type, configuration rule

- Rule date

- Left Hand Side/Right Hand Side

- Products (single product on the Left Hand Side and list of products on the Right Hand Side)

- Product status

- Product scope (only on Right Hand Side)

Note. The Configurator Controller application validates the Brings On Creation rule.

Brings On Creation Rule - Example

This section provides a sample brings on creation rule definition and explains how the rule impacts a configuration session when applied.

This table shows the details of the sample rule definition:

Rule Details	
Rule Type	Brings on Creation
Rule Status	Active
Rule Start Date	06/11/2008
Rule End Date	06/13/2099
Left Hand Side Product	
Product ID	**Product Description**
TEL000023	3G Wireless Postpaid Package
Right Hand Side Product	
Product ID	**Product Description**
TEL000093	Internet Access (Scope: play)

A sample brings on creation rule definition

At runtime, when a user creates an order (or service management order) and initiates a configuration session, all active rules are being evaluated, including this sample rule that is valid between June 11, 2008 and June 13, 2099 if the product selling date of the order falls within this time frame. In each session that has the *3G Wireless Postpaid Package* product (ID: TEL000023) selected, the system automatically selects the *Internet Access* product (ID: TEL000093) in the session, if this product is available within the same play as the *3G Wireless Postpaid Package* product. If the *Internet Access* product is unavailable in the same play, it is not going to be automatically selected in the configuration.

See Also

Chapter 23, "Setting Up Multilevel Product Bundles," Setting Up Brings On Creation Rules, page 553

Brings and Removes Rules

Brings and removes rules are similar to brings on creation rules in a sense that they are both used to automatically add target products to configuration sessions after the source products have been selected. These rules are different in terms of the duration in which the original and target products are coupled together. In a brings and removes rule, the source product is tied to its target products in the same relationship forever, even after the order is fulfilled. The removal of the source product results in the removal of its target installed products.

The system creates links between the left hand side product and its right hand side products after order fulfillment. These *brings and removes* links persist in orders for the purpose of restoring configuration sessions as well as between installed products to enable the coupling of left hand side and right hand side installed products in service management orders.

Note. The *brings and removes* relationship is also referred to as the *brings and removes* relationship in this documentation.

Elements of Rule

The Brings and Removes Rule is comprised of the following elements:

- Rule type, configuration rule

- Rule date

- Products (single product on the Left Hand Side and list of products on the Right Hand Side)

- Product status

- Product scope (only on Right Hand Side)

See Also

Commercial Incompatibility Rules

Commercial incompatibility rules can be used to restrict the selection of commercial products in configuration sessions (by displaying warnings or errors) upon the selection of certain commercial products due to incompatibility.

A commercial incompatibility rule consists of:

- Rule reference scope

  The scope determines the context within which the rule evaluation occurs.

  For example, if the scope is *Contract,* the system evaluates the rule at the contract level and all products selected in the contract can potentially be considered when the rule execution condition is being evaluated. If the scope is *Play,* the system evaluates the rule separately for each play selected in the contract, the rule execution condition will only be evaluated against products belonging to the same play.

- Rule execution condition

  Represented by the *left hand side sentence* in the rule definition, the rule execution condition defines some specific configuration selections that make the rule potentially applicable to the configurations.

- Rule constraint condition

  Represented by the *right hand side sentence* in the rule definition, the rule constraint condition identifies the specific configuration selections that, when evaluated to TRUE, cause the violation of the incompatibility rule.

  For an incompatibility rule, the product selection conditions for the left hand side and the right hand side should be mutually exclusive. A configuration session is in violation of an incompatibility rule if both sides of the rule are evaluated to TRUE at runtime.

- Product groups

  Product groups are components of the rule execution condition and the rule constraint condition. A product group is created by specifying a list of commercial products and the conditions for each product that a configuration needs to have and satisfy in order for it to be evaluated further by the rule. Within a group, there are product-level and group-level conditions that a configuration must fulfill before it can move onto the next step—which can be another evaluation by another group in the validation process, or a result that indicates if the configuration has violated an incompatibility rule.

Elements of Rule and Validation Result

The Commercial Incompatibility Rule is comprised of the following elements:

- Rule type, including logical expressions

- Rule date

- Left Hand Side/Right Hand Side

- Scope of rule

- Product and product rule group

- Product status

- Product scope (only on Right Hand Side)

- Local and Global cardinality

- AND/OR/()

The Commercial Incompatibility Rule is invalid when both the Left Hand Side and Right Hand Side are true.

Commercial Incompatibility Rule - Example

This section provides a sample commercial incompatibility rule definition and explains how the rule impacts a configuration session when applied.

This table shows the details of the sample rule definition:

Rule Details	
Rule Type	Commercial Incompatibility
Rule Status	Active
Rule Start Date	06/14//2008
Rule End Date	12/31/2009
Rule Severity	Error
Rule Reference Scope	
Rule Reference Scope	Play
Left Hand Side Groups	
Group ID	**Group Description**
L1	Cheap Offer Pack
L2	Basic Phone
Right Hand Side Groups	
Group ID	**Group Description**
R1	Premium Services
R2	Extra Minutes
Rule Definition	
Left Hand Side sentence (Rule Execution Condition)	L1 AND L2
Right Hand Side sentence (Rule Constraint Condition)	R1 OR R2

A sample commercial incompatibility rule definition

At runtime, when a user creates an order (or service management order) and initiates a configuration session, all active rules are being evaluated, including this sample rule that is valid between June 14, 2008 and December 31, 2099 if the product selling date of the order falls within this time frame. For each play (which is the specified rule reference scope) selected in the configuration, the evaluation of the left hand side (L1 and L2) sentence first applies. This table shows the condition defined for the L1 group:

Left Hand Side Groups				
Group ID		L1		
Description		Cheap Offer Pack		
Minimum Group Quantity		2		
Maximum Group Quantity		3		
Group Products				
Product ID	**Product Description**	**Product Status**	**Minimum Quantity**	**Maximum Quantity**
TEL000100	Inexpensive Calling Plan	New	1	1
TEL000176	TEL000176	New	1	2

A left hand side group definition of the sample commercial incompatibility rule definition

Based on the group definition, a play configuration satisfies the condition of the L1 group if it:

• Contains one Inexpensive Calling Plan product that is in the new status.

• Contains at least one but no more than two Basic Phone products that are in the new status.

• Includes a total of at least two but no more than three of the Inexpensive Calling Plan and Basic Phone products combined.

Next, the play configuration is being evaluated by the L2 group condition. If the condition is again satisfied, then the rule execution condition (specified by the left hand side sentence) is resolved to TRUE, which triggers another set of evaluations that checks if the configuration is indeed in violation of the sample rule.

In this example, all the plays that meet the left hand side sentence condition are subject to the evaluation that is set by the right hand side sentence (R1 OR R2).

This table shows the of the condition defined for the R1 group:

Right Hand Side Groups				
Group ID	R1			
Description	Premium			
Minimum Group Quantity	6			
Maximum Group Quantity	6			
Products				
Product Description	**Product Status**	**Scope**	**Minimum Quantity**	**Maximum Quantity**
Free Mailbox	New	Play	3	5
Caller ID	New	Contract	2	3

A right hand side group definition of the sample commercial incompatibility rule definition

Based on the group definition, a play configuration satisfies the condition of the R1 group if it:

* Contains at least three but no more than five Free Mailbox products that are in the new status. These products must be selected within the same play (specified by the scope).

* Contains at least two but no more than three Caller ID products that are in the new status. These products must be selected within the same contract (specified by the scope).

* Includes a total of at least six of the Free Mailbox and Caller ID products combined.

Next, the play configuration is being evaluated by the R2 group condition. The rule constraint condition (specified by the right hand side sentence) is resolved to TRUE if either R1 or R2 is satisfied. In the case of the sample rule (rule type = commercial incompatibility), when both left hand side and right hand side sentences are evaluated to TRUE, the configuration being evaluated is considered in violation. As a result, the status of the configuration is shown as *Invalid,* based on the specified rule severity.

See Also

Commercial Incompatibility Rules for Attribute Values

Use the commercial incompatibility rules for attribute values to restrict the value of any commercial product that is a descendant of the functional product and has an attribute attached. For example, a hypothetical 'Student Offer' can restrict the value 4096 of the DSL Speed attribute, which is attached to the DSL access product.

The underlying logic of commercial incompatibility rules for attribute values is the same as the functional incompatibility rules for attribute values, except that with the former rule type, the rule definition includes an additional section where you can select a commercial product as part of the rule execution condition and rule constraint condition. This rule definition provides the ability to apply restrictions on incompatible attribute values based on commercial products. A commercial incompatibility between attribute values rule is executed if the values that are specified for commercial product, functional product and attribute in the Restricting Attribute section of the rule are met in a configuration session at runtime. Next, the system checks if the configuration meets the condition that is defined in the Restricted Attributes section of the rule. If yes, the entire rule constraint condition is automatically resolved to TRUE, which means that the configuration is in violation of the commercial incompatibility rule for attribute values, causing the product configuration to become invalid.

Refer to the Functional Incompatibility Rules for Attribute Values for an overview and an example of the rule type.

See and <u>Chapter 23, "Setting Up Multilevel Product Bundles," Functional Incompatibility Rules for Attribute Values, page 503.</u>

Elements of Rule and Validation Result

The Commercial Prerequisite Rule is comprised of the following elements:

*   Rule type, excluding logical expressions

*   Rule date

*   Product

*   Product status

*   Attribute and attribute value

The Commercial Incompatibility Rules for Attribute Values is invalid when any of the incompatible elements (such as product id, functional product ID, or attribute ID) exists in the contract, a product is an descendant of the functional product in the contract structure, and an attribute is attached to the functional product.

Commercial Restriction Rules for Attribute Values

Use the commercial restriction rules for attribute values to restrict the selection of attribute values or the use for certain format for specifying attributes on commercial products in configuration sessions (by displaying warnings or errors) through the manipulation of the functional products that they sell. For example, a call number attribute value can be restricted to one starting with 69 for a mobile telephone offer.

In the rule setup where the rule execution condition is defined, you specify one single commercial product, which can either be an atomic offer that sells the functional product used in the rule, or the package containing the atomic offer that sells the functional product (it is possible that the same functional product is sold by different commercial offers within different commercial packages. For product configurations that satisfy this condition, additional evaluations are performed to verify if these configurations have selected attribute values of the functional product that are in fact defined as restricted values in the rule.

At the end, the system updates the status of the configuration based on the result of the evaluation:

*   *Valid*: submitted configuration does not violate any rules; order can be processed.

- *Valid with warnings*: submitted configuration violates some rules and this status is issued based on the specified rule severity *(Warning)*; order can be processed.

- *Invalid:* submitted configuration violates some rules and this status is issued based on the specified rule severity *(Error)*; order cannot be processed.

Elements of Rule and Validation Result

The Commercial Restrictions on Attributes rule is comprised of the following elements:

- Rule type, including logical expressions

- Rule date

- Product

- Product status

- Attribute and attribute value

The Commercial Restrictions on Attributes rule is invalid when any of the incompatible elements (such as product id, functional product ID, or attribute ID) exists in the contract, a product is a descendant of the functional product in the contract structure, and an attribute is attached to the functional product.

Commercial Restriction on Attributes Rule - Example

At runtime, when a user creates an order (or service management order) and initiates a configuration session, all active rules are being evaluated, including this sample rule that is valid between April 6, 2008 and June 30, 2008 if the product selling date of the order falls within this time frame. Based on the rule definition, the rule execution condition (specified in the Restricting Attributes section) is satisfied if:

- Any commercial atomic offers within the *3G USIM* package is selected in the configuration session.

- That atomic offer sells the *Prod 1* functional product that is specified in the Restricted Attributes section.

Rule Details	
Rule Type	Commercial Restrictions on Attributes
Rule Status	Active
Rule Start Date	06/04/2008
Rule End Date	06/30/2008
Rule Severity	Error
Restricting Product	
Product ID	TEL000092 (3G USIM) (Play)

A sample commercial restriction between attribute values rule definition (1 of 2)

The configuration, having met the rule execution condition, is now subject to the evaluation that is set by the Restricted Attributes section. This table shows the rule constraint condition:

Restricted Attributes	
No	1 of 2
Product ID	PN0002 (Prod 1)
Market	GBL
Attribute Name	COLOR_SELECTION
Attribute Field Type	Drop-Down (manual)
Manual Drop-Down Items	
Item Value	Restricted Values (Y/N)
Black	N
Grey	Y
Putty	Y
White	Y

A sample commercial restriction between attribute values rule definition (2 of 2)

The system checks if the value selected for the COLOR_SELECTION attribute is in fact a restricted value. In this example, if the selected color for *Prod 1* is *Grey,Putty,* or *White* (all of them are restricted attribute values), the rule constraint condition is then resolved to TRUE, which means that the configuration is in violation of the commercial restriction rule for attribute values. As a result, the status of the configuration is shown as *Invalid,* based on the specified rule severity. In addition, because the attribute is set as required, the configuration becomes invalid as well if no value is selected for the COLOR_SELECTION attribute upon submission.

See Also

Commercial Prerequisite Rules

Commercial prerequisite rules can be used to require the selection of commercial products in configuration sessions (by displaying warnings or errors) upon the selection of certain commercial products due to prerequisite requirements.

The composition of commercial prerequisite rules is the same as commercial incompatibility rules, which includes a rule reference scope, a rule execution condition and a rule constraint condition. The ways the two rule types are evaluated at runtime are also identical. The only difference between them is the way evaluation results are being interpreted. Specifically:

- A configuration is considered invalid of a *prerequisite* rule if the rule execution condition (left hand side sentence) is evaluated to TRUE whereas the rule constraint condition (left hand side sentence) is evaluated to FALSE.

  For a prerequisite rule, the product selection conditions for the right hand side should be a prerequisite of the left hand side selection.

- A configuration is considered invalid of a *incompatibility* rule if both conditions are evaluated to TRUE.

Elements of Rule and Validation Result

The Commercial Prerequisite Rule is comprised of the following elements:

- Rule type, including logical expressions

- Rule date

- Left Hand Side/Right Hand Side

- Scope of rule

- Product and product rule group

- Product status

- Product scope (only on Right Hand Side)

- Local and Global cardinality

- AND/OR/()

The Commercial Prerequisite Rule is invalid when the Left Hand Side is equal to true and the Right Hand Side is equal to false.

Commercial Relies On Rule

Commercial relies on rules restrict for each shared service how many other services and what types of services can be connected simultaneously to the shared service.

Use commercial relies on rules to restrict the selection of commercial products in configuration sessions (by displaying warnings or errors) upon the selection of certain commercial products based on predefined resource sharing criteria.

In the rule setup where the rule execution condition is defined, you specify an atomic offer or a complex group offer (a package product).

For product configurations that satisfy the rule execution condition, they are further evaluated by the rule constraint condition, which consists of commercial components (as well as external services) and specific conditions based on which they are permitted to leverage the resources. For a configuration session to be validated by a commercial relies on rule, all the required commercial products listed in the rule must be selected in the same session, the functional products of these commercial products must be linked as well—the functional product of the commercial product specified in rule execution condition must be related to functional products of commercial products specified in rule constraint condition through the *relies on* product link. This linkage can be established during the configuration session before it is submitted for rule validation.

A *Relies On* product link can relate two products from the same or different contracts, as different product scopes are supported when you specify commercial products in the rule constraint condition section of the rule definition:

* If *Contract* is selected, the left hand side and right hand side commercial components must belong to the same contract in order for the evaluation of the rule constraint condition to continue.

* If *Play* is selected, the left hand side and right hand side commercial components must belong to the same play in order for the evaluation of the rule constraint condition to continue.

* If *Direct Parent* is selected, the left hand side and right hand side commercial components must have the same direct parent in order for the evaluation of the rule constraint condition to continue.

* If *Same Customer* is selected, the left hand side and right hand side commercial components must belong to different contracts that are owned by the same customer in order for the evaluation of the rule constraint condition to continue.

* If *Other Customer* is selected, the left hand side and right hand side commercial components must belong to different contracts that are owned by the different customers in order for the evaluation of the rule constraint condition to continue.

* If *External Service* is selected, the right hand side commercial components must be customers of other communications service providers in order for the evaluation of the rule constraint condition to continue.

  The system selects this value as the default scope if the corresponding right hand side product is an external service. The *External Service* scope is the only available value for external services.

A configuration is in violation of a commercial relies on rule if the rule constraint condition resolves to FALSE, which can be caused by missing relies on relationships between products, or missing prerequisite products. The configuration is considered valid if the rule constraint condition is resolved to TRUE. At the end, the configuration status is updated on the corresponding order or service management order:

* *Valid*: submitted configuration does not violate any rules; order can be processed.

* *Valid with warnings*: submitted configuration violates some rules and this status is issued based on the specified rule severity *(Warning)*; order can be processed.

* *Invalid:* submitted configuration violates some rules and this status is issued based on the specified rule severity *(Error)*; order cannot be processed.

Relies On product links become installed links after the completion of the fulfillment process for service management purposes.

Elements of Rule and Validation Result

The Commercial Relies On Rule is comprised of the following elements:

- Rule type, including links with logical expressions

- Rule date

- Left Hand Side/Right Hand Side

- Product and product rule group (groups only on the Right Hand Side)

- Product status

- Product scope (only on Right Hand Side)

- Local and Global cardinality (only on Right Hand Side)

- AND/OR/() (only on Right Hand Side)

The Commercial Relies On Rule is invalid when the Left Hand Side is equal to true and the Right Hand Side is equal to false. Also, the rule is invalid when an incoming prerequisite link is not in a permissible range.

See and

Commercial Relies On Rule - Example

This section provides a sample commercial relies on rule definition and explains how the rule impacts a configuration session when applied.

This table shows the details of the sample rule definition:

Rule Details		
Rule Type	Commercial Relies On	
Rule Status	Active	
Rule Start Date	06/26/2008	
Rule End Date	12/31/2099	
Rule Severity	Error	
Left Hand Side Product		
Product ID	TEL200012 (Shared Directory) (New or Active)	
Right Hand Side Groups		
Group ID	**Group Description**	
R1	Voice Over IP	
R2	Phones Lines	
Rule Definition		
Right Hand Side sentence (Rule Constraint Condition)		R1 and R2

A sample commercial relies on rule definition

At runtime, when a user creates an order (or service management order) and initiates a configuration session, all active rules are being evaluated, including this sample rule that is valid between June 26, 2008 and December 31, 2099 if the product selling date of the order falls within this time frame. Based on the rule definition, the rule execution condition (specified in the Left Hand Side Product section) is satisfied if a new or active *Shared Directory* product is selected in the configuration session.

The configuration, having met the left hand side product condition, is now subject to the evaluation that is set by the right hand side sentence (R1 AND R2). This table shows the condition defined for the R1 group:

Right Hand Side Groups			
Group ID	R1		
Group Description	Voice Over IP		
Minimum Group Quantity	1		
Maximum Group Quantity	3		
Products			
Product Description/Status	**Scope**	**Minimum Quantity**	**Maximum Quantity**
Voice Over IP 11(New/Active)	Contract	1	3

A right hand side group definition of the sample commercial relies on rule definition

The system evaluates the condition of the right hand side sentence against each instance of the left hand side product found in the configuration. For any identified left hand side product (the *Shared Directory,* the R1 group condition is satisfied if:

• The configuration includes at least one but no more than three quantities of the *Voice Over IP 11* product that is in New or Active status and it is in the same contract as the *Shared Directory.*

• The total quantity of the *Voice Over IP 11* product ordered in the configuration session is at least one (minimum group quantity = 1) but no more than three (maximum group quantity = 3).

The right hand side sentence consists of only two right hand side groups, the rule constraint condition is resolved to TRUE when the conditions of both R1 and R2 groups are satisfied. If any of these groups is not satisfied, the rule constraint condition is resolved to FALSE, and the configuration being evaluated is considered in violation. Based on the specified rule severity, the status of the configuration can be:

• *Valid with warnings:* submitted configuration violates some rules and this status is issued based on the specified rule severity *(Warning)*; order can be processed.

• *Invalid:* submitted configuration violates some rules and this status is issued based on the specified rule severity *(Error)*; order cannot be processed.

Note. Exercise caution when introducing changes to commercial relies on rules as they can cause incompatibility in installed products and invalidate configurations inadvertently. For instance, an installed link was created between two installed products after a configuration was validated by a commercial relies on rule and the order was fulfilled. Assume that the commercial relies on rule is now expired, and an installed link that was previously created by it is identified in a configuration session of a service management order, the configuration becomes invalid because the rule is no longer present to validate the relationship.

You can set up relies on rules for functional components as well. Refer to the see also reference for more information on functional relies on rules.

Commercial Relies From Rules

The commercial relies from rules function in the same manner as the functional relies from rules and let you define the reverse cardinality of the commercial products that rely on shared products.

Refer to the see reference for more information on functional relies from rules.

See and

Functional Incompatibility Rules

Functional incompatibility rules can be used to restrict the selection of functional products in configuration sessions (by displaying warnings or errors) upon the selection of certain functional products due to incompatibility. The definition and the validation logic for functional incompatibility rule is almost identical to commercial incompatibility rule, with the exception that functional incompatibility rules are set between functional products.

At runtime, a functional product is *selected* in a configuration session through the selection of the commercial offer that sells it.

See and

For rules with the *Direct Parent* reference scope, it is understood as the direct parent of the commercial offer which sells the functional product.

Rule Reference Scope

Before the evaluation of a rule execution condition occurs, the system needs to know the scope for which this condition should be evaluated, so that it can determine which products in the configuration are to be considered when the rule execution condition is being evaluated. Similar to commercial incompatibility rules, three scope values are available:

- Contract

  All products selected in the contract are considered when the evaluation occurs.

- Play

  The rule execution condition is being evaluated in every play that is selected within the contract. For each play, all products selected in it are subject to evaluation. For example, if the rule execution condition requires functional products FA and FB, this condition is met only if products FA and FB are selected in the same play.

- Direct Parent

  The rule execution condition is being evaluated in every offer that is selected within the contract. For each offer, the condition is evaluated against functional products that are sold by the commercial atomic offers which are direct children of this offer. For example, if the rule execution condition requires functional products FA and FB and the scope is *Direct Parent,* this condition is met if products FA and FB are sold by two atomic offers that have the same immediate parent.

Elements of Rule and Validation Result

The Functional Incompatibility Rule is comprised of the following elements:

- Rule type, including logical expressions

- Rule date

- Left Hand Side/Right Hand Side

- Scope of rule (contract, play, direct parent)

- Product and product rule group

- Product status

- Product scope (only on Right Hand Side)

- Local and Global cardinality

- AND/OR/()

The Functional Incompatibility Rule is invalid when the Left Hand Side and the Right Hand Side are equal to true.

Functional Incompatibility Rule - Example

This section provides a sample functional incompatibility rule definition and explains how the rule impacts a configuration session when applied.

This table shows the details of the sample rule definition:

Rule Details	
Rule Type	Functional Incompatibility
Rule Status	Active
Rule Start Date	06/12/2008
Rule End Date	05/31/2099
Rule Severity	Error
Rule Reference Scope	
Rule Reference Scope	Direct Parent

A sample functional incompatibility rule definition (1 of 2)

Left Hand Side Groups	
Group ID	**Group Description**
L1	PSTN0001
Right Hand Side Groups	
Group ID	**Group Description**
R1	ISDN003
Rule Definition	
Left Hand Side sentence (Rule Execution Condition)	L1
Right Hand Side sentence (Rule Constraint Condition)	R1

A sample functional incompatibility rule definition (2 of 2)

At runtime, when a user creates an order (or service management order) and initiates a configuration session, all active rules are being evaluated, including this sample rule that is valid between June 12, 2008 and May 31, 2099 if the product selling date of the order falls within this time frame. For each commercial offer (rule reference scope: direct parent) selected in the configuration, the evaluation of the left hand side (L1) sentence first applies. This table shows the of the condition defined for the L1 group:

Left Hand Side Groups			
Group ID	L1		
Description	PSTN0001		
Minimum Group Quantity	1		
Maximum Group Quantity	1		
Group Products			
Product Description	**Product Status**	**Minimum Quantity**	**Maximum Quantity**
PSTN	New	1	1

A left hand side group definition of the sample functional incompatibility rule definition

Based on the group definition, an offer configuration satisfies the condition of the L1 group if it contains one commercial atomic offer that sells the PSTN functional product and is in the new status.

In this example, because the left hand side sentence consists of only L1, the rule execution condition is automatically resolved to TRUE as soon as the L1 group condition is satisfied, which then triggers another set of evaluations that checks if the configuration is indeed in violation of the sample rule.

All the offers that meet the left hand side sentence condition are subject to the evaluation that is set by the right hand side sentence (R1). This table shows the of the condition defined for the R1 group:

Right Hand Side Groups				
Group ID	R1			
Description	ISDN001			
Minimum Group Quantity	2			
Maximum Group Quantity	3			
Products				
Product Description	**Product Status**	**Scope**	**Minimum Quantity**	**Maximum Quantity**
ISDN	New	Contract	2	3

A right hand side group definition of the sample functional incompatibility rule definition

Based on the group definition, an offer configuration satisfies the condition of the R1 group if it contains at least two but no more than three quantities of the commercial products that sells the ISDN functional product. These products must be selected within the same contract (specified by the scope) as the PSTN functional product.

Because the right hand side sentence consists of only one right hand side group, the rule constraint condition is automatically resolved to TRUE as soon as the R1 group condition is satisfied.

In the case of the sample rule (rule type = functional incompatibility), when both left hand side and right hand side sentences are evaluated to TRUE, the configuration being evaluated is considered in violation. Based on the specified rule severity, the status of the configuration can be:

- *Valid with warnings*: submitted configuration violates some rules and this status is issued based on the specified rule severity *(Warning)*; order can be processed.

- *Invalid:* submitted configuration violates some rules and this status is issued based on the specified rule severity *(Error)*; order cannot be processed.

See Also

Chapter 23, "Setting Up Multilevel Product Bundles," Setting Up Functional Incompatibility Rules, page 571

Functional Incompatibility Rules for Attribute Values

Functional incompatibility rules for attribute values can be used to restrict the attribute values or formats allowed for functional products based on certain attribute values or formats entered for other functional products due to incompatibility. They are the super-set of the standard functional incompatibility rules in that you can set up product incompatibility based on attribute values as well as the format in which the values are entered.

In the rule setup where the rule execution condition is defined, you specify a functional product-attribute pair and attribute values (or formats). For configuration sessions that select the specified functional product and attribute values (through the selection of commercial product that sells the functional product), additional evaluations of the functional incompatibility rule are performed to check if these sessions have also selected another functional product with certain specified attribute values, which are in fact defined as restricted values in the rule.

At the end, the system updates the status of the configuration based on the result of the evaluation:

- *Valid*: submitted configuration does not violate any rules; order can be processed.

- *Valid with warnings*: submitted configuration violates some rules and this status is issued based on the specified rule severity *(Warning)*; order can be processed.

- *Invalid:* submitted configuration violates some rules and this status is issued based on the specified rule severity *(Error)*; order cannot be processed.

See and Chapter 23, "Setting Up Multilevel Product Bundles," Functional Incompatibility Rules, page 499.

Elements of Rule and Validation Result

The Functional Incompatibility Rules for Attribute Value is comprised of the following elements:

- Rule type, excluding logical expressions

- Rule date

- Scope

- Attribute and attribute value

The Functional Incompatibility Rules for Attribute Value is invalid when any of the incompatible elements (such as a restricting attribute ID of a given Functional product ID or restricted attribute value) exists in the given scope. The matching of attribute value can be done either by equality of values, or by matching format of a value, depending on restriction type.

Functional Incompatibility between Attribute Values Rule - Example

This section provides a sample functional incompatibility rule definition for attribute values and explains how the rule impacts a configuration session when applied.

This table shows the details of the sample rule definition:

Rule Details	
Rule Type	Functional Attributes Incompatibility
Rule Status	Active
Rule Start Date	06/04/2008
Rule End Date	06/30/2008
Rule Severity	Error
Restricting Attribute	
Product Id	TEL000092 (3G USIM)
Market	COM
Attribute Name	ATTR_KAROLA
Attribute Field Type	Drop-Down (manual)
Manual Drop-Down Items	
Item Value	**Restricting Value**
Value 1	Not selected
Value 2	Selected
Value 3	Not selected

A sample functional incompatibility between attribute values rule definition (1 of 2)

At runtime, when a user creates an order (or service management order) and initiates a configuration session, all active rules are being evaluated, including this sample rule that is valid between April 6, 2008 and June 30, 2008 if the product selling date of the order falls within this time frame. Based on the rule definition, the rule execution condition (specified in the Restricting Attributes section) is satisfied if the *3G USIM* product is selected in the configuration session, and *value 2* of the ATTR_KAROLA attribute is specified for the product.

The configuration, having met the rule execution condition, is now subject to the evaluation that is set by the Restricted Attributes section. This table shows the rule constraint condition:

Restricted Attributes	
No	**1 of 1**
Rule Scope	Play
Product ID	PN0002 (Prod 1)
Market	COM
Attribute Name	ATTR_STX1
Attribute Field Type	Edit Box
Regular Expression	\(\d{3}\)\d{3}-\d{4}

A sample functional incompatibility between attribute values rule definition (2 of 2)

The system checks if the configuration includes the selection of the *Prod 1* product within the same play as the *3G USIM* product. If yes, it continues to check if the ATT_STX1 attribute of the *Prod 1* product has been filled out in this format: \(\d{3}\)\d{3}-\d{4} (it is a Java expression that represents the US phone number format: (800)555-5555). If the attribute condition is again satisfied, the entire rule constraint condition is automatically resolved to TRUE, which means that the configuration is in violation of the functional incompatibility rule for attribute values. As a result, the status of the configuration is shown as *Invalid,* based on the specified rule severity.

See Also

Functional Relies On Rules

Functional relies on rules let you define functional prerequisite relationships between one functional component and a group of functional components. They evaluate product configurations for possible prerequisite violations and issue proper validation statuses to configurations as a result.

In order for functional products to be evaluated by functional relies on rules in configuration sessions, they have to be linked already through the *relies on* product relationship during the sessions. Functional relies on rules do not create installed links.

The concept of rule reference scope does not apply to functional relies on rules as it does to commercial prerequisite rules. Because you only specify one product for the rule execution condition (left hand side condition), it is defaulted implicitly that the rule reference scope is *Direct Parent.*

Elements of Rule and Validation Result

The Functional Relies On Rule is comprised of the following elements:

- Rule type, including links with logical expressions

- Rule date

- Left Hand Side/Right Hand Side

- Scope of rule

- Product and product rule group (groups only on the Right Hand Side)

- Product status

- Product scope (only on Right Hand Side)

- Local and Global cardinality (only on Right Hand Side)

- AND/OR/() (only on Right Hand Side)

The Functional Relies On Rule is invalid when the Left Hand Side is equal to true and the Right Hand Side is equal to false. Also, the rule is invalid when an incoming Relies On link is not in a permissible range.

Functional Relies On Rule - Example

This section provides a sample functional relies on rule definition and explains how the rule impacts a configuration session when applied.

This table shows the details of the sample rule definition:

Rule Details	
Rule Type	Functional Relies On
Rule Status	Active
Rule Start Date	05/26/2008
Rule End Date	12/31/2099
Rule Severity	Error
Left Hand Side Product	
Product ID	TEL230191 (ABC DSL Service Plan)
Product Status	New/Active
Right Hand Side Groups	
Group ID	**Group Description**
R1	Livebox
Rule Definition	
Right Hand Side sentence (Rule Constraint Condition)	R1

A sample functional relies on rule definition

At runtime, when a user creates an order (or service management order) and initiates a configuration session, all active rules are being evaluated, including this sample rule that is valid between May 26, 2008 and December 31, 2099 if the product selling date of the order falls within this time frame. Based on the rule definition, the rule execution condition (specified in the Left Hand Side Product section for functional relies on rules) is satisfied if the *ABC DSL Service Plan* product that is in either New or Active status is selected in the configuration session, in which case triggers another set of evaluations that checks if the configuration is indeed in violation of the sample rule.

The configuration, having met the left hand side sentence condition, is now subject to the evaluation that is set by the right hand side sentence (R1). This table shows the condition defined for the R1 group:

Right Hand Side Groups	
Group ID	R1
Group Description	Livebox
Minimum Group Quantity	1
Maximum Group Quantity	1
Products	

Product Description	Product Status	Minimum Quantity	Maximum Quantity	Scope
Sagem 23421	New/Active	1	1	Contract

A right hand side group definition of the sample functional relies on rule definition

The system evaluates the condition of the right hand side sentence against each instance of the left hand side product found in the configuration. For any identified left hand side functional product (the *ABC DSL Service Plan,* the R1 group condition is satisfied and the right hand side sentence resolved to TRUE if:

*   The configuration includes exactly one *Sagem 23421* product that is in New or Active status and it is in the same contract as the *ABC DSL Service Plan.* Additionally, *ABC DSL Service Plan* is tied to this product through the *relies on* link.

*   The quantity of the *Sagem 23421* product ordered in the configuration session is one.

Because the right hand side sentence consists of only one right hand side group, the rule constraint condition is automatically resolved to TRUE as soon as the R1 group condition is satisfied.

In the case of functional relies on rules, when the left hand side product is successfully identified in a configuration and the right hand side sentence is evaluated to FALSE, the configuration being evaluated is considered in violation. Based on the specified rule severity, the status of the configuration can be:

*   *Valid with warnings*: submitted configuration violates some rules and this status is issued based on the specified rule severity *(Warning)*; order can be processed.

*   *Invalid:* submitted configuration violates some rules and this status is issued based on the specified rule severity *(Error)*; order cannot be processed.

Note. Exercise caution when introducing changes to functional relies on rules as they can cause incompatibility in installed products and invalidate configurations inadvertently. For instance, an installed link was created between two installed products (functional products) after a configuration was validated by a functional relies on rule and the order was fulfilled. Assume that the functional relies on rule is now expired, and an installed link that was previously created by it is identified in a configuration session of a service management order, the configuration becomes invalid because the rule is no longer present to validate the relationship.

You can set up relies on rules for commercial components as well. Refer to the see also reference for more information on commercial relies on rules.

Functional Relies From Rules

Functional relies from rules let you define the reverse cardinality of the functional products that rely on shared products.

For example, you may have defined a relies *on* rule that allows a family plan to support mobile lines (0 to 3 lines) and VOIP lines (1 or 2 lines). This relies on rule definition provides the cardinality from family plan to mobile line and family plan to VOIP line. You use functional relies *from* rules to specify the cardinality from mobile line to family plan and from VOIP line to family plan, for example:

- The mobile line can support family plan (0, 2).

  This rule definition provides the cardinality *from* the mobile line to the family plan.

- The VOIP line can support family plan (1,1).

  This rule definition provides the cardinality *from* the VOIP line to the family plan.

The functional relies from rule is not installable.

You can set up relies from rules for commercial components as well. Refer to the see also reference for more information on commercial relies from rules.

Commitment Triggering and Covering Rules

Commitment triggering and covering rules work hand in hand to automatically assign commitment coverage to products that are about to be added as well as those that are currently selected in configuration sessions. This diagram illustrates at a very high level what a commitment triggering rule and covering rule can accomplish when they are executed in a configuration session:
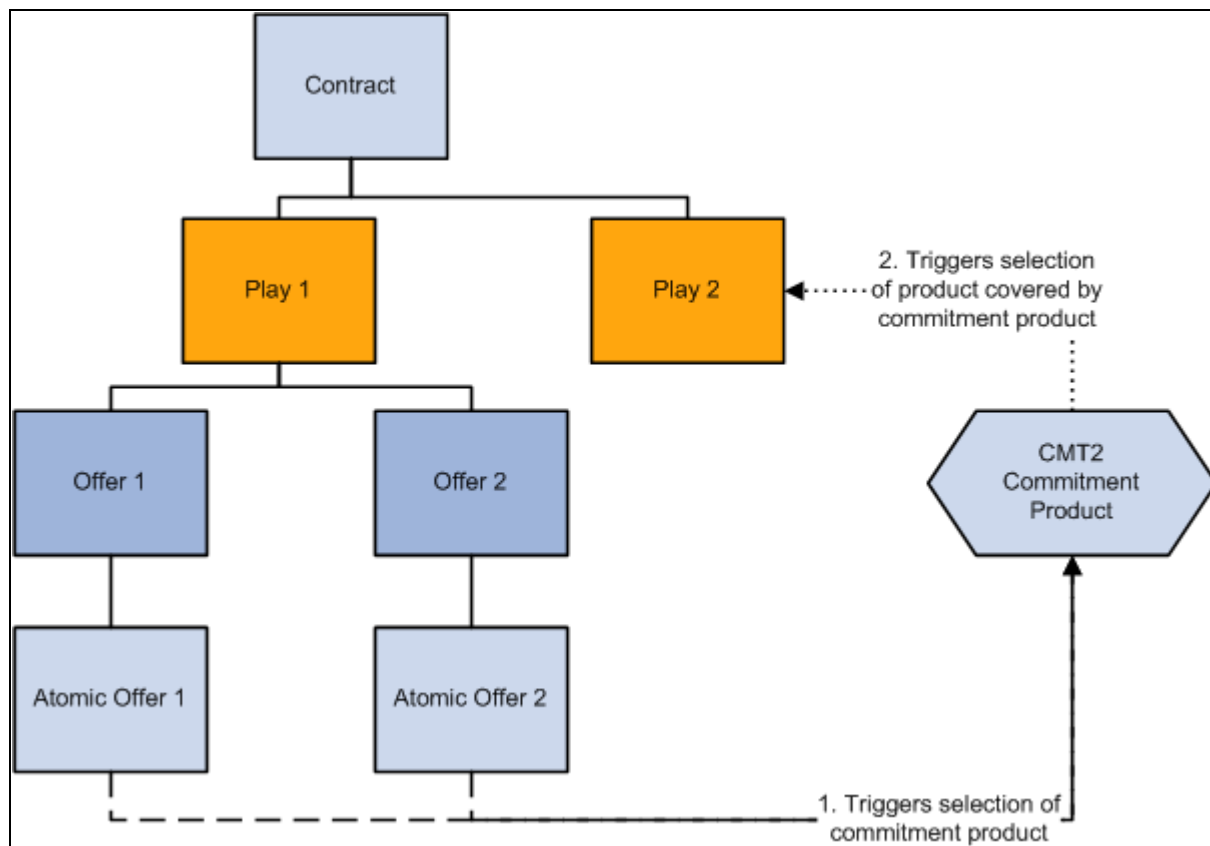
Use of commitment triggering rule and covering rule to add commitment coverage for newly added products and existing product in configuration sessions

Here are the assumptions set for the diagram:

- A commitment triggering rule definition *CT1* exists for atomic offers *1* and *2,* and commitment product *CMT2.*

- A commitment covering rule definition *CC1* exists for the commitment product *CMT2* and play *2.*

At runtime, you select both atomic offers *1* and *2* in a configuration session. The selection triggers the evaluation and execution of commitment triggering rule *CT1,* which automatically adds a new commitment product *CMT2* or extends the duration of an existing installed commitment *CMT2.*

The selection of commitment product *CMT2* in the configuration session triggers the evaluation and execution of commitment covering rule definition *CC1.* As a result, play 2 (an existing installed product) is automatically selected in the configuration session and covered by commitment product *CMT2.*

Refer to these sections for more information on commitment triggering rules and commitment covering rules:

- Commitment triggering rules.

- Commitment covering rules.

- Commitment triggering and covering Rules - example.

Commitment Triggering Rules

Use commitment triggering rules to add commitment products (or update the commitment period of existing commitment products) in configuration sessions upon the selection of products that these commitment products cover.

In a commitment triggering rule definition, you specify:

- A left hand side product (if rule reference scope is set to *Instance*), or groups of left hand side products. For each product you reference in a left hand side group, you specify the minimum and maximum quantities of the product that belongs to the group (that is, local quantity) and product status. At the group level, you specify the minimum and maximum total count of products that belong to the group (that is, global cardinality).

  These products are also referred to as triggering products in this documentation.

- Rule reference scope, which identifies the extent of a multilevel product hierarchy within which the evaluation of rule conditions take place.

  A commitment triggering rule is invoked for each product component in the session that matches the scope defined for the rule (the rule reference scope). For example:

  - If rule reference scope is set to *Play,* the evaluation of the left hand side sentence condition takes place for each instance of the play found in the configuration. For each *play* instance in which the left hand side sentence condition is met, a commitment product (defined in the rule definition) is added to it as a result. (that is, in that context *applied* means that Commitment is due to that instance of Play, Commitment that is applied might cover different products within or outside this Play). The commitment product is applied only once for each instance.

    Note that a commitment product that is applied to any given scope *(play* in this example) of a product hierarchy may actually cover other products within or outside of the current scope.

  - If rule reference scope is set to *Instance,* the evaluation of the left hand side sentence condition takes place for each instance of the specified left hand side product found in the configuration. The commitment product is applied only once for each instance.

- Logical sentence, also known as left hand side sentence, which consists of left hand side groups and logical operators that connect the groups.

  A logical sentence does not apply if a rule has only one triggering product.

  Note. The combination of product groups, rule reference scope and logical sentence forms the rule execution condition. A commitment triggering rule is executed if the product selection in the current configuration session meets the requirement set by the logical sentence and the specified reference scope.

- A commitment product that is referenced in the configuration session to provide commitment coverage for the triggering products.

  You can specify multiple commitment products in a rule definition. In this case, when the rule is executed at runtime, the agent needs to manually pick one from the list of available commitment products.

  Note. In a rule definition, you can mandate the selection of a commitment product in configurations. At runtime, agents have the option to clear the selection of commitment products that are preselected by default.

- The method to use to introduce the commitment product. Options are:

  - Create a new commitment product.

    The agent has the option to choose a duration of the commitment product from a list of options that are defined in the rule definition.

  - Extend the duration of an existing installed commitment.

    When a rule with this behavior is executed at runtime, it checks the configuration session for an existing commitment product matching the one that is specified in the rule definition and extends its duration. The agent can choose the length of the extension from a list of options that are defined in the rule definition.

    Note. If multiple matching commitment products are found, the agent needs to pick one manually and the select the length of extension for it in the configuration session.

  - Renew the duration of an existing installed commitment.

    The *renew* and *extend* behaviors are almost identical except that duration options sets they use in specifying commitment options in the commitment triggering rule definition are different.

The execution of commitment triggering rules, when applicable, occurs after the submission of product configurations for verification in configuration sessions. First, product selections are evaluated against the conditions defined for each triggering rule instance to check which rules to apply. If the condition of a rule is fulfilled, the system adds the commitment product to the session, or presents the agent a list of possible commitment products that are defined by the rule (if multiple commitment products are associated with the rule). The rule evaluates to TRUE if the required commitment is added for the product selected that needs coverage. In the case where a commitment product is mandatory for a product in the configuration session but the agent doesn't select one, the rule is considered broken and that invalidates the configuration.

Commitment triggering rules take into account the status of products in rule evaluation. There must be at least one product in the *New* status for the rule to be evaluated.

In the configuration session, a link is established between the triggering product and the commitment product that is added or extended for referencing purposes. In other words, if the agent removes the triggering product from the configuration, its commitment product should no longer be a required selection anymore and the system can make that happen with the presence of this link.

Then, product selections are evaluated against the constraints specified by the rule that applies to the submitted configuration. Depending on the rule severity and the results of rule evaluation, the configuration status can be set to:

- *Valid*: submitted configuration does not violate any rules; order can be processed.

- *Valid with warnings*: submitted configuration violates some rules and this status is issued based on the specified rule severity *(Warning)*; order can be processed.

- *Invalid*: submitted configuration violates some rules and this status is issued based on the specified rule severity *(Error)*; order cannot be processed.

See and <u>Chapter 23, "Setting Up Multilevel Product Bundles," Setting Up Commitment Triggering Rules, page 576.</u>

Commitment Covering Rules

Use commitment covering rules to define products that any given commitment product covers. These covered products are selected automatically to configuration sessions upon the addition or extension of their associated commitment product, the result of a commitment triggering rule execution.

In a commitment triggering rule definition, you specify:

*   The commitment product, for which the commitment covering rule is created.

    Each commitment product can only be referenced in one single active commitment covering rule.

*   Duration settings.

    Two sets of duration settings are available: one for creating and renewing the corresponding commitment product, and the other for extending the commitment product.

    These duration sets are used in commitment triggering rules to specify durations of commitment products based on the selected behavior.

*   Covering scope, which is the scope (contract, play, direct parent, and instance) that covered products must be in together with the commitment product in order for them to be covered.

*   Commitment activation option, which determines the installation order of covered products – either after the first committed product is installed or after all committed product are installed.

*   List of covered products, which are categorized in groups and processed with the AND logical operator.

    These products are added in configuration sessions and covered by the rule's commitment product as a result of the execution of the commitment covering rule.

A commitment covering rule is executed upon the selection or addition of its commitment product in configuration sessions. The result of the rule execution is the automatic selection of the list of covered products in configuration sessions based on the specified product scope, status and quantities.

In the rule definition you specify a scope for each covered product that is referenced. Values of product scope are available based on the covering scope that is selected at the rule level. Here are the delivered product scopes for commitment covering rules and how commitment coverage is assigned based on product scope:

*   If product scope is *Contract,* the commitment product provides coverage to this product (covered product) if both this product and the triggering products of the commitment product reside in the same contract.

*   If product scope is *Play,* the commitment product provides coverage to this product if both this product and the triggering products of the commitment product reside in the same play.

*   If product scope is *Direct Parent,* the commitment product provides coverage to this product (covered product) if both this product and the triggering products of the commitment product have the same direct commercial parent in the product hierarchy.

*   If product scope is *Instance,* the commitment product provides coverage to every instance of the covered product, which must be the same as the left hand side product of the associated commitment triggering rule (the rule that triggered the creation or extension of the commitment product).

    Note. This option is available only if the reference scope of the associated commitment triggering rule is also set to *Instance.* Only one product within the commitment covering rule definition can have its product scope set to *Instance.*

As part of the rule operation, logic is in place to also look at product status and allowable quantities at both group and product levels to determine the final covered product list. It identifies the number of covered product instances found in the configuration session (taking into account the status and scope of these products in the configuration) and evaluates their commitment availability (by checking to see if any of the products are currently linked to an active commitment product). One of two things happens:

• If the number of instances found within the selected scope in the configuration session is outside the range of minimum and maximum quantities specified for the covered product, the covering rule cannot be fulfilled and that invalidates the configuration.

• If number of instances found within the selected scope in the configuration session is within the range of minimum and maximum quantities specified for the covered product, the identified product instances are automatically linked to the commitment product. Otherwise the agent needs to manually select instances to be covered by the commitment product.

See and

Commitment Triggering and Covering Rules - Example

This example includes discussion of both commitment triggering and covering rules as these rule types work close together in product configurations.

At runtime, when a user creates an order and initiates a configuration session, all active rules are being evaluated, including this sample rule that is valid between May 27, 2008 and December 21, 2099 if the product selling date of the order falls within this time frame. Based on this commitment triggering rule definition, the rule execution condition is satisfied if both *Atomic Offer 1* and *Atomic Offer 2* are selected within the same play in the configuration session.

Rule Details	
Rule Type	Commitment Triggering
Rule Status	Active
Rule Start Date	05/27/2008
Rule End Date	12/31/2099
Rule Severity	Error
Rule Reference Scope	
Reference Scope	Play
Left Hand Side Groups	
L1	Atomic Offer 1
L2	Atomic Offer 2

A sample commitment triggering rule definition (1 of 2)

Commitment Behaviour	
Commitment Behaviour	Create
Commitment Options	
Commitment is mandatory	Yes
Product ID	CMT2 Commitment
Rule Definition	
Left Hand Side sentence	L1 AND L2

A sample commitment triggering rule definition (2 of 2)

Let's assume that product selections in the configuration session has met the triggering rule execution condition. The triggering rule is executed, which automatically adds a new commitment product (CMT2) to the configuration session for *Atomic Offer 1* and *Atomic Offer 2*. It is a new commitment product because the selected commitment behavior is *Create*. The selected reference scope is *play,* which means that the rule adds a commitment product (CMT2) for each play found in the configuration session that has both *Atomic Offer 1* and *Atomic Offer 2* selected.

The addition of the *CMT2* commitment product triggers the execution of its commitment covering rule automatically. Based on this commitment covering rule definition that is set up for *CMT2,* the execution adds coverage of *CMT2* to three quantities of *Play 2* that are found in the same contract.

Rule Details	
Rule Type	Commitment Covering
Rule Status	Active
Rule Start Date	05/27/2008
Rule End Date	12/31/2099
Unit of Measure	Months
Commitment Product	CMT2 Commitment

A sample commitment covering rule definition (1 of 2)

Rule Scope Setting	
Covering Scope	Contract
Product Group Details	
Group	G1
Product	Play 2
(Product) Scope	Contract
Minimum Quantity	3
Maximum Quantity	3

A sample commitment covering rule definition (2 of 2)

See Also

Setting Up Multilevel Product Bundles

This section discusses how to:

- Set up product relations codes.

- Set up product relationships.

- Set up product components.

- Set up multilevel product packages.

Pages Used to Set Up Multilevel Product Bundles

Page Name	Definition Name	Navigation	Usage
Product Relations Codes	RB_RELATIONS	Products CRM, Product Relations Codes, Product Relations Codes	Set up the codes that describe relationships between products.
Product Relationships	PROD_RELATIONS	Products CRM, Product Relationships, Product Relationships	Set up relationships between products.
Product Definition - Definition	PROD_DEFN	Products CRM, Product Definition, Definition	Set up components that build multilevel product packages.
Package Components	PRODKIT_SUMMARY	Products CRM, Package Components, Package Components	Set up multilevel product packages.

Setting Up Product Relations Codes

Access the Product Relations Codes page (Products CRM, Product Relations Codes, Product Relations Codes).

These options are specific to multilevel product bundles.

Warning! Do not modify the predefined setup in the Product Relations Codes component for configured multilevel product bundles, as Advanced Configurator is set up to support the delivered code setup only.

Installable	Select for the system to create links (called installed links) between installed products with the corresponding relation after the order fulfillment process completes.
	For example, product A is related to product B through the *Relies On* relation, which is set to be installable as delivered. When the fulfillment process for products A and B completes, the system creates an installed product for each of them for service management purposes, plus an installed link for the relies on product relation.
Rule based	Select if the corresponding product relation can only be established between products at runtime, through the execution of validation and configuration rules during configuration sessions in ordering or service management processes.
	Rule based product relationships cannot be established in design time therefore they are not available for selection in the Product Relationship component.

Note. The product relations codes that appear in the preceding example are delivered as system data. You can add relations, but you should not remove any delivered relations.

See Also

PeopleSoft CRM 9.1 Product and Item Management PeopleBook, "Setting Up Product Definitional Elements," Setting Up Product Relationship Codes

Setting Up Product Relationships

Access the Product Relationships page (Products CRM, Product Relationships, Product Relationships).

Among all the product relationships that are delivered specifically for multilevel product bundles, the *Sells* relationship can be established between products using this component. To set up a sells relationship between two products, the product in the header must be an atomic offer (a commercial component) with the *Link to Functional* option enabled at the component type level. The products selected in the Products to Relate section must be functional components

See Also

PeopleSoft CRM 9.1 Product and Item Management PeopleBook, "Setting Up Products," Managing Product Relationships

Setting Up Product Components

Access the Product Definition - Definition page (Products CRM, Product Definition, Definition).

Note. Information that is discussed in this section applies only to the definition of products (standard product, service product and package product) for multilevel product bundles to be used in the communications solution. *COM01* is the system-delivered setID for the communications solution. Other sections within the product definition component are supposed to work the same for both multilevel and non-multilevel product structures unless stated otherwise.

See and *PeopleSoft CRM 9.1 Product and Item Management PeopleBook*, "Setting Up Products," Defining Products.

Product Definition page for multilevel product packages (1 of 2)

Product Definition page for multilevel product packages (2 of 2)

Product Definition page for service products (1 of 2)

Product Definition page for service products (2 of 2)

Product Definition page for standard products (1 of 2)

Product Definition page for standard products (2 of 2)

Product Definition page for commitment products

Delivered communications-specific display templates control the presence of sections in the Product Definition component for the communications solution.

See and *PeopleSoft CRM 9.1 Automation and Configuration Tools PeopleBook*, "Configuring Display Templates," Understanding Display Templates.

Configuration Information

Fields that are introduced in this section are applicable to products that are configured using the Advanced Configurator. If *Sales Product Configurator* or *Oracle Configurator* is selected on the General Options page as the configurator product that is used by the CRM system, these fields are hidden; the existing layout for non-multilevel products is displayed instead.

Multilevel Bundle Component	Select this option if the product (standard product, service product, or package product) is part of a multilevel product bundle.
	When you select this option, the Component Type field becomes available for use.
Hide in Order Lines	Select to not show the product (standard product, service product, or package product) in the Line Summary section of the Entry Form page of orders and quotes.
	This option is *not* available to all functional components and top-level product components, which are commercial.

Hide in Installed Product Hierarchy	Select to not show the product (standard product, service product, or package product) on the Installed Product Hierarchy tree. If a package is set to be hidden, all of its descendants are hidden as well.
	This option is *not* available to all functional components and top-level product components, which are commercial.
Hide in Configurator	Select to not show the product (standard product, service product, or package product) in configuration sessions.
	This option is *not* available to all functional components and top-level product components, which are commercial.
Disable in Configurator	Select to disable any actions from being performed on the product (standard product, service product, or package product) in configuration sessions.
	This option is *not* available to all functional components and top-level product components, which are commercial.
Component Type	Select a multilevel bundle component type for the offer.
	In order for component type values to be available for selection, you must, as a prerequisite, specify a multilevel structure on the Multilevel Structure Linkage page for the setID that supports multilevel product bundles.
	See and *PeopleSoft CRM 9.1 Product and Item Management PeopleBook*, "Setting Up Product Definitional Elements," Setting Up Multilevel Structure Linkages.
	For example, associate the *COM01* setID with the predefined *MLPB01* structure. Based on this system setup, component type values are:
	Atomic Offer: Select this value for a single product or service. When you select this value, the Group Offer Details group box becomes available for use.
	External Service: Select this value if you want to define a service that is provided by an external carrier.
	Functional Component: Select this value if the offer is a functional product or service.
	Note. Standard products and service products can only be assigned to functional components, or commercial components that can be linked to functional components. Packages can only be assigned to commercial components that cannot be linked to functional components.

Group Offer Details

This section appears if the selected component type is *Atomic Offer.*

Offer Type	Select either *Shared* or *Group* offer type.
	Shared offers consist of a single shared service.
	Group offers consist of a single or multiple shared services.
	If you select either offer type, the Modification Count Type field becomes available for use.
	If you select *Group* offer type, the Bundling Type field becomes available for use.
	Note. This is not a required field.
Bundling Type	Specify how group offer members relate to the offer.
	Available values are:
	Individual Services: Select this value to link all members to a single instance of the shared service that is sold by the group offer.
	Dedicated Services: Select this value to link each member to a separate, dedicated instance of the shared service that is sold by the group offer.
Modification Count Type	Select an Operations Count AAF to calculate the number of operations performed on the offer (for example, adding or removing members).
	Operation count is calculated separately for each instance of the offer based on the specific algorithm associated with the selected Operations Count AAF.
	Clicking the lookup button opens the 'Term selection' screen, which enables you to select an Operation Count AAF for the offer.
	Note. This is not a required field.
	Operations Count value will be not displayed in the order, however its value will be stored in order lines to enable future extension of this feature.

Covering Rule Details

This section appears if the product type of the current definition is *Commitment.*

Covering Rule ID and **Covering Rule Description**	Displays the identifier and textual description of the commitment covering rule that applies to the commitment product. In other words, if the commitment product is added automatically in a configuration session as a result of an execution of a commitment triggering rule, it triggers the execution of this commitment covering rule, which in turn adds products (products that are covered by this rule) to the configuration session.
	Each commitment product must be associated with one commitment covering rule before the product can be referenced in any commitment triggering rule definition.

Order Standalone By

This section appears if the Order Standalone option is enabled in the multilevel component type setup for the component type that is assigned to the product (standard products, service products, and package products).

Service Information

Service Required	This field is hidden for standard products, service products, package products and subscription products.
Service ID	This field is hidden for standard products, service products, package products and subscription products.
Install as Service	Select for the system to create an installed service for the package after the ordering process for the package is completed. If cleared, an installed product is created instead.
	This field appears if the package is set to track as installed product on the Installed Product page of its product definition.
	Note. The Track as Installed Product option is selected by default, if the Installability Default option is enabled in the multilevel component type setup for the component type that is assigned to the product (standard products, service products, and package products).

Billing Options

Use this section to specify billing options for the product. This section appears if the product type is *Standard Product, Service Product,* or *Product Package.*

Billing Account Selectable	Select to identify the corresponding product as billable and it needs to be associated with some type of accounts for billing purposes. When selected, the Billing Account Details group box appears, where you specify the types of billing accounts that can be used to bill the product's charges.
	Clear this field for products that are not billable and therefore don't need to link to any billing accounts in orders. In this case, billing accounts are not available for selection at the order line level at runtime.
Split Billing	Select to enable the split billing functionality for the corresponding product, making it a *split billing product.* When you add products that are split billing-enabled to orders, the system allows you to select one or more billing accounts for them at the order line level to pay for different kinds of charges (for example, recurring, non-recurring), and these billing accounts can belong to customers other than the sold-to customer (the one specified in the order header) of the order.

Billing Account Details

Use this section to specify types of billing accounts that can be selected when ordering this product at runtime. This section appears if the Billing Account Selectable field is selected.

If the product is a split billing product, associate at least two billing account types (serving different purposes) with it and add more as deemed necessary. When you add this product to an order and want to select different accounts to pay for its charges, the number and type of billing accounts that can be selected is based on the selection made in this section.

If the product is not a split billing product, this section contains only one row and does not support adding or removing rows.

Refer to this see reference for more information on the split billing functionality.

See and <u>Chapter 24, "Working with Orders for Multilevel Product Bundles," Orders and Service Management, page 637.</u>

No (number)	Assign a number to a newly added billing account.
Primary	Select to indicate that the corresponding billing account type is the primary one for the product. This column appears if the product is a split billing product (the Split Billing field is selected). At save time, the system checks to make sure that each split billing product must have one primary billing account.
	When a split billing product is added to an order at runtime, the system by default displays its primary billing account type at the order line level for the product on the Line Details page. You can change the customer contact and select a specific billing account as these options are made available by the system.
Purpose ID	Enter an identifier that specifies the purpose of the corresponding billing account. The system passes this information to the billing system when the product is being provisioned. Use the purpose ID to clarify the usage of various accounts that are selected for the product.
	The system sets the default value of this field to *ALL* for products that do not support split billing. The default value comes from the Message Catalog.
Billing Account Type	Select the type of billing account that can be used or created to pay for this product when ordered. Values are *Either,Postpaid Only* and *Prepaid Only*. Some products can only be serviced through a prepaid or a postpaid account.
Required	Select if this billing account is required to show in orders and must be selected when you add the corresponding non-split billing product to an order and capture the billing details for the product at runtime.

Purpose	Enter a textual description as the purpose of the billing account. Depending on how your company implements the split billing functionality, you can assign certain accounts to specific billing purposes. For example, use of postpaid accounts for local call charges, prepaid accounts for international call charges.
	The system sets the default value of this field to *All recurring charges* for products that do not support split billing. The default value comes from the Message Catalog.

See Also

PeopleSoft CRM 9.1 Product and Item Management PeopleBook, "Setting Up Products," Defining Product Information

Updating Obsolete Dates for Multilevel Product Components

Access the Package Usage page (Products CRM, Product Definition, Package Usage).

Package Usage page

Package Usage

This section lists all the multilevel product bundles which the current product is a part of. In this section, you can reset the selling period end date of the current product within the selected multilevel product bundles.

Product Component ID and **Description**	Displays the identifier and the textual description of the immediate parent of the current product in the corresponding multilevel product bundle.
Type Description	Displays the type of the current product, for example, contract, play, offer and so on.
Effective Date and **Obsolete Date**	Displays the start and end dates of a selling period for the current product.
	The obsolete date must be a date later than the effective date.

Obsolete Date   Enter a date to be the new selling period end date of the current product within the selected multilevel product bundles. If you want to retire the current product from multiple product bundles that it associates with, use this field to set its selling period end date.

This field is available for edit after one or more product bundles are selected.

Setting Up Multilevel Product Packages

Access the Package Components page (Products CRM, Package Components, Package Components).

The Package Components component is used to define both standard product packages and multilevel product bundles. Here is a list of behaviors that apply when the component is used in defining multilevel product bundles:

- When a product package is saved, a parent-child relationship is established automatically between the product in the header of the Package Components page and any product that is specified in the Components section. It is no longer necessary to declare the *Child Of* relationship between these two products explicitly in the Product Relationships component.

- Validations are in place to make sure that each selected package component belongs to a sub-level that the component type of its parent supports, hence adhering the multilevel package structure to the predefined multilevel component type setup.

- The minimum and maximum values at the component level specify the minimum and maximum numbers of instances of any given package component that its immediate parent can have. For rules in which a package component is referenced, the system populates its minimum and maximum values (specified in the Product Package component) as the default minimum and maximum quantities in the Group Definition section on the rule definition page.

- The minimum and maximum values at the package level specify the minimum and maximum numbers of instances of components that a package can have.

  For rules in which a package is referenced, the system populates its group minimum and maximum values (specified in the Product Package component) as the default minimum and maximum group quantities in the Group Definition section on the rule definition page.

- The only unit of measure (UOM) that multilevel product bundles support is *EACH*.

- The package hierarchy for multilevel product bundles does not have a limit on the number of levels it can display. It does not have a limit on the number of characters (in product names) it can display. The hierarchy can be scrolled both vertically and horizontally if needed. The product definition, however, has a maximum number of characters it allows in a product description, which is the name used in the package hierarchy (30 spaces).

- Clicking the link of a product takes you to the product definition for that product.

Note. A product package cannot be built with a mix of multilevel and non-multilevel product components. Multilevel product packages contain only multilevel product components, whereas non-multilevel product packages contain only non-multilevel product components.

Minimum and Maximum Components in Packages

Here is an example to show how the minimum and maximum quantities defined in a product package are used in validating package configurations at runtime.

Suppose that a package definition for *package A* is available in the CRM system. It consists of three components (X, Y, and Z) and the minimum and maximum numbers of instances allowed for the product and each component are:

- Minimum and maximum numbers of instances allowed for product X: 0,1

- Minimum and maximum numbers of instances allowed for product Y: 3,5

- Minimum and maximum numbers of instances allowed for product Z: 1,4

- Minimum and maximum numbers of components allowed for package A: 4,8

Here are several sample configurations for *package A* at runtime and their validation results:

Sample Configuration	*Configuration Result*	*Description*
1 of X, 3 of Y, 1 of Z	Valid	• Quantities selected for X, Y and Z are within component quantity limit. • Sum of all component quantities (5) is within the group quantity limit (4-8).
5 of Y, 3 of Z	Valid	• Quantities selected for Y and Z are within component quantity limit. • It is okay not to select X in the package because X is an optional component (minimum quantity is 0). • Sum of all component quantities (8) is within the group quantity limit (4-8).
10 of X	Invalid	• Quantity selected for X (10) exceeds the component quantity limit (0-1). • Configuration should include Y and Z, which are required components (minimum quantities are 3 and 1 respectively). • Sum of all component quantities (10) exceeds the group quantity limit (4-8).
1 of Y, 1 of Z	Invalid	Quantity selected for Y (1) falls below the component quantity limit (3-5).
1 of X, 4 of Y, 4 of Z	Invalid	Sum of all component quantities (9) exceeds the group quantity limit (4-8).

See Also

PeopleSoft CRM 9.1 Product and Item Management PeopleBook, "Setting Up Products," Defining Product Packages

Setting Up Migration Actions

To define migration actions, use the Define Migration Action component.

Use the RB_MIG_ACT_SRCH_CP and RB_MIG_ACT_DFN_CMP component interface to load data into the tables for this component.

This section discusses how to:

• Define migration actions.

• Establish source and target product migration mappings.

• View target product hierarchy.

• View related eligibility rules.

Refer to the see reference for an overview of migration actions.

See and Chapter 24, "Working with Orders for Multilevel Product Bundles," Understanding Migration Actions, page 609.

Pages Used to Set Up Migration Actions

Page Name	Definition Name	Navigation	Usage
Migration Action	RB_MIG_ACT_DFN_PG	Set Up CRM, Product Related, Advanced Configurator, Define Migration Action, Migration Action	Define basic information of migration actions.
Migration Mapping	RB_MIG_ACT_MAP_PG	Set Up CRM, Product Related, Advanced Configurator, Define Migration Action, Migration Mapping	Define the mapping of source and target products for migrations.
View Target Hierarchy	RB_MIG_ACT_MAP_SEC	Click the View Target Hierarchy link on the Migration Mapping page.	View the hierarchy of the selected target product as the outcome of the migration action.

Page Name	Definition Name	Navigation	Usage
Related Objects	RB_MIG_REL_OBJ_PG	Set Up CRM, Product Related, Advanced Configurator, Define Migration Action, Related Objects	View any eligibility rules that reference the currently opened migration action in their rule definitions.

Defining Migration Actions

Access the Migration Action page (Set Up CRM, Product Related, Advanced Configurator, Define Migration Action, Migration Action).

Migration Action page

Migration Action ID   Displays the unique identifier of the migration action that the system assigns automatically as the action is saved. You can override the value when at the time you create the migration action.

By default, migration action IDs begin with the prefix *MGA*.

Action Definition

Status

Select *Active* or *Inactive* for the migration action. Only *active* migration actions can be exported to Advanced Configurator.

If you want to export *inactive* migration actions as well, select the Include Obsolete Definitions field on the Export Product Definitions page.

Start Date and **End Date**

Enter the date range within which the migration action is considered valid and usable. The system uses the start and end dates as well as the status to determine the availability of the migration action at runtime. Only active, non-expired and public migration actions appear as selectable options in configuration sessions.

Public Migration

Select to make the migration of referenced source and target products available for selection in configuration sessions. This option is enabled by default.

As for actions that are *not* marked as public (that is, private migration actions), they:

- Are not exported to Advanced Configurator and are not viewable in configuration sessions.

- Can be used by other migration actions as part of their migration scripts.

- Are unavailable for reference in eligibility rule definitions.

Scope

Select the scope that the migration action can apply. Values are:

Same Customer Only (default value): You can only perform the migration action only between contracts that belong to the same customer.

Different Customers Only: You can only perform the migration action only between contracts that belong to different customers.

All Customers: You can perform the migration action between contracts of any customer.

If the migration action is associated with an eligibility rule and the rule definition has the Product Not Eligible setting selected for the same product that is currently referenced on this page as the source or target product, the rule setting supersedes this scope setting and when the rule applies at runtime, the product is not available for selection in configuration sessions.

Source Information

Product ID	Select the product component to be transformed (or reparented) by the migration action. The product can be a commercial component of any multilevel component type that is defined in the system. When a source product is selected, the system limits the selection of the target product to those that belong to the same multilevel component type as the source product. For example, if you choose a *Play* type component as the source product, you can only select another *Play* type component as the target product. The same is true to the source product if you select the target product first.
	The migration action is a reparenting one if both source and target products refer to the same product. In this case, only the Added Products section of the Migration Mapping page is available for edit.
Context	Select contracts that the source product must be a part of in order for the migration action to become available in configuration sessions. Values are:
	All Contracts: Select to let all contracts as the Source Context for the particular migration action.
	Selected Contracts (default value): Select if you only want certain contracts in the system to be considered. The Product ID lookup restricts the selection of products to those belong to component types that are marked as *Top Level* on the Multilevel Component Types page. *Contract* is the delivered top level component type.
	The context defines the boundary within which the migration action becomes available. If the context is set to *All Contracts,* the migration action is available for all contracts in the system, otherwise, the migration action is only available for the contracts that are selected in the subsequent Contracts section.
	Note. This section is not applicable if the component type is *Contract.*

Target Information

The usage of the Product ID field and the Context group box in this section is identical to those in the Source Information section except that they are specific to the target product of the migration action.

Default in Configurator	Select to allow default product selections to be made in the target contract after the execution of the migration action in configuration sessions. This setting does not impact the execution of any *Brings on Creation,Brings and Removes* or *Relies-On automation* rules—they are executed the same way as any manual product selections.

Establishing Source and Target Product Migration Mappings

Access the Migration Mapping page (Set Up CRM, Product Related, Advanced Configurator, Define Migration Action, Migration Mapping).

Migration Action	Migration Mapping	Related Objects

SetID COM01   Description Communications

Migration Action ID YCA1

Source Hierarchy View

Product ID TELCO40001   Migration Action [   ] 🔍

Description My Mobile Contract   Description

Mapping   Customize | Find | ⬚ | ⬚   First ◄ 1-20 of 20 ► Last

Product ID	Description	*Option	Migration Action	Target Product ID	Description
TELPL40001	My Mobile Play	Transform ▾	[ ] 🔍		
TELOF40001	Initial Handset Proposition	Transform ▾	[ ] 🔍		
TELOF40005	Handset Equipments	Transform ▾	[ ] 🔍		
TELAO40001	MOTORAZR V3 Series Phone	Transform ▾		TELAO9000 🔍	Phoenix 200
TELAO40002	iPhone 2G	Transform ▾		TELAO9000 🔍	Phoenix Base
TELAO40003	iPhone 3G	Transform ▾		TELAO9000 🔍	Phoenix Base
TELOF40006	SIM Card Equipments	Transform ▾	[ ] 🔍		
TELAO40004	SIM Card 2G	Transform ▾		TELAO9000 🔍	Sim 2G
TELAO40005	SIM Card3G	Transform ▾		TELAO9000 🔍	Sim 3G

Migration Mapping page (1 of 2)

Migration Mapping page (2 of 2)

Source Hierarchy View

Product ID	Displays the unique identifier of the selected source product.
Migration Action	Select a migration action defined in the system if you want to reuse the mapping of an existing migration action for the same pair of source and target products instead of entering the information manually. When selected, the system populates the Mapping section with the option settings and target products (migration script) that pertain to the selected migration action.
	If you select a private migration action to be reused in a public migration action, the system ensures that the reused product mapping is copied properly for the export of the public migration action.

Mapping

This section displays the commercial hierarchy of the source product. You can either select a migration action and have its product mapping populated automatically, or choose a target product for each component in the hierarchy to map to manually. This mapping is subject to integrity check validations that are put in place in the system.

Note. This section does not appear for reparenting actions where the source and target components are identical and when the migration mapping is defined for two different atomic offer products.

Product ID	Displays the identifier of a component in the source product hierarchy to be migrated.
Option	Select the action to be performed in the migration process for the corresponding component. Values are:

Remove: the component (for atomic offers only), as well as its descendants, are no longer available in the target product hierarchy after the migration. All its children inherit this option setting automatically. When selected, the Migration Action and Target Product ID fields are blank and unavailable for edit. In the case where the component must be present in the target hierarchy (for example, due to cardinality restrictions in a rule), the system removes the source component and creates a new instance of that component in the target hierarchy so that the configuration can remain valid.

Re-parent: the component is associated to a new parent product in the target product hierarchy with all its descendants after the migration. The system sets the values of the target product ID and description in these reparenting products to the same values as their corresponding source products and they unavailable for edit.

Transform: if the component is an atomic offer, select another atomic offer in the target product hierarchy to migrate to. If the component is not an atomic offer, select an existing migration action and reuse its mapping.

Migration Action	Select a migration action according to which the corresponding component and its descendants are transformed. The system limits the selection to the ones that have the corresponding source product component as the source product. The option setting and target component of its descendants are populated based on the selected migration action. You can override the option setting manually, and update the target component when the field becomes available for edit.

Public migration actions must meet these criteria in order to be referenced in this field:

- The source product of the migration action is the same as the corresponding source product component in the Mapping section.

- The status is set to active.

- Context settings are identical.

Target Product ID   Select a product that the corresponding source product is transformed or reparented as the end of the migration.

This field is available for edit for atomic offers only.

For all other component types, this field displays the target product ID in read-only mode, specifically, it shows:

- The same product ID as the source component if the option setting is *Reparenting*.

- A blank value if the option setting is *Remove*.

In the case a Product Id is selected more than one time in the grid, the meaning of such action will be adding another Instance of the Product rather than merging different Atomic Offers together.

View Target Hierarchy   See and <u>Chapter 23, "Setting Up Multilevel Product Bundles," Viewing Target Product Hierarchy, page 539.</u>

Added Products

This section displays products to be added to the target contract after the completion of the migration.

Add Product   Click to add non-top-level commercial components (for example, atomic offers, offers and plays) that are added to the target contract as a result of the migration. Each chosen product must be part of the target Hierarchy.

Note that if the maximum cardinality of an added product is exceeded in a configuration session, the configuration becomes invalid and you must address the issue prior to validating the configuration again.

Viewing Target Product Hierarchy

Access the View Target Hierarchy page (click the View Target Hierarchy link on the Migration Mapping page).

View Target Hierarchy page

Click to access the View Target Hierarchy page and view the commercial hierarchy of the target product. For target products that are of type *Atomic Offer,* the system displays their corresponding source products on the page and indicates the actual migration actions that are performed as comments. Available comments are:

- *Added:* Indicates that the corresponding target product is not part of the source hierarchy but it is present in the target hierarchy as it is added in the Added Products section of the Migration Mapping page.

- *Not Added:* Indicates that the corresponding target product is not mapped to a source object; it is added by the system as a result of rule execution, for example, brings on creation.

- *Reparent*: Indicates that the corresponding target product and its descendant are reparented from the source product hierarchy.

Viewing Related Eligibility Rules

Access the Related Objects page (Set Up CRM, Product Related, Advanced Configurator, Define Migration Action, Related Objects).

Migration Action	Migration Mapping	Related Objects

SetID COM01	**Description** Communications	
Migration Action ID YCA1		

Related Eligibility Rules

No Rule Eligibility defined

Related Objects page

Related Eligibility Rules

This section displays rules that can impact the migration action selection depending on the selected user or customer criteria in the rule definition. The selection of public migration actions can be restricted through eligibility rules. This page displays information as read-only and does not apply to private migration actions.

Rule ID   Click the rule link to access the corresponding eligibility rule definition.

Setting Up Configuration Rules for Multilevel Product Bundles

Use the RB_RULE_SRCH, RB_RULE_BRN, RB_RL_COM_INC_ATTR, RB_RULE_COMM_ATTR, RB_RULE_ER, RB_RULE_INCO_PRE, RB_RULE_CRF, RB_RULE_FRO_SS, RB_RULE_COMM_CVR, RB_RULE_COMM_TRG, RB_RULE_FUNC_ATTR RB_RULE_FRF component interfaces to load data into the tables for these components.

This section discusses how to:

- Set up commercial eligibility rules.

- Set up brings on creation rules.

- Set up brings and removes rules.

- Set up commercial incompatibility rules.

- Define left hand side and right hand side groups.

- Set up commercial incompatibility rules for attributes.

- Set up commercial restriction rules for attributes.

- Set up commercial prerequisite rules.

- Set up commercial relies on rules.

- Set up commercial relies from rules.

- Review related rules.

- Set up functional incompatibility rules.

- Set up functional incompatibility rules for attributes.

- Set up functional relies on rules.

- Set up functional relies from rules.

- Set up commitment triggering rules.

- Set up commitment covering rules.

Note. Configuration rules are setID-based. The system delivers a background process that synchronizes rule updates that are made in the CRM system to PeopleSoft Advanced Configurator. Rule changes do not take effective until they are exported successfully.

Common Elements Used in this Section

Rule Status or **Status**	Displays the status of the rule instance. Values are *Active* and *Inactive.* Inactive rules do not apply in configuration sessions.
Severity	Enter rule severity. Values are *Warning* and *Error.*
	If the rule is being violated during a configuration validation, the configuration status is then set based on the selected severity of the rule. The status is set to:
	Invalid if the selected rule severity is *Error.* An order cannot be processed if its product configuration is being invalidated.
	Valid with Warning if the selected rule severity is *Warning.* An order can still be processed if its product configuration is in this status.
	Note. This field appears on definition pages for rules that are designed to check configuration sessions for possible violations, such as product incompatibility or missing prerequisites, and provide the appropriate configuration status as a result.
Start Date	Displays the date from which the rule becomes active and are subject to evaluation during configuration sessions.
End Date	Displays the date to which the rule remains active and are subject to evaluation during configuration sessions.
Description	Displays the short business description of the rule.
Exception Message or **Exception Message Text**	Enter the description for the rule to be displayed to users in case the rule is being violated in a configuration session.
	Note. This field appears on definition pages for rules that are designed to check configuration sessions for possible violations, such as product incompatibility or missing prerequisites, and provide the appropriate configuration status as a result.

Reference Scope   Enter the scope to which the evaluation of this rule applies. The system uses this information to determine which products in a configuration session are to be considered when the conditions of this rule are being evaluated. Values are:

Contract (default value): All products selected in the contract are taken into account when rule conditions are being evaluated.

Play: Rule conditions are evaluated for each individual play selected in the contract. Conditions are evaluated against products within the same play. For example, if the rule condition requires the selection of products A and B, the condition is met only if both products A and B are selected in the same play.

Direct Parent: Rule conditions are evaluated for each individual commercial offer selected in the contract. Conditions are evaluated against products belonging to the same immediate parent. For example, if the rule condition requires the selection of products A and B, the condition is met only if both products A and B have the same immediate parent.

Instance: Rule conditions are evaluated separately for each product instance selected in the contract. For example, product A is set to trigger the creation of commitment product B in a commitment triggering rule definition, and the reference scope is *Instance.* When this rule is executed at runtime in a configuration session, what happens is an instance of the rule is executed for each instance of product A found within the configuration, which results in the creation of the same number of commitment product B for all product A instances.

Pages Used to Set Up Configuration Rules for Multilevel Product Bundles

Page Name	Definition Name	Navigation	Usage
Eligibility Rule Definition	RB_RULE_INCO_PRE	Set Up CRM, Product Related, Advanced Configurator, Multilevel Component Rules Select the *Commercial Eligibility* rule type on the Multilevel Component Rules search page.	Create new or view existing commercial eligibility rules.
Brings On Creation Rule Definition	RB_RULE_BRN	Set Up CRM, Product Related, Advanced Configurator, Multilevel Component Rules Select the *Brings On Creation* rule type on the Multilevel Component Rules search page.	Create new or view existing brings on creation rules.

Page Name	Definition Name	Navigation	Usage
Brings and Removes Rule Definition	RB_RULE_BRN	Set Up CRM, Product Related, Advanced Configurator, Multilevel Component Rules Select the *Brings and Removes* rule type on the Multilevel Component Rules search page.	Create new or view existing brings and removes rules.
Commercial Incompatibility Rule Definition	RB_RULE_INCO_PRE	Set Up CRM, Product Related, Advanced Configurator, Multilevel Component Rules Select the *Commercial Incompatibility* rule type on the Multilevel Component Rules search page.	Create new or view existing commercial incompatibility rules.
Commercial Prerequisite Rule Definition	RB_RULE_INCO_PRE	Set Up CRM, Product Related, Advanced Configurator, Multilevel Component Rules Select the *Commercial Prerequisite* rule type on the Multilevel Component Rules search page.	Create new or view existing commercial prerequisite rules.
Commercial Relies From Rule Definition	RB_RULE_CRF	Set Up CRM, Product Related, Advanced Configurator, Multilevel Component Rules Select the *Commercial Relies From* rule type on the Multilevel Component Rules search page.	Create new or view existing commercial relies from rules.
Commercial Relies On Rule Definition	RB_RULE_FRO_SS	Set Up CRM, Product Related, Advanced Configurator, Multilevel Component Rules Select the *Commercial Relies On* rule type on the Multilevel Component Rules search page.	Create new or view existing commercial relies on rules for group offers.

Page Name	*Definition Name*	*Navigation*	*Usage*
Related Rules	RB_RL_REL_RULES	Set Up CRM, Product Related, Advanced Configurator, Multilevel Component Rules Select the *Commercial Relies On, Commercial Relies From, Functional Relies On, or Functional Relies From* rule type on the Multilevel Component Rules search page and click the Search button. Select the Related Rules page.	View summary information for rules associated with the primary multilevel component rule.
Functional Incompatibility Rule Definition	RB_RULE_INCO_PRE	Set Up CRM, Product Related, Advanced Configurator, Multilevel Component Rules Select the *Functional Incompatibility* rule type on the Multilevel Component Rules search page.	Create new or view existing functional incompatibility rules.
Functional Relies from Rule Definition	RB_RULE_FRF	Set Up CRM, Product Related, Advanced Configurator, Multilevel Component Rules Select the *Functional Relies From* rule type on the Multilevel Component Rules search page.	Create new or view existing functional relies from rules.
Functional Relies On Rule Definition	RB_RULE_FRO_SS	Set Up CRM, Product Related, Advanced Configurator, Multilevel Component Rules Select the *Functional Relies On* rule type on the Multilevel Component Rules search page.	Create new or view existing functional relies on rules.
Functional Attributes Incompatibility	RB_RULE_FUNC_ATTR	Set Up CRM, Product Related, Advanced Configurator, Multilevel Component Rules Select the *Functional Attrs. Incompatible* rule type on the Multilevel Component Rules search page.	Create new or view existing functional incompatibility rules for attribute values.

Page Name	*Definition Name*	*Navigation*	*Usage*
Commercial Restrictions on Attributes Rule Definition	RB_RULE_COMM_ATTR	Set Up CRM, Product Related, Advanced Configurator, Multilevel Component Rules Select the *Commercial Attrs. Restriction* rule type on the Multilevel Component Rules search page.	Create new or view existing commercial restriction rules for attribute values.
Commercial Incompatibility between Attribute Values Rule Definition	RB_RL_COM_INC_ATTR	Set Up CRM, Product Related, Advanced Configurator, Multilevel Component Rules Select the *Commercial Attrs. Incompatible* rule type on the Multilevel Component Rules search page.	Create new or view existing commercial incompatibility rules for attribute values.
Commitment Triggering Rule Definition	RB_RULE_COMM_TRG	Set Up CRM, Product Related, Advanced Configurator, Multilevel Component Rules Select the *Commitment Triggering* rule type on the Multilevel Component Rules search page.	Create new or view existing commitment triggering rules.
Commitment Covering Rule Definition	RB_RULE_COMM_CVR	Set Up CRM, Product Related, Advanced Configurator, Multilevel Component Rules Select the *Commitment Covering* rule type on the Multilevel Component Rules search page.	Create new or view existing commitment covering rules.
Add Group	RB_RULE_GRP	Click the Add Group link or any group link on the Commercial Incompatibility Rule Definition, Commercial Prerequisite Rule Definition, Functional Incompatibility Rule Definition page, Functional Relies From Rule Definition page, or Functional Relies On Rule Definition page.	Define left hand side and right hand side groups.

Setting Up Commercial Eligibility Rules

Access the Eligibility Rule Definition page (Set Up CRM, Product Related, Advanced Configurator, Multilevel Component Rules. Select the *Commercial Eligibility* rule type on the Multilevel Component Rules search page).

Eligibility Rule Definition page (1 of 3)

Eligibility Rule Definition page (2 of 3)

Eligibility Rule Definition page (3 of 3)

Rule Details

These fields are required if the *Product Not Eligible* validation restriction is defined for the rule.

See and Chapter 23, "Setting Up Multilevel Product Bundles," Common Elements Used in this Section, page 542.

Rule Conditions

Source and **Sub Source**   Enter the sales channel and sub channels to be used as criteria in the rule conditions.

Sources and sub sources are setID-based and they are established using the Order Capture Setup workbench.

Add Term	Select user-specific and customer-specific criteria in the form of AAF terms as rule conditions on the Term Selection page.
	User criteria are specific to the user who initiated the configuration session; the AAF Term infrastructure uses the ID of that user to resolve actual term values for the order for rule evaluation. Similarly, terms for customer criteria are resolved based on the customer selected for the order.
	The system delivers these terms that can be used to define eligibility rule conditions:
	Customer since more than 1 year: Customer term. Expected values are *Y* and *N.* The value is calculated based on the Customer Since field value.
	Customer Assessment: Customer term. Expected values are *Bronze,Silver, Gold,* and *Platinum.*
	Customer Segment: Customer term. Expected values are *Low,Medium, High,* and *Superior.*
	Manager Level: User term. Expected values are *Non-Manager* and *First Line Manager,* which are available values for the Manager Level field on the Worker - Job: Job Details page.

Note. To create new terms for user criteria, the only bind variable necessary to resolve term values is the "user ID"; terms should always return string value as the resolution result. As for customer criteria, the bind variables necessary to resolve term values are the "business object ID" and the "role type ID"; terms should also always return string value as the resolution result.

Level of Competency in 'Communication System': User term.

Product Details

Use this section to list the commercial products and specific rule actions that are applied to these products if conditions of the corresponding rule are met.

Product Not Eligible	Select to not allow the selected product to be included in configuration sessions.
	Product Not Eligible is a validation restriction and is evaluated during configuration validation. Validation warning or error is displayed if a non-eligible product is added during configuration sessions manually or automatically.
Hide Product	Select to hide the selected product from configuration sessions.
Product No Add	Select to disable the *Add* action for the selected product in configuration sessions so users cannot add the product manually to orders.
	This option doesn't restrict the selected product from being added automatically by the system through other rule operations, such as *bring on creation,* and *brings and removes* rules.

Product No Remove	Select to disable the *Remove* action for the selected product in configuration sessions so users cannot delete the product manually from service management orders.
	This option, doesn't restrict the selected product from being removed automatically by the system through other rule operations, such as the *brings and removes* rule.

Relies On Link Action Restrict

Use this section to place restrictions on the addition or removal of relies on links in configuration sessions between the identified source and target products. This setup disables the manual operations of adding and removing relies on links sourcing from the related functional component of the specified source product leading to the specified target products. Note that the relies on link action restriction that is defined for a commercial product also has an impact on actions for the links that are defined for its related functional product, as functional products are added, removed and configured in configuration sessions through commercial offers that sells them. The restriction defined for the commercial product also restricts actions on links that are defined for its related functional product.

Source Product ID	Enter the product component as the source product of relies on links on which you want to impose restrictions.
Restrict Add	Select to disable to manual creation of relies on links between the specified source product and target products.
	Note. Relies on rules do not add links between products if commercial eligibility rules prohibits such operation.
Restrict Remove	Select to disable to manual removal of relies on links between the specified source product and target products.
To	Select how the corresponding relies on link restriction (Restrict Add or Restrict Remove) should apply. Values are:
	All Targets: Select to disallow the creation or removal of any relies on links between the specified source product and any other products.
	All Targets with exception: Select to disallow the creation or removal of any relies on links between the specified source product and any other products except for the ones specified in the Exception Target List section.
	Selected Targets: Select to disallow the creation or removal of any relies on links between the specified source product and any other products that are specified in the Restricted Target List section.
Restricted Target List or **Exception Target List**	Enter the product components as the target products of relies on links on which you want to impose restrictions. The name of this section changes based on the value selected on the To field. For example, if you select the *All Targets with exception* value, the section name becomes Exception Target List and you list the target products for relies on links that would not be impacted by this restriction.

Restricted Migration Actions

Use this section to list the migration actions that are prohibited from being available in configuration sessions, if conditions of the corresponding rule are met. Migration actions are restricted based on user or customer criteria that are specified in the Rule Condition section. Users or customers do not see an option to perform any restricted migration unless they meet the criteria defined in the eligibility rule.

Migration Action ID	Select a migration action to be unavailable for selection in configuration sessions if the associated eligibility rule is evaluated to true at runtime based on the specified criteria in this rule definition. Only migration actions that are marked as *public* are available for selection.
(Define Migration Actions)	Click to view the definition of the corresponding migration action.

Attribute Actions

Use this section to select commercial products, their attributes and specific actions that are applied to each of their attributes, if conditions of the corresponding rule are met. The system uses the selected product ID and market to refine the list of attributes that are available for selection.

Hide Attribute	Select to hide the attributes of the selected product from configuration sessions.
Disable Attribute	Select to take away user's ability to add and update attributes of the selected product in configuration sessions.

Commitment Product Actions

Use this section to specify actions that are allowed on commitment products in configuration sessions.

Product ID	Enter the identifier of a commitment product to which restrictions apply. Only commitment products are available for selection.
Cancel penalty	Select to allow the cancellation of penalties that incur as a result of commitment violation.
Deny Renew/Extend	Select to disallow selected commitment product from being renewed or extended, which can potentially mean stopping the execution of a valid commitment triggering rule.
Shorten Duration	Select to allow a manual override (in free text) of the predefined duration for the selected commitment product.
Add/Remove Product	Select to allow the addition or removal of covered products that are predefined for the selected commitment product. You can select a different set of covered products as permitted by the corresponding commitment covering rule.

Commitment Duration Options Exclusion

Use this section to manipulate available commitment duration options at runtime by excluding them based on eligibility criteria.

For example, a commitment covering rule for commitment product *CMT2* exists in the system and the rule definition specifies 3 possible durations, which are 12, 18, 24 months. A business requirement comes in and recommends that customers using the web channel to place orders should not be allowed to commit for more than 12 months as research shows that many of these commitments turn out to be problematic. To meet this business requirement, you can create an eligibility rule that uses *source equals self service* as the rule condition, references commitment product *CMT2* in this section and select to exclude 18 and 24 months from the list of available duration options. When this eligibility rule is executed at runtime in a configuration session where CMT2 is added, 18 and 24 months are not available as duration options for the self service user.

Product ID	Select the identifier of a commitment product to which exclusion of duration options applies. Only commitment products are available for selection.
Duration Option	Displays the list of duration options that pertain to the selected commitment product.
Exclude	Select to remove the corresponding duration option from being available to the selected commitment product as a selectable option.

See Also

Chapter 23, "Setting Up Multilevel Product Bundles," Commercial Eligibility Rules, page 479

Setting Up Brings On Creation Rules

Access the Brings On Creation Rule Definition page (Set Up CRM, Product Related, Advanced Configurator, Multilevel Component Rules. Select the *Brings On Creation* rule type on the Multilevel Component Rules search page).

Brings On Creation Rule Definition page

The Severity and Exception Message Text fields are not applicable to the brings on creation rule type because it is not used for validating configuration sessions.

See and Chapter 23, "Setting Up Multilevel Product Bundles," Common Elements Used in this Section, page 542.

Left Hand Side Product

Use this section to select the source product that, upon selection in configuration sessions, causes the addition of products that are specified in the Right Hand Side Products section.

Right Hand Side Products

Use this section to specify the target products to be added to configuration sessions automatically after the source product has been selected (manually or automatically).

Product ID	Select a target product to be added to the configuration session together with the source target.
	Only non-top-level multilevel product components (commercial components) are available for selection.

Scope	Enter the scope of the right hand side product. Values are *Contract,Play,* and *Direct Parent.* Both the left hand side and right hand side products have to be in the same scope in order for the rule to be applied.
	For example, if the scope selected for the right hand side product is *Play,* the system adds the right hand side product only if it can find the product in the *same* play as the left hand side product.
Single Instance	Select for the system to check if there is already a new product instance being added to the configuration by another rule execution. A new product instance is automatically added only if there is no new instance of that product being added for the specified scope.

Note. *Brings on creation* and *brings and removes* rules do not allow automatic addition of another products in different contracts.

See Also

Setting Up Brings and Removes Rules

Access the Brings and Removes Rule Definition page (Set Up CRM, Product Related, Advanced Configurator, Multilevel Component Rules. Select the *Brings and Removes* rule type on the Multilevel Component Rules search page).

Brings and Removes Rule Definition page

The page that is used for setting up *brings and removes* rules is the pretty much the same as the one for *Brings on creation* rules, except that the page title is different and the Single Instance field is not applicable to *brings and removes* rules.

The Severity and Exception Message Text fields are not applicable to the brings and removes rule type because it is not used for validating configuration sessions.

See and Chapter 23, "Setting Up Multilevel Product Bundles," Setting Up Brings On Creation Rules, page 553.

See Also

Chapter 23, "Setting Up Multilevel Product Bundles," Brings and Removes Rules, page 485

Setting Up Commercial Incompatibility Rules

Access the Commercial Incompatibility Rule Definition page (Set Up CRM, Product Related, Advanced Configurator, Multilevel Component Rules. Select the *Commercial Incompatibility* rule type on the Multilevel Component Rules search page).

Commercial Incompatibility Rule Definition

Save | Search | Add Rule | Next | Personalize

SetID COM01   Description Communications
Rule ID BFT10005

Rule Details

*Status Active   *Start Date 11/24/2008

*Severity Error   *End Date 12/31/2099

*Description 60 SMS / month incompatible with 40 SMS / month

*Exception Message 60 SMS / month incompatible with 40 SMS / month

Rule Reference Scope

*Reference Scope Play

Rule Left Hand Side Groups

Customize | Find | | First   1 of 1   Last

Group ID	Group Name	
L1	60 SMS / month	

Add Group

Commercial Incompatibility Rule Definition page (1 of 2)

Rule Right Hand Side Groups

Customize | Find | | First   1 of 1   Last

Group ID	Group Name	
R1	40 SMS / month	

Add Group

Rule Definition

Use groups defined above to create rule sentences. 'AND', 'OR' operators and '(', ')' are permitted.

*Left Hand Side sentence L1

*Right Hand Side sentence R1

Commercial Incompatibility Rule Definition page (2 of 2)

See and Chapter 23, "Setting Up Multilevel Product Bundles," Common Elements Used in this Section, page 542.

Rule Reference Scope

Reference Scope	Enter the scope to which the evaluation of this rule applies. The system uses this information to determine which products in a configuration session are to be considered when the conditions of this rule are being evaluated. Values are:

Contract (default value): All products selected in the contract are taken into account when rule conditions are being evaluated.

Play: Rule conditions are evaluated for each individual play selected in the contract. Conditions are evaluated against products within the same play. For example, if the rule condition requires the selection of products A and B, the condition is met only if both products A and B are selected in the same play.

Direct Parent: Rule conditions are evaluated for each individual commercial offer selected in the contract. Conditions are evaluated against products belonging to the same immediate parent. For example, if the rule condition requires the selection of products A and B, the condition is met only if both products A and B have the same immediate parent.

Left Hand Side Groups

Use this section to define the first set of product selection condition for the rule, which consists of one or more groups of products—components that are used to build the left hand side sentence.

For incompatibility rules, products specified in left hand side groups should be incompatible with products in the right hand side groups.

For prerequisite rules, products specified in right hand side groups should be prerequisites for the products in the right hand side groups.

Add Group	Click to access the group definition page to create left hand side groups for the corresponding rule.

See and <u>Chapter 23, "Setting Up Multilevel Product Bundles," Defining Left Hand Side and Right Hand Side Groups, page 559.</u>

Right Hand Side Groups

Use this section to define the final set of product selection condition for the rule, which consists of one or more groups of products—components that are used to build the right hand side sentence.

Add Group	Click to access the group definition page to create right hand side groups for the corresponding rule.

See and <u>Chapter 23, "Setting Up Multilevel Product Bundles," Defining Left Hand Side and Right Hand Side Groups, page 559.</u>

Rule Definition

Left Hand Side sentence	Enter the first set of condition for the rule.

The condition should be written in a logical sentence using left hand side group IDs that are created and supported operators *(AND* and *OR)*.

Here is an example of a left hand side sentence: *L1 AND L2,* which means that if a product configuration satisfies the product selection conditions set in both L1 and L2, additional evaluation of the configuration will be performed based on the right hand side sentence to validate whether the configuration is indeed in violation of the rule. If the condition specified in the left hand side sentence is not satisfied, the system terminates the evaluation for this configuration.

Right Hand Side sentence	Enter the final set of condition for the rule, which is used to further evaluate product configurations for violation. It should be written in the same format as the left hand side sentence.

A product configuration will be evaluated the second time against the right hand side sentence, if it satisfies the condition of the left hand side sentence. If the condition specified in the right hand side sentence is:

- Satisfied: the configuration is considered in violation of the rule if it is an incompatibility rule, and the configuration status is then set to *Invalid* or *Valid with warnings* based on the severity that is set for the rule.

  The system terminates the evaluation for this configuration if it is a prerequisite rule.

- Not satisfied: the configuration is considered in violation of the rule if it is a prerequisite rule.

  The system terminates the evaluation for this configuration if it is an incompatibility rule.

See Also

Defining Left Hand Side and Right Hand Side Groups

Access the Add Group page (click the Add Group link or any group link on the Commercial Incompatibility Rule Definition, Commercial Prerequisite Rule Definition, Functional Incompatibility Rule Definition page, Functional Relies From Rule Definition page, or Functional Relies On Rule Definition page).

Add Group page

Note. The same page screens are used for creating left hand side and right hand side groups that are used in various configuration rules. The page title changes based on the on the rule that is currently being viewed.

Rule Details

Group ID   Displays a unique, auto-generated ID for the group you just created. Left hand side group IDs use *L* as the prefix (L1, L2 and so on); *R* is used for right hand side group IDs.

Group Type   Displays the type of product group, which is preset based on the section from which the group is added. Values are *Left Hand Side* and *Right Hand Side*.

Group Name   Enter a descriptive name for the group.

Minimum Group Quantity and **Maximum Group Quantity**	Enter the minimum and maximum quantities of products (specified in the group) allowed in a configuration session for the group-level condition to be satisfied.
	In a runtime configuration session, when the conditions (on minimum and maximum quantities) that are set for all products within the groups are satisfied, the next step is to evaluate the configuration to see if it meets the group-level condition, which is set by defining the range of total quantities of products belonging to this group that the configuration must have to pass the group-level evaluation. If the total quantities of products in the configuration session falls below the minimum group quantity or exceeds the maximum group quantity, the group-level condition is not satisfied.
	The numbers must fall into the 0-999 range. The value of the minimum group quantity must be smaller or equal to the value of the maximum group quantity. Additionally, the minimum group quantity must not exceed the total of minimum quantities that are specified for all products within the group. The same holds true for maximum group quantity.
Product ID	Enter a product to be included in the group.
	Products that are available for selection are non-top-level multilevel product components.
Status or **Product Status**	Select the status that the corresponding product must be in to be taken into account when the rule is being evaluated. Values are:
	Active
	New
	Removed (this value does not apply to the Product Status field)
	New/Active
	Note. For the Functional Relies On Rule Definition page, the label of this field becomes Product Status.
Minimum Quantity and **Maximum Quantity**	Enter the minimum and maximum quantities allowed for the corresponding product in a configuration session for the product-level condition to be satisfied.
	For example, if the minimum and maximum quantities specified for product A in group X are *1* and *3* respectively. In a configuration session where product A is selected, the evaluation of the rule terminates if the selected quantity for product A does not fall into the 1-3 range because the product-level condition set of product A is not satisfied. In other words, the configuration session is not subject to violation of this rule.
	The value of the minimum quantity must not be greater than the value of the maximum quantity.

Scope	Enter the scope in which the corresponding product is expected to be evaluated.
	Note. This field is specific to right hand side group definitions.
	The system populates available values based on the reference scope (or covering scope in the case of commitment covering rules) that is selected on the rule definition page. If the selected rule reference scope is:
	Direct Parent: Available scope values are *Direct Parent,Play,* and *Contract.*
	Play: Available scope values are *Play* and *Contract.*
	Contract: Available scope value is *Contract,Other Customer,* or *Same Customer.*
	Same Customer: Select this value if you want the product to be subject to evaluation only when it belongs to a different contract by the same customer (offer holder).
	Note. This option is specific to functional and commercial relies on rule definitions.
	Other Customer: Select this value if you want the product to be subject to evaluation only when it belongs to a different contract by different customers.
	Note. This option is specific to functional and commercial relies on rule definitions.
	External Service: Select this value if you want the product to be subject to evaluation only when it belongs to a customer using a third-party communication service provider.
	Instance: Available scope values are *Instance,Direct Parent,Play* and *Contract.* The *Instance* product scope is specific to commitment covering rules. If this scope is selected for a product within a group, the minimum and maximum quantities of the product must be set to *1*.
Add Product	Click the button to add another product to the group.

Setting Up Commercial Incompatibility Rules for Attributes

Access the Commercial Incompatibility between Attribute Values Rule Definition page (Set Up CRM, Product Related, Advanced Configurator, Multilevel Component Rules. Select the *Commercial Attrs. Incompatible* rule type on the Multilevel Component Rules search page).

Commercial Incompatibility between Attribute Values Rule Definition page (1 of 2)

Commercial Incompatibility between Attribute Values Rule Definition page (2 of 2)

Refer to the Setting Up Functional Incompatibility Rules For Attributes section for descriptions of fields that are shared in these two rule types.

See and Chapter 23, "Setting Up Multilevel Product Bundles," Setting Up Functional Incompatibility Rules For Attributes, page 573.

Commercial Product ID	Select a commercial product for the rule. This product must be in the same branch as the functional component specified in the Functional Product ID field in order for the rule to be executed.
	Only commercial components are available for selection.
Description and **Component Type**	Displays the text description and component type of the selected commercial product.

Setting Up Commercial Restriction Rules for Attributes

Access the Commercial Restrictions on Attributes Rule Definition page (Set Up CRM, Product Related, Advanced Configurator, Multilevel Component Rules. Select the *Commercial Attrs. Restriction* rule type on the Multilevel Component Rules search page).

Commercial Restrictions on Attributes Rule Definition page

See and Chapter 23, "Setting Up Multilevel Product Bundles," Common Elements Used in this Section, page 542.

Restricting Product

Product ID	Enter a multilevel commercial product, which can be an atomic offer that sells the functional product specified in the Restricted Attributes section. Or, it can be a play or offer to which that atomic offer belongs.

Restricted Attributes

Use this section to enter the rule constraint condition, which includes at least one functional product-attribute pair with at least one attribute value that, if specified here as required for the commercial product that sells the corresponding functional product in a configuration session, invalidates the configuration. The format of attribute values varies depending on the type of the attribute.

Specify restricted attribute values either by selecting them from a grid with prepopulated values or entering a Java expression.

You can also define value or format restrictions for external service attributes.

Required	Select to mandate the selection of a value for the corresponding attribute. At runtime, the configuration session becomes invalid if the user doesn't select a value for the attribute that appears in the session, if that attribute is set as required.
	In the case where more than one commercial restrictions on attributes rule are executed that impact the same attribute in a configuration session and they have different settings for the Required option (that is, the attribute is required in one rule but is optional in another rule), the rule that references the highest multilevel component type takes precedence. For example, these two rules are executed in a configuration session:
	• Commercial restrictions on attribute rule #1 references contract A, and the referenced attribute a is not set as required.
	• Commercial restrictions on attribute rule #2 references play B, and the referenced attribute a is set as required.
	If contract A and play B belong to the same commercial branch, for example, contract A is the parent of play B, rule #1 takes precedence and attribute a is set as optional in the configuration session.

See Also

Setting Up Commercial Prerequisite Rules

Access the Commercial Prerequisite Rule Definition page (Set Up CRM, Product Related, Advanced Configurator, Multilevel Component Rules. Select the *Commercial Prerequisite* rule type on the Multilevel Component Rules search page).

Commercial Prerequisite Rule Definition page (1 of 2)

Commercial Prerequisite Rule Definition page (2 of 2)

Note. The same page screens are used for creating commercial incompatibility rules, commercial prerequisite rules, and functional incompatibility rules. The page title changes based on the on the rule that is currently being viewed. Refer to the Setting Up Commercial Incompatibility Rules section for page descriptions that are shared by these rule types.

See and <u>Chapter 23, "Setting Up Multilevel Product Bundles," Setting Up Commercial Incompatibility Rules, page 556.</u>

See Also

<u>Chapter 23, "Setting Up Multilevel Product Bundles," Commercial Prerequisite Rules, page 493</u>

Setting Up Commercial Relies On Rules

Access the Commercial Relies On Rule Definition page (Set Up CRM, Product Related, Advanced Configurator, Multilevel Component Rules. Select the *Commercial Relies On* rule type on the Multilevel Component Rules search page).

Commercial Relies On Rule Definition

| Save | Search | Add Rule | Next | | Personalize |

SetID COM01   Description Communications
Rule ID FPC10001

Rule Definition | Related Rules

Rule Details

*Status Active   *Start Date 01/01/1900
*Severity Error   *End Date 12/31/2099
*Description Simple Family Group Offer relies On holder and member mobile subscription
*Exception Message Simple Family Group Offer relies on holder and member mobile subscription

Left Hand Side Product

*Product ID TELAO50001   *Product Status New/Active
Description Simple Family Talk Minutes

Rule Right Hand Side Groups

Right Hand Side Groups   Customize | Find | | | First ◄ 1 of 1 ► Last

Group ID	Group Name	
R1	R1	🗑

Add Group

Rule Definition

Use groups defined above to create rule sentences. 'AND', 'OR' operators and '(', ')' are permitted.

*Right Hand Side sentence R1

Commercial Relies On Rule Definition page

See and

Setting Up Commercial Relies From Rules

Access the Commercial Relies From Rule Definition page (Set Up CRM, Product Related, Advanced Configurator, Multilevel Component Rules. Select the *Commercial Relies From* rule type on the Multilevel Component Rules search page).

Note. The same page screens are used for creating Commercial Relies On rules, Functional Relies On rules, and Functional Relies From rules. The page title changes based on the on the rule that is currently being viewed.

Commercial Relies From Rule Definition page

Rule Details

Rule detail fields are common to this section and described in detail in a separate section of this chapter.

See and Chapter 23, "Setting Up Multilevel Product Bundles," Common Elements Used in this Section, page 542.

Left Hand Side Product

Use this section to select the source product that, upon selection in configuration sessions, causes the evaluation of the condition that is specified in the Right Hand Side Products section for possible functional product prerequisite violations.

Similar to commercial prerequisite rules, a product configuration is considered in violation of a functional prerequisite rule if the condition of the left hand side product section is satisfied but the condition of the right hand side statement is *NOT*.

Product ID   Select a target product to be added to the configuration session.

Product Status   Select a status for the product.

Available options are *Active,New,* and *New/Active.*

Description   Displays a description of the product you selected.

Rule Right Hand Side Groups

Group ID   Displays the unique ID for the group you associated with the selected product.

Group Name   Displays the name of the group associated with the group ID.

You can click the Group Name link to access the Add Group page and modify information for this group.

Add Group   Click this link to access the Add Group page and create a new group.

See and <u>Chapter 23, "Setting Up Multilevel Product Bundles," Defining Left Hand Side and Right Hand Side Groups, page 559.</u>

Rule Definition

Right Hand Side Sentence   Enter the right hand side sentence you want to use to further evaluate product configurations for a violation.

A product configuration is evaluated the second time against the right hand side sentence, when it satisfies the condition of the left hand side sentence.

Reviewing Related Rules

Access the Commercial Relies From Related Rules page (Set Up CRM, Product Related, Advanced Configurator, Multilevel Component Rules. Select the *Commercial Relies From* rule type on the search page and click the Search button. Select the Related Rules page).

Note. The same page screens are used to view Commercial Relies From related rules, Functional Relies On related rules, and Functional Relies From related rules. The page title changes based on the on the rule that is currently being viewed.

Commercial Relies From Related Rules page

Rule ID	Displays the ID for the commercial relies on rule in which the product ID that is currently shown on this page is listed as the left hand side product. Similarly, if you are viewing a functional relies from rule, this page displays functional relies on rules in which the product ID currently shown is listed as the left hand side product in these rules.
	You can click the Rule ID link to access the definition of the rule.
Add Related Rule	Click to access the Commercial Relies On Rule Definition page and create a related rule to associate with the primary Commercial Relies From rule. The system sets the product ID currently shown on this page as the left hand side product of the new rule by default.

Setting Up Functional Incompatibility Rules

Access the Functional Incompatibility Rule Definition page (Set Up CRM, Product Related, Advanced Configurator, Multilevel Component Rules. Select the *Functional Incompatibility* rule type on the Multilevel Component Rules search page).

Functional Incompatibility Rule Definition

| Save | Search | Add Rule | | Personalize |

SetID COM01   **Description** Communications
Rule ID NEXT

Rule Details

*Status [   ]   *Start Date 05/07/2009
*Severity Error   *End Date 12/31/2099
*Description [   ]
*Exception Message [   ]

Rule Reference Scope

*Reference Scope Contract

Rule Left Hand Side Groups

No Left Hand Side Groups have been found.
Add Group

Rule Right Hand Side Groups

No Right Hand Side Groups have been found.
Add Group

Rule Definition

Use groups defined above to create rule sentences. 'AND', 'OR' operators and '(', ')' are permitted.
*Left Hand Side sentence [   ]
*Right Hand Side sentence [   ]

Functional Incompatibility Rule Definition page

See and

Important! The definition for functional incompatibility rules is almost identical to the definition for commercial incompatibility rules, except that when selecting products for left hand side and right hand side groups, you select *functional components* for functional incompatibility rules. At runtime, a configuration is subject to the evaluation of an active functional incompatibility rule if the configuration contains commercial products that sell the functional products specified in the left hand side groups, and the product selection of the configuration successfully meets the rule execution condition.

See and

See Also

Setting Up Functional Incompatibility Rules For Attributes

Access the Functional Attributes Incompatibility page (Set Up CRM, Product Related, Advanced Configurator, Multilevel Component Rules. Select the *Functional Attrs. Incompatible* rule type on the Multilevel Component Rules search page).

Functional Attributes Incompatibility page

See and Chapter 23, "Setting Up Multilevel Product Bundles," Common Elements Used in this Section, page 542.

Restricting Attributes

Use this section to specify the rule execution condition.

Product ID	Enter the ID of a functional product.
	The system does not limit the selection of attributes based on product ID.
Market	Enter the market of the attribute that you want to select. Only markets that are supported by the attributes setup component are available for selection.

Attribute	Enter the attribute that must be present in configuration sessions for the corresponding rule to apply. Only edit field and manual drop-down type attributes are available for selection.

Based on the type of the selected attribute, one of these sections appears:

- For manual drop-down type: A grid appears and it lists all the drop-down values that are defined for the attribute. Select the attribute values that configuration sessions must match for this incompatibility rule to apply. If multiple values are selected, a configuration has to match only one of the values for the rule to apply.

- For edit field type: A text field called Regular Expression appears, which allows free form text to be entered. Enter a valid Java expression for the system to evaluate attribute values based on the expression.

Restricted Attributes

Use this section to enter the rule constraint condition, which includes a scope, at least one product-attribute pair with at least one attribute value that, if selected in a configuration, invalidate the configuration because the product attribute value is incompatible with the other product attribute value that is selected (specified in the Restricting Attributes section) within the same scope in the configuration. Depending on the type of the attribute, specify attribute values either by selecting them from a grid with prepopulated values or entering a Java expression.

See Also

Chapter 23, "Setting Up Multilevel Product Bundles," Functional Incompatibility Rules for Attribute Values, page 503

Setting Up Functional Relies On Rules

Access the Functional Relies On Rule Definition page (Set Up CRM, Product Related, Advanced Configurator, Multilevel Component Rules. Select the *Functional Relies On* rule type on the Multilevel Component Rules search page).

Functional Relies On Rule Definition

| Save | | Search | Add Rule | Next | | Personalize |

SetID COM01   Description Communications
Rule ID MMC40003

Rule Definition | Related Rules

Rule Details

*Status Active   *Start Date 01/01/1900

*Severity Error   *End Date 12/31/2099

*Description iphone 2G relies on 2G SIM Card

*Exception Message iphone 2G must rely on 2G SIM Card

Left Hand Side Product

*Product ID TELPS40002   *Product Status New/Active

Description iPhone 2G

Rule Right Hand Side Groups

| Right Hand Side Groups | | Customize | Find | | | First 1 of 1 Last |

Group ID	Group Name	
R1	R1	🗑

Add Group

Rule Definition

Use groups defined above to create rule sentences. 'AND', 'OR' operators and '(', ')' are permitted.

*Right Hand Side sentence R1

Functional Relies On Rule Definition page

Setting Up Functional Relies From Rules

Access the Functional Relies From Rule Definition page (Set Up CRM, Product Related, Advanced Configurator, Multilevel Component Rules. Select the *Functional Relies From* rule type on the Multilevel Component Rules search page).

Functional Relies From Rule Definition page

See and <u>Chapter 23, "Setting Up Multilevel Product Bundles," Setting Up Commercial Relies From Rules, page 568.</u>

Setting Up Commitment Triggering Rules

Access the Commitment Triggering Rule Definition page (Set Up CRM, Product Related, Advanced Configurator, Multilevel Component Rules. Select the Commitment Triggering rule type on the Multilevel Component Rules search page).

Commitment Triggering Rule Definition

| Save | Search | Add Rule | Next | Personalize |

SetID COM01   Description Communications
Rule ID HLR00002

Rule Details

*Status Active   *Start Date 02/25/2009
*Severity Error   *End Date 12/31/2099
*Description CMT Triggering Rule to Trigger the CMT Creation.
*Exception Message Triggering Product for the CMT Creation.

Rule Reference Scope

*Reference Scope Contract

Left Hand Side Groups

The selected term has been already added.   Customize | Find | First 1 of 1 Last

Group ID	Group Name
L1	Trigger Product

Add Group

Commitment Triggering Rule Definition (1 of 2)

Commitment Behaviour

*Commitment Behaviour Create

Commitment Options

☑ Commitment is mandatory

For instance scope value the minimal and maxinal quantity value must be set to 1   Customize | Find | First 1 of 1 Last

Product ID	Description
TEL000039	CMT 4 Xtra Adv Con

Add Commitment Product

Rule Definition

*Left Hand Side sentence L1

Commitment Triggering Rule Definition (2 of 2)

See and Chapter 23, "Setting Up Multilevel Product Bundles," Common Elements Used in this Section, page 542.

Rule Reference Scope

If you select *Instance* as the reference scope for the commitment triggering rule, you can only select one product in the Left Hand Side Groups section.

See and <u>Chapter 23, "Setting Up Multilevel Product Bundles," Common Elements Used in this Section, page 542.</u>

Left Hand Side Groups

Use this section to define one or more triggering products, which is one of the three conditions leading to the execution the commitment triggering rule. The other two conditions are reference scope and the left hand side sentence specified in the rule definition.

Group Name	Click to access the Add Group page to create one or more groups of triggering products.
	See and <u>Chapter 23, "Setting Up Multilevel Product Bundles," Defining Left Hand Side and Right Hand Side Groups, page 559.</u>
	Note. If the scope of a product is set to *Instance* in the Add Group page, both the minimum and maximum quantities must be set to *1*.

Commitment Behaviour

Commitment Behaviour	Values are:
	Create: Select for the system to create new commitment products (specified in the Commitment Options section) in the configuration session as a result of the selection of a triggering product, which is specified in the Left Hand Side Group section.
	You can define one or more of triggering products in the Left Hand Side Group section of a rule definition, and the system uses the value entered for the Left Hand Side sentence field to determine the qualifying triggering product or product combinations for the rule.
	Extend: Select for the system to check the current configuration session of an existing commitment product (the same that is specified in the Commitment Options section) and extend its duration by the amount that is specified for the extend action in the rule definition.
	Renew: Select for the system to check the current configuration session of an existing commitment product (the same that is specified in the Commitment Options section) and push out the end date of the product by the amount that is specified for the renew action in the rule definition.
	Note. Each commitment product is associated with a commitment covering rule and you can specify in the commitment covering rule two sets of duration values, one for the create and renew behaviors and the other for the renew behavior. Depending on the selected behavior (extend or renew) in the commitment triggering rule, the corresponding duration values appear for you to choose a duration when you click the link of the product ID.

Commitment Options

Commitment is mandatory   Select to make selecting a commitment product in the configuration session a requirement. If one commitment product is currently selected in this section, the system adds it to the configuration session automatically as a result of the execution of the commitment triggering rule. If multiple commitment products are listed in this section, they become available for selection in the configuration session at runtime and you must select one of them manually. As the configuration gets verified and submitted, a link between the selected commitment product and the triggering product is established and displayed in the order.

This field applies to the *Create* behavior only and is unavailable for edit for other behaviors.

Product ID   Click the product ID link to access the Add Commitment Product page where you specify the duration for the commitment product when it is created, renew or extended at runtime.

The values that appear in the Duration Options section are specific to the selected commitment behavior. Duration sets are defined for the each individual commitment product in the Commitment Covering Rule Definition component.

Rule Definition

Left Hand Side sentence   Enter a logical sentence consisting of at least one left hand side group.

An example of a left hand side sentence is *L1 AND L2,* which means that if a runtime product configuration satisfies the product selection conditions set in both L1 and L2, the system performs the action that is specified in the Commitment Options section. If the condition specified in the left hand side sentence is not satisfied, the system terminates the evaluation for this configuration.

This section is not available if the reference scope of the rule definition is *Instance,* in which you can only select one left hand side product.

See and Chapter 23, "Setting Up Multilevel Product Bundles," Commitment Triggering and Covering Rules, page 510.

Setting Up Commitment Covering Rules

Access the Commitment Covering Rule Definition page (Set Up CRM, Product Related, Advanced Configurator, Multilevel Component Rules. Select the *Commitment Covering* rule type on the Multilevel Component Rules search page).

Commitment Covering Rule Definition page (1 of 2)

Commitment Covering Rule Definition page (2 of 2)

See and Chapter 23, "Setting Up Multilevel Product Bundles," Common Elements Used in this Section, page 542.

Duration (Months)

Use this section to add the list of available durations for the commitment product. These durations appear on the Add Commitment Product page, where you specify the default length of the commitment product in a commitment triggering rule definition. This set of duration options is used when *create* or *renew* commitment behavior.

Note. To maintain data integrity, the system doesn't allow you to remove any duration option that is currently selected in an existing commitment triggering rule. A system error appears and you cannot save the change.

Default	Select to make the corresponding duration option appear as selected by default on the Add Commitment Product page.
Duration Options	Enter the length of the duration in number.
Unit of Measure	Display the unit of measure that is selected in the Commitment Details section. Values are days, weeks, months and years.
Add Duration Option	Click to enter new duration options.

Duration Extension (Months)

Use this section to define the list of available durations that are used for the *extend* commitment behavior.

Rule Scope Setting

Covering Scope	Select the scope within which the covered products must be found by the commitment covering rule in order for the commitment product to be assigned properly.
	The scope identified here determines the available values of product-level scope when you add groups in the Product Group Details section.

See and <u>Chapter 23, "Setting Up Multilevel Product Bundles," Common Elements Used in this Section, page 542.</u>

Commitment Activation Option

Select when to install the covered products. Values are:

After One Item is Installed: after the first committed product is installed.

After All Items are Installed: after all committed product are installed.

Product Group Details

Use this section to specify groups of products to be covered by this commitment product. Groups are processed with the AND logical operator.

Group Name   Click to access the Add Group page to create one or more groups of
                                        products that are to be covered by the commitment product.

                                        See and Chapter 23, "Setting Up Multilevel Product Bundles," Defining
                                        Left Hand Side and Right Hand Side Groups, page 559.

See and Chapter 23, "Setting Up Multilevel Product Bundles," Commitment Triggering and Covering Rules,
page 510.

Chapter 24

Working with Orders for Multilevel Product Bundles

This chapter provides overviews of the use of orders for multilevel product bundles, group offers, product component migration, split billing, commitments, trial periods, selling periods for multilevel product bundles and components and discusses how to:

*   Create orders and quotes for multilevel product bundles.

*   Create service management orders for multilevel installed products.

*   Configure multilevel product bundles.

*   View commitment contracts.

Important! The Order Capture application supports the creation of orders, quotes, and service management orders for multilevel product bundles. Bulk orders and service management orders for multilevel product bundles are not supported.

Understanding Use of Orders for Multilevel Product Bundles

This section discusses:

*   Convergent orders.

*   Orders.

*   Service management orders.

*   Common practice for all capture types.

Understanding Convergent Orders

Convergent Order is a capture type that allows new orders for multilevel product bundles and service requests for multilevel installed services to be captured in one single order. In a convergent order, product configuration and validation for multilevel product bundles and installed services is performed within the same configuration session. Similar to simple orders, convergent orders capture data (besides product details) that is necessary for order fulfillment, such as billing (nonrecurring and recurring), shipping, and installation site information.

Upon submission, based on the line items and actions currently selected, the convergent order is either converted to a simple order (if convergent order contains only one new multilevel product bundle), a service management order (if convergent order contains only one multilevel installed product), or it generates child regular and service management orders (if convergent order contains a mix of new and installed products) for order fulfillment. In the case of child order generation, child orders of the convergent order are synchronized for fulfillment if there are order line relationships (for example, the *brings and removes* relationship) that span across multiple child orders. Billing, shipping and installation site information is copied over to child simple orders for fulfillment purposes. The information is not populated in child service management orders as it is not applicable in the service management process.

See and

Before a simple order is submitted, you can convert it to a convergent order manually using the Convert to CO toolbar button if you wish to file service requests for multilevel installed services in same order as well. The same is true for service management orders—they can be converted to convergent orders so that new multilevel product bundles can be ordered, configured, and validated in the same session. Convergent orders can be created and searched manually under the Orders and Quotes navigation menu.

Note. The Order Capture self service application does not support the ordering of multilevel product bundles. Orders and quotes are shown in read-only mode and not editable if they contain multilevel product bundles and are opened in the self service application.

Convergent Order Submission

The submission of convergent orders for fulfillment may result in the generation of child orders, or conversion to simple orders or service management orders depending on the products (new or installed) that are included in the order lines.

This diagram illustrates the convergent order submission process flow:
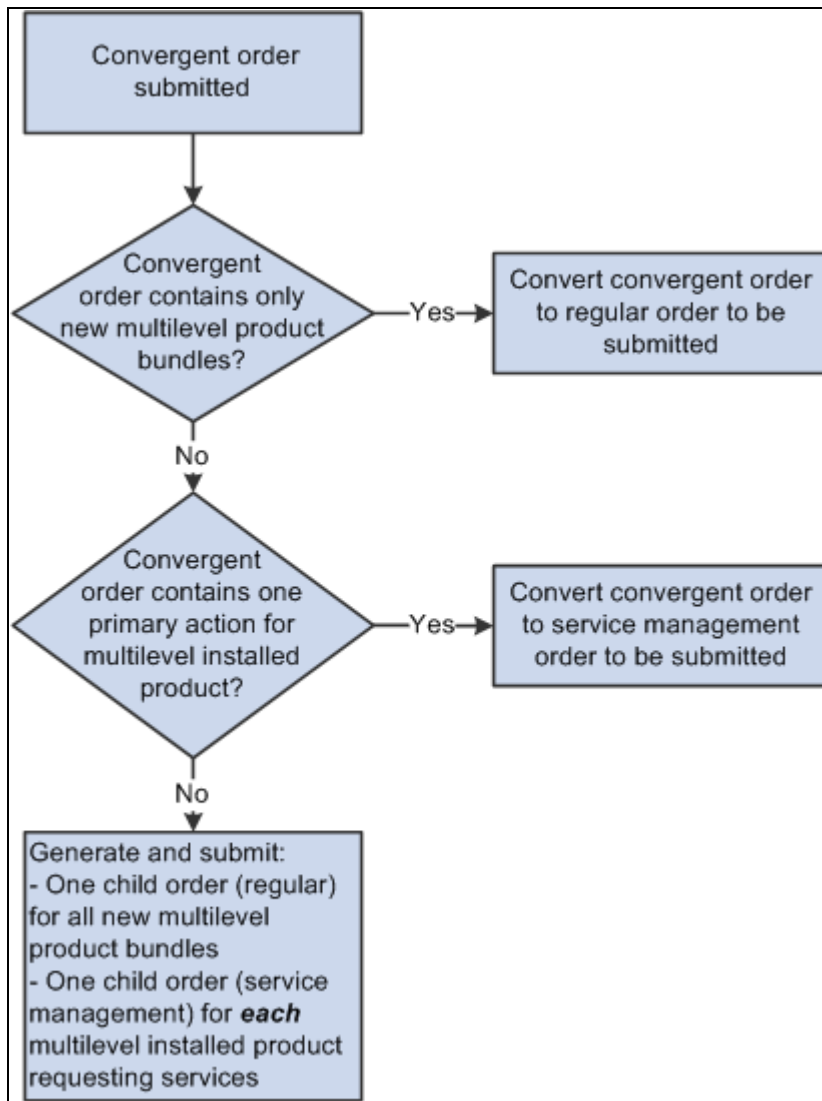
Convergent order submission process flow, which can result in the generation of child orders or conversion to regular or service management orders

Upon submission, the system:

- Converts a convergent order to a simple order, if the convergent order contains only new multilevel product bundles and no installed services. A system message *The order will be automatically converted to Simple Order* appears to notify users of the conversion.

- Converts a convergent order to a service management order, if the convergent order contains only one installed service. A system message *The order will be automatically converted to Service Management Order* appears to notify users of the conversion.

  If the convergent order contains more than one installed service, a separate service management order is generated for each of them.

- Generates one simple order for all new multilevel product bundles and one service management order for each installed service included in the convergent order, if the convergent order contains both new multilevel product bundles and multilevel installed services.

Order ID Autonumbering Assignment

As delivered, the system automatically assigns IDs to convergent orders (prefix: *CO0*) and simple orders (prefix: *COM*) at the time they are saved. If a saved convergent order is later on submitted and converted to a simple order, the ID of the old convergent order becomes the ID of the newly converted simple order. If the convergent order does not already have an assigned ID when it is converted to a simple order, the system assigns the next available ID to the new simple order based on autonumber setup for simple orders.

Business Project for Child Order Generation and Submission

The CRM system delivers the *Submit Convergent Order* business project that is responsible for generating and submitting child orders for convergent orders. This business project consists of three components:

*   Synchronization process initialization – performed by the Convergent Order Synchronization BPEL business process to enable synchronization of child orders within convergent orders for the fulfillment process. The process ensures that installed products for all child orders that depend on each other are successfully created before further tasks, such as establishing an installed link between two installed services, can be performed.

*   Child order generation – child orders are generated right after the initiation of the synchronization process. All data necessary to process child order fulfillment is copied to the child order.

    Important! After the generation process finishes, child orders and their convergent order are unavailable for edit as a result of the *Exclusive* maintenance event for simple order (SO), service management (SM) and convergent order (CO) capture types. As delivered, this event is enabled to avoid potential issues that arise due to updates in either the convergent order or any of the child orders. Because the configuration session is not restorable on the convergent order after the generation of child orders, it is impossible to verify that changes made in the convergent or child orders are in fact legitimate and do not pose negative impact data integrity.

*   Child order submission – child orders are submitted without further validation, as all the validation logic is executed in the context of the parent convergent order.

Ordering Actions and Various Capture Types

In addition to convergent orders which support the ordering and servicing of multilevel product bundles, the Order, Quote, and Manage Service components are enhanced to facilitate the ordering and service management of multilevel and non-multilevel product bundles. You can add both multilevel and non-multilevel product bundles in the same order or quote. This table summarizes the type of actions each delivered capture type supports:

Action	Simple Order	Service Management Order	Quote	Convergent Order
Ordering new multilevel product bundles	Yes	-	Yes	Yes
Ordering new non-multilevel products	Yes	-	Yes	Yes
Servicing multilevel installed service	-	Yes (one installed service per order)	-	Yes

Action	*Simple Order*	*Service Management Order*	*Quote*	*Convergent Order*
Servicing non-multilevel installed service	-	Yes (one installed service per order)	-	Yes
Migrating components within or across multilevel product bundles	-	-	-	Yes

360-Degree View Support

Customer 360-Degree View supports the creation, search and viewing (by status) of convergent orders under the *Orders* node of the Activities section.

Clicking a status link in the *Orders* node populates the dynamic grid on the right hand side with orders of the selected status with information such as order ID, order date, capture type and order status. When you select an order from the dynamic grid, the system displays any related installed products in a sub-grid. This screenshot shows a dynamic grid with a list of orders that are returned after clicking a status link:

Customer 360 Degree View — Dynamic grid showing a list of orders that are in the selected status

You can add convergent orders from the Actions field of the 360-Degree View page as well. The option is enabled for users who are associated with the *Communications* market.

Understanding Orders

This section discusses behaviors of simple orders that are specific for handling multilevel product bundles.

Refer to the Managing Orders and Quotes chapter for information on the core order functionality.

See and Chapter 13, "Managing Orders and Quotes," Understanding Order Capture, page 269.

While convergent order is the primary component used by Communications users for ordering multilevel product bundles because of its ability to capture new orders (and service requests) for multiple multilevel product bundles, there are situations where the system would use simple order for multilevel product bundle purchases. They are:

- A convergent orders is automatically converted to a simple order upon submission because the convergent order contains only one new multilevel product bundle.

- A convergent order generates child simple orders upon submission, each referencing a multilevel product bundle included in the convergent order that needs to be fulfilled.

Note. As delivered, Communications users cannot add simple orders manually from the Order and Quotes menu folder. They always use convergent orders as the starting point to capture new orders.

While the ordering process for both type of products is almost identical, changes are made to the Order component to support order fulfillment for multilevel product bundles. This list includes some of the behavioral differences that orders demonstrate when handling multilevel product bundles. Simple orders containing multilevel product bundles:

- Display the Status and Link columns in the Line Summary section of the Entry Form page to show configuration status and link information pertaining to multilevel product bundles.

- Include the Sub Source field in the Order Details section of the Entry Form page for multilevel product bundles to collect additional information about the source from which the order is created.

- Do not capture attribute values directly in the Line Summary section of the Entry Form page for multilevel product bundles. Attributes are collected within configuration sessions and displayed in read-only mode on the he Entry Form page.

- Do not support updates (adding or removing) on order line relations for multilevel product bundles. Changes to order line relations are the result of product configurations that occur in configuration sessions.

- Disable the Order Quantity field for multilevel product bundle order lines on the Entry Form page, as order quantity is entered in configuration sessions.

  If more than one quantity of a multilevel product bundle is ordered, the system generates the same number of order lines in the order when the data comes back from the configuration session. Each product bundle initiates its own individual configuration session for capturing configuration data and attributes.

- Set the unit of measure of all multilevel product bundle order lines to *Each.* The value is not modifiable.

- Disable the Add to Order button on the Find Products page (accessible by clicking the Search or Browse Catalog link) so that non-top-level multilevel product components cannot be added to orders.

  Only top-level multilevel product components can be added to orders. The system delivers *contract* as the top-level multilevel component type and you can only add multilevel product components of this type directly to orders.

Understanding Service Management Orders

This section discusses behaviors of service management orders that are specific for handling installed contracts.

Refer to the Working with Service Management chapter for information on the core service management functionality.

See and <u>Chapter 9, "Working with PeopleSoft Service Management," Understanding Service Management, page 171.</u>

Service management orders are created to process service requests for existing multilevel installed services in one of these ways:

- Manually created from the left hand menu navigation.

- Automatically generated from convergent orders.

Note. Each service management order is responsible for processing only one multilevel installed service. An error message appears if you attempt to add more than one multilevel installed service to a service management order.

When you select an installed service to add to a service management order, you must choose a *top-level* installed service. The system creates one order line for the selected top-level installed service initially, which essentially represents its multilevel hierarchy. An error message appears if a non-top-level installed service is selected. After the configuration session is completed and data is returned to the service management order, additional line items (for the same order line number) are added in the service management order for other installed services of the same hierarchy that were selected in the session. Different from service management orders that handle non-mulitlevel installed services, service management orders for multilevel installed services:

- Capture attributes within configuration sessions and displayed them in read-only mode on the he Entry Form page.

- Do not support updates (adding or removing) on order line relations. Changes to order line relations are the result of product configurations that occur in configuration sessions.

- Do not use the End Date field on the Line Details page for multilevel installed services, because multilevel installed services do not currently support temporary services.

- Include the Sub Source field in the Header Details section of the Entry Form page for multilevel installed services to collect additional information about the source from which the order is created.

- Disable the Add to Order button on the Find Products page (accessible by clicking the Search or Browse Catalog link) so that non-top-level multilevel installed services cannot be added to service management orders.

For data that is needed to complete the service management process but not captured in configuration sessions, it is collected directly from the service management order after returning from the configuration session. Upon submission, the service management order is fulfilled by one of the delivered BPEL business processes, based on the selected action of the order (change, disconnect, suspend, suspend and change, and resume).

Understanding Common Practice for All Capture Types

This section discusses parts of the ordering process that are common and applicable to all three capture types. Topics are:

- Order fulfillment.

- Holds.

- Links.

Order Fulfillment

As mentioned earlier, multilevel product bundles are fulfilled in the form of orders or service management orders. In the case of convergent orders, either they are being converted to orders or service management orders, or they generate child orders (orders and service management orders) to be fulfilled. The fulfillment of orders and service management orders of the Communications market are performed by these BPEL business processes.

- Communication New Order Process

- Change Service Process

- Service Management Activate Service Process

- Service Management Disconnect Service Process

- Service Management Suspend Service Process

- Service Management Resume Service Process

- Convergent Order Synchronization Process

- Create New Account Creation Process

See and <u>Appendix A, "Order Capture Delivered Business Processes and Web Services," Delivered Business Processes, page 723.</u>

These business processes are also responsible for the creation and service management of installed links.

See and *PeopleSoft CRM 9.1 Product and Item Management PeopleBook*, "Tracking Installed Products," Installed Links.

Holds

The system delivers and enables these hold codes for the *SO,SM* and *CO* capture types to ensure that orders for multilevel product bundles are validated and that errors are caught and corrected before they're sent to fulfillment:

Note. As delivered, these hold codes cannot be overridden manually; they need to be resolved by taking the appropriate corrective actions.

Hold Code	Capture Type	Explanation
Concurrent Orders Validation (COV)	*SO* and *SM*	Hold is triggered if there are other orders in the system with the same multilevel product bundles as the order you are going to submit, and these orders have already been submitted for fulfillment. For reference purposes, information of concurrent orders is logged on the Related Actions page of the order that's put on hold as a result of this hold violation. How to address the issue: Wait until all concurrent orders are completed before resubmitting the order.

Hold Code	Capture Type	Explanation
Cyclical Migration Validation (MLCMV)	CO	Hold is triggered if a cyclical migration is identified on the order. An example of a cyclical migration: a component migrates from contracts A to B, then to contract C, and back to contract A within a single order. How to address the issue: Reconfigure the order, or split migration process into two separate orders.
Header Customer Migration Validation (MLBHC)	CO	Hold is triggered if there is no order line for the Sold-to customer selected on the order header. How to address the issue: Include a multilevel installed contract (owned to the customer on the header) in the order, or replace the customer on the header.
Migrated Component Billing Account Validation (MLBAV)	CO	Hold is triggered if the billing account for the migrated installed product order line is not filled and service is migrated to the installed contract. How to address the issue: Fill the missing billing account information and resubmit the order.
Multilevel Contract Type Validation (MLCTV)	SO and SM	Hold is triggered if the configuration status of any multilevel product bundle stored in the order is invalid when the order is submitted or validated. How to address the issue: Reconfigure any invalid multilevel product bundle until they become valid before resubmitting or revalidating the order.

Hold Code	Capture Type	Explanation
Related Bill To Address Hold (RADRBL) Related Bill To Contact Hold (RNBILC) Related Bill To Customer Hold (RNBILL) Related Ship To Address Hold (RADRSH) Related Ship To Contact Hold (RNSHPC) Related Ship To Customer Hold (RNSHIP) Related Site Contact Hold (RNSITC) Related Site Address Hold (RADRSI) Related Credit Card Hold (RCRCD) Related Credit Card Required Hold (RNOCC) Related Site Hold (RNOSIT) Related Product Site Contact Hold (RPSITC) Related Product Site Hold (RPSITE) Related Shipment Date Hold (RSHPDT)	*CO*	Hold is triggered if any of this information is missing for one of the related customers in a simple order (SO): • Address (bill-to, ship-to, or site) • Contact (bill-to, ship-to, or site) • Customer (bill-to or ship-to) • Credit card • Site • Product site • Contact of product site • Shipment date How to address the issue: Fill the missing information and resubmit the order.
Selling Period Conflict (SELCON)	*CO,SO,* and *SM*	Hold is triggered when an order consists of products that are available currently (for example, selling period is this month) and in the future (for example, selling period is two months from now). The order is going to be put on hold for selling period conflict when it's being validated. **Note.** This hold is informational and can be manually overridden as delivered. How to address this issue: Either: • Create two orders: one for fulfilling current product elements, and the other for future product elements (a future dated order). • Let the order be fulfilled on the date when the last available future element (the one on the order with the last selling period start date of all) becomes available. The *fulfill by* date of the order is automatically set to this date when future elements are added.

Hold Code	Capture Type	Explanation
Selling Period Violation (SELPER)	*CO,SO,* and *SM*	Hold is triggered if a product with a past selling period is added to an order to be fulfilled. A selling period is considered a past one if it ended before the product selling date that is specified on the order (or the system's current date if product selling date is unavailable).
		How to address this issue: Remove the past product element and choose one that is currently available. If you have to order and fulfill the past product, back-date the product selling product so that it falls within the selling period of the past product element and re-validate the order.
Standalone Multilevel Components Validation (MLCTL)	*SO* and *SM*	Hold is triggered if the order being submitted or validated contains any order lines with multilevel product components that are non-top-level and do not belong to any multilevel product bundle.
		How to address the issue: Remove the components from the order lines before resubmitting the order.

In addition to adding new hold codes, existing hold codes for *SO* and *SM* capture types are also enhanced to support multilevel product bundles.

The hold validations for convergent orders are executed only at the convergent order level; they do not apply and therefore disabled for child orders that are generated for convergent orders.

Refer to the see references for additional hold codes that are specific to the selling period and split billing functionality.

Links

After the configuration of a multilevel contract or installed contract is completed, the result is displayed in the order. For each multilevel component that is related to a functional component, an icon appears in the Link column to identify the linkage that the multilevel component (commercial) has with its associated functional components. Similarly, when a component is moved or transformed from one contract to another, icons are also presented in this column to identify the source and target objects of the migration.

This table lists delivered icons that can be visible in the Link column in orders to show line and component relationships:

Note. Some of these icons are available for display in the Installed Product Hierarchy and the Configuration and Attributes section of orders as applicable.

Indicates that the corresponding multilevel product component (commercial) is linked to a functional component in a *Sells* relationship.

Suppose that the *Network Access Offer* commercial product is set to sell the *Network Access* functional component in the system. If the *Network Access Offer* commercial product is selected in an order, this icon appears in the Line Summary section of the order, indicating that the product is related to a functional component.

Clicking the icon transfers you to the order line of the functional component (in this case, *Network Access)* on the Line Details page, where you view the actual relationship type and functional component from the perspective of the functional component: *Network Access* Is Sold By *Network Access Offer*.

Clicking the product description link transfers you to the order line of the commercial component (in this case, *Network Access Offer*) on Line Details page, where you view the actual relationship type and functional component from the perspective of the commercial component.

Indicates that the corresponding multilevel product component (commercial) is linked to a functional component in a *Sells* relationship and that functional component relies on another functional component.

Suppose that the *Network Access Offer* commercial product is set to sell the *Network Access* functional component in the system, and the *Network Access* functional component relies on the *DSL Modem* functional component. If the *Network Access Offer* commercial product is selected in an order, this icon appears in the Line Summary section of the order, indicating that the product is related to a functional component that relies on another functional component.

Clicking the icon transfers you to the order line of the functional component (in this case, *Network Access*) on the Line Details page. From there, you see a total of two order line relationships:

- *Network Access* Is Sold By *Network Access Offer*.

- *Network Access* Applies On *DSL Modem*.

fn (icon)	Indicates that the corresponding multilevel product component (commercial) is linked to a functional component in a *Sells* relationship and that functional component is relied on by another functional component.
	Suppose that the *Network Access Offer* commercial product is set to sell the *Network Access* functional component in the system, and another functional component called *Internet TV* relies on the *Network Access* functional component. If the *Network Access Offer* commercial product is selected in an order, this icon appears in the Line Summary section of the order, indicating that the product is related to a functional component that is relied on by another functional component.
	Clicking the icon transfers you to the order line of the functional component (in this case, *Network Access*) on the Line Details page. From there, you see a total of two order line relationships:
	• *Network Access* Is Sold By *Network Access Offer.*
	• *Network Access* Is Used By *Internet TV.*
fn (icon)	Indicates that the corresponding multilevel product component (commercial) is linked to a functional component in a *Sells* relationship and that functional component both relies on and is relied on by functional components.
	Suppose that the *Network Access Offer* commercial product is set to sell the *Network Access* functional component in the system. The *Network Access* functional component relies on the *DSL Modem* functional component and is relied on by the *Internet TV* functional component. If the *Network Access Offer* commercial product is selected in an order, this icon appears in the Line Summary section of the order, indicating that the product is related to a functional component that relies on and is relied on by other functional components at the same time.
	Clicking the icon transfers you to the order line of the functional component (in this case, *Network Access*) on the Line Details page. From there, you see a total of two order line relationships:
	• *Network Access* Is Sold By *Network Access Offer.*
	• *Network Access* Is Used By *Internet TV.*
	• *Network Access* Applies On *DSL Modem.*
(group offer members details)	Indicates that the corresponding product component (commercial) is a group offer. It appears only when new members are added to or existing members are removed from the group offer, and it doesn't appear if the group offer doesn't change.
	Click to access the order line details of the group offer on the Line Details page. The line detail contains a section that lists all members that are added and removed within the order.

(shared offer users details)	Indicates that the corresponding multilevel product component (commercial) is a shared offer. It appears only when new members are added to or existing members are removed from the shared offer, and it doesn't appear if the shared offer doesn't change.
	Click to access the order line details of the shared offer on the Line Details page. The line detail contains a section that lists all members that are added and removed within the order.
(product is covered by commitment)	Indicates that the corresponding multilevel product component is being covered by a commitment product from another order line.
	Click to access the order line details of the commitment product on the Line Details page. The line detail contains a section that shows additional information of the commitment product.
	Indicates that the corresponding multilevel product component (commercial) is a shared offer that is linked to a service (functional component), which is currently shared by other services.
	Suppose that the *Shared Directory Offer* commercial product is set to sell the *Shared Directory* functional component in the system, and the functional product is linked to the *Mobile Line* functional component in the *relies on* relationship. If the *Shared Directory Offer* commercial product is selected in an order, this icon appears in the Line Summary section of the order, indicating that the product is related to a shared functional component.
	Clicking the icon transfers you to the order line of the functional component (in this case, *Shared Directory)* on the Line Details page. From there, you see a total of two order line relationships:
	• *Shared Directory* Is Sold By *Shared Directory Offer.*
	• *Shared Directory* Applies On *Mobile Line.*
	Indicates that the corresponding multilevel product component (commercial) is an offer that is linked to a functional component, and the functional component is currently using the resource of a shared service.
	Suppose that the *Network Access Offer* commercial product is set to sell the *Network Access* functional component in the system, and the functional product is linked to the *1000 Shared Minutes* functional component in the *relies on* relationship. If the *Network Access Offer* commercial product is selected in an order, this icon appears in the Line Summary section of the order, indicating that the product is related to a shared functional component.
	Clicking the icon transfers you to the order line of the functional component (in this case, *Network Access*) on the Line Details page. From there, you see a total of two order line relationships:
	• *Network Access* Is Sold By *Network Access Offer.*
	• *Network Access* Benefits From *1000 Shared Minutes.*

(group & shared offer details)	Indicates that the corresponding multilevel product component (atomic offer) is added (or removed) as a member or user of the group or shared offer in the current order. This icon is not shown in the case where the product component is already a member or user of another offer and it was not changed in the current order. Click to access the order line details of the offer on the Line Details page.
	Indicates that the corresponding component is the target product of a migration link. The target product is added to the target contract as a result of the execution of the migration action (reparenting or transformation).
	Indicates that the corresponding component is the source product of a migration link. The source product is removed from its source contract as a result of the execution of the migration action (removal, reparenting or transformation).
CMT	Indicates that the corresponding component is a product that is covered by a commitment.
	Indicates that the corresponding component is available for sale in the future. Place the cursor over the icon to view the date when the selling period of the component begins.
	Indicates that the corresponding component is a past element. Place the cursor over the icon to view the date when the selling period of the component ended.

Understanding Group Offers

A group offer is a commercial offer which is dedicated for a group of users. A group offer is ordered by one customer (the offer holder) and may be associated with other customers (offer members). The offer holder and offer members form a group of users who mutually benefit from the offer.

Group offers are similar to shared offers, but differ in that group offers:

• Consist of single or multiple shared services, whereas shared offers consists only of a single shared service

• Members constitute a group of related customers, whereas shared offer users are independent of each other.

   For example, for group offer members, calling rates are lower only when calling between members of the same group offer instance.

- Members can include customers of an external service provider.

    External members cannot take advantage of all group offers benefits (special rates when calling other group members, for example), but other offer members can benefit in relation to these members (for example, special rates when making connections to external members providing that they are defined as group offer members).

You define group offers and group offer rules using:

- the Product Definition component

    See and <u>Chapter 23, "Setting Up Multilevel Product Bundles," Setting Up Product Components, page 519</u> .

- the Commercial Relies On Rule Definition component

    See and <u>Chapter 23, "Setting Up Multilevel Product Bundles," Setting Up Commercial Relies On Rules, page 567.</u>

- the Functional Relies On Rule Definition component

    See and <u>Chapter 23, "Setting Up Multilevel Product Bundles," Setting Up Functional Relies On Rules, page 574.</u>

Family and Tribe Offers

Group offers vary depending on how the resources of the offer are shared between group members. For a *family* group offer, all group members benefit from a single pool; for example, a common pool of free minutes for all offer members to be used when calling other group members. For a *tribe* group offer, each group member benefits from an individual pool of resource; for example, each member has his or her own pool of free minutes to use when making calls to other group members.

Simple and Complex Group Offers

Group offers also vary depending on the number of shared services with which they are associated. A *simple* group offer is associated with a single shared service, which is shared among all group offer members. A *complex* group offer is associated with multiple shared services, and those services can either be identical or varied. For example, a simple group offer might provide each member a single pool of resources and link with a separate instance of a shared service, while a complex group offer might provide shared minutes and text messaging that are bundled into a one group offer and sold as a package.

The following diagram illustrates the difference between a simple and complex group offer:
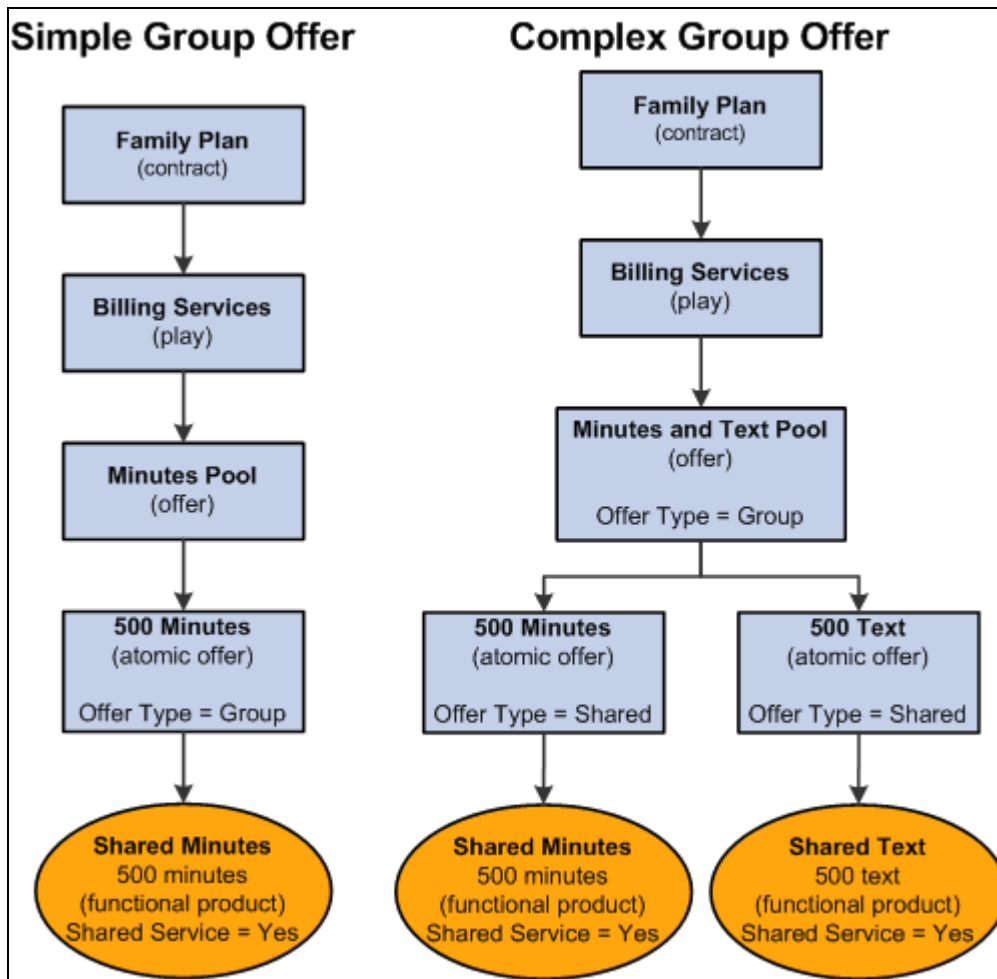
Simple and complex group offers

A complex group offer can have one of two bundling options associated with it:

* Individual Services: All group members are linked to a single instance of the shared service that is sold by the group offer; for example, at run time all group members are linked with the same instance of the shared service component.

* Dedicated Services: Each group member is linked to a separate, dedicated instance of the shared service that is sold by the group offer; for example, at run time each group member is linked with a different instance of the shared service component.

The following diagram illustrates the difference between an individual and dedicated complex group offer:
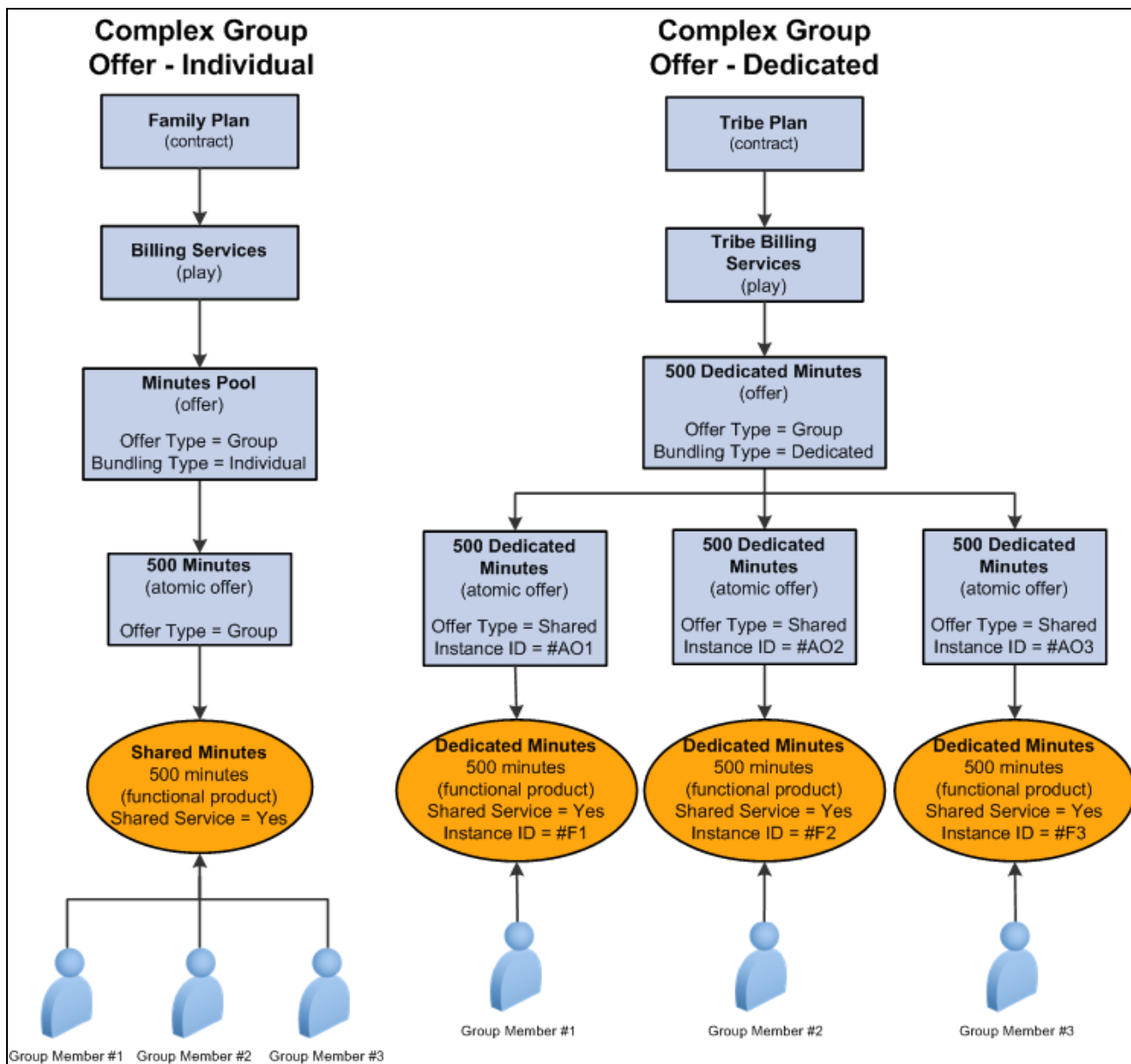
Individual and dedicated complex group offers

Note. All family and tribe offers are complex group offers.

Understanding Product Component Migration

This section discusses:

• Package migration.

• Migration actions.

• Package migration requests.

Understanding Package Migrations

Product migrations refer to actions being executed in configuration sessions that result in:

- Change of product offers, which can be:

    - Removal of product components.

    - Transformation of product offers—replacement of components.

- Reparenting of product offers.

Through product migrations, new and installed multilevel product components can be merged, split, transferred or transformed within one single or across different contracts (which belong to the same or different customers) using convergent orders. Migration requests are subject to validation within configuration sessions prior to fulfillment. If configurations are invalidated due to rule violations, corresponding errors return and configurations must be fixed and revalidated successfully before orders can be submitted for fulfillment.

Product migrations cover a range of operations, including:

- Migration of functional components between commercial offers within the same multilevel product bundle.

- Migration of functional components between commercial offers across different multilevel product bundles.

- Migration of commercial offers within the same multilevel product bundle.

- Migration of commercial offers across different multilevel product bundles.

Migration of Functional Components Within or Across Multilevel Product Bundles

This migration involves the removal of one commercial atomic offer and the addition of another one within the same or across different multilevel contracts in a configuration session. At the end of the migration:

- The source atomic offer of the migration is removed and the target atomic offer added to the system.

- The functional component is transferred from the source atomic offer to the target atomic offer as both atomic offers sell the same functional component. This is done by disconnecting the existing *Sells* installed link between the functional component and the source atomic offer, and creating a new installed link for the functional component and the target atomic offer, which can either be a totally different atomic offer or another instance of the same atomic offer within the same or across multilevel contracts.

    If source and target atomic offers are associated with different functional components, the system removes the existing *Sells* installed link and functional component and creates a new installed link and new functional component for the target atomic offer.
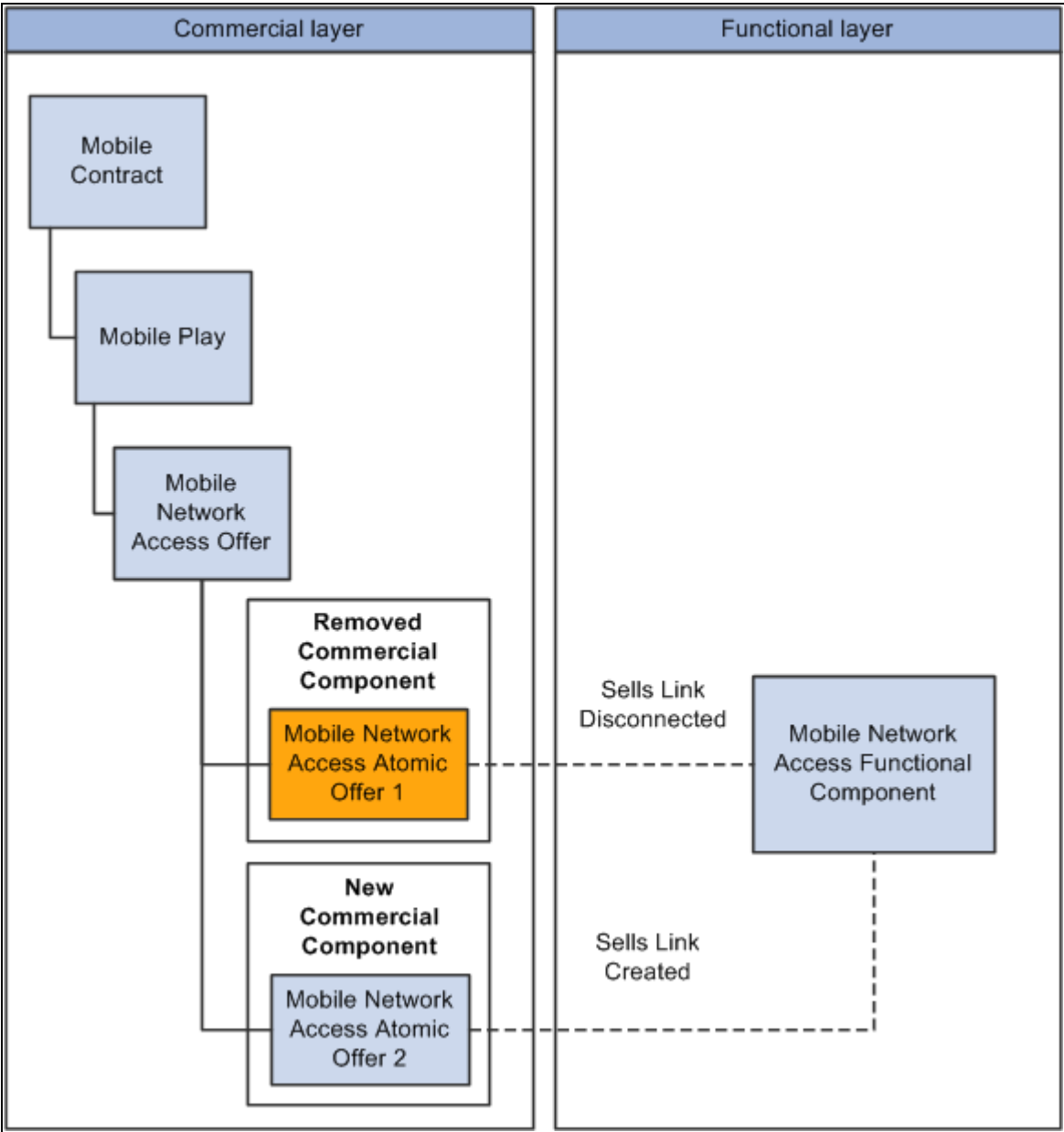
Migration of a functional component across different commercial atomic offers within a single installed multilevel contract

The target multilevel contract can be a new one or it can be an existing one, and they can belong to one or different customers.
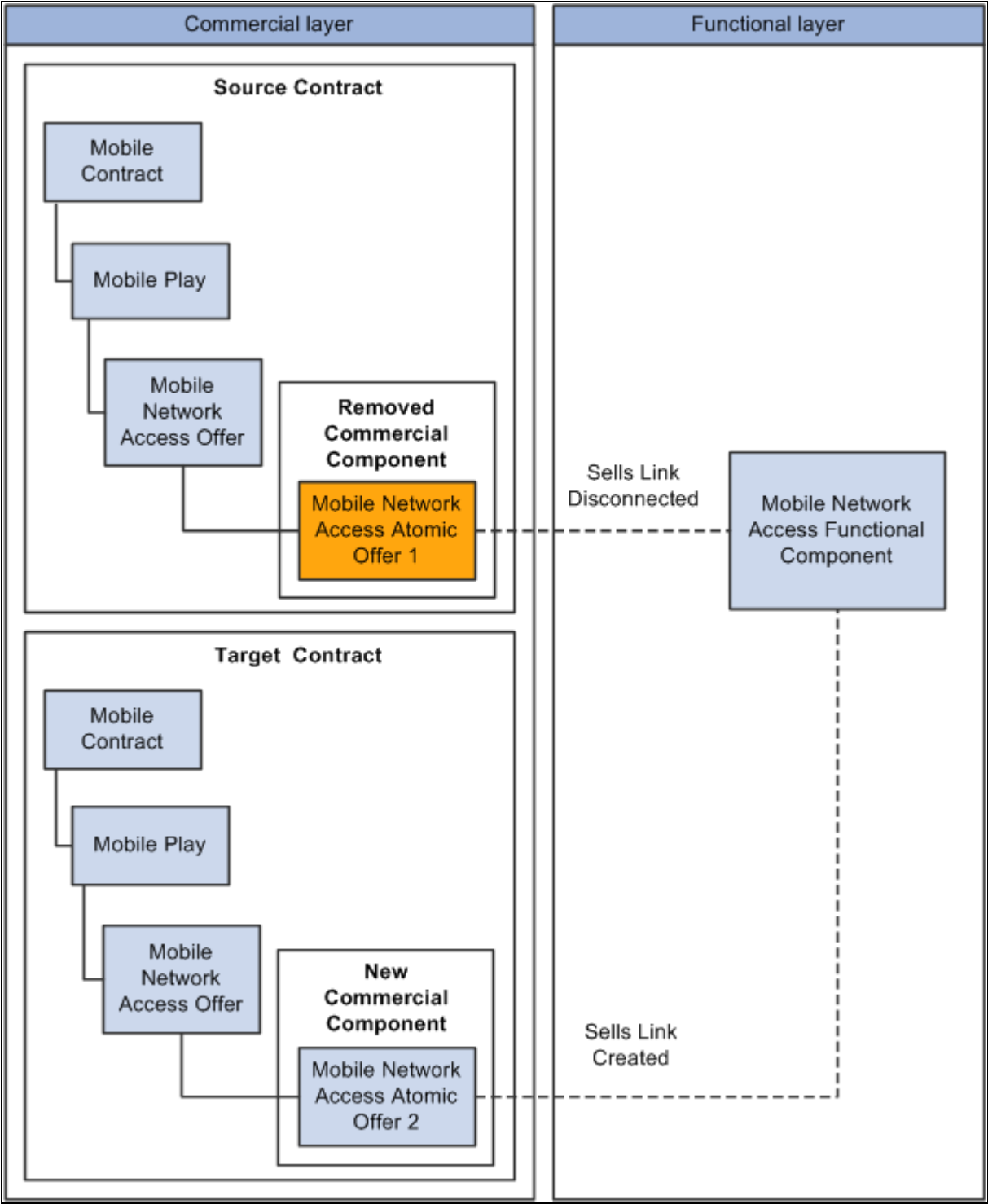
Migration of a functional component between different commercial offers in different installed multilevel contracts

Migration of Commercial Components Within or Across Multilevel Product Bundles

This migration, which is a type of reparenting, involves the transfer of a commercial component from one parent (a commercial component) to another in the same or across multilevel contracts. At the end of the migration, this transferred commercial component, along with its descendants as well as any links to functional components, are moved under the new parent. This is done by disconnecting the existing *Child Of* installed link between the commercial component and its old parent and creating a new installed link with its new parent, which can either be another instance of the same commercial offer as the old parent, or another commercial offer that has a parent-child relationship with the transferred commercial component in product definition.
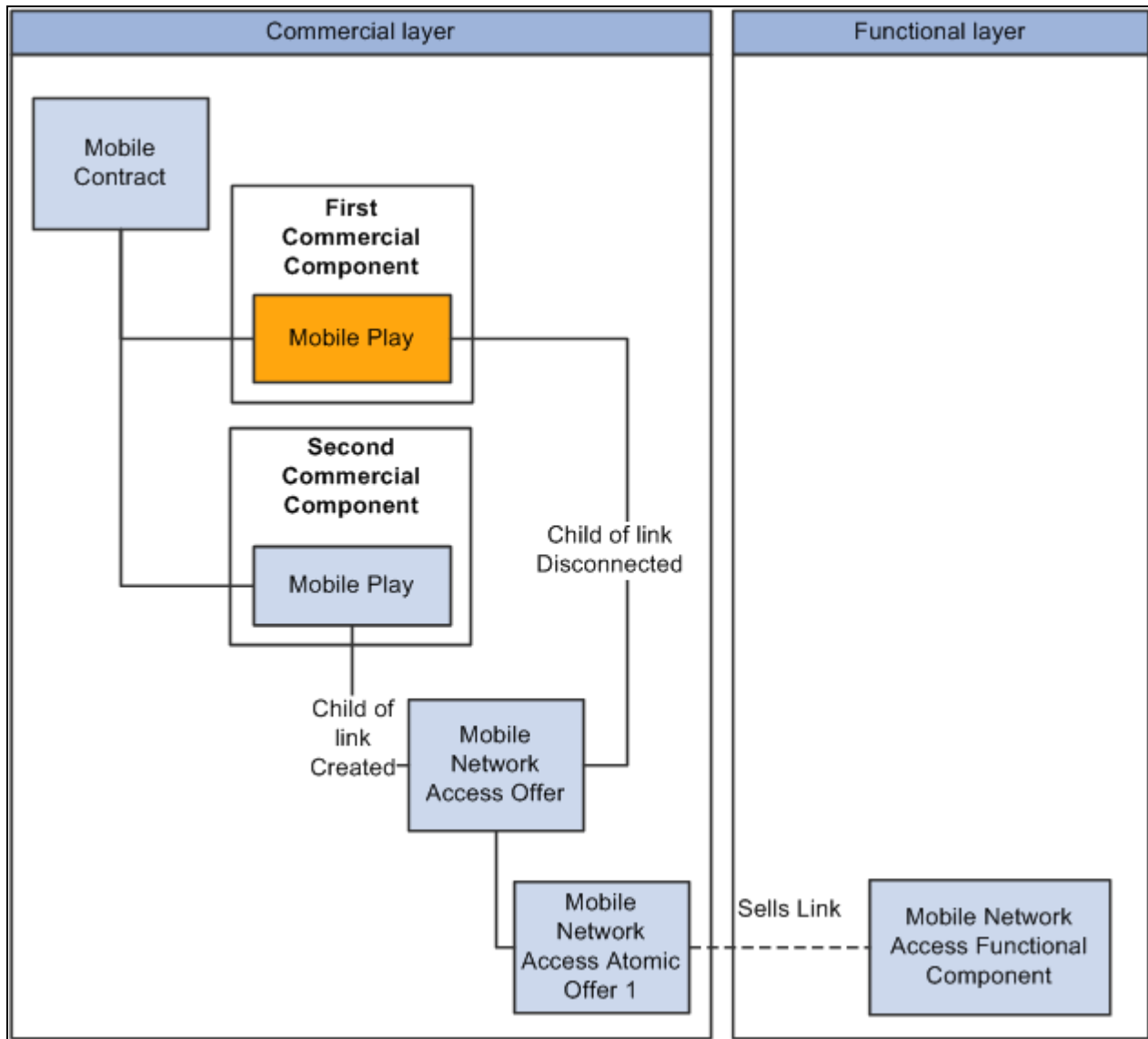
Migration of a commercial component across different commercial offers within a single installed multilevel contract

In case of a cross-contract migration, the target multilevel contract can be a new one or it can be an existing one, and they can belong to one or different customers.
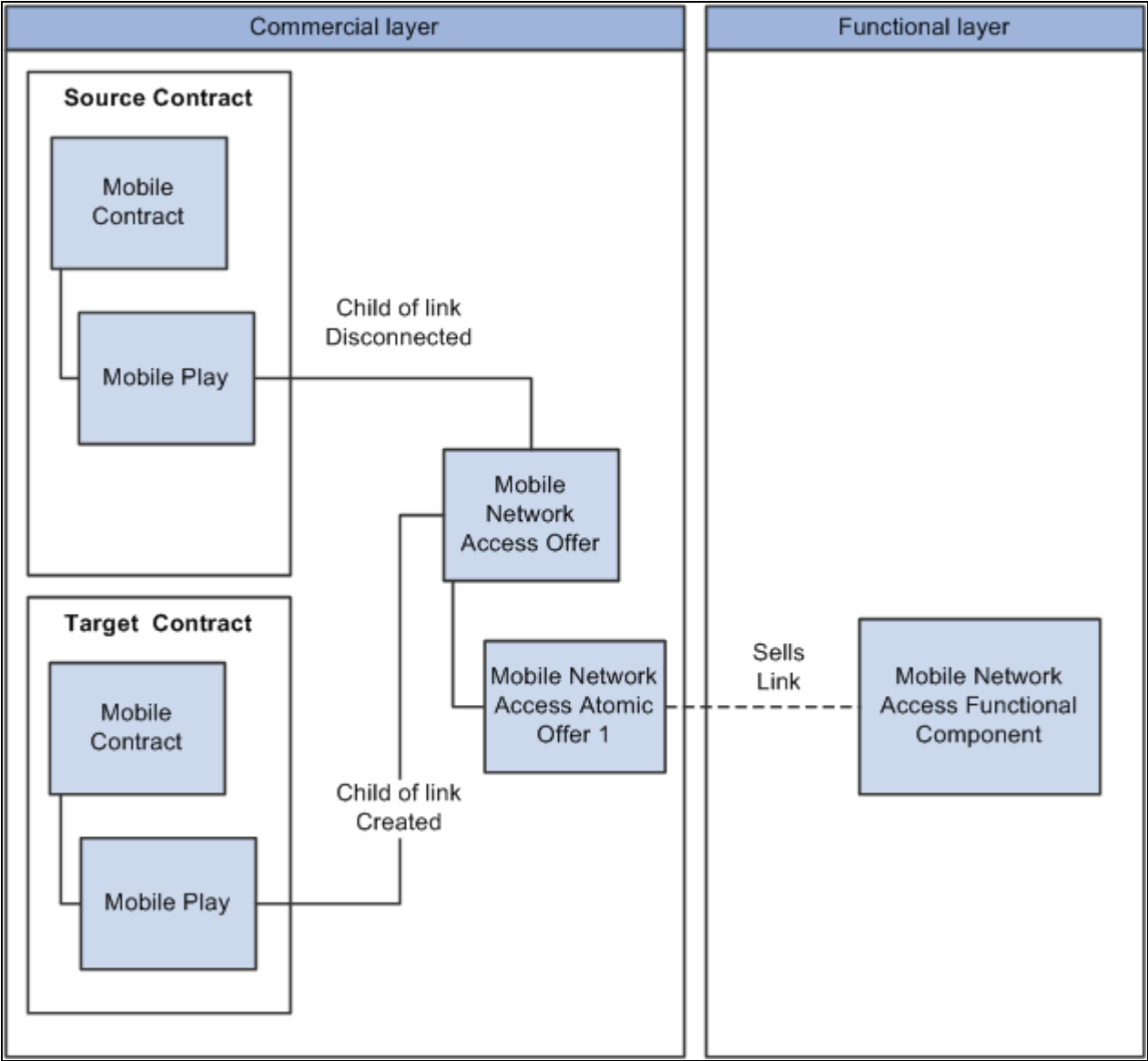
Migration of a commercial component between different commercial offers in different installed multilevel contracts

Package Migration Scenarios

Multilevel product bundles support various forms of migrations and they can be summarized into these types:

C1 stands for contract 1, and *C2* for contract 2.

Migration Type	Example
Contract change	Migrate all offers or services from the existing C1 contract to the new C2 contract and terminate C1.
Contract takeover	Migrate all offers or services from the existing C1 contract to the existing C2 contract and terminate C1.

Migration Type	Example
Contract split	Migrate all offers or services from the existing C1 contract to the new C2 contract and new C3 contract. Terminate C1.
Contract merge	Migrate all offers or services from existing C1 and C2 contracts to the new C3 contract. Terminate C1 and C2.
Contract separation and merging	Migrate some offers or services from the existing C1 contract to the new C2 contract. C1 remains active after order fulfillment.
Transfer between contracts (split and merge)	Migrate some offers or services from the existing C1 contract to the existing C2 contract and at the same time migrate some other offers or services from C2 to C1. C1 and C2 remain active after order fulfillment.

This table lists the supported package migration scenarios and their migration results at a high level:

Use this legend to read the tables:

* C1, C2, and C3: Contract 1, contract 2 and contract 3

* E: Existing contract

* N: New contract

* A and B: Customer A and Customer B

Example: *EC1 of customer A* stands for an existing contract called *C1* that belongs to customer A; *NC2* stands for a new contract called *C2*.

Scenario	Description	Same Contract Customer?	Migration Result
1	Migration of all products and services from EC1 to NC2 (contract change)	Yes	• Termination of EC1. • Creation of NC2.
2	Migration of all products and service from EC1 and EC2 to NC3 (contract merge)	Yes	• Termination of EC1 and EC2. • Creation of NC3.
3	Migration of all products and services from EC1 to EC2 (contract takeover)	Yes	• Termination of EC1. • EC2 remains active.
4	Migration of all products and services from EC1 of customer A to EC2 of customer B (contract takeover)	No	• Termination of EC1 for customer A. • EC2 of customer B remains active. • Change of ownership for migrated products and services.

Scenario	Description	Same Contract Customer?	Migration Result
5	Migration of some products and service from EC1 to NC2 (contract separation and merging)	Yes	• EC1 remains active. • Creation of NC2.
6	Migration of some products and services from EC1 of customer A to NC2 of customer B (contract separation and merging)	No	• EC1 of customer A remains active. • Creation of NC2 for customer B. • Change of ownership for migrated products and services.
7	Migration of all products and service from EC1 to NC2 and NC3 (contract split)	Yes	• Termination of EC1. • Creation of NC2 and NC3.
8	Migration of some products and services between EC1 and EC2 (transfer between contracts)	Yes	EC1 and EC2 remain active.
9	Migration of some products and services from EC1 of customer A to EC2 of customer B (transfer between contracts)	No	• EC1 and EC2 remain active. • Change of ownership for migrated products and services.
10	Migration of products and services from EC1 and EC2 to NC3 (contract separation and merging)	Yes	• EC1 and EC2 remain active. • Creation of NC3.
11	Migration of products and services from EC1 (all) and EC2 (some) to NC3 (contract separation and merging)	Yes	• Termination of EC1. • EC2 remains active. • Creation of NC3.
12	Migration of products and services from EC1 (some) of customer A and EC2 (all) of customer to NC3 of customer A (contract separation and merging)	No	• EC1 customer A remains active. • Termination of EC2 for customer B. • Creation of NC3 for customer A. • Change of ownership for migrated products and services.

Understanding Migration Actions

This section discusses:

- Migration action definitions.

- Integrity checks on migration actions.

- How are functional components handled during product migrations.

Migration Action Definitions

Migration actions specify all the details involved in migrating multilevel product components within or across contracts, which include:

- Source component to be migrated.

- Source context within which the source component must be present in order for the migration action to be applicable. The context can be specific contracts or any contract in the system.

- Target component, which is the outcome of the migration.

  Both the target and source component are the same object in the case of reparenting; they are different for transformation-type migrations.

- Target context within which the target component resides as a result of the migration. The context can be specific contracts or any contract in the system.

- (optional) Other migration actions that are nested under the current migration action definition.

There are two types of migration actions, public and private:

- Public - These migration actions are visible in configuration sessions that users can select to perform at runtime. At design time, these actions can be referenced in other migration actions. You can use eligibility rules to restrict the availability of migration actions in product configuration based on specified user and customer criteria.

  Note. Migration actions that are created for products of the highest level component type (that is, *Contract*) must be public.

- Private - These migration actions are used solely as part of other migration actions. They are invisible in configuration sessions and not impacted by eligibility rules.

Each package migration is associated with one migration action or sometimes multiple ones, which is referred to as *migration scripts*. A migration script contains a group of migration actions that are part of the *parent* migration action definition and they can be nested based on these rules:

- Contract migration actions can contain play, offer and atomic offer migration actions.

- Play migration actions can contain offer and atomic offer migration actions.

- Offer migration actions can contain other offer and atomic offer migration actions.

Note. Atomic offer migration actions (both source and target components are atomic offers) are considered atomic operations on products and they cannot be nested.

See and <u>Chapter 23, "Setting Up Multilevel Product Bundles," Setting Up Migration Actions, page 532.</u> and <u>Chapter 23, "Setting Up Multilevel Product Bundles," Setting Up Commercial Eligibility Rules, page 547.</u>

Integrity Checks on Migration Actions

To ensure data integrity, the system performs a number of validations when a migration action definition is saved. They are:

- Selected source and target products must exist in the product catalog.

- Product components that are referenced in both the source and target sides are consistent with their definitions in the Package Components component.

- The specified end date must be greater than the specified start date.

- The component type of the selected source and target products must match.

- If *Selected Contracts* is selected as the context of the source product or target product (or both) on the Migration Action page, the Contracts group box that appears must contain at least one contract.

- The Migration Action lookup in the Mapping section of the Migration Mapping page is available to products that are of types *Play* and *Offer.* Only migration actions containing products that are present in the source hierarchy are available for selection.

- For private migration actions to be reused, the source product that is specified in the definition of the reused private migration action and the corresponding product to which the action is mapped (in a different migration action definition) must be the same.

- The Target Product ID lookup on the Migration Mapping page is restricted to atomic offers (products that are marked as *Link to Functional* in the Product Definition component) that are present in the hierarchy of the target object. If the same product ID is used in another row, the system creates a separate entity for that product.

- If the selected source and target products on the Migration Action page are different, then at least one atomic offer from the source hierarchy must be mapped to another atomic offer in the target hierarchy regardless of nesting.

- The system performs a referential integrity check when a migration action is being inactivated. A system message appears if the it is currently being referenced in any other active migration action.

How Are Functional Components Handled During Product Migrations

All the commercial components that are defined in the system can potentially be selected as source and target components in migration action definitions. And for functional components relating to atomic offers that are subject to be reparented or transformed to other atomic offers, one of these things happen:

- If atomic offers (source) are removed as a result of the migration, their associated functional components are also terminated.

- If atomic offers (source) are moved to other parents, their functional components are moved along with them as well. Existing *Sells* installed links remain intact.

- If atomic offers (source) are transformed in target product hierarchies and the transformed target atomic offers are also set to relate to the same functional components as the source atomic offers, functional components are relinked to target atomic offers—the system removes installed links with the old atomic offers and creates installed links with the new atomic offers.

   If the transformed target atomic offers sell different functional components, then both the source atomic offers, their associated functional components and installed links are removed as a result of the migration.

Understanding Package Migration Requests

This section discusses:

- Creation of convergent orders for product migration: example.

- Cross-contract migration.

- Line relationships in convergent orders for package migration.

- How is migration information presented in convergent orders: example.

- Order submission and generation of child orders.

- Order pricing.

- Removal of multilevel contracts with migrated components.

- Order fulfillment for package migration.

- Relationships between installed products and service agreements after migration.

Creation of Convergent Orders for Product Migration: Example

Convergent orders are used for capturing package migration requests and supporting the transfer of commercial and functional components between existing contracts as well as new and existing contracts. The capture type allows multiple customers to be selected in an order, facilitating cross-contract migrations that involve different customers.

Here is an example on migrating an atomic offer in a convergent order. In this example, a change service request is made to upgrade the *8-5 BB support* atomic offer to the *24/7 BB Support* atomic offer in a different contract. This transformation occurs as a result of the system-delivered *8-5 BB support to 24/7 BB Support* migration action.

To migrate an atomic offer to a different contract:

1. Create a convergent order. Select customer for the order.

2. Add related customers to the order.

   This step is necessary if you want to migrate package components across different multilevel contracts that belong to customers other than the one already selected in the previous step.

3. Select multilevel installed contracts and add new multilevel contracts needed for the migration. Select the *Change* line action.

    Installed contracts that belong to or associated with selected customers on the order are available for selection.

    If you add a new multilevel contract and related customers are selected in the order, you must identify a customer for which the new contract is created. If no related customers are selected, the customer of the order header is by default the owner of the new contract.

    You cannot change the customer of a new contract customer once the customer has been assigned. If you need to make that change, you have to add another new contract (and this time assign it to the desired customer) to the order and remove the previous one with the wrong customer.

4. Add the source and target products for the migration in the order and select the *Change* line action.

Convergent Order, with source and target products added for the migration

5. Click the Reconfigure Product link to initiate a configuration session and perform package migrations. A configuration session opens for the customer and it displays the two contracts previously selected in the convergent order.

Configuration session showing the source contract and its broadband play where the 8-5 BB Support atomic offer, which is subject to transformation, is located

Configuration session showing the structure of the target contract and its broadband play

6. Click the Migrate icon next to the atomic offer. A list of possible migrations are displayed in two sections: one section includes migrations to contracts that are currently identified in the configuration session, another section includes possible migrations to contracts that will be created as a result of the selection of any migration within this section. Select a migration action for the atomic offer.
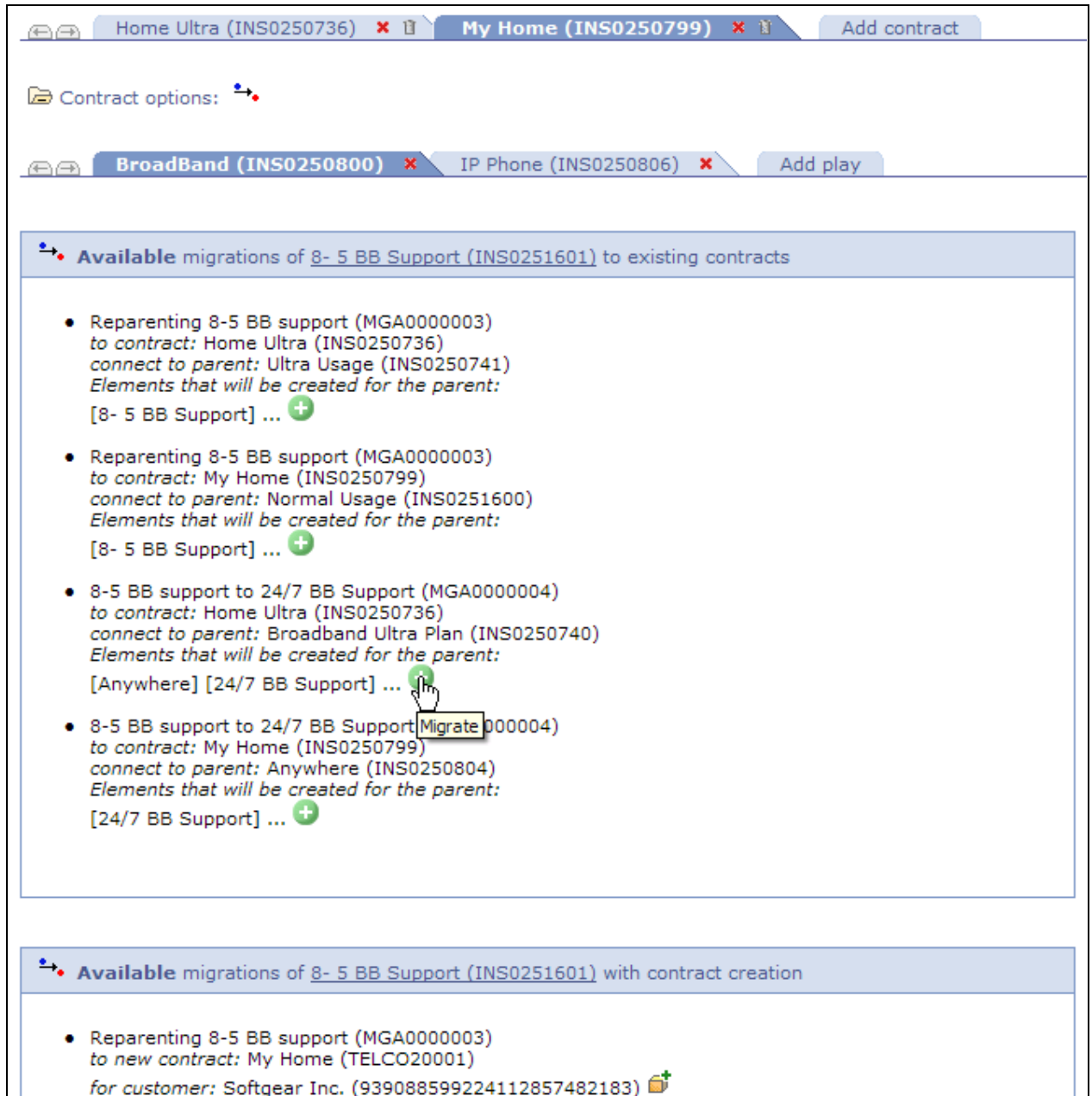
Configuration session showing a list of available migration actions for the 8-5 BB Support atomic offer

Important! The system uses the current date as the reference date for determining the list of valid migration actions to be evaluated and presented after evaluation as possible migrations for any given product configuration. In the case of multilevel configuration rules, the order's product selling date is used to determine which of the rules are subject to evaluation in configuration sessions.

There will be no validation to check for the validity of the selected migration action against the current date after the order is submitted.

7. The migration is shown in both the source and target product structures. The configuration indicates that the removal of the *8-5 BB Support* atomic offer from the source product and addition of the *24/7 BB Support* atomic offer to the target product as a result of the migration.

Configuration session showing the removal of the 8-5 BB Support atomic offer from the source contract

Configuration session showing the addition of the 24/7 BB Support atomic offer to the target contract

8. Verify and submit the new configuration. When finished, configuration information is updated and displayed in the convergent order.

    Configuration sessions can be saved and submitted at a later time. If the configuration result comes back as invalid, reconfigure the product until it is valid, otherwise the order cannot be submitted.

Line	Configuration Status	Line Action	Reason	Product Description	Link	Options	List Price	Unit Price	
1	🔺 Valid	Change ▾	Migration ▾	My Home		🖼 Reconfigure Product	0.00	0.00	🗑
				BroadBand			0.00	0.00	
				Equipment BB			0.00	0.00	
				Phoenix Cable Modem	🔔		0.00	0.00	
				BroadBand Plan			0.00	0.00	
				Anywhere			0.00	0.00	
				24/7 BB Support	🔔		0.00	0.00	
		Remove		Normal Usage			0.00	0.00	
		Remove		8- 5 BB Support	🔔		0.00	0.00	
				IP Phone					
				IP Line			0.00	0.00	
				IP Phone Line access	🔔		0.00	0.00	
				Phone Plan			0.00	0.00	
				Limited Plan			0.00	0.00	
				250 Sms	🔔		0.00	0.00	
				250 mins	🔔		0.00	0.00	

Product is linked by the "Migrated to" type link with another product.

The Service Line Summary section of the convergent order, showing the removal of the 8-5 BB Support atomic offer from the source contract due to package migration

2	▲ Valid	Change ⌄	Migration ⌄	Home Ultra		🖼 Reconfigure Product	0.00	0.00	🗑
				Broadband Ultra			0.00	0.00	
				Equipment BB			0.00	0.00	
				Phoenix Cable Modem	👤		0.00	0.00	
				Broadband Ultra Plan			0.00	0.00	
				Ultra Usage			0.00	0.00	
				100 GB	👤		0.00	0.00	
				100 Emails	👤		0.00	0.00	
				8- 5 BB Support	👤		0.00	0.00	
		Add		Anywhere			0.00	0.00	
		Add		24/7 BB Support	👤 📄		0.00	0.00	
				Phone Ultra	Product is linked by the "Migrated from" type link with another product.		0.00		
				IP Line			0.00	0.00	
				IP Phone Line access	👤		0.00	0.00	

The Service Line Summary section of the convergent order, showing the addition of the 24/7 BB Support atomic offer to the target contract due to package migration

9. Click the 8-5 BB Support link to access the Line Details page and view the line relationships that are impacted as a result of the migration.

| Entry Form | Line Details | Holds | Notes | Related Actions | History | Fulfillment |

Go To Select One... ⌄

Line Details   Find | View All First ◀ 11 of 47 ▶ Last

Product 8- 5 BB Support Line 37		Total Price 0.00
Product ID TELAO20006 Add Note		Recurring List Price
Installed Product INS0251601		Net Recurring Price 0.00
ID		
Unit of Measure Each		List Price 0.00
Order Qty 1.0000 Check Availability Refresh		Lead Time 0
Unit Price 0.00		Selling Status Current
Partial Shipments Single Shipment ⌄		

Configuration Status

Order Configuration Status Valid   📷 Reconfigure Product
Contract Configuration Status Valid
Line Configuration Status Valid
Functional Component Status Valid

Configuration Status Details

Line Relationship

	Action	Type	Relation	Object Description	Related Line ID	Related Order ID	Related Object Type	Related Object ID
1	Remove	Child Of	Is Child Of	Normal Usage	36		Installed Product	INS0251600
2	Remove	Sells	Sells	BroadBand Support	17		Installed Product	INS0251602
3	Add	Migration	Migrated from	24/7 BB Support	16			

Line Details page, showing various configuration statuses and post-migration line relationship changes

They are:

- Removal of a *Sells* relationship with its functional product (BroadBand Support).

- Removal of a *Child Of* relationship with its parent product (Normal Usage).

- Creation of a *Migration* relationship with the transformed product (24/7 BB Support) in the target contract.

10. Click the 24/7 BB Support link to access the Line Details page and review the line relationships.

Line Details page, showing various configuration statuses and post-migration line relationship changes

They are:

- Creation of a *Child Of* relationship with its new parent product (Anywhere) in the target contract.

- Creation of a *Migration* relationship with the removed product (8-5 BB Support) in the source contract.

- Creation of a *Sells* relationship with its functional product (BroadBand Support).

11. Enter remaining information needed for the order to be fulfilled, for example, shipping and billing information. Submit the order.

    If related customers are selected in the order, the order captures shipping and billing information separately for each one of them. Upon the submission of the order, this information is populated to child simple orders that are generated for these customers. The shipping and billing information, however, is not copied to service management orders because it is not applicable to the *service management* capture type.

When the order is completed, components with the *Add* line action are created; for those that are associated with the *Remove* line action, they are removed in the system. For all components that are present both in the source and target structures (reparenting), the attributes of the target component are updated accordingly.

Cross-contract Migration

In a package migration, the source contract must already exist (that is, an installed service for a purchased multilevel product bundle and is also referred to as *installed contract* in this document), whereas the target contract can be a new contract, an installed contract, or a combination of both. In a *cross-contract* package migration where the target contract is a new product bundle selected in the order, its installed service gets created as a result of the fulfillment of that order.

In order for a commercial component instance to be moved successfully to another contract structure (new or existing), the commercial component needs to be part of the structure at the exact same level to which the instance is migrating and the component must still be a valid, active member of the target contract structure, which means that it is not obsolete. Similarly, for a functional component instance to be migrated and validated successfully, the new atomic offer that it associates with has to be set up to sell it.

When a cross-contract package migration involves more than one customer, some of the information in the migrated multilevel installed products is subject to update in order to maintain the integrity of the installed product. This information includes:

*   Owner—the owner of the target multilevel contract becomes the new owner of the installed product.

*   Billing account—the new billing account of the installed product has to belong to the target contract owner.

Orders involving cross-contract package migration are validated upon submission to make sure that errors are caught and correct prior to fulfillment.

See and <u>Chapter 24, "Working with Orders for Multilevel Product Bundles," Holds, page 591.</u>

If the migration of a multilevel installed product causes an update to its owner, or billing account, the change of information is captured and available for review in the Line Relationship section of the Line Details page of the order, after the completion of the configuration session and retrieval of configuration information to the order.

Note. Components of installed contracts cannot be migrated to other contracts that are being disconnected simultaneously in configuration sessions.

Line Relationships in Convergent Orders for Package Migration

After the submission and validation of configuration sessions, configuration information is returned to the order and all of the corresponding order actions are shown on the Line Details page. Based on the nature of package migration requests, the Line Relationship section supports the display of these line actions:

Line Relationship Type	Applicable Action	Description
Child Of	Add/Remove	Indicates the creation (Add) of the child of relationship between a migrated installed product (commercial component) and its new parent (commercial component), and the deactivation (Remove) of the relationship with its old parent as a result of the migration.
		As a result of the migration, the parent installed product ID of the migrated installed product is updated with the ID of the new parent installed product.
Sells	Add/Remove	Indicates the creation (Add) of the sells relationship between a migrated functional component and a new atomic offer (commercial component) that sells the component, and the deactivation (Remove) of the relationship with its old atomic offer as a result of the migration.
Billed To	Add/Remove	Indicates the change of billing account for a migrated installed product if the migration involves contracts that are associated with different billing accounts. If the target contract is a brand new one and a new billing account is created for it, the migrated installed product is then assigned to this new account; if the target contract is an existing one, the installed product can be assigned to one of the billing accounts belonging to the owner of the target contract.
		As a result of the migration, the account ID of the migrated installed product and all its child installed products is changed to the newly selected one that belongs to the target contract owner.
Owned By	Add/Remove	Indicates the change of ownership for the migrated installed product if the migration involves two contracts that are owned by different customers.
		As a result of the migration, the customer ID of the migrated installed product and all its child installed products is changed to the ID of the owner of the target contract.
Migration	Add	Indicates that the corresponding object or installed product is either the source or target component of a migration, based on the relation stated on the order line. The system creates a migration link (not installable) behind the scene between the source component order line and the target component order line and it cannot be removed without initiating a configuration session.
		As a result of the migration, the source component is removed and the target component added to the system.
		Note. Migration links do not apply to reparenting migrations as both the source and target components refer to the same entity.

How Is Migration Information Presented in Convergent Orders - Example

This section provides an example of a how data is presented in a convergent order and child orders created for an commercial offer migration. The first table shows the customer, order line and line relationship information of a sample convergent order that is created to migrate a commercial offer named *OB* from *Play PB* to *Play PA* across different contracts (from *CB* to *CA*) belonging to different customers (from *Customer B* to *Customer A*).

Parent Convergent Order						
Customer						
Header (Sold to) Customer		Customer A				
Related Customer		Customer B				
Order Lines						
Order Line	1	2	3	4	5	6
Action	Change	No operation	No operation	No operation	Change	Remove
Product	**Contract** CA	**Play** PA	**Offer** OA	**Offer** OB	**Contract** CB	**Play** PB
Parent Line Number	N/A	1	2	2	N/A	4
Customer	Customer A	Customer A	Customer A	Customer A	Customer B	Customer B
Contract	C1	C1	C1	C1	C2	C2
Comment	Billed to BA-A1; top-level product	Billed to BA-A1	Billed to BA-A1	Billed to BA-A1 This offer is going to migrate from **Play** PB to **Play** PA billed to BA-B2 before migration	Billed to BA-B1; top-level product	Billed to BA -B1 After **Offer** OB is migrated to **Play** PA, this play has no other child offer and is going to be terminated

Data presented in a parent convergent order for migrating an offer from one contract to another that are owned by different customers (1 of 2)

Line Relationships						
Order Line Relationship	1	2	3	4	5	6
Action	Remove	Add	Remove	Add	Remove	Add
Link Type	Child Of	Child Of	Owner	Owner	Billed To	Billed To
Link	**Offer** *OB->* **Play** *PB*	**Offer** *OB->* **Play** *PA*	**Offer** *OB->* **Customer** *B*	**Offer** *OB->* **Customer** *A*	**Offer** *OB->* **Billing Account** *- B1*	**Offer** *OB->* **Billing Account** *- A1*
Source Related Order	N/A	N/A	N/A	N/A	N/A	N/A
Order Line	4	4	4	4	4	4
Target Related Order	N/A	N/A	N/A	N/A	N/A	N/A
Related Order Line	6	2	N/A	N/A	N/A	N/A
Related Object Type	Installed Product	Installed Product	Customer	Customer	Billing Account	Billing Account
Related Object ID	**Play** PB (Installed Product)	**Play** PA (Installed Product)	**Customer** B	**Customer** A	BA-B1	BA-A1

Data presented in a parent convergent order for migrating an offer from one contract to another that are owned by different customers (2 of 2)

These tables show the customer, order line, and line relationship information that is populated to its child orders that are generated for each multilevel installed service (multilevel installed contracts C1 and C2) involved in the parent convergent order:

Child Order 1 (CA)				
Customer				
Header (Sold to) Customer	Customer A			
Order Lines				
Order Line	1	2	3	4
Action	Change	No operation	No operation	No operation
Product	**Contract** CA	**Play** PA	**Offer** OA	**Offer** OB
Parent Line Number	N/A	1	2	2
Customer	Customer A	Customer A	Customer A	Customer A
Contract	C1	C1	C1	C1
Comment	Billed to BA-A1; top-level product	Billed to BA-A1	Billed to BA-A1	Billed to BA-A1 This offer is going to migrate from **Play** PB to **Play** PA billed to BA-B2 before migration

Data presented in a child service management order (child order 1) of a convergent order created for package migration (1 of 2)

Line Relationships						
Order Line Relationship	1	2	3	4	5	6
Action	Remove	Add	Remove	Add	Remove	Add
Link Type	Child Of	Child Of	Owner	Owner	Billed To	Billed To
Link	**Offer** *OB->* **Play** *PB*	**Offer** *OB->* **Play** *PA*	**Offer** *OB->* **Customer** *B*	**Offer** *OB->* **Customer** *A*	**Offer** *OB->* **Billing Account** *- B1*	**Offer** *OB->* **Billing Account** *- A1*
Source Related Order	N/A	N/A	N/A	N/A	N/A	N/A
Order Line	4	4	4	4	4	4
Target Related Order	N/A	N/A	N/A	N/A	N/A	N/A
Related Order Line	6	2	N/A	N/A	N/A	N/A
Related Object Type	Installed Product	Installed Product	Customer	Customer	Billing Account	Billing Account
Related Object ID	**Play** PB (Installed Product)	**Play** PA (Installed Product)	**Customer** B	**Customer** A	BA-B1	BA-A1

Data presented in a child service management order (child order 1) of a convergent order created for package migration (2 of 2)

Child Order 2 (CB)		
Customer		
Header (Sold to) Customer	Customer B	
Order Lines		
Order Line	1	2
Action	Change	Remove
Product	**Contract** CB	**Play** PB
Parent Line Number	N/A	2
Customer	Customer B	Customer B
Contract	C2	C2
Comment	Billed to BA-B1; top-level product	Billed to BA -B1 After **Offer** OB is migrated to **Play** PA, this play has no other child offer and is going to be terminated

Data presented in a child service management order (child order 2) of a convergent order created for package migration (1 of 2)

Order Line Relationships	
Order Line Relationship	1
Action	Remove
Link Type	Child Of
Link	**Offer** OB-> **Play** PB
Source Related Order	Parent Order
Order Line	4
Target Related Order	N/A
Related Order Line	2
Related Object Type	Installed Product
Related Object ID	**Play** PB (Installed Product)

Data presented in a child service management order (child order 1) of a convergent order created for package migration (2 of 2)

Order Submission and Generation of Child Orders

Upon the submission of convergent orders for package migration, corresponding child orders are generated based on the available order lines and selected customers.

In a situation where a convergent order includes multiple customers, new multilevel contracts and multilevel installed services, the system generates:

- One simple order for each customer to process all new contracts that are assigned to the customer.

- One service management order for each multilevel installed product included in the convergent order.

Generated child orders are submitted for fulfillment at the same time. In the case of future dated convergent orders, child orders are generated together on the execution date of the convergent orders.

See and

Order Pricing

All pricing information (including pricing adjustments) applied on the parent convergent order is populated automatically to its child orders. Line-level pricing adjustments is copied over with the order line to which they apply. As for header-level pricing adjustments:

- All *percent* type adjustments are copied to all generated child orders.

- All *amount* type adjustments are copied to the child order that is generated for header *Sold To* customer of the parent order. If an order of the *SO* type is created for the header customer, adjustments are copied to this order; otherwise, they are available in the service management order for the customer.

Removal of Multilevel Contracts with Migrated Components

Multilevel contracts that are involved in migration processes cannot be removed from convergent orders. A system message is displayed when you attempt to delete a contract that has any migrated components, which states that the remove operation cannot be performed unless the migration action is reversed for that contract in a configuration session.

Note. If you want to migrate some components in a contract and the migration actions selected call for the removal of all components in the contract, the system automatically changes the action of the contract from *Change* to *Disconnect* in the convergent order.

Order Fulfillment for Package Migration

In case of package migrations, the fulfillment process for convergent orders includes the synchronization between child orders for contracts that are impacted by the migrations (contacts being the source or the target of the migrations). The reparenting action is always performed in the order created for the target contract. During the fulfillment process, child orders are synchronized at two steps:

- Before an installed product involved is set to the *Pending* status.

  This ensures that the migrated components are reparented to the target contract only after the source contract has been updated to the *Pending* status; otherwise, the reparenting action can cause inconsistency among installed products (for example, the previous commercial parent in the source contract remains *active* even after all its children have already been moved to the target contract). The fulfillment of the target contract order is put on hold right before approaching the step to set the installed product to pending status step until the source contract order has finished this step.

- Before a message is sent to the provisioning system.

  This ensures that messages are sent to the provisioning system in proper sequence. The provisioning system should be notified first on the reparenting action (that is, message sent in the context of the target contract order) and later about changes in the source contract (for example, removal of the previous commercial parent).

The submission child orders kicks off the fulfillment process. This table highlights some of the steps in the process where major events in installed products occur based on the previous example (migration of *OB* offer from *CB* to *CA* contracts):

Step	Child Order #1 (target contract CA)	Child Order #2 (source contract CB)	Description of the Step
1	Synchronization Step	-	Pending installed products created for the target contract (CA) is put on hold until the source contract (CB) is set to pending status.
2	-	Installed Products for child order #2 in pending status	Source contract (CB) is set to pending status.

Step	Child Order #1 (target contract CA)	Child Order #2 (source contract CB)	Description of the Step
3	Installed Products for child order #1 in pending status	-	Target Contract (CA) is set to pending status. This step can proceed only after the source contract is set to pending status.
4	-	Synchronization Step	Message to provisioning step for the migration source Contract (CB) is put on hold until message to provisioning is sent for migration target contract (CA) .
5	Message sent to provisioning system	-	Message sent to provisioning system for the migration target contract (CA).
6	Callback message sent from provisioning system	Message sent to provisioning system	Message sent to provisioning system for the migration source contract (CB).
7	-	Callback message sent from provisioning system	The migration target contract (CA) is updated to the *Installed* status (only selected components).
8	Installed Products for child order #1 in installed status	Installed Products for child order #2 in disconnected status	The migration target contract (CA) is updated to the *Installed* status (only selected components), whereas the migration source Contract (CB) is updated to the *Disconnected* status (only selected components). Synchronization of these steps is not required.

During the fulfillment process, installed links are created and their statuses updated based on the status change of their associated installed products. Status updates take place in these steps: (data fields that are updated within the corresponding step are highlighted in blue)

• Step 1

Installed Products	
Product	Product Status
Contract CA	Installed
Play PA	Installed
Offer OA	Installed
Contract CB	Installed
Play PB	Installed
Offer OB	Installed

Installed Links				
Link Type	Link	Link Status	Source	Target
Child Of	Offer OB -> Play PB	Installed	Offer OB	Play PB
Child Of	Offer OB -> Play PA	N/A	N/A	N/A

Product Relations				
Product	Relation Type	Related Object Type	Related Object ID	Comment
Offer OB	Owner	Customer		Customer B
Offer OB	Billed To	Billing Account		BA-B1

Any update to installed products that pertains to the target contract is on hold until changes that are specific to the source contract are set to appropriate pending status

- Step 2

Installed Products	
Product	**Product Status**
Contract CA	Installed
Play PA	Installed
Offer OA	Installed
Contract CB	Installed
Play PB	Pending-Disconnection
Offer OB	Installed

Installed Links				
Link Type	**Link**	**Link Status**	**Source**	**Target**
Child Of	Offer OB -> Play PB	Pending-Disconnection	Offer OB	Play PB
Child Of	Offer OB -> Play PA	N/A	N/A	N/A

Product Relations				
Product	**Relation Type**	**Related Object Type**	**Related Object ID**	**Comment**
Offer OB	Owner	Customer		Customer B
Offer OB	Billed To	Billing Account		BA-B1

Installed product for the migrated play and its installed link are set to pending-disconnection status in the source contract

- Step 7

Installed Products	
Product	Product Status
Contract CA	Installed
Play PA	Installed
Offer OA	Installed
Contract CB	Installed
Play PB	Pending-Disconnection
Offer OB	Installed

Installed Links				
Link Type	Link	Link Status	Source	Target
Child Of	Offer OB -> Play PB	Pending-Disconnection	Offer OB	Play PB
Child Of	Offer OB -> Play PA	Installed	N/A	N/A

Product Relations				
Product	Relation Type	Related Object Type	Related Object ID	Comment
Offer OB	Owner	Customer		Customer B
Offer OB	Billed To	Billing Account		BA-B1

Installed link of the migrated play is set to installed status in the target contract

- Step 8

Installed Products	
Product	Product Status
Contract CA	Installed
Play PA	Installed
Offer OA	Installed
Contract CB	Installed
Play PB	Disconnected
Offer OB	Installed

Installed Links				
Link Type	Link	Link Status	Source	Target
Child Of	Offer OB -> Play PB	Disconnected	Offer OB	Play PB
Child Of	Offer OB -> Play PA	Installed	N/A	N/A

Product Relations				
Product	Relation Type	Related Object Type	Related Object ID	Comment
Offer OB	Owner	Customer		Customer B
Offer OB	Billed To	Billing Account		BA-B1

Installed product for the migrated play and its installed links are updated to disconnected status in the source contract

Relationships Between Installed Products and Service Agreements After Migration

If an installed product is covered by a service agreement and it is moved to another multilevel contract that is owned by a different customer, the fulfillment process terminates the relationship between the migrated installed product and the service agreement (belonging to the old customer) upon the completion of package migration. The migration also breaks any existing commitment that the migrated installed product has.

See and

Understanding Split Billing

PeopleSoft CRM provides robust billing capabilities to support the ordering and service management of multilevel product packages, which often include a combination of products and services from different lines of businesses and can potentially be consumed by multiple customers. For example, a phone directory that can be shared between a mobile and landline service of one or more customers, or a 1000-minute mobile air time that can be shared by a group of customers. With the nature of communications-specific product packages where components can be shared by different individuals, customers prefer to be charged only for the portion of the package that they use. For example, a company may agree to pay for the monthly subscription and weekday minutes of its employees' mobile phone plans, but each employee is responsible for their weekend minute usage. The split billing functionality meets this business need by allowing order payments to be charged to multiple billing accounts that belong to the order's sold-to customer as well as customers with which it has a bill-to relationship.

At a high level, the split billing functionality enables, but not limited to:

• Capturing and displaying of multiple billing accounts for products in ordering and service management processes.

• Defaulting of billing accounts for billable products.

• Selection of billing accounts that are owned by customers other than the orders' sold-to customers.

• Management of billing accounts in package migrations.

More details on the split billing functionality are discussed in this section.

This section discusses:

• Split billing products.

• Orders and service management.

• Installed products.

• 360-degree view support.

Split Billing Products

Refer to the see section for information on split billing products.

See and Chapter 23, "Setting Up Multilevel Product Bundles," Split Billing Products, page 478.

Orders and Service Management

The split billing functionality allows you to:

• Select to pay for nonrecurring and recurring charges by billing account.

• Select multiple billing accounts to pay for split billing products at the order line level.

- Select billing accounts of associated bill-to customers to pay for products.

- Change billing accounts of installed products using service management orders.

Note. A prepaid account can only be used to pay for products and services that belong to one single contract or product package. In addition, you cannot select both prepaid and postpaid billing accounts within an order.

Billing Account Selection and Split Billing At Order Line Level

For order lines containing products that are set as *billing account selectable,* the Billing Account Details section appears in the Line Details page at the order line level, prepopulated with the same number of billing accounts that are predefined in each of the respective product definitions. Each row has information such as the required and primary properties of the account, account number and purpose. The system prepopulates customer accounts in this section based on the defaulting logic, and you can select a different contact and billing account manually if applicable.

The number of rows in the Billing Account Details section comes from product definition and is not available of edit. For products that are set as *billing account selectable* but not *split billing* enabled, only one row appears in this section. You can still select a billing account in this case but cannot perform split billing for the order line.

Use of Billing Accounts From Different Customers

The CRM system allows you to charge payment, at the order line level, to billing accounts that do not belong to the order's sold-to customer (that is the customer selected at the order header). You can choose from billing accounts that are owned by bill-to customers of the sold-to customer.

The bill-to relationship between companies are established in the Company component.

Communications Setup Options for Split Billing

The system delivers several communications setup parameters that are used to enable or disable features related to split billing. This table lists the delivered parameters and their values are set to *Y* for the COM01 setID:

Name	*Description*
RBTACCNONREC	When enabled (value = Y), the Billing Account option becomes available as an option to pay for nonrecurring charges in orders.
RBTCUSTSPLITBIL	When enabled (value = Y), the system allows you to select a billing account (which belongs to the sold-to customer or any customer that has a bill-to relationship with the sold-to customer) to pay for recurring charges in orders. In addition, you can select a customer and contact in the Billing Account Details section on the Line Details page.
RBTSMNONREC	When enabled (value = Y), the Nonrecurring Billing Summary section appears in service management orders, which allows you to capture nonrecurring billing information in service management orders.

Name	Description
RBTREUSEPPACC	When enabled (value = Y), the system allows you to reuse a prepaid billing account (the account that is being marked for creation for the bill-to customer within the same convergent order) to pay for recurring charges in orders.

See and *PeopleSoft Number Management 9.1 PeopleBook*, "Setting Up Number Management," Setting Up the Configuration Table.

Holds

The system delivers a number of hold codes to support split billing in the ordering process, making sure that errors are caught and corrected before order are sent to fulfillment.

Note. As delivered, these hold codes cannot be overridden manually; they need to be resolved by taking the appropriate corrective actions.

This table lists the split billing-specific hold codes that are added to the *COM01* setID through the Capture Setup Tables Workbench:

Hold Code	Explanation
Prepaid and Postpaid accounts referenced in a single order (BAIMIX)	Hold is triggered if the order being validated contains both prepaid and postpaid billing accounts. The system only allows one type of billing accounts to be selected for each individual order line in any given order. How to address the issue: Make sure that all the billing accounts select for the order (at the header level and order line level) belong to the same type, that is, either prepaid or postpaid, but not both.
Prepaid Account Reuse Validation (BAPRH)	Hold is triggered if the prepaid account that is currently selected in the Recurring Billing Summary section of the order is already assigned to pay for charges of another contract. A prepaid account can only be used to pay for one contract on the same order and therefore cannot be referenced on two or more contracts within the same order. How to address the issue: Use a prepaid account that is not already assigned to another contract or product package.
New billing account selected for nonrecurring charges, but not marked for creation (BANAN)	Hold is triggered if the *Billing Account* option with the *New Account* value is selected for paying the nonrecurring charge in the order, but currently no new account has been marked for creation (in the Recurring Billing System section) for the bill-to customer in the system. How to address the issue: Either select to pay for recurring charges using the *New Account* option and select to create an account for the bill-to customer, or select to pay for nonrecurring charge using an existing billing account.
New billing account selected for reuse, but not marked for creation (BANAH)	Hold is triggered if either the *New Account* option or the *Reuse New Account* option is selected for paying the recurring charge in the order, but currently no new account has been marked for creation for the bill-to customer in the system. How to address the issue: Either select a type of billing account to create for the bill-to customer, or select to pay for nonrecurring charge using an existing billing account.

Hold Code	Explanation
Nonrecurring Billing Details not provided (BANRM)	Hold is triggered if the order has one-time charges but no information is available in the Nonrecurring Billing Summary section to provide payment details. How to address the issue: Provide details in the Nonrecurring Billing Summary section before submitting the order again.
Duplicate billing accounts marked for creation (BADMC)	Hold is triggered if more than one new billing account for the same bill-to customer and contact have been marked for creation on the order. How to address the issue: Update the order to not request more than one new account for the same bill-to customer.
Pending billing account selected (BAPND)	Hold is triggered if any of the billing account that is selected to pay for nonrecurring or recurring charges is still in the *Pending* status upon order submission. How to address the issue: Wait until the account is in Active status or choose another active account for the bill-to customer.
Insufficient prepaid account balance (BABAL)	Hold is triggered if the prepaid account that is currently selected to pay for nonrecurring charges does not have enough fund to make the payment. The system repeats this check next time the order is validated or submitted. In the case where the account balance is sufficient to cover the order's nonrecurring charges to begin with, information is stored in the order and the system does not repeat this check when the order is validated or submitted again in the future. Hold validation is performed when there is a change of value in nonrecurring charges to make sure that the current balance of the prepaid account is able to cover the payment. For future dated orders, this hold validation applies only to the final order submission. This hold logic is not triggered on orders that are in the *Queued* status. How to address the issue: Top-up the account with the required amount or select a different billing account or payment method.
New billing account selected, but not marked for creation. (BANAL)	Hold is triggered if the *New Account* option is selected for nonrecurring or recurring charges, but no account for the corresponding bill-to customer has been marked for creation on the order. How to address the issue: Mark new account for creation for the selected bill-to customer in the Recurring Billing Summary section or select a different billing account.
Billing Account required, but not selected (BARNS)	Hold is triggered if a billing account is required but is not currently selected at the order line level. How to address the issue: Select a billing account for the order line.
Prepaid Account Reuse Validation (BAPRL)	Hold is triggered if the prepaid account that is currently selected for an order line is already assigned to another contract or package. A prepaid account can only be used to pay for one single contract or package. How to address the issue: Update the order to use a prepaid billing account that is not linked to another contract or package in the system.

Hold Code	Explanation
Bill To customer validation (BANBT)	Hold is triggered if the current bill-to customer does not have an active bill-to relationship with the sold-to customer of the order. How to address the issue: Establish a bill-to relationship between the this bill-to customer and the sold-to customer, or select a different billing account to pay for the order.
Pending billing account selected (BAPNL)	Hold is triggered if a billing account that is currently selected to pay for recurring charges at the order line level is still in the *Pending* status upon order submission. How to address the issue: Wait until the account is in Active status or choose another active account.

See and <u>Chapter 4, "Setting Up PeopleSoft Order Capture," Defining Hold Codes, page 47.</u>

Convergent Orders

In convergent orders where multiple sold-to customers can exist in the same order, the system provides an option to use the new billing account in order lines of the convergent order in addition to the order line for which it is created, and these order lines can belong to different sold-to customers.

Here is an example. You create a convergent order that references two customers (one at the header level and one a related customer) for a package migration. In the Recurring Billing Summary section of the order for sold-to customer 1, you select a bill-to customer of customer 1 (customer A) and opt to create a new billing account. The account is marked for creation. Now, if you look at the Recurring Billing Summary section of the order for sold-to customer 2, the Reuse New Account option appears if the selected bill-to customer of this section for customer 2 is also customer A. If you choose to reuse the new account for customer A, the system populates customer A and new account as the default bill-to customer and billing account for all new order lines that are created for customer 2. The billing account defaulting logic applies.

Upon submission, a validation check is performed to make sure that no more than one new billing account for the same bill-to customer and contact can be created within a single convergent order.

On the Line Details page, you can manually select, or override existing default bill-to customer and billing account that pays for the recurring charge of the order line. If installed product is selected in the order line, you can change the billing account that is currently associated with the installed product to a different one, including a new account that is marked for creation (the option is available in the Account Number field if the bill-to customer of the new account is also the bill-to customer of the installed product order line).

Service Management Orders

You can use service management orders to perform these billing related updates for installed products and services:

- Change to a different billing account.

   Billing account change can be performed both in the Manage Service component and in a configuration session (as a type of *Change* service action in service management orders).

   When you create a service management order and add a billable installed product to it, the system populates available billing information, such as billing account owner, contact and account number, at the order and order line levels. You can change the billing account that is originally defaulted to the order line by selecting another billing account of the current bill-to customer or select another bill-to customer and billing account entirely. When that happens, the system generates a message to confirm if you want the newly selected customer and billing account be cascaded to child order lines. If yes, the change gets updated to both the current order line as well as its eligible child order lines; if no, only the current order line is updated.

   Two lines appear in the Line Relationship section of the Line Details page for the billing account change that occurs to the order line. One is an *Add* action line that points to the newly selected billing account and a *Remove* action line that points to the current billing account. They are not installable link.

   Upon submission, a validation check is executed to make sure that all required billing accounts are selected for the service management order. The result of the billing account change is the overwriting of old billing account data with the new one for the installed product.

- Enter payment details for nonrecurring charge that the service management order may have.

   The system performs a validation to make sure that nonrecurring payment information is present if the service management order incurs one-time payment.

- Enter new account details if a new account is to be created as part of the service management order.

   If you select to create a new billing account for recurring billing, the billing account defaulting logic applies and it cascades the new account information to eligible child order lines.

   If you select an existing billing account for recurring billing, different from the behavior of simple and convergent orders on billing account defaulting, the currently selected customer and billing account in the Recurring Billing Summary section are not used as default values for eligible order lines in service management orders. The reason is that most of the billable installed products in the system are already associated with a billing account, therefore it is not necessary to perform any automatic assignment of billing account at the order line level.

Prepaid to Postpaid Billing Account Conversion

The prepaid and postpaid account conversion business process is not applicable to prepaid billing accounts that are used for multilevel product bundles or multilevel installed products. While the conversion cannot be performed automatically behind the scenes, you can still manually change billing accounts (from prepaid to postpaid) for multilevel installed products using service management orders. If, however, the multilevel product component that you want to a billing account change actually cannot be associated with a postpaid account (it happens if its product definition is set to be paid for by prepaid billing accounts only), the product component needs to be migrated to a product hierarchy that accepts postpaid billing accounts, so that when the migration completes, the migrated multilevel installed product can select to associate with a postpaid billing account that belongs to its new owner.

In the case where an installed product is owned by an anonymous customer and paid for using a prepaid account, the prepaid to postpaid account conversion can be done through package migration as well. First, you migrate the installed product to a product hierarchy that belongs to an identified customer who owns a postpaid billing account. After the migration, you can select the postpaid billing account for the migrated installed product in a service management order.

Viewing Split Billing Information In Self Service Application

While the Order Capture Self Service application does not support the ordering of split billing products, it supports the display of billing account information for split billing product or installed products.

The View Services page of the Account Management component in Order Capture Self Service lists the services of a user along with their account, status and pricing information in the Services Summary section. If a service is split billing-enabled and is associated with more than one billing account, the number of the first billing account on the product definition is listed, and a More Details link appears. Clicking this link transfers you to the Service Details page where summary information of all the associated billing accounts is displayed in the Billing Account Details section. Information provided is in read-only mode and it includes the number of account, account customer and contact, account number and description, as well as account status.

See and *PeopleSoft CRM 9.1 Industry Application Fundamentals PeopleBook*, "Working with Self-Service Transactions for Communications and Energy," Managing Services.

Billing Account Defaulting

The system provides defaulting of billing accounts for products that require billing accounts. It uses the Required and Primary options of billing accounts in product definition to determine if and which customer account is to be populated in any given order line as the default account. Typically, billing account defaulting occurs at the order line level when:

- The billing account that is specified in the Billing Account Details section is set to be *required* in the corresponding product definition. This condition applies to order lines that are associated with billable products that are not split billing-enabled.

- The billing account that is specified in the Billing Account Details section is set to be *primary* in the corresponding product definition. This condition applies to order lines that are associated with split billing products.

For billing account rows that do not meet these requirements, no billing account defaulting occurs. For example, the system does not populate default customer billing accounts in rows where the account is set as optional. Another scenario where the system doesn't set billing account defaults is if it cannot find any customer billing account that matches the billing account type specified in the product definition. When that happens, the system generates this message: *Due to the billing account type mismatch some of order lines have been not assigned to any billing account. Please review billing accounts configuration and select billing accounts manually where required.* In this case, you can review each order line with the Billing Account Details section and select customer and billing account manually as you see fit. All billing accounts which have been not automatically defaulted will need to be manually selected.

Validation check is executed upon order submission to make sure that billing account information is entered properly.

This is how the billing account defaulting works at a high level:

- If the order line is a top-level order line, the bill-to customer and billing account that are referenced in the Recurring Billing Summary section becomes the default customer and billing account of the order line.

- If the order line is not a top-level order line, the customer and billing account of its parent order line become its default values.

  In the case where the customer or billing account is manually changed on an order line, the system automatically cascades the newly selected customer or billing account to its child order lines (those that meet the condition for billing account defaulting). And if any of these child order lines happens to have a billing account already selected, the system generates a confirmation message and ask for approval before overriding the current selection. For child order lines that do not meet the defaulting condition, for example, they are not required accounts, the update to their parent does not apply to them.

Billing Account Defaulting

Configurator Controller employs the following processing rules to default billing accounts:

- Configurator Controller defaults the billing account for newly added order lines within the configuration. However, previously selected billing accounts, or those passed from the Order Capture application, do not default.

- Configurator Controller defaults the primary billing account for split billing order lines.

- Configurator Controller defaults non split-billing enabled accounts when they are set to *required* in the Billing Account Details.

- When you enable split billing for a customer, Configurator Controller defaults the bill to customer (either the customer defined in the recurring billing account information in the order header or the customer defined in the parent order line).

- Configurator Controller cannot default order lines when the product account type (prepaid or postpaid) and the account set to default are mismatched.

- When you add child order lines, Configurator Controller defaults the primary billing account of a parent order to the primary billing accounts of the child order lines.

  When you enable split billing for a customer, Controller also defaults the bill to customer from the parent order line to the child order line.

- Configurator Controller defaults billing accounts from top to bottom. In other words, Controller defaults the billing account as defined in the order header for the contract. Similarly, the billing accounts defined at contract level are automatically defaulted to offer.

- Configurator Controller defaults billing accounts differently according to the component type.

  The search for billing account stops whenever the first non-empty billing account (the primary account if defined as split billing) is found while traversing up the hierarchy.

  - If the component is a contract, then Configurator Controller searches for the billing account defined in the order header summary.

  - If the component is a play, then Configurator Controller searches for the billing account defined in the contract, order header summary.

  - If the component is an offer, then Configurator Controller searches for the billing account defined in the parent offer, play, contract, order header summary.

  - If the component is an atomic offer, then Configurator Controller searches for the billing account defined in the offer, play, contract, order header summary.

  - If the component is a functional component, then Configurator Controller searches for the billing account defined in the atomic offer, offer, play, contract, order header summary.

- During the default process, Configurator Controller does not overwrite installed products with the billing accounts, even if a primary account is required and empty on the Installed Products for valid reasons.

- Configurator Controller does not use the initial billing account from the Order Capture application for defaulting if the account value is modified within the configuration. Controller defaults the account the account value used within the configuration.

Billing Account Defaulting In Migrated Order Lines

Billing account defaulting does not occur to order lines that are impacted by package migration. After the migration, no additional action is performed automatically to change the billing account that is associated with any migrated order line. You can, however, manually select a different billing account for a migrated order line if needed. In doing so, the system may be able to cascade the newly selected billing account to the child order lines of the migrated order line, if the child order lines meet the condition for billing account defaulting.

In a cross-contract migration where the contracts belong to different customers, it is possible that the bill-to customer of the migrated order line does not have a bill-to relationship with the target customer. A validation check is triggered upon order submission to make sure that all billing accounts that are selected to pay for recurring charges belong to customers that have a bill-to relationship with the order's sold-to customer.

Billing Account Cascading

During a configuration session you can modify the bill to customer and the billing accounts defined in the order lines. When you perform these modifications, Configurator Controller automatically cascades these changes to the descendent products. The same process occurs when you modify the bill to customer and the billing accounts defined in the order header for a specific sold to customer.

Note. Before cascading the change of BillTo Customer and/or the Billing Account to its descendent Order lines, you are prompted for confirmation.

A warning message '*The new Billing Account will be cascaded to all the descendent products of [Product ID] – [Product Description]. Do you want to cascade the Billing Account to all its descendent products?*' displays to ensure you understand that the account will be cascaded down to all child products as well. The Controller will continue with cascading the changes if the user response is 'OK'.

Configurator Controller cascades changes to the bill to customer and billing accounts when:

• you enable split billing for an order.

• the account type of the cascading account is compatible with the supported account type of the descendent order lines.

• the order line has descendent order lines that are not marked for removal.

• the billing account modified is a primary billing account (with split billing).

• the billing account modified is either required (without split billing).

Configurator Controller cascades changes to the following billing accounts of descendent order lines:

• primary billing account (with split billing).

• required billing account (without split billing).

• order lines that are not marked for removal.

When the default Account and/or the BillTo Customer for recurring charges of a SoldTo customer is changed, the Controller will cascade the changes to all the contracts owned by the SoldTo.

Installed Products

The CRM system makes billing account information available in installed products for viewing and service management purposes. The Billing Account Details section appears if the associated product definition of the installed product is defined as *billing account selectable* with at least one billing account type selected.

See Also

PeopleSoft CRM 9.1 Product and Item Management PeopleBook, "Tracking Installed Products," Entering Installed Product Information

360-Degree View Support

360-Degree View supports the display of split billing information for multilevel installed products under the *Account* node of the Activities section.

See and *PeopleSoft CRM 9.1 Product and Item Management PeopleBook*, "Tracking Installed Products," Multilevel Installed Products in 360-Degree View.

Understanding Commitments

PeopleSoft CRM provides commitments capabilities in ordering and service management processing to prevent customers from churning to other communication service providers (CSP). A commitment is an agreement between a customer and a CSP. It is assigned to products and services with a purpose to ensure that the customer does not terminate the products or services before a specified period of time has elapsed. In the case where the commitment is violated, the customer can be subject to a mutually-agreed penalty payment.

This section discusses:

- Commitment products.

- Commitment configuration rules.

- Orders and service management.

- Commitment contracts.

- Installed commitments and installed products.

- 360-degree view support.

- Product catalog export of commitment products and rules.

Commitment Products

Refer to the see section for information on commitment products.

See and <u>Chapter 23, "Setting Up Multilevel Product Bundles," Commitment Products, page 477.</u>

Commitment Configuration Rules

Configuration rules drive the assignment of commitment products to other products and services. These rules are in place to support the commitments functionality:

- Commitment triggering rules.

    They add commitment products automatically to configuration sessions upon the selection of certain products (specified in rule definitions) that trigger the evaluation of the rules.

- Commitment covering rules.

    They determine which products to be covered by commitment products (which are created in configuration sessions after the execution of commitment triggering rules).

- Eligibility rules.

    They determine the type of actions that can be performed on commitment products and products that are covered by commitment products.

Orders and Service Management

Commitment products are added to orders as a result of the execution of commitment triggering rules in configuration sessions. The addition can either be automatic (if only one applicable commitment product applies) or manual (if multiple commitment products are applicable and the agent needs to select one). After the verification and submission of product configuration, information of the configuration is stored and displayed in the order. The system adds a commitment-specific icon to lines in the line summary for products that are associated with a commitment product, indicating that the products are linked to a commitment.

A commitment product (or installed commitment), once added to a product configuration, appears in the Line Summary section of an order in a separate order line, which is not part of the product bundle that the commitment product is assigned to. The order line comes after the last order line of the hierarchy and it has a line number just like the top-level product of that hierarchy.

You can use the service management framework to handle these requests that are filed for installed commitments:

* Extension of commitment.

  This action updates the end date of the installed product of a commitment product (also referred to as *installed commitment* in this documentation). It is available to any active installed commitment in the system as long as the commitment product of the installed commitment is associated with a commitment triggering rule that is defined for the *extend* behavior.

  The result of this action is an updated commitment end date, which is extended by the value specified in the rule definition. Only agents with a special role (according to eligibility rules) can perform this action, which is a type of *change* action in a service management order.

* Renewal of commitment.

  Similar to commitment extension, this action also updates the end date of the installed commitment. It is available to any active installed commitment in the system as long as the commitment product of the installed commitment is associated with a commitment triggering rule that is defined for the *renew* behavior.

  The result of this action is an updated commitment end date, which is extended by the value specified in the rule definition. Only agents with a special role (according to eligibility rules) can perform this action, which is a type of *change* action in a service management order.

- Removal of commitment.

  Installed commitments are typically removed automatically by a batch process that runs daily to take care of commitments with an elapsed end date, though it can also be done manually in a service management order. The removal action updates the status of installed commitment to *Expired* and disconnects the links it has to the installed products it covers, freeing these installed products from a commitment that they are no longer required to relate to.

  Removing an installed commitment is considered a violation of the commitment unless its end date is reached. If you wish to remove an installed product that is currently covered by an installed commitment, you need to terminate the installed commitment first. However, if you terminate an installed commitment prematurely, it becomes a violation and as a result, the system:

  - Sets the configuration status of the installed commitment to *Violated.* on its order line.

  - Sets the status of the associated commitment contract to *Violated.*

  - Deactivate (set status to *Inactive*) all commitment-related links between the installed commitment and its covered installed products.

Commitment Product Relationships and Links

The Line Relationship section of the Line Details page displays relationships between commitment products and their covered products that can be grouped into these types:

- Committed.

- Brings commitment.

- Commitment scope.

See and <u>Chapter 23, "Setting Up Multilevel Product Bundles," Product Relationships for Multilevel Product Bundles, page 471.</u>

Commitment Contracts

After the fulfilment is completed for an order that includes a commitment product, the system creates a commitment contract for reference. The commitment contract is a read-only record that contains information of:

- The customer to which the commitment contract pertains.

- The commitment product that was added to the order for the customer, its duration, current status as well as the installed commitment ID.

- One or more covered installed products to which the commitment product is assigned.

As delivered, a batch process runs daily to provide status updates for commitment contracts in the system. If a customer violates a commitment (for example, by terminating one of its covered service before the commitment end date is reached), the commitment contract status is set to *Violated.* The batch process also looks for expired commitments and makes appropriate updates. The process changes the status to *Expired* for installed commitments and commitment contracts with an elapsed end date. Additionally, it deactivates (by setting the status to *Inactive*) installed links between expired installed commitments and the installed products that they cover, so that termination of covered installed products is no longer considered a violation.

Installed Commitments and Installed Products

The CRM system stores and displays installed commitment information for viewing and service management purposes. The information circulates and is easily accessible in these records:

- Commitment contracts.

- Installed commitments.

- Installed products that are covered by installed commitments.

This diagram illustrates how commitment information flows between its related commitment contract, installed commitment and commitment-covered installed products:
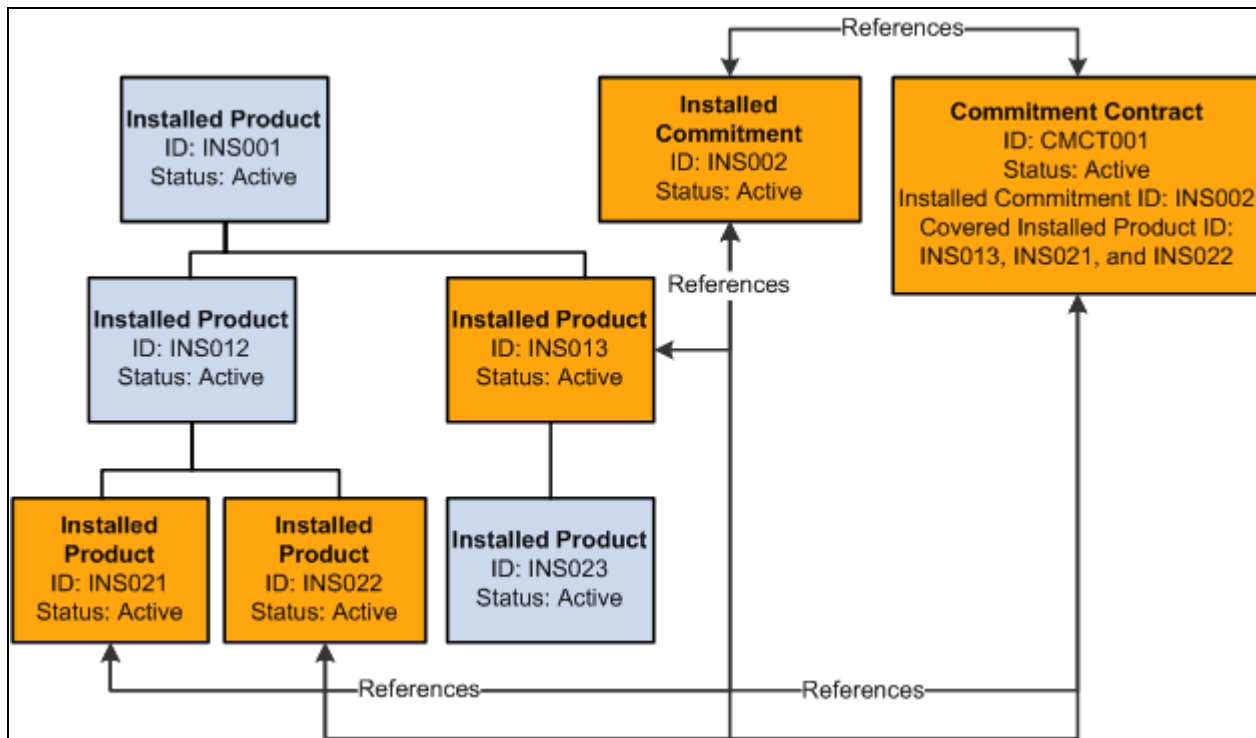
Availability of commitment product in commitment contract, installed commitment and commitment-covered installed products

A commitment contract references:

- Its related installed commitment ID, which is a link that takes you to that installed commitment record.

- The top level installed product of the installed products that the commitment covers. It is also a link that takes you to that installed product record.

    The commitment contract also references the actual installed products that it covers. They are not links, however, that transfer you directly to these records. You need to go through the link of the top level installed product.

An installed commitment references:

- Its related commitment contract ID, which is a link that takes you to that commitment contract record.

- Installed products that it covers. They are links in the Links Summary page that take you to these installed product records.

A commitment-covered installed product references the ID of the installed commitment that assigns to it, which is a link that takes you to that commitment contract record.

Installed Products

The system makes commitment information available in installed products that are created for commitment-covered products. The Commitment Information section appears if at least one commitment is assigned to the installed product and it displays commitment data, such as:

- ID and description of the related installed commitment.

- Status.

- Commitment duration and unit of measure.

- Commitment start and end dates.

Installed Commitments

Installed commitments are a type of installed product that are used to represent commitment products. To support the display of commitment specific information, additional fields appear for installed products of type *Commitment,* they are:

- Duration

- Unit of Measure

- Commitment Start Date

    This value is set by the Communication New Order process.

- Commitment End Date

    This value is set by the Communication New Order process.

- Commitment Contract

    This is a link that transfers you to the read-only commitment contract that is created for the related commitment product.

See Also

PeopleSoft CRM 9.1 Product and Item Management PeopleBook, "Tracking Installed Products," Entering Installed Product Information

360-Degree View Support

Customer 360-Degree View supports the search and viewing (by status) of installed commitments in the system under the *Commitments* node of the Activities section.

See and *PeopleSoft CRM 9.1 Product and Item Management PeopleBook*, "Tracking Installed Products," Multilevel Installed Products in 360-Degree View.

Product Catalog Export of Commitment Products and Rules

Prior to exporting commitment products and rules to Configurator application data structures for product configuration purposes, the system performs these integrity checks to make sure that the entities exported can be used to support to the commitments functionality:

- Commitment products are defined to be installable.

- All products that are referenced in the commitment covering rules are defined to be installable.

- The status of related commitment products, commitment triggering rules and commitment covering rules must be the same—either active or inactive but not a mix of the two.

- The covering scope of a commitment covering rule definition is greater or equal to the reference scope of its related commitment triggering rule definition.

- The reference scope of all commitment triggering rules that reference the same commitment product must be lesser than the covering scope commitment covering rule that is defined for the commitment product.

- Duration options selected in the triggering rule definitions are synchronous with the duration options defined related commitment covering rules.

The Product Catalog export process needs to be executed regularly to pick up all the latest updates on product and rule definitions for use in product configurations.

See Also

Understanding Trial Periods

A trial period in an order provides the customer the ability to test-drive newly purchased products and services for a specified period of time, during which the customer can return products or cancel services freely without any obligation or penalty. PeopleSoft CRM supports the definition of trial durations and the computation of trial period end dates on all capture types—simple orders (single and bulk), convergent orders, service management orders (single and bulk), and quotes.

Trial Period Setup

The setup of the trial periods capability involves two tasks:

1. Enabling the functionality at the business unit level.

2. Defining the default trial period for each source and sub-source combination.

Trial Period Enablement

You enable the trial periods functionality by selecting the Allow Trial Period field on the Communications page of the business unit definition.

See and Chapter 3, "Defining Order Capture Business Units," Specifying Order Capture Telecommunications Service Options, page 30.

Trial Period Definition

You can specify a trial duration (the minimum number of days as required by law) for each source code and sub source code combination on the Sub Source Mapping Workbench page within the Order Capture Setup Workbench at the setID level.

See and Chapter 4, "Setting Up PeopleSoft Order Capture," Defining Sub Source Codes, page 61.

Trial Periods in Orders

At runtime, for orders belonging to the setIDs that support the trial periods functionality, the system populates the default trial durations in them based on their selected source and sub source values. You can update the number of trial duration days in orders by increasing the number value, because the default values (specified on the Sub Source Mapping Workbench page) supposedly represent the minimum trial period lengths as permitted by law in your country.

The field remains editable prior to order submission and becomes read-only after the submission. The same is true for quotes.

The system automatically populates the default trial periods in orders that are created through component interface as applicable.

Trial Period End Date Computation

The trial period of an order begins on the date the order is completed, which is when all of its order lines are processed completely. The system calculates the end date of a trial period by adding the trial duration days to the trial period start date:

Trial Period End Date (or Order Completion Date) = Trial Period Start Date + Trial Period (in days)

The trial period end date is displayed on the order after its completion.

This table summarizes the support of trial period end date computation for all supported capture types:

Capture Type	Trial Period End Date Computed?	Note
Convergent Order	Yes	-
Simple Order	Yes	-
Service Management Order	Yes	Trial period end date is available for the *Change* and *Change and Suspend* actions only.
Quote	No	Quote needs to be converted to Order to complete successfully. For cancelled or expired quote, end date of Trial period is not applicable.
Bulk Order	No	Only the generated child orders are associated with a trial period end date.
Bulk Service Management Order	No	Only the generated child service management orders are associated with a trial period end date.
Multiline Service Management Order	No	Only the generated child service management orders are associated with a trial period end date.

Trial Periods in Bulk Orders and Bulk Service Management Orders

Trial periods are supported in bulk orders and bulk service management orders as well. The system cascades the applicable trial period of any bulk order or service management order to its generated child orders.

Trial Periods in Quotes

During the quote to order conversion process, the system populates the trial duration that is available in a quote to its order.

See Also

Understanding Selling Periods for Multilevel Product Bundles and Components

A selling period of a multilevel product bundle or product component specifies the time frame during which the bundle or the component is available for sale. The setting of selling periods allows the definition, ordering and service management of product packages and components that are seasonal (available certain times of the year) or promotional (available for only a period of time) in nature.

Selling periods for multilevel product bundles and components are defined on the Package Components page. At design time, each multilevel product bundle can be associated with one selling period and any products (with current or future selling periods) as package components, whereas a product (as a component) can be associated with multiple product bundles at the same time and has a different selling period (past, current or future) in each of the bundles.

At runtime, the system restricts the visibility and availability of multilevel product bundles and components within configuration sessions based on selling periods, specifically, only products that are available for sale currently and in the future can be fulfilled. As for past product elements, they can only be fulfilled if the product selling dates of their orders are backdated to the time when the past elements were current. To determine if a product is eligible for order fulfillment, the *product selling date* on the order is used (the current date is used if the product selling date is not specified). This date serves two purposes:

* Determine the selling status of products in an order—*past* if the selling periods of products ended before the product selling date; *current* if the date falls within the selling periods of products; *future* if the selling periods of products start after the date. Only *current* and *future* products can be fulfilled—current products can be fulfilled immediately whereas future products can be fulfilled when their selling period start dates are reached.

* Determine applicable configuration and validation rules to execute in configuration sessions for the multilevel product bundles in the order. In order for a rule to be triggered, it must be in an active status on the date specified as the product selling date.

While it is possible to add products with past selling periods to an order if products are selected from catalogs that are accessed directly from the left hand navigation menu, when the order is validated prior to being submitted for fulfillment, it is going to be placed on hold for a violation as it contains past product elements. The hold is called *Selling Period Violation* and it is not be overridden manually. The order cannot be submitted until it no longer has any past products. If you must add past products to an order, you need to change the product selling date on the order to a past date that past products were considered current. Similarly, an order can be placed on hold (named *Selling Period Conflict Hold*) if it contains products that are available currently as well as in the future. In this case, you can either let the order to be fulfilled when all of the product elements are available, or create two orders, one for current product elements that can be fulfilled now, and the other for future product elements that are fulfilled later when all of them become available.

Note. If a product selling date is not specified for an order at submission, the system's current date is used as default. Updating a product selling date invalidates the order and any configuration sessions it associates with. Make sure to re-validate the order if the product selling date of the order is changed.

Service management can be performed on multilevel installed products regardless of selling periods, in other words, you can add, remove, migrate, and change features of an installed contract even if the corresponding contract product itself or any of its products is no longer available for sale.

For the purpose of product element compilation and deployment that take place on the Advanced Configurator server, all product elements (past, current, and future) are exported along with their selling period dates (if available) when the export batch process runs.

See and *PeopleSoft CRM 9.1 Product and Item Management PeopleBook*, "Setting Up Products," Defining Product Packages. and <u>Chapter 23, "Setting Up Multilevel Product Bundles," Export of Multilevel Product Bundle, Rule and Migration Action Definitions, page 476.</u>

Past, Current, and Future Product Elements

A product is considered a past, current, or future element on an order based on:

*   The selling period of the product.

    The selling period of a multilevel product component is defined by specifying the effective and obsolete dates for the component (as part of a multilevel product bundle) on the Package Components page.

    Selling periods for multilevel product bundles are defined at the package level.

*   The product selling date specified on the order.

    When a configuration session is initiated, the system passes the product selling date (if specified) into the session. The date is used to determine which product components of the selected multilevel product bundle are available for selection. For instance, components with selling periods earlier than the product selling date of their orders are not displayed in configuration sessions. If the product selling date is not specified, the current system date is used as the product selling date. This is applicable to new simple or convergent orders.

    In the case of service management orders, past elements are displayed as read-only in configuration sessions.

As each of these elements has its own properties and behavior, the product selection and ordering process changes slightly based on the type of elements that are selected on orders. Here are lists that summarize the properties of past, current and future elements:

PAST ELEMENTS:

*   Have selling periods that were valid in the past (with reference to product selling dates that are specified on orders).

*   Cannot be fulfilled in orders.

    Orders for new products and services can only be fulfilled when all of the products selected are currently available. When accessing catalog search from the orders, past elements are not available for display.

    Important! Past elements can potentially be added to orders if they are selected either from catalog search that is accessed directly from the left hand navigation menu, or using the Add Product(s) field in orders. However, orders are put on hold when validated (selling period validation hold) if past elements are found and cannot be fulfilled.

    To make past elements available for new order fulfillment, you must back-date the product selling date on orders to fall within their selling periods so that they become currently available.

- Are *not* shown in configuration sessions even if they are added manually to new orders through the catalog search on the left hand navigation or the Add Product(s) field on the Entry Form page. When adding new contracts within configuration sessions, any of their past elements are not available for viewing. Similarly, when you add a new contract or a new play in a configuration session, the list restricts available contracts or plays to the ones that have valid selling periods—past contracts or plays are excluded from the list.

Note. Past elements can potentially be added and displayed to configuration sessions automatically as a result of the execution of configuration rules (for example, brings on creation rules). Visual indicators are used to identify past elements in configuration sessions. Validation check is in place and it invalidates any product configuration that contains a past product element. Reparenting a past product is considered as retaining the current installed product in the target contract after migration. Therefore, reparenting of past installed products can validate the product configuration regardless of the product selling date.

To make past elements available for product configuration, such as adding past elements to current contracts or adding current elements to past contracts, you must back-date the product selling date on orders to fall within their selling periods so that past elements and contracts become currently available.

- (Installed products that are past elements) Are available for display in the read-only mode and for service management operations to be performed (for example, disconnecting an expired roaming service that belongs to an installed contract or changing attributes). The operation that is not supported for past elements is adding them to new orders.

- Can be migrated within the same contract or to another contract (new or existing) as long as:

  - The move doesn't violate any rules that are being evaluated in configuration sessions.

  - The target contract and its components have valid selling periods.

    Contracts are validated for their selling periods before they can be potential target contracts in a migration. Past contracts are not considered as potential target contracts.

- (Installed products that are past elements and represent group offers) Can still be shared by members just like any current and future group offers.

  In new orders, prior to establishing links between a product that shares resources and products that use shared resources, validation is performed to ensure that the product with resources is a current or future element.

- Are not copied over to cloned orders or quotes.

  When orders are cloned or converted to quotes, only current and future elements are copied over to target orders or quotes. Past elements are, however, copied over to orders in the quote-to-order conversion process.

The selling period of past product elements does not impact the status of their product definitions. This diagram shows the selling period of a past element on a timeline in relation to the product selling date of an order:
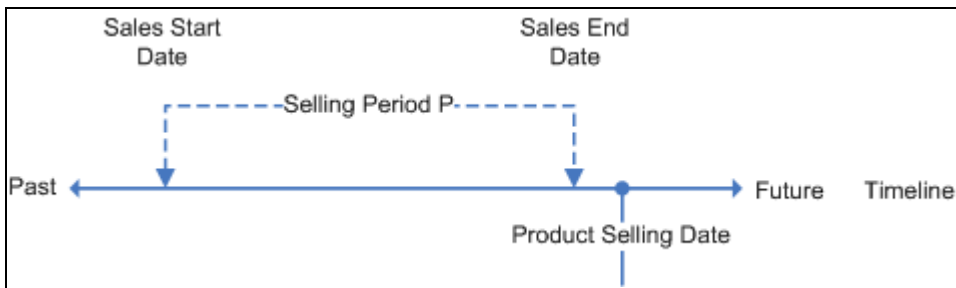
Selling period of a past element, which falls before the order's product selling date on the timeline

CURRENT ELEMENTS:

• Have selling periods that product selling dates of orders fall within.

• Are displayed in catalog search (accessed from left hand navigation menu or within order) and can be added to in orders for fulfillment.

• Can be submitted and fulfilled immediately.

• Are displayed and configurable in configuration sessions.

• May or may not be available (based on product definition) for service management purposes after fulfillment.

Note. A product is considered *current* if no selling period is defined for it. In the case where a product does not have its selling period end date defined, it is considered *current* if its selling period start date comes earlier than the order's product selling date; it is considered *future* if its selling period start date comes later than the order's product selling date.

For current elements, the status of their product definitions can be maintained manually based on business needs. This diagram shows the selling period of a current element on a timeline in relation to the product selling date of an order:
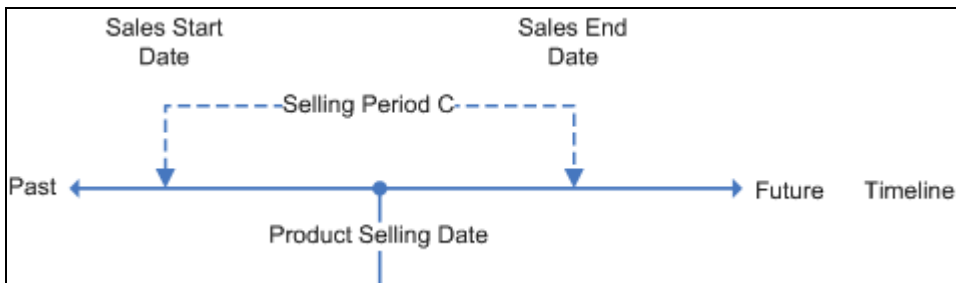
Selling period of a current element, which covers the order's product selling date on the timeline

FUTURE ELEMENTS:

• Have selling periods that start and end in the future, after product selling dates that are specified on orders.

- Are displayed in catalog search (accessed from left hand navigation menu or within order) and can be added to orders.

  Orders with future elements can be fulfilled when the last selling period start date of all selected future elements is reached.

- Are displayed and configurable in configuration sessions.

- Are fulfilled using service management orders if they become available after their associated product bundles have expired.

For orders where future elements are selected (future-dated orders), users can update or cancel these orders while they are in the *Queued* status waiting for order execution. This diagram shows the selling period of a future element on a timeline in relation to the product selling date of an order:
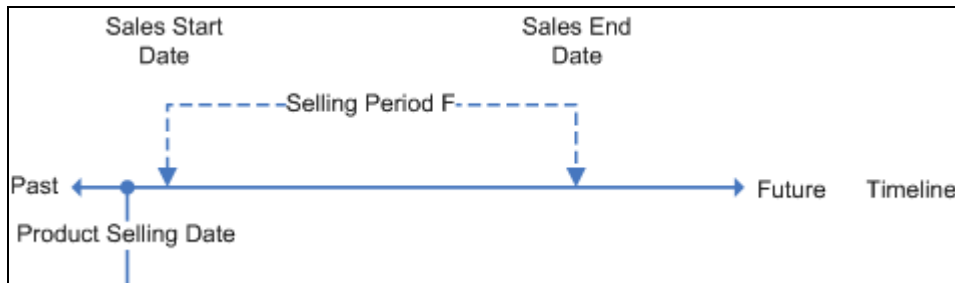
Selling period of a future element, which falls after the order's product selling date on the timeline

Validations on Product Selling Status During Rule Execution

This table lists configuration and validation rules that involve the inclusion of additional product elements to orders either as a result of rule execution (configuration rule) or rule compliance (validation rule), and provides information on whether selling status validations are performed on associated product elements when these rules are executed:

Rule Type	*Selling Status Validation*
Brings on Creation Example: Product A \<brings on\> product B	No validation on product B's selling period is performed. Should a brings on rule apply, product B would be added automatically to the order regardless of its selling status.
Brings and Removes Example: Product A \<brings and removes\> product B	No validation on product B's selling period is performed. Should a brings and removes rule apply, product B would be added to or removed from the order automatically regardless of its selling status.
Commercial Prerequisite Example: Product A \<is a prerequisite of\> product B	No validation on product A's selling period is performed. Should a commercial prerequisite apply, users would be able to add product A to orders successfully regardless of its selling status.

Rule Type	Selling Status Validation
Functional Relies On Example: Product A <relies on> product B	Validation on product A's selling period is performed prior to establishing a functional link between products A and B. There is no selling period validation performed on past installed products when relies on links are created (with past elements as the source or the target).

If any of these rules cannot be committed due to unavailability of participating product elements, an error is logged in the system and the validation status of the configuration is set to *Validated with Warnings.*

Selling Period Hold Validations

Two hold validations are delivered around selling periods and they are:

*   Selling period violation.

    To ensure that no past product elements, products that are unavailable for sale, are fulfilled inadvertently, logic is put in place to put orders on hold if it contains product elements that have past selling periods. Specifically, if a product is added to an order and its selling period ended before the order's product selling date (or the current system date if product selling date is not specified), the order is put on hold for a selling period violation. To address the hold, either remove the past product element and replace it with a current one, or back-date the product selling date so that it falls within the selling period of the past product element and re-validate the order.

    Another situation that triggers this hold is when the order has two products and their selling periods do not overlap. For example, product A is available for sale only in the month of June this year whereas product B in the same order is available for sale in the month of August this year. Suppose that the order's product selling date is June 15, only product A can be fulfilled and product B is considered a future product. If the order is set to be fulfilled in some time in August when product B is available, product A becomes a past element. To address this hold violation, put these two products on separate orders.

    This hold code cannot be manually overridden.

- Selling period conflict.

  This hold logic is triggered if an order contains both current and future product elements—the current product element may have a selling period for this month and the future product element is not available for sale two months later. The purpose of this hold is to make the user aware that because the order contains future elements, it is going to be fulfilled at a later time until all of its elements become available (which is when the last selling period start date of all the elements is reached). The order's fulfill by date is automatically updated by the system when future elements are present and it can be manually updated as well. If the customer prefers not to wait for the current element to come at a later date, create two orders—one for the current element that can be submitted for fulfillment immediately, and the other one (a future dated order) for the future element that is fulfilled when it becomes available.

  For example, you want to order a package with 3G wireless service and 2 megabit internet service. However, only 1.5 megabit internet service is currently available; the 2 megabit service is going to be available in 30 days. There are two ways on how the order can be fulfilled. One option is to order the package in a single convergent order with the fulfillment date set to 30 days from today. In other words, the entire order is fulfilled when the 2 megabit product becomes available. If you want to purchase and start the 3G wireless service immediately, then another options is to place an order for the 3G wireless service and the 1.5 megabit internet first, which are both currently available. After this order is fulfilled, create a future-dated convergent order to modify the contract by replacing the 1.5 megabit internet with the 2 megabit internet when the latter becomes available.

  This hold code can be manually overridden.

These hold codes are delivered for the COM01 setID and is applicable to all capture types.

Selling Period Indicator

The system provides information on the availability of products in orders and catalog search based on selling periods, so that when users place orders or file service requests, they can make informed decisions about whether or not to purchase products as they may be only available some time in the future, or simply unavailable for sale. Based on the order's product selling date or the system's current date, the system determines and displays the selling status *(Past, Current,* or *Future)* of products selected on orders and catalog search. When moving the cursor over the status, the actual selling period appears as mouse over text. If the product is a current element and it is available for sale, the status is left blank.

Note. If the product selling date is specified on an order, it is used to determine the selling status of products selected in the order or displayed in the catalog search result that is invoked from the order. In case the product selling date is not available (it's not specified on the order), the system's current date is used.

Selling period indicators are present in these areas:

- Catalog search result on the Find Products page.

  If the catalog search is accessed from an order (using the Search and Browse Catalog link), all top-level multilevel product components are displayed, along with a visual cue indicating a past, current or future selling period based on the order's product selling date.

  If the catalog search is accessed directly from the left hand navigation menu, all products, regardless of their selling periods, are displayed and no information regarding their selling statuses is included.

- The sections where order line summaries are displayed in simple orders, service management orders, and convergent orders.

Note. You can add products (regardless of their selling status) manually using the Add Product(s) field. However, if the order contains any past product elements, it is put on hold as it violates the selling period validation.

- The Order Line Hierarchy section of simple orders. For products that have a future selling period, a indicator with the label *Future* is displayed at the end of product name.

- The Cross/Up Sell Opportunities section of simple orders.

Selling Periods in Service Management Orders

As mentioned earlier, you can file service requests for multilevel installed products even if their corresponding products are not longer available for sale. When you reconfigure an installed contract, the existing configuration can be kept intact as long as it doesn't violate any validation rules that are triggered. For example, you file a request to add a wireless phone service feature to your existing Direct TV and 1500 megabit broadband internet package (the 1500 megabit broadband internet service is no longer available). The existing configuration does not need to be altered as long as adding the new feature doesn't introduce any rules that invalidate the new configuration. However, if the new wireless phone service is associated with a rule that allows only 1000 megabit or 2000 megabit broadband internet to be selected, then the existing 1500 megabit internet service must be removed and replaced by one of the available options.

Future Dated Orders

Orders containing future product elements have future *fulfill by* dates and they are called future-dated orders. If an order contains multiple future elements with different selling periods, the fulfill by date is the latest date of all the product selling period start dates on the order. When the order is submitted, the system changes its status to *Queued*.

A background process runs regularly to identify queued orders that are ready to be processed for fulfillment (system current date = order execution date). In the meantime, queued orders can go into the maintenance mode in which they are subject to modification or cancellation.

When the order is resubmitted, the system checks for any hold violation again before the order is sent for fulfillment.

Quote to Order Conversion

When quotes are converted to orders, all of their products are copied over to orders regardless of selling status. If converted orders contain past elements (current elements that became expired by the time quotes were converted), they are placed on hold for the selling period violation like any other orders. Past elements are copied over to converted orders for informational purposes, allowing customer service representatives (CSRs) and customers to keep track of what happened to the elements and giving CSRs the upsell opportunity to recommend other products to customers as alternatives. Among other quote details, the conversion process also brings over the product selling dates of quotes (if specified) to orders.

Converted orders do not inherit the fulfill by dates from quotes as the date does not apply to quotes. The system computes the fulfill by date based on the presence of future product elements in converted orders. If future elements are available, the last selling period start date of all future elements is used as the fulfill by date; otherwise, the field is left blank.

Retiring Components from Multilevel Product Bundles

To retire a product component from a multilevel product bundle structure, simply update the obsolete date of that component from the product bundle on the Package Components page (product elements can also be removed physically from multilevel product bundles on the Package Components page). Logic is in place to make sure that products selected in new orders are valid when orders are being validated. For future-dated orders that contain retired or expired product elements (they were current when the future dated orders were first submitted), they are put on hold so CSRs can take proper actions to address the issue.

See and Chapter 23, "Setting Up Multilevel Product Bundles," Updating Obsolete Dates for Multilevel Product Components, page 529.

Common Elements Used in This Chapter

Selling Status	Displays the status of availability for the selected product based on its selling period.
	If a product is currently available, the field is blank; if the product is going to be available in the future, the value of *Future* appears. The system displays the actual selling period as hover text if you move the cursor over the *Future* status.

Product Selling Date   Enter the date when the multilevel product bundles added to the order are sold.

Advanced Configurator uses this date as a reference for executing configuration and validation rules that pertain to the selected multilevel product bundles.

Note. The system uses the current date as reference when evaluating possible migration actions to be available in configuration sessions.

In order for a rule to be triggered in a configuration session of an order, it must be in an active status on the date specified as the product selling date.

In addition, the product selling date is also used by the system to determine the availability of products (for ordering) based on selling periods. If an order contains past or future product elements (products with selling periods prior to or after the specified product selling date), the order is put on hold for selling period conflict when it is being submitted. The product selling date can be updated on the order (in situations where you want to order past product elements, you can back-date the product selling date so that it falls within the selling period of past product elements to make them available for sale). However, changing the product selling date invalidates the order and its configuration sessions if they have already been validated; make sure to re-validate the order after a change is made to the product selling date.

The product selling date is not visible and therefore not modifiable within configuration sessions.

Creating Orders and Quotes for Multilevel Product Bundles

This section discusses how to:

*   Create orders for multilevel product bundles.

*   Specify shipping and billing information.

*   View order line details.

*   View attributes.

*   View external service details.

Important! This section uses the interface of convergent orders as the base of discussion as convergent orders, simple orders and quotes share a lot of common sections and fields. Unless otherwise stated, information available in this section apply to these three capture types.

Pages Used to Create Orders and Quotes for Multilevel Product Bundles

Page Name	Definition Name	Navigation	Usage
\<capture type\> - Entry Form	RO_FORM	• Orders and Quotes, Add Order, Convergent Order - Entry Form • Orders and Quotes, Add Order, Order - Entry Form • Orders and Quotes, Add Quote, Quote - Entry Form • Orders and Quotes, Search Orders and Quotes, Convergent Order - Entry Form • Orders and Quotes, Search Orders and Quotes, Order - Entry Form • Orders and Quotes, Search Orders and Quotes, Quote - Entry Form • Click the Convert to CO toolbar button on the Manage Service - Entry Form page or the Order - Entry Form page.	Create orders or quotes for multilevel product bundles.
Convergent Order - Shipping Billing	RO_SHIP_BILL_INFO	(For new orders) Click the Shipping & Billing button in the Related Customer section of the Convergent Order - Entry Form page. You must select a customer on the Customer section before prior to selecting a related customer. (For existing orders with multiple customers) Orders and Quotes, Search Orders and Quotes, Shipping Billing	Capture shipping and billing information for all customers on the order.

Page Name	Definition Name	Navigation	Usage
<capture type> - Line Details	RO_CAPTURELINE_DTL	• Orders and Quotes, Add Order, Convergent Order - Line Details • Orders and Quotes, Add Order, Order - Line Details • Orders and Quotes, Add Quote, Quote - Line Details • Orders and Quotes, Search Orders and Quotes, Convergent Order - Line Details • Orders and Quotes, Search Orders and Quotes, Order - Line Details • Orders and Quotes, Search Orders and Quotes, Quote - Line Details	View order line details, such as pricing, relationships with other order lines, upsell and cross-sell opportunities, as well as configuration and attribute information.
Attributes for <multilevel product name> page	RO_ATTR_RUN_SEC	Click the View Attributes link on the <capture type> - Entry Form page.	View attributes for multilevel product bundles, which are only available for edits in configurations sessions.
External Service Details	RO_EXT_SVC_DTL_SEC	Click the *External Service Details* link on the <capture type> - Line Details page.	Displays information about the external service associated with a group offer member.

Creating Orders for Multilevel Product Bundles

Access the Convergent Order - Entry Form page (Orders and Quotes, Add Order, Convergent Order - Entry Form).

Convergent Order - Entry Form page (1 of 4)

Related Customer

	Customer Name	Contact Name	Shipping & Billing	
1	Overature Inc.	Tom Ramsey	Shipping & Billing	🗑

Search

Capture Line Summary

Products | Pricing Adjustments | Availability | Customer

Line	Configuration Status	Product Description	Product ID	UOM	Order Quantity	Link	Options	List Price	Unit Price		
17	🔺 Valid	College Special	TELCO110001	Each	1.0000		Reconfigure Product	1.00	1.00		🗑
		Student Mobile	TELPL110001	Each	1.0000			0.00	0.00		
		Handset Bundle	TELOF110001	Each	1.0000			0.00	0.00		
		Handset	TELOF110005	Each	1.0000			0.00	0.00		
		LG 600	TELAO110001	Each	1.0000	📟		0.00	0.00		
		SIM Card	TELOF110006	Each	1.0000			0.00	0.00		
		SIM Card 2G	TELAO110003	Each	1.0000	📟		0.00	0.00		
		Basic Plan	TELOF110002	Each	1.0000			0.00	0.00		
		Mobile Access	TELAO110005	Each	1.0000	📟		0.00	0.00		
		Mobile Subscription	TELAO110008	Each	1.0000	📟		0.00	0.00		
		SC tariff	TELOF110004	Each	1.0000			1.00	1.00		
		Flexi Usage Plan	TELAO110011	Each	1.0000	📟		1.00	1.00		

Convergent Order - Entry Form page (2 of 4)

Convergent Order - Entry Form page (3 of 4)

Convergent Order - Entry Form page (4 of 4)

Note. As delivered, this component is only accessible to users who are associated with the *Communications* vertical solution (navigation: Set Up CRM, Security, User Preferences, Overall Preferences) and are assigned to either the CSP Admin or CSP Agent role (navigation: PeopleTools, Security, User Profiles, Roles).

The Convergent Order component is built based on the Order component. Note that most of the sections and component pages are shared between the two components as they support the capturing of data that is often common to both ordering processes (though billing, shipping, and installation site information is not used in service management orders). Please refer to the Managing Orders and Quotes chapter for documentation on controls and sections that are common to the Convergent Order and Order components. This chapter focuses on new information that is specific to convergent orders.

Order Details or Header Details

This section is called Header Details in quotes.

Trial Duration	Displays the default trial period (in days) for the selected source and sub source combination that is currently defined on the Sub Source Mapping Workbench page. The value is available for edit as long as the order is not submitted for fulfillment, and the new value must be higher, not lower, than the default value.

Related Customer

Use this section to specify additional customers to be included in the order. Convergent orders support the migration of new and installed contract components among customers that are specified in this section and the Customer section.

Note. This section is applicable to convergent orders for package migration purposes.

Shipping & Billing	Click to access the Convergent Order - Shipping & Billing Info page to enter shipping and billing information for the corresponding customer and contact.
Add Customer	Click to access the customer search to add a customer to the convergent order.

If you delete a customer from this section and the order currently has order lines that are created for this customer, a system message is displayed, asking if you want to continue with the customer deletion if it also means removing its order lines. If you opt to continue, the system deletes both the customer and its order lines. In a situation where any of the order lines involves package migration (for example, a component in an installed contract belonging to this customer is migrated to another contract), the customer cannot be deleted unless the migration has been reversed in the configuration session. Also, the system does not allow you to delete contracts that contain (in whole structure) links going out of its structure. An example of these links is a relies on link that goes out and relates to a functional product that belongs to another contract's structure.

Capture Line Summary or Line Summary

Use this section to search and add multilevel product bundles to the convergent order. Similar to simple orders, you can add a multilevel product bundle by entering its name or ID directly, accessing a product catalog or launching an advisor session.

If related customers are selected for the convergent order, the system:

- Displays a popup window with all the related customers (including the customer in the header) when you click to access the catalog or add a product to the order. You need to first select a customer from the list and that customer is going to be assigned to the new installed contract you add to the order (from the catalog or by pressing the Add button).

- Displays the Customer tab, showing the customer and contact information for each multilevel contract and component added to the section.

Note. This section is called Line Summary for simple orders.

Configuration Status	Displays the configuration status of the corresponding multilevel product bundle. Click the link to access the Configuration Session Details page to view additional information about the configuration result. Values are:

- *Not Validated*: configuration is saved and stored in the order but it has not been validated.

- *Valid*: configuration is submitted for validation and is validated.

- *Valid with Warning*: configuration is submitted for validation and is validated with a warning.

- *Invalid*: configuration is submitted for validation and is invalidated due to rule violation.

- *Invalidated*: configuration was validated but later on an operation executed on the configuration caused it to be invalidated. Such operation can be a change of customer, or cloning or removal of any multilevel product bundle order line.

This link is visible on the *top-level* order line only.

Link	See and <u>Chapter 24, "Working with Orders for Multilevel Product Bundles," Links, page 594.</u>
Configure Package or **Reconfigure Package**	Click to start a configuration session for the selected multilevel product bundle. This link is available to the *top-level* order line only.
	See and <u>Chapter 24, "Working with Orders for Multilevel Product Bundles," Configuring Multilevel Product Bundles, page 695.</u>
View Attributes	Click to view attribute values entered for corresponding order item. This link is available to each multilevel product bundle service that has an attribute specified during the configuration session. Attributes are not editable directly from any capture types.
	See and <u>Chapter 24, "Working with Orders for Multilevel Product Bundles," Viewing Attributes, page 684.</u>
(clone line)	Click to clone the corresponding multilevel product bundle and its configuration, attributes and line relationships (if available).
	The configuration status of the new cloned order line is set to *Invalidated.* The product bundle must be revalidated prior to order submission.

Add Product(s) and **Search or Browse Catalog**	Enter or look up from catalogs multilevel product bundles to add to the order. Only top-level multilevel product components can be added to orders.
	Note. When administrators design pricing and promotional rules that apply to multilevel product bundles, it is important that these rules, when applied, do not result in adding non-top-level product components to orders. Orders are put on hold upon submission, if they contain order lines for multilevel product bundles *and* those lines do not have top-level multilevel product components.

Service Line Summary

Use this section to add multilevel installed services to the convergent order for service management. Similar to service management orders, clicking the Select Installed Services button transfers you to a tree structure in which a list of installed services belonging to the selected customer (and contact, if available) are displayed. From there you can select the installed services you want to perform service actions. Make sure to add all the installed contracts necessary for the order before initiating a configuration session as they cannot be added from the session.

Note. This section does not appear for simple orders or quotes.

If related customers are selected for the convergent order:

*   the Customer and Contact fields (required) in the tree structure allows the filtering of multilevel installed services by customers and contracts that are previously selected in the order.

*   the system displays the Customer tab, showing the customer and contact information for each multilevel installed contract and component added to the section.

Note that the Show Add Products link, which is available to service management orders to add new products in the Manage Service component, is not available to convergent orders.

Shipping Summary, Nonrecurring Billing Summary, and Recurring Billing Summary

If related customers are selected for the convergent order, these sections are displayed on the Convergent Order - Shipping & Billing Info page for each customer being viewed.

See and <u>Chapter 24, "Working with Orders for Multilevel Product Bundles," Specifying Shipping and Billing Information, page 673.</u>

Child Orders

This section displays a list of child orders (simple orders and service management orders) that are generated for all line items in the convergent order after order submission.

The section provides this information about child orders: order ID, order action (for service management orders only), description of the ordered product, customer name, contact name and the order status.

The Product Description field for regular child orders supports the display of multiple products as a multilevel product bundle added to an order can contain a number of product components.

Note. This section does not appear for simple orders or quotes.

Totals

The charges displayed in this section are calculated for both new order as well as service management line items.

See Also

Chapter 13, "Managing Orders and Quotes," Understanding Order Capture, page 269

Specifying Shipping and Billing Information

Access the Convergent Order - Shipping Billing page (Orders and Quotes, Search Orders and Quotes, Convergent Order - Shipping Billing).

Convergent Order - Shipping Billing page (1 of 3)

Convergent Order - Shipping Billing page (2 of 3)

Convergent Order - Shipping Billing page (3 of 3)

Note. This page appears if the convergent order is associated with more than one customer (in other words, at least one related customer is selected in the order). If the order does not have any related customers, the Shipping Billing page is not visible and the Shipping Summary, Nonrecurring Billing Summary and Recurring Billing Summary sections appear on the Entry Form page.

Related Customers

This section lists all customers (including the customer in the header) that are associated with the convergent order. When you select a customer in the section, the system populates the line summary and any shipping and billing information that is currently available for this customer.

Line Summary

This section displays summary information of order lines (for both new and installed products) that pertain to the selected customer. For each line in the section, the top-level component of the product bundle is shown, along with line action and reason (for service management order lines), configuration status, product description and product ID.

Shipping Summary

Use this section to specify the shipping and installation site information for the selected customer. It looks and behaves the same in both simple and convergent orders.

Note. This section appears on the Entry Form page if the order does not have any related customers.

See and Chapter 13, "Managing Orders and Quotes," Entering Shipping Information, page 315.

Nonrecurring Billing Summary

Use this section to specify the one-time billing information for the selected customer. It looks and behaves the same in both simple and convergent orders.

Note. This section appears on the Entry Form page if the order does not have any related customers.

Billing Account	Select to charge the customer using the billing account that is selected in the Account Number field.

Account Number	Select from a list of prepaid or postpaid accounts that the bill-to customer (the one selected in this section) owns, including the ones that are currently in active or pending activation statuses. Active accounts are shown in a concatenated <account number - account name> format. For those that are pending activation, only the account number is displayed.

The Transfer button takes you to the actual record of the selected billing account, which must already exist in the system. In other words, it does not work for the *New Account* value.

Note. Make sure that selected billing accounts are all activated by the time orders are submitted; orders are put on hold if associated existing billing accounts are not in the *Active* status.

Select **New Account** if you want to choose a new postpaid billing account to pay for the order. This option is available if a new postpaid billing account has been marked for creation in the Recurring Billing Summary section for the bill-to customer.

Note that this option doesn't apply if the new billing account to be created is a prepaid one because the system doesn't allow the use of new prepaid billing accounts to pay for nonrecurring charges. When that happens, the validation process puts the order on hold.

See and <u>Chapter 13, "Managing Orders and Quotes," Managing Billing Information, page 317.</u>

Recurring Billing Summary

Use this section to specify the recurring billing information for the selected customer. It looks and behaves the same in both regular and convergent orders.

Note. This section appears on the Entry Form page if the order does not have any related customers.

See and <u>Chapter 13, "Managing Orders and Quotes," Managing Billing Information, page 317.</u>

Viewing Order Line Details

Access the Convergent Order - Line Details page (Orders and Quotes, Add Order, Convergent Order - Line Details).

Convergent Order - Line Details page, new order (1 of 3)

Convergent Order - Line Details page, new order (2 of 3)

Convergent Order - Line Details page, new order (3 of 3)

Billing Account Details

This section displays billing account assignments for products that are billable; it appears if the product referenced in the order line is set as *billing account selectable.*. Use this section to select a billing account for the order line or multiple billing accounts to split the order line payment in case the selected product is split billing-enabled. Upon order submission, a validation check takes place to make sure that information for all the required billing accounts is collected properly.

You cannot add or remove billing accounts in this section.

No (number)	Displays the sequence number of the corresponding account based on the product definition.
Primary	Indicates, if selected, that the corresponding account is the primary one for the product. This column appears only if the product referenced is a split billing product. This information comes from the product definition.
Required	Indicates, if selected, that the corresponding account is required for the product. This information comes from the product definition.
Customer	Displays the owner or sold-to customer of the order line by default. If you want to select a different customer for the order line, click the Search button to choose a bill-to customer of the sold-to customer as the new customer for the order line.
Contact	Select a contact for the customer. The list refreshes as a different customer is selected.
Account Number	Select a billing account from the list of existing accounts that belongs to the customer selected for the order line. The list can contain a mix of prepaid and postpaid accounts, only prepaid accounts, or only postpaid accounts depending upon the account type that is defined in the product definition for each row.
	You can also select the *New Account* option providing that a new account for the same customer has been marked for creation in the Recurring Billing Summary section.
	Click the Transfer button to access the view details of the selected account in the Account component.
Purpose	Displays the account purpose as defined in the product definition.

Commitment Details

This section appears if corresponding product is a commitment product.

Commitment Details		
Creating Rule ID HLR00002		**Duration** 6 Months
Description CMT 4 Xtra Adv Con		
Start Date 08/14/2009		**End Date** 02/13/2010

Commitment Details section on the Line Details page

It displays additional information about the commitment product, such as the associated commitment triggering rule and the commitment duration for the products it covers.

Configuration Status

Order Configuration Status	Displays the configuration status of all multilevel product bundles within the order. Values are:

- *Not Validated*: configuration is saved and stored in the order but it has not been validated.

- *Invalid*: configuration is submitted for validation and is invalidated due to rule violation.

- *Valid*: configuration is submitted for validation and is validated.

- *Valid with Warning*: configuration is submitted for validation and is validated with a warning.

- *Invalidated*: configuration was validated but later on an operation executed on the configuration caused it to be invalidated. Such operation can be a change of customer, or cloning or removal of any multilevel product bundle order line.

Contract Configuration Status	Displays the configuration status of the multilevel product bundle to which the current order line belongs.
Line Configuration Status	Displays the configuration status of the current order line.
Functional Component Status	Displays the configuration status of the functional component that is related to the commercial product of the current order line.
	This field does not appear if the corresponding product is a functional component.
Configuration Status Details	See and <u>Chapter 24, "Working with Orders for Multilevel Product Bundles," Viewing Configuration Details, page 719.</u>
Reconfigure Product	Click to open the configuration session to view or edit the corresponding product.

Group & Shared Offers Details

This section appears if the corresponding product is a member or consumer of a shared offer.

Group & Shared Offers Details				
Action	**Description**	**Offer Type**	**Customer Name**	**Contact**
Add	Shared Directory Service	Shared	Softgear Inc.	Ted Pepper

Group & Shared Offers Details section on the Line Details page

Action	Displays the order line action that is set in the configuration session. Values are:
	Add: group offer member was added from the offer.
	Remove: group offer member was removed from the offer.
Offer Type	Displays the offer type associated with the order line.
	Values are *Shared* and *Group.*
Customer	Displays the name of the offer holder associated with the order line.
Contact	Displays the name of the contact associated with the customer.

Users of Shared Product or Users of Group Product

This section appears if the corresponding product is a shared offer or group offer. It shows the list of members associated with the offer.

Users of Shared Product					
Action	**Description**	**Customer Name**	**Contact**	**Comment**	**Details**
Add	Mobile Subscription	Softgear Inc.	Ted Pepper		Order Line Details

Users of Shared Product section on the Line Details page

Action	Displays the order line action that is set in the configuration session. Values are:
	Add: group offer member was added from the offer.
	Remove: group offer member was removed from the offer.
Customer	Displays the name of the offer holder associated with the order line.
	If the offer holder is part of an external service, you can select the name of the offer holder.
Contact	Displays the name of the contact associated with the customer.
	If the contact is part of an external service, you can select the name of the contact.

Details   Click to view additional details about the order line. Available links
                                               include:

                                               Order Line Details: Clicking this link transfers you to the line details of the
                                               functional component that is sold by the corresponding product.

                                               Installed Product Details: Clicking this link transfers you to the Installed
                                               Product page.

                                               External Service Details: Clicking this link transfers you to the External
                                               Service Details page.

Line Relationship

This section displays order line relationships between the product component that is listed in the Line Details
section (the source component) and the rest of the components (target components) within the same
multilevel product bundle. This section does not apply to non-multilevel product bundles or installed services.

Important! Refer to this section for all field descriptions and values that are supported in the Line
Relationship section for all capture types. Field values are available for viewing depending on the nature of
the order and the line action, some of these fields or values may not apply.

Action   Displays the order line action that is set in the configuration session. Values
                                               are:

                                               ADD: Establish a new relationship of the specified type between two
                                               product components.

                                               REMOVE: Inactivating existing relationship of the specified type between
                                               two product components.

                                               If the specified relationship type is *installable,* adding or removing the
                                               relationship means creating or inactivating the corresponding installed link
                                               in the order fulfillment process. Removing an installed link changes its
                                               status and this action doesn't remove the link physically from the database.
                                               If the relationship type is *non-installable,* adding or removing the
                                               relationship doesn't create or remove any installed links.

                                               To keep track of when an installed link instance is added or removed, the
                                               Installed Date field is updated when the link is created; the Disconnect Date
                                               is updated when the link is being removed.

Type and **Relation**	Displays the relationship type between the source component (specified in the Line Details section) and the target component (specified on the Product Description field or the Object Description field) and the description of the relation viewed from the source component's perspective. Values are:
	Brings Commitment. Supported relations are *Brings Commitment* and *Covers because of.*
	Committed. Supported relations are *Commits* and *Is Committed.*
	Sells. Supported relations are *Sells* and *Is Sold By.*
	Relies On. Supported relations are *Applies On* and *Is Used By.*
	Brings On Creation. Supported relations are *Brings* and *Is Brought By.*
	Child Of. Supported relations are *Is Child Of* and *Is Parent Of.*
	Brings and Removes. Supported relations are *Brings and Removes* and *Removes.*
	Migration. Supported relations are *Migrates to* or *Migrated from.*
	Owner. Supported relation is *Owned by.*
	Billed to. Supported relation is *Billed to.*
Object Description	Displays the product name, customer name or account name, depending on the related object type.
Related Line ID	Displays the order line ID to which the target component belongs. This value is not available, for example, if the target component is a functional component.
Related Order ID	Displays the order ID of the target component if this component is from another order. This field applies to convergent order child orders as order line relationship spans across multiple orders.
Related Object Type	Displays one of these values depending on the line relationship type:
	• *Installed Product* for types such as *Relies On,Child Of* or *Shared With.*
	• *Customer* for types such as *Owned By.*
	• *Billing Account* for types such as *Billed By.*
	• *External Service* for an external service provided by an external carrier.
Related Object ID	Displays the ID link of the corresponding object type, which can be installed product ID, customer BO ID, billing account number, or external service detail.

Manual Price Adjustments

The behavior of this section is the same between simple and convergent orders.

See and <u>Chapter 13, "Managing Orders and Quotes," Viewing or Modifying Line Details, page 304.</u>

Cross/Up Sell Opportunities

This section displays any cross-sell and up-sell opportunities for the current order. For multilevel product bundles:

• The Replace button is disabled for all multilevel product component order lines.

• The Replace button is disabled for all cross-sell and up-sell opportunities that point to multilevel product components.

• The Add to Order button is disabled for all cross-sell and up-sell opportunities that point to non-top-level multilevel product components.

• The selling period indicator is displayed for multilevel product components that have selling periods scheduled in the future.

These changes do not apply to non-multilevel product bundles in the order.

Configuration and Attributes

This section displays the product hierarchy of the current order. It presents the target contract structure and it takes into consideration all the actions captured in the configuration session. Migrated components are displayed in the context of the target contract. For multilevel product bundles:

Note. This product hierarchy does not show functional components.

• Each multilevel product bundle included in the order is presented in its own line hierarchy individually.

• Each node within the hierarchy is expandable up to the lowest level of the bundles (atomic offer). Information such as attribute values and links are displayed as applicable. Visual indicators (icons) pertaining to components within the hierarchy are displayed as well. You can click a node or icon on the tree to access the corresponding product component with relevant information.

• Configuration status is displayed for information purposes.

• Selling period indicators are displayed for product components that are available for sale in the future.

These changes do not apply to non-multilevel product bundles in the order.

Viewing Attributes

Access the Attributes for <multilevel product name> page (click the View Attributes link on the Entry Form page of a capture type).

Attributes for MyTribe SMS

Order Capture

Dedicated SMS 200

Cancel

Attributes for <multilevel product name> page

For multilevel product bundles, attributes are entered during configuration sessions based on the setup of the *Configurator* attribute object type. The Configure properties button appears for product components that are associated with attributes. After submitting the configuration to the Configurator server, attribute values are passed and stored in the order.

Clicking the View Attributes link on the Entry Form page brings up this page that displays the values in read-only mode.

See Also

Viewing External Service Details

Access the External Service Details page (click the *Details* link on the Line Details page)

External Service info page

Convergent Order

External Service Details

Product ID TELPS60004

Description External Service

Customer Softgear Inc.
Name

Contact Name Ted Pepper

Comment

Return to Order

External Service Details page

The External Service Details page displays information about the external service associated with a group offer member.

Creating Service Management Orders for Multilevel Installed Products

This section discusses how to:

• Create service requests for multilevel installed products.

• Select multilevel installed products.

• View line details of service management orders.

Pages Used to Create Service Management Orders for Multilevel Installed Products

Page Name	Definition Name	Navigation	Usage
Manage Service - Entry Form	RO_FORM	• Service Management, Maintain Service, Manage Service - Entry Form • Service Management, View Service Management Order, Manage Service - Entry Form	Create service management orders for multilevel installed products.
Manage Services - Select Installed Services	RO_INSSVC_TREE	Click the Add Installed Product button on the Manage Service - Entry Form page.	Select multilevel installed products for the service management orders.
Manage Service - Line Details	RO_CAPTURELINE_DTL	• Service Management, Maintain Service, Manage Service - Line Details • Service Management, View Service Management Order, Manage Service - Line Details	View line details for service management orders.

Creating Service Requests for Multilevel Installed Products

Access the Manage Service - Entry Form page (Service Management, Maintain Service, Manage Service - Entry Form).

Manage Service - Entry Form page (1 of 3)

Manage Service - Entry Form page (2 of 3)

Manage Service - Entry Form page (3 of 3)

Important! Select only one multilevel installed service for each service management order. Use convergent orders if you wish to process multiple multilevel installed services in a single configuration session.

When a multilevel installed service is added to the order initially, only one order line is created (for the top-level component of the multilevel installed service). Additional order lines (associated with the same line number) for other components are displayed subsequently based on the result of the configuration session.

Suspension or resumption of a multilevel installed service can be filed directly on a service management order without the need to go through a configuration session.

Header Details

Sub Source   Select the sub source of the service management order to indicate the origin from where the order is created. Available sub source values are based on the selected source. The default value of this field is specified in the definition of the associated order capture business unit.

Sub sources are established in the Order Capture Workbench.

Line Summary

Line Action	Select an action to perform on the selected installed service. Delivered values are:
	*Change
	Disconnect
	Suspend
	*Suspend/Change
	Suspend/Resume

Note. Validations (through configuration sessions) are required for servicing installed services with actions that are appended with an asterisk (*). Validation is not required for performing any of the remaining actions through service management orders.

Reason	Select a reason for the selected line action. The list of reasons change based on the selected line action.
	Reasons are mapped to reason types (line actions) on the Capture Setup Tables - Reason Codes page.
	See and Chapter 4, "Setting Up PeopleSoft Order Capture," Defining Reason Codes, page 49.
Configuration Status	Displays the configuration status of the corresponding multilevel product bundle. Click the link to access the Configuration Session Details page to view additional information about the configuration result.
	This link is available to the *top-level* order line only.
	See and Chapter 24, "Working with Orders for Multilevel Product Bundles," Viewing Configuration Summaries, page 718.
Link	Displays, if any, links that are established between corresponding installed services (commercial components) and their functional components.
	See and Chapter 24, "Working with Orders for Multilevel Product Bundles," Links, page 594.

Note. The Line Summary section shows only commercial components; functional components are always hidden.

Configure Package or **Reconfigure Package**	Click to start a configuration session for the selected installed service. This link is available to the *top-level* order line only.
	See and Chapter 24, "Working with Orders for Multilevel Product Bundles," Configuring Multilevel Product Bundles, page 695.

View Attributes

Click to view attribute values entered for corresponding order items. This link is available to each installed service that has an attribute specified during the configuration session. Attributes are not editable directly from any capture types.

See and <u>Chapter 24, "Working with Orders for Multilevel Product Bundles," Viewing Attributes, page 684.</u>

Line Status

Displays status of each line item. This information is available after the submission of the service management order.

Nonrecurring Billing Summary

Use this section to enter payment information for any nonrecurring charge that incurs in the service management order. Upon submission, validation check is executed to make sure that payment information is in place should any one-time charge be applied to the service management order.

See the *Viewing Line Details of Convergent Orders* section for more information on nonrecurring billing. The business and display logic of this section is the same for convergent orders and service management orders.

Recurring Billing Summary

Use this section to enter details for the new account that you want to create as part of the service management order. Unlike simple and convergent orders, the bill-to customer and existing billing account selected here are not used as values for billing account defaulting.

See the *Viewing Line Details of Convergent Orders* section for more information on recurring billing. With the exception of what is mentioned here, the business and display logic of the Recurring Billing Summary section is the same for convergent orders and service management orders.

See and <u>Chapter 24, "Working with Orders for Multilevel Product Bundles," Holds, page 639.</u>

Selecting Multilevel Installed Products

Access the Manage Services - Select Installed Services page (click the Select Installed Services button on the Manage Service - Entry Form page).

Manage Services - Select Installed Services page

The installed service tree shows all the installed services that belong to the customer and contact of the order as filtered by the selected filtering criteria (if available).

If the search is not for a specific service, the tree displays the top two levels (*contracts* and *plays* as delivered in the system) of multilevel installed services. The top level is expanded so that all of its immediate descendents are shown.

If the search is for a specific service, the tree displays the top two levels of the multilevel hierarchy to which that service belongs. For the branch in which the searched service resides, it is expanded all the way until the searched service is shown.

Non-multilevel installed services matching the search criteria appear according to existing functionality and are not impacted by changes that are specific to multilevel installed services.

Viewing Line Details of Service Management Orders

Access the Manage Service - Line Details page (Service Management, Maintain Service, Manage Service - Line Details).

| Entry Form | Line Details | Holds | Notes | Related Actions | History |

Go To Select One...

Line Details   Find | View All   First ◀ 16 of 19 ▶ Last

Product Flexi Usage Plan **Line** 34	**Total Price** 0.00
Product ID TELAO110011 Add Note	**Recurring List Price**
Installed Product ID INS0251059	**Net Recurring Price** 0.00
Unit of Measure Each	
Order Qty 1.0000 Check Availability Refresh	**List Price** 0.00
Unit Price 0.00	**Lead Time** 0
Partial Shipments Single Shipment	**Selling Status** Current

Billing Account Details

No	Primary	Required	Customer Name	Contact		Account Number		Purpose
	☐	☑	Softgear Inc.	Ted Pepp ▾	🔍	▾	📲	ISD Call Charges
	☑	☑	Softgear Inc.	Ted Pepp ▾	🔍	SG20019 ▾	📲	Local Call Charges

Manage Service - Line Details page (1 of 2)

Configuration Status

    Order Configuration Status Valid   Reconfigure Product
Contract Configuration Status Valid
      Line Configuration Status Valid
Functional Component Status Valid

Configuration Status Details

Line Relationship

	Action	Type	Relation	Object Description	Related Line ID	Related Order ID	Related Object Type	Related Object ID
1		Sells	Sells	Flexi Usage	35		Installed Product	INS0251060
2		Child Of	Is Child Of	SC tariff	33		Installed Product	INS0251058

Manual Price Adjustments

           Adjustment for One-time Charges   **Recurrence**

Flexi Usage Plan

Expand All | Collapse All
   College Special   1@ 1.00/EA
      Student Mobile   1@ 0.00/EA
         SC tariff   1@ 0.00/EA
            Extra Balance   1@ 0.00/EA
           Flexi Usage Plan   **1@ 0.00/EA**
      Basic Plan   1@ 0.00/EA
      Handset Bundle   1@ 0.00/EA

Manage Service - Line Details page (2 of 2)

Line Details

Shipment	This field is editable for multilevel installed services, but not non-multilevel installed services.
End Date	This field is not used by multilevel installed services as temporary services are not supported.

Billing Account Details

This section allows you to change the billing account (belonging to the same bill-to customer or a different bill-to customer) for the current installed product.

Refer to the see reference below for more information on billing account details.

Line Relationship

Refer to the see reference below for field descriptions and values that apply to service management orders.

See and <u>Chapter 24, "Working with Orders for Multilevel Product Bundles," Viewing Line Details of Service Management Orders, page 692.</u>

Manual Price Adjustments

This section is editable for multilevel installed services, but not for non-multilevel installed services.

Configuring Multilevel Product Bundles

This section discusses how to:

- Configure multilevel product bundles.

- Add contracts or plays.

- View and change recurring billing accounts.

- Create new recurring billing accounts.

- Migrate product components.

- Enter attributes.

- View link summaries.

- View offer members.

- View commitment information.

- View configuration request information.

- View configuration summaries.

- View configuration details.

Pages Used to Configure Multilevel Product Bundles

Page Name	*Definition Name*	*Navigation*	*Usage*
(Request Information)	CFG_HTML_SEC	Click the Show Request Info button on the configuration session.	View general and customer term information used in presenting the corresponding configuration session.

Page Name	Definition Name	Navigation	Usage
<capture type> - Configuration Session Details	RO_CONFIG_DTL_SEC	Click a configuration status link in the Line Summary section on the <capture type> - Entry Form page.	View configuration details.
Configuration Session Details - Error/Warning Message Details	RO_CONFIG_EXT_SEC	Click the View Details button of an error or warning message on the <capture type> - Configuration Session Details page	View error or warning messages that are generated for configurations.

Configuring Multilevel Product Bundles

Access the configuration session (click the Configure Package or Reconfigure Package link on the Entry Form page).

Important! The delivered Configurator GUI solution is a sample one and it does not cover all the possible configuration scenarios for multilevel product bundles. The CRM system provides APIs to handle product configurations that the sample GUI solution does not support.

A configuration session showing the newly selected contract and play for the order's sold-to customer (1 of 3)

A configuration session showing the newly selected contract and one of the plays for a related customer in the order (2 of 3)

A configuration session showing the newly selected contract and one of the plays for another related customer in the order (3 of 3)

A configuration session with a newly selected play that contains future products

A configuration session with a newly selected play that contains a shared offer

The configuration of multilevel product bundles or multilevel installed products is always initiated from the top-level component order line, where the Configure Package link appears on the Entry Form page. A configuration session can support a variety of actions, such as adding and removing product components, adding, modifying and removing product relationships, and setting product attributes. The actual list of actions that are available to a product or installed product in a configuration session is determined by a number of factors, including the nature and current status of the product or installed product. All multilevel product bundles that are added or selected on an order with the *Change* or *Suspend/Change* action are subject to validation in the same configuration session. Other service management actions, such as *Disconnect* or *Resume,* do not require validations in configuration sessions and can be processed directly from service management orders.

For the purpose of rule validations, the *Pending Activation,Suspended,Pending Suspension* and *Pending Resumption* statuses are considered active statuses for installed products and links. The suspension of a multilevel installed contract doesn't impact installed links that point to it, as multilevel installed contracts that are associated with the *Suspend* or *Resume* action do not need to be validated in configuration sessions. However, in case of package migrations, you cannot initiate a configuration session with a suspended multilevel installed contract (or one that has not been resumed yet) and these multilevel installed contracts are not available for modification in configuration sessions.

Suppose that an order contains four contracts and each one is associated with a different action:

*   Change Contract A

*   Disconnect Contract B

*   Suspend Contract C

• Suspend/Change Contract D

When you click the Configure Package link of any given contract, a configuration session is initiated and it includes all of the contracts in this order that are associated with the *Add* (for new products), *Change* or *Suspend/Change* action, that is contracts A and D in this example. Contract C and D are excluded because *Suspend* and *Disconnect*actions do not require configuration or validation. These contracts are configured and validated in one single session and they can be reconfigured and revalidated until the submission of the order.

Note. The links to initiate configuration sessions in catalogs are disabled for multilevel product bundles.

Verify	Click this button to validate the current product configuration for the order.
	If the validation is successful, the *Configuration is valid* message is displayed.
	If the validation fails, *Configuration is invalid* message is displayed and you can locate the actual error messages in the Verification results element.
Show Request Info (show request information)	See and <u>Chapter 24, "Working with Orders for Multilevel Product Bundles," Viewing Configuration Request Information, page 716.</u>
Submit	Click to submit the current configuration session and pass the configuration data back to the order for display and further order processing.
	If you click to reconfigure the product that was invalid at the time it was submitted, the *Configuration is not validated* message is displayed when you return to work on it for the first time.
Save	Click to save the current product configuration and return to the order.
	If click to reconfigure the product that was invalid at the time it was saved, the *Configuration is not validated* message is displayed when you return to work on it for the first time.
Cancel	Click to return to the order without saving the current product configuration.
Verification results	Click to open the folder and view validation errors that pertain to the current product configuration. This element appears only when validation errors occur.
(add instance)	Click to add another unit of the corresponding product in the configuration.
(remove selected)	Click to remove the corresponding product from the configuration.
(show links)	Click to display for the corresponding product information on:

• Any existing links to other products in the system.

• Any configuration rules that are defined for it.

• Any products that it can establish new links with instantly.

	(error on product)	Indicates that one or more validation errors are present for the corresponding product component. Expand the Verification results element to view the actual error messages.
	(configure properties)	Click to enter attributes for the corresponding product component.
		See and Chapter 24, "Working with Orders for Multilevel Product Bundles," Entering Attributes, page 712.
	(migrate)	Indicates that the product component can be migrated to another contract (new or existing).
		Click to view a list of available migrations that can occur to the corresponding product component
		See and Chapter 24, "Working with Orders for Multilevel Product Bundles," Migrating Product Components, page 712.
	(show members)	Indicates that the corresponding product component is a group offer. Click to display:
		• Any configuration rules that are defined for it.
		• Any existing members that are using the offer.
		• Any potential members that can be using the offer.
		See and Chapter 24, "Working with Orders for Multilevel Product Bundles," Viewing Offer Members, page 715.
	(brings on creation)	Indicates that the corresponding product component (A) has a brings on creation relationship with another product (B), which means that selecting A causes the automatic selection of B in the configuration session.
		Click the Show links icon to identify the product at the other end of the brings on creation relationship.
	(brings and removes)	Indicates that the corresponding product component (A) has a brings and removes relationship with another product (B), which means that selecting A causes the automatic selection of B in the configuration session.
		Click the Show links icon to identify the product at the other end of the brings and removes relationship.
	(future product)	Indicates future product. Place a cursor over the corresponding product component to view its selling start and end dates.

Indicates that corresponding component is a billable product, which has the Billing Account Selectable option selected in its product definition.

Click this icon if you wish to change the current billing account of the corresponding product component (which can be a contract, a play, an offer, or an atomic offer).

When you place the cursor over the icon, information of each billing account that is currently associated with the corresponding product component appears as hover text in one of these formats:

- For an identifiable account:

  <An asterisk if the account is required><Account Sequence Number>: <Account Purpose> -- <Account Number> -- <Account Name>

- For an unidentifiable account:

  <An asterisk if the account is required><Account Sequence Number>: <Account Purpose> -- [not specified]

  It occurs if the billing account is not required as defined in product definition and no actual billing account has been selected for the product component (which can be newly added in the session or selected among installed products).

The hover text also includes the billing account information of the product component's functional component, if the Billing Account Selectable option is selected in the product definition of the functional component. The *Functional Component* subtitle appears when functional component-specific billing account information is available.

See Viewing and Changing Recurring Billing Accounts

Indicates that both the corresponding product component and its functional component have the Billing Account Selectable option selected in their product definitions, and you can view their account information as well as change the account assignment in the configuration session.

The same icon also shows if only the functional component requires billing options.

Click this icon if you wish to change the current billing account of the corresponding product component (which can be a contract, a play, an offer, an atomic offer, or a functional component).

See and <u>Chapter 24, "Working with Orders for Multilevel Product Bundles," Viewing and Changing Recurring Billing Accounts, page 707.</u>

☑ (show active commitment)	Indicates that the corresponding product component is covered by a commitment product.
	Click this icon to view the commitment details and the list of the product components that are covered by this commitment product.
	See and <u>Chapter 24, "Working with Orders for Multilevel Product Bundles," Viewing Commitment Information, page 715.</u>

Customer Details

The first level of tabs represent customers (the sold-to customer and related customers selected for the order) that are available in the configuration session. You can place the cursor over a tab and view summary information of the customer, which includes the name and ID of the customer and its contact.

Contract Details

The second level of tabs represent contracts that are available in the configuration session. You can:

• Place the cursor over a tab and view summary information of the contract in hover text, which includes the ID, instance ID (temporary ID for new product or installed product ID), status and price of the product.

• (for convergent orders) Add new contracts.

• (for convergent orders) Unload the current contract and replace it with another new contract or installed contract.

• (for convergent orders) Remove installed contracts.

Note. For every product component that is added to or removed from the configuration, validation is performed automatically to the entire configuration automatically.

Product Details

The third level of tabs represent plays that are available within the selected contract in the configuration session. You can:

• Place the cursor over a tab and view summary information of the play in hover text, which includes the ID, instance ID (temporary ID for new product or installed product ID), status, price, and the minimum and maximum quantities allowed of the product.

• Add new plays.

• Remove plays (new or installed).

Automatic Selection of Components in Multilevel Product Hierarchy

From the multilevel product hierarchies that appear in the configuration session, you can select components to add to or remove the ones that are no longer needed from the configuration. When you select a component and its parent is not already being selected, the system automatically selects the parent component in the configuration. Similarly, if you remove a selected component with child components that are currently selected, the system automatically removes its child components as well.

In the case where you add a product component to the configuration and this component is associated with a *brings on creation* or *brings and removes* rule, the controller application adds the new product automatically as required by the rule, if there is no ambiguity as to where the new product should be added in the hierarchy. If ambiguity does exist, you are asked to indicate where the product needs to go in the hierarchy. This situation can occur when the new product is added under a multi-instantiated component (multiple instances of the same product component, which are shown separately as individual hierarchy in the configuration session).

Adding Contracts or Plays

Click the Add Instance button to add new (or installed) contracts or plays.

Adding new or installed contracts in configuration session

This section displays a list of new contracts or installed contracts of the customer that can be added to the configuration session. Select a desired contract and click the Submit button to add it to the configuration session.

The same user interface is used for adding plays.

Viewing and Changing Recurring Billing Accounts

Access the configuration session to view and change recurring billing account information. For new orders, the Default Billing Options for <Customer Name> section appears if products (which have the Billing Account Selectable and Split Billing options selected in its product definition) are selected in the configuration sessions.

Viewing current billing account for recurring charges in configuration session at the customer and contract level

Viewing current billing account for recurring charges in configuration session at the play level

Default Billing Options for <Customer Name>

This section appears to display recurring billing account information that pertains to the order. In this section, you can change the billing account for recurring payments by selecting a different account that the same bill-to customer owns, or selecting a different account that is owned by a different bill-to customer.

Bill To Customer	Displays the bill-to customer that is currently selected in the order for recurring billing. Other available values in this field are customers that have a bill-to relationship with the sold-to customer of the order.
	This field is not visible if the option to allow customer level split billing is not selected in the Communications Setup page.
Bill To Contract	Displays the bill-to contact that is currently selected in the order for recurring billing. Other available values in this field are bill-to contacts of the selected bill-to customer.
	This field is not visible if the option to allow customer level split billing is not selected in the Communications Setup page.

Account	Displays the billing account that is currently selected in the order for recurring billing. Other available values in this field are all accounts that the selected bill-to customer owns, plus *New Account*.
	If the option to allow customer level split billing (RBTCUSTSPLITBIL) is not selected in the Communications Setup page, only accounts that are owned by the sold-to customer of the order plus *New Account* are available for selection.
	If the option to allow the reuse of existing prepaid accounts (RBTREUSEPPACC) is not selected in the Communications Setup page, current prepaid accounts for the bill-to and sold-to customers are not available for selection.
(create new recurring billing account)	Click to create a new billing account for recurring billing from the configuration session. The configuration session is refreshed and a new section appears to capture the information needed for creating a new billing account for the corresponding product.
(reload billto customers and accounts)	Click to invoke a web service which reloads values of the Account field in the Default Recurring Account section. It also refreshes the Bill To Customer field values if the the option to allow customer level split billing (RBTCUSTSPLITBIL) is selected.
(modify new recurring billing account)	Click to modify the corresponding new account.

Billing Accounts for <Name of Contract>

This section appears if you click the Billing Account icon of the top-level component in the configuration session.

Note. When the section appears, page tabs at the play level are not available for viewing or editing.

Purpose	Displays the purpose description of the corresponding account.
Customer	Same as the Bill To Customer field in the Default Recurring Account section.
Contact	Same as the Bill To Contact field in the Default Recurring Account section.
Account	Displays the number and name of the default billing account. Other available values include billing accounts that match the predefined account type and are owned by the selected bill-to customer, plus *New Account*.

Note. Prepaid accounts are available for selection if the option to allow the reuse of existing prepaid accounts option is selected. In the case where one of the billing account rows in this section is defined as prepaid accounts only and the option to reuse existing prepaid accounts is not selected, the row becomes unavailable for edit.

Billing Accounts for <Name of Non-Contract>

This section appears if you click the Billing Account icon of a non-top-level component (for example, play or offer) in the configuration session.

The display logic and elements of this section is the same as the Billing Accounts for <Name of Contract> section.

Functional Component Billing Accounts for <Name of Non-Contract>

This section appears if you click the Billing Account icon of a non-top-level component (for example, play or offer) in the configuration session AND the component is linked to a functional component that has the Billing Account Selectable option selected in its product definition.

The display logic and elements of this section is the same as the Billing Accounts for <Name of Contract> section.

See Also

Creating New Recurring Billing Accounts

Click the Create New Recurring Billing Account icon in the configuration session to create new billing accounts.

Creating a new billing account for recurring charges in configuration session from a new order

Request New Account

The Request New Account window appears .

Customer and **Contact**	Displays the customer and contact for which the new account is going to be created.
	If the the option to allow customer level split billing (RBTCUSTSPLITBIL) is not selected, the Bill To Customer and Bill To Contact fields are not visible. As a default, the system creates the new account for the sold-to customer and contact.
Account Name	Displays the system-assigned name for the new account.
Account Type	Select the type for the new account. Values are *Individual,Prepaid, Sponsored* and *Subordinate.*
OK	Click to perform checks to make sure that all the information needed for account creation is available in the section, save the information, and return to the configuration session main page.

Note. If the billing account validation comes back with an error, a visual indicator appears (a red square) and the error message appears close to the billing account row that causes the error.

Cancel	Click to abort the account creation action and return to the configuration session main page.

See Also

Chapter 24, "Working with Orders for Multilevel Product Bundles," Understanding Split Billing, page 637

Migrating Product Components

Refer to the *Creation of Convergent Orders for Product Migration: Example* section of the see reference for a walkthrough on package migration.

See and Chapter 24, "Working with Orders for Multilevel Product Bundles," Understanding Package Migration Requests, page 611.

Entering Attributes

Click the Configure Properties icon to enter attributes for the corresponding product component.

Entering attributes in the configuration session

The first section displays offer (atomic offer) attributes, if any. The second section presents product (functional component) attributes. Depending on the attribute type, a free-text field or a drop-down field is displayed for you to enter the attribute value. Here, you can set attribute value or remove an existing attribute if permitted by the eligibility rule.

Click the Submit button to confirm the selection and click the Return button to go back to the previous configuration screen.

Note. In case of atomic offers, you select attribute values for them as well as their corresponding functional components at the same time.

Viewing Link Summaries

Click the Show Links icon to view link summary for the corresponding product component.

Viewing links in the configuration session

The first section displays the configuration rules (grouped by type) that are defined for the corresponding product. The second section displays existing (added) links between the corresponding product and the other product. These links are grouped by types and direction. The third section displays products that can possibly be linked to the corresponding product. You can perform additional actions (action buttons are displayed accordingly) based on eligibility rules, for example, remove an existing link or add a new one.

Search   Click to enter search values to find link destinations. The section lists a number of fields for you to enter search values, or you can search just by customer ID.

The search result is a list of possible link destinations for the products listed on the same section (below the Search and SEARCH BY CUSTOMER ID buttons). You can select a product in the search result with which a link is created.

Viewing Offer Members

Click the Show members icon to view existing or add new members for the corresponding offer.

Configuration session showing current members of an offer and available members that can potentially be added to the offer

The first section displays the configuration rules (grouped by type) that are defined for product. The second section shows existing (added) members of the shared product. The third section displays members that can be added to the product. You can perform additional actions (action buttons are displayed accordingly) based on eligibility rules, for example, remove an existing member or add a new one.

Viewing Commitment Information

Click the Show Active Commitment icon to view information of an existing or newly added commitment.

Configuration session showing commitment information

The first section displays basic information of the commitment currently assigned to corresponding product component and possible actions (like shorten or extend the commitment duration) that can be performed. The second section lists the products that the commitment product covers in the current configuration session. The third section allows you to change (remove) commitment coverage for product components, though doing so can cause the commitment triggering rule to break, which invalidates the configuration session.

Viewing Configuration Request Information

Access the (Request Information) page (click the Show Request Info button on the configuration session).

General request information

Channel:	STORE
Sub Channel:	
Order ID:	NEW
Order Date:	2009-08-06
Currency Code:	USD
Business Unit:	COM01
Language Code:	ENG
Configuration Session ID:	
User ID:	CSPADMIN

(Request Information) page (1 of 2)

Terms for customer Softgear Inc. (93908859922411285748283)

Name: Customer Assessment
ID: 5438745947299857671595300042636
Value: Platinum

Name: Customer since more than 1 year
ID: 3566253517656678089402029041071
Value: Y

Name: Customer Segment
ID: 3374252283268829357491450445957
Value: Superior

Name: Name of Customer
ID: 6071701801135855499213389117740
Value: Softgear Inc.

Return

(Request Information) page (2 of 2)

This page displays information gathered from request data. The first section presents general information that is passed in the request. The second section is generated for each customer included in the corresponding order; it lists all the terms (with IDs and values) that pertain to each customer.

Viewing Configuration Summaries

Access the <capture type> - Configuration Session Details page (click a configuration status link in the Line Summary section on the <capture type> - Entry Form page).

The same page is used in simple orders, convergent orders and service management orders.

Convergent Order - Configuration Session Details page

Configuration Session Details

This header section includes basic configuration information such as session ID, configuration status and the time when the configuration session was initiated.

Contract

For each contract that is validated in the order, the Contract section appears and it displays high-level information pertaining to its corresponding contract: customer name, customer contact name, configuration status, order line number, product ID and description.

Reconfigure Product or **Configure Product**	Click to launch a configuration session from the page directly without returning to the Entry Form page.
	See and Chapter 24, "Working with Orders for Multilevel Product Bundles," Configuring Multilevel Product Bundles, page 696.

Configuration Session Context

This section displays the user role retrieved by configurator for the purpose of eligibility criteria evaluation. This section will be presented only if debug mode is enabled for the configurator.

Customer Criteria

This section displays customer criteria values retrieved by configurator for the purpose of eligibility criteria evaluation. This section will be presented only if debug mode is enabled for the configurator.

Products

This section identifies all products for the contract that were configured and validated in the configuration session for which configuration status was set to *Invalid* or *Valid with Warnings.*

Error/Warning Messages

This section displays any error or warning messages that were returned after configuration validation for any products within the contract. Each entry contains this information: product ID and name for which the message is issued, the order line number of the product, the severity level of the rule by which the message is issued, and the actual message text, which is specified in the definition of the corresponding rule.

View Details	Click to access the Configuration Session Details - Error/Warning Message Details page to view additional information about the rule violation.

Viewing Configuration Details

Access the Configuration Session Details - Error/Warning Message Details page (click the View Details button of an error or warning message on the Convergent Order - Configuration Session Details page).

Configuration Session Details - Error/Warning Message Details page

Error Code	Displays the error code that is returned from Advanced Product Configurator.
Message Text	Displays the message text that is defined for the error code. Error codes are defined on the Error Codes Setup page.
Exception Message Text	Displays the error message issued for the product, which is set up in the definition of the rule that the listed product has violated.
Technical Description	Displays the technical details of the error that is returned from Advanced Product Configurator.

Viewing Commitment Contracts

To view commitment contracts, use the Commitment Contract (RF_COMMITMENT_CONT) component.

This section discusses how to view commitment contracts.

Page Used to View Commitment Contracts

Page Name	Definition Name	Navigation	Usage
Commitment Contract	RO_COMM_CONT_PG	Customer Contracts CRM, Commitments, Commitment Contracts	View commitment contract information for customers, including the duration of the commitment and the list of products that are covered under the commitment contract.

Viewing Commitment Contracts

Access the Commitment Contract page (Customer Contracts CRM, Commitments, Commitment Contracts).

Commitment Contract page

When an order, containing a commitment product, is submitted for fulfillment, the *Communication New Order BPEL* process is invoked and among other tasks, it creates a commitment contract for the commitment product. A commitment contract contains information such as:

• Customer to which the commitment applies.

• Duration of the commitment.

• Identifier of the commitment rule that applied the commitment.

• List of products that are covered by the commitment.

Information on this page is read-only.

See Also

Chapter 24, "Working with Orders for Multilevel Product Bundles," Understanding Commitments, page 647

Appendix A

Order Capture Delivered Business Processes and Web Services

This appendix discusses the delivered Business Process Execution Language (BPEL) business processes and web services, and provides guidelines on how to view message elements.

See Also

PeopleSoft CRM 9.1 Automation and Configuration Tools PeopleBook, "Working with Business Processes and Web Services," Understanding Web Services

Delivered Business Processes

This section discusses:

- Communications New Order process flow.

- Mobile Number Portability process flow.

- Change Service process flow.

- Prepaid to Postpaid Account Conversion process flow.

- Port Authorization Code (PAC) Request process flow.

- Service Management Activate Service process flow.

- Service Management Suspend Service process flow.

- Service Management Suspend and Change Service process flow.

- Service Management Resume Service process flow.

- Service Management Disconnect Service process flow.

- Lost or Stolen Handset process flow.

- Service Management Port In process flow.

- Convergent Order Synchronization process flow.

- New Account Creation process flow.

• Use of sub and stub business processes in delivered business processes.

Communications New Order Process Flow

This process is initiated when an order for communications is created and submitted after passing through any holds. Payload is created with order details in it and is passed onto this business process as part of the initiation process, which is illustrated in the following graphic:
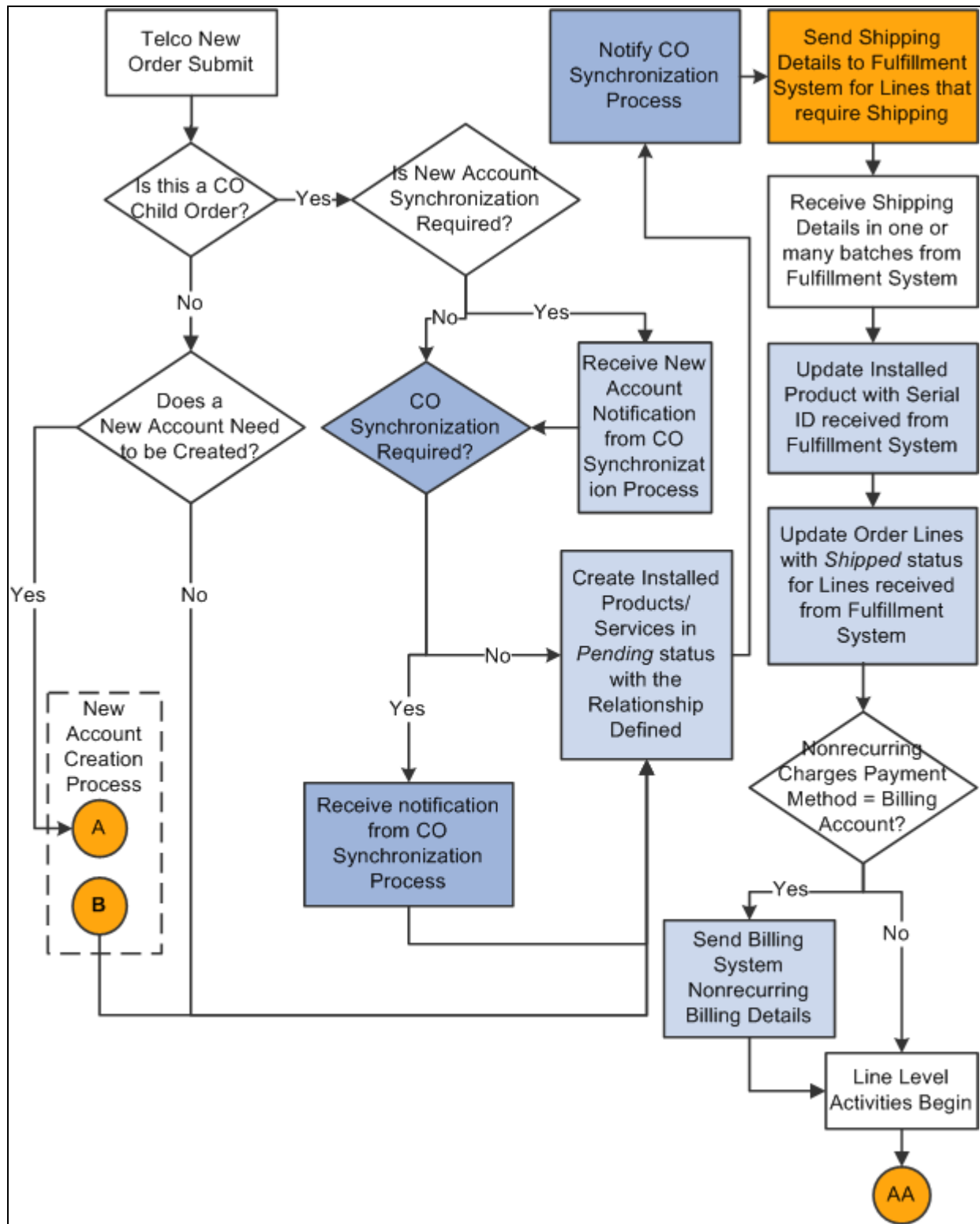
Communications New Order process flow for handling tasks and updates in CRM and fulfillment systems (1 of 2)
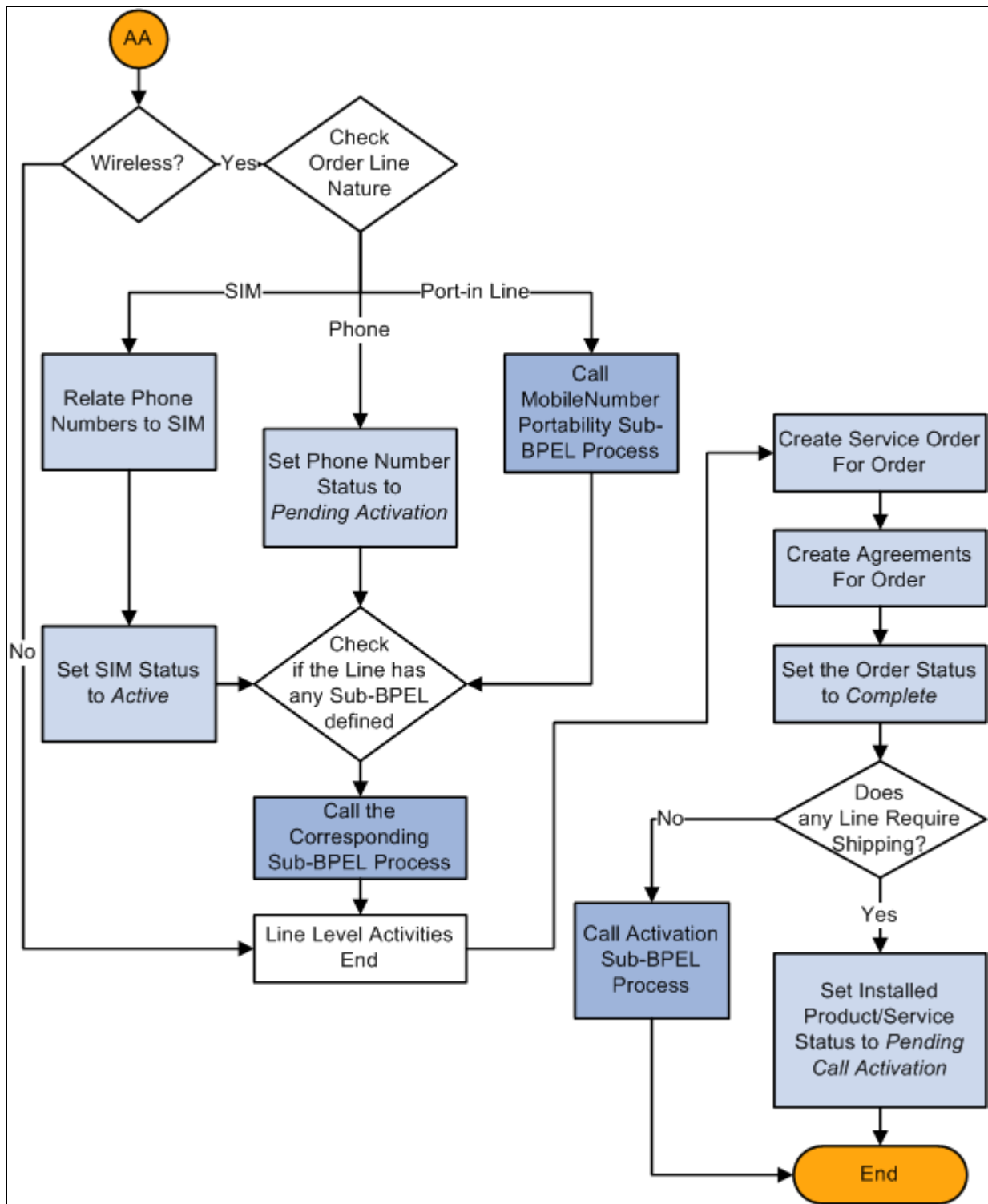
Communications New Order process flow for handling tasks and updates in CRM and fulfillment systems (2 of 2)

Note. If this is a storefront transaction, change the source from *Phone* to *Storefront* to ensure the correct New Order flow is used. A storefront order skips shipping and does not go to fulfillment. In other words, if the source of an order is storefront, the Communications New Order business process calls the Activate Service business process automatically as part of its processing. For other source values, the Activate Service business process is not triggered automatically within the Communications New Order business process. The Activate Service business process is triggered upon the submission of a service management order, typically after the customer has received the shipment and calls in to activate the service.

When this business process is initiated, it:

1. Checks if the new order that is be created is a child order of a convergent order.

   If yes, any new billing account is to be created at the context of its parent convergent order. In other words, new accounts are not created as part of the Communication New Order process instances that are invoked for child orders.

   If no, any new billing account (if requested in the order) is to be created at the context of the new order.

   - If the account should be created at the context of the parent convergent order, the process determines if it should wait for the *New Account* notification message from the parent *Convergent Order Synchronization* process flow before moving on to the next step.

   - If the account should be created at the context of the new order, the process checks if the New Account option is enabled in the order.

     If the option is enabled, the process then triggers the *New Account Creation* subbusiness process, which performs customer credit check and creates billing accounts. If the option is not selected or when the *New Account Creation* subbusiness process is completed, the *Communication New Order* process goes to the step where proper installed products and relationships are established with the *Pending* status.

     See and <u>Appendix A, "Order Capture Delivered Business Processes and Web Services," New Account Creation Process Flow, page 769.</u>

2. Checks if the convergent order synchronization process needs to be invoked.

Note. This step applies to multilevel product bundles. This process is required if there are product components that are migrated from an existing contract to this new contract to be created by this new order process instance, which is currently put on hold until the installed source contract has been set in pending status. The new order process instance resumes once it receives a notification from the synchronization process.

---

3. Creates installed products for all products available in the order with the appropriate relationships through an internal web service call.

   This step also supports the creation of installed products for orders that contain split billing products.

   If the order contains commitment products, this step creates installed commitments and commitment contracts for them in the *Pending* status. In the case where the customer of this order has other concurrent orders in the system, its pending installed commitments are considered active. It is because when an installed commitment is in a pending status, the system allows service management orders to be created for installed products that may impact the pending installed commitment, which includes extending, renewing or canceling the commitment. Therefore, the Controller application considers pending installed commitments active so that it can take proper steps to handle these kinds of impacts for installed commitments, for example, adding or updating the corresponding installed links.

   Important! For multilevel product bundles, this step creates installed links between multilevel installed products as required by the configuration. The reference to the original order line relationship is stored in the installed link as well. If the new order is a *target* order of a product component migration, this step also performs migration-specific actions for migrated installed products, for example, creating a *child of* link between the migrated installed product (commercial component) to the new commercial parent, creating a *sells* link between the migrated installed product (functional component) to the new commercial atomic offer, or changing installed product information (owner, installation site, or billing account).

   ---

4. Notifies the convergent order synchronization process.

   Note. This step is applicable only if the current order has sibling orders (from the same parent convergent order) that are dependent on it. For example, in a convergent order where two products with the *brings and removes* line relationship, the target child order depends on the source child order and a *brings and removes* installed link cannot be established as installed until the installed products for both child orders are created.

   ---

5. Cumulates the information for all the line items that require shipment.

   This information is published to an external fulfillment system through an external web service call.

6. Receives the shipment notice from the external fulfillment system.

   This notice can contain one or many lines. The business process waits for all the shipment information, which can be returned in multiple batches from the external system.

7. Updates the corresponding installed product (that is, the serial ID) for each received shipment notice.

   This is done through an internal web service call.

8. Updates the corresponding order line status to *Shipped* for each received shipment notice.

9. Checks if the payment method selected for nonrecurring charges is by billing account.

   If yes, the process sends the billing system details about the nonrecurring payment.

   If no, go to the next step.

10. Performs these activities for each line item in the order if the nature of the product in the line item is *Wireless*:

   • If the category of the product is *SIM* (Subscriber Identity Module):

   i. The process relates the corresponding phone numbers (which are related to the line item to which this SIM is associated) to this SIM, through an internal web service call.

   ii. The SIM status is set to *Active.*

   • If the category of the product is *Phone,* the phone number status is set to *Pending Activation.*

   • If the line item has a port-in request, the *Mobile Number Portability* business process is invoked.

   After the completion of the *Mobile Number Portability* business process, the control is returned to this business process.

   See and Appendix A, "Order Capture Delivered Business Processes and Web Services," Mobile Number Portability Process Flow, page 730.

   • If the line item is associated with a subbusiness process, a call to the subbusiness process is made and the control is returned to the main calling business process.

   All line-level activities are completed.

11. Creates service orders for installed products, if applicable, through an internal web service call.

12. Creates an agreement for the order, if applicable, through an internal web service call.

13. Sets the order status to *Completed* through an internal web service call, which also sets the status of all lines to *Completed* if they are not already in the *Completed,Shipped,* or *Cancelled* status.

   Important! For multilevel product bundles, this step is performed *after* the BPEL process has identified line items that require shipping.

   ---

14. If any of the line items requires shipping, sets the status of the parent installed product to *Pending Call Activation* through an internal web service call, which also takes care of updating the status of all child installed products to *Pending Call Activation.*

15. If no line items require shipping, invokes the *Service Management Activate Service* business process.

   After the *Service Management Activate Service* business process is completed, the control is returned to this main business process.

   See and Appendix A, "Order Capture Delivered Business Processes and Web Services," Service Management Activate Service Process Flow, page 747.

The *Communications New Order* business process ends.

While this business process is in progress, a cancellation message is sent to it if the corresponding new order is being cancelled. When that happens, the business process terminates regardless of the stage it is in.

Mobile Number Portability Process Flow

This process is typically initiated from the *Communications New Order* business process. For each port-in found on an order, an instance of this process exists. This process is responsible for validating the details provided for the port-in and is illustrated in the following graphic:

See and
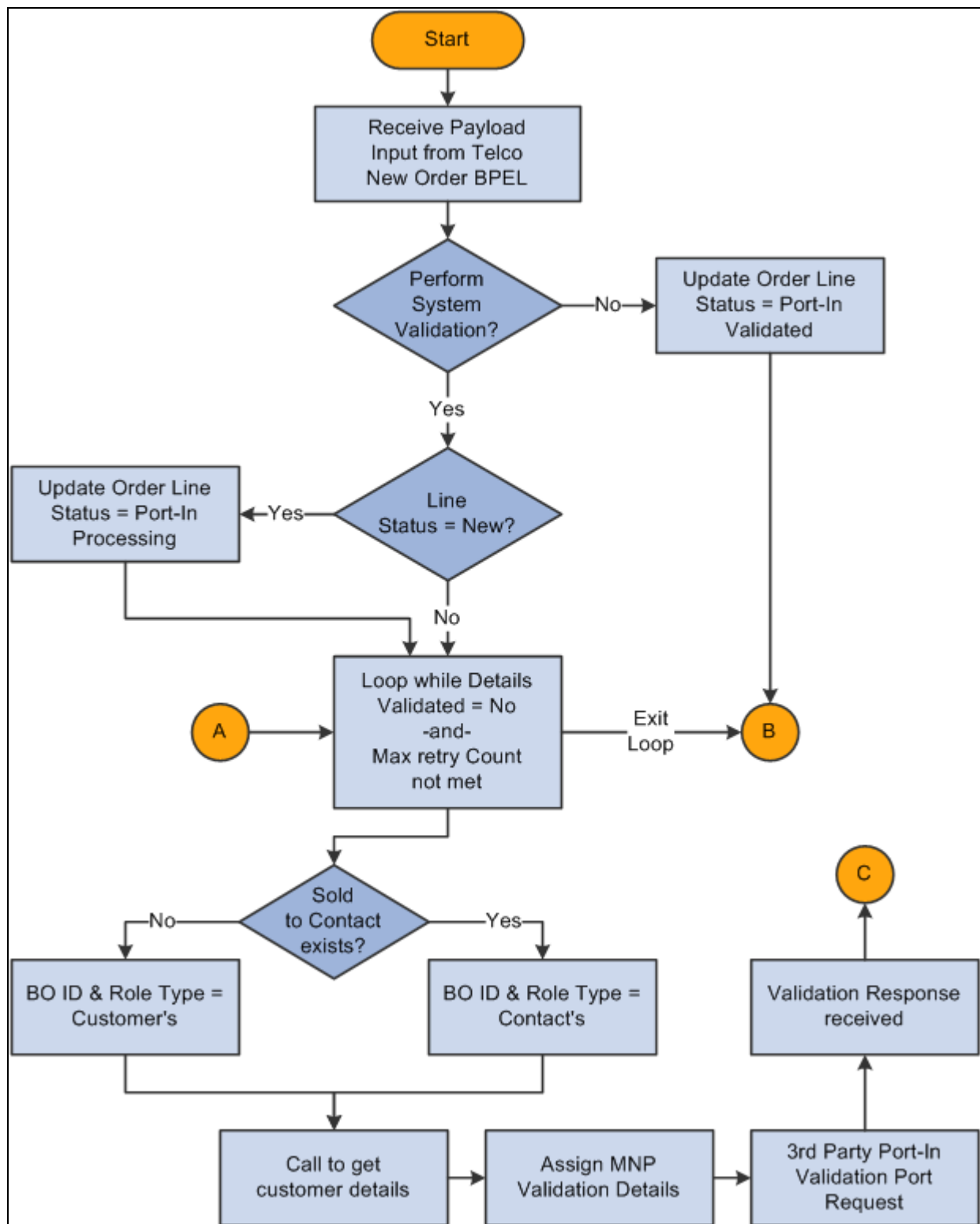
Mobile Number Portability process flow initiated from the Communications New Order process (1 of 2)
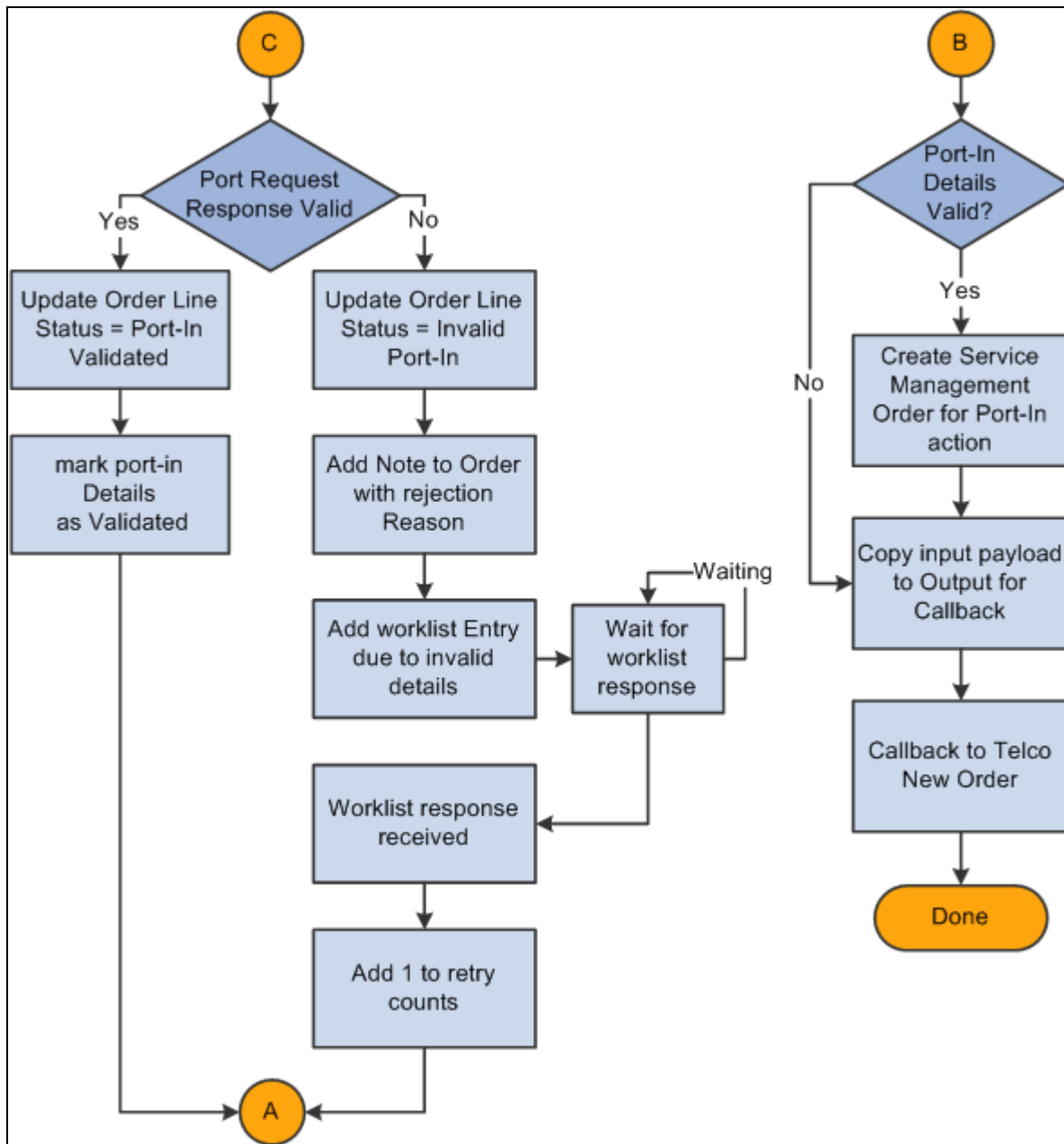
Mobile Number Portability process flow initiated from the Communications New Order process (2 of 2)

When this business process is initiated from the *Communications New Order* business process it:

1. Examines the payload for the port-in details.

   If the details indicate that a system validation is needed, the process calls a third-party service to validate the porting details. Otherwise, it assumes that the details are validated already.

2. If system validation is needed, sets the order line status to *1200 : Port-In Processing* if its current status is *1000 : New*.

   This is accomplished by calling a delivered service operation.

   A loop is performed until either the port-in details become valid or the maximum number of *Retry Attempts* (default = 3) is reached. Then it:

   a. Calls the RB_CUSTOMER_GET_CUSTOMER (Get Customer Information) service operation of the delivered Customer web service to retrieve customer details.

      If the order has a contact BO (business object) ID, the ID is used to obtain customer information. Otherwise, the customer BO ID is used.

      See and *PeopleSoft CRM 9.1 Business Object Management PeopleBook*, "Business Object Delivered Web Services."

   b. Copies all needed customer details and payload data into the Port Request message.

   c. Calls the third-party web service (it is a placeholder that customers need to replace with their own web services) for the port-in request.

      The purpose of this routine is to validate the details and respond with the validation results. This is an asynchronous call.

   d. Receives a response from the third-party system and checks for the validity of the details.

   e. If the details are valid, it:

      i. Calls a delivered web service to update the order line status to *1230 : Port In Validated.*

      ii. Returns to the top of the loop with the details marked as valid.

   f. If the details are invalid, it:

      i. Calls a delivered web service to update the order line status to *1210 : Invalid Port-In.*

      ii. Calls the RO_SERVICEMGT_ADDNOTE service operation to add a note with the validation message that is returned from the third-party system.

      iii. Calls the CREATE_WORKLIST_ITEM service operation to add a worklist entry for this order, indicating that the port-in details are invalid.

      At this point, the process waits until a manual update of the worklist item takes place, which typically happens after a customer service representative makes the necessary changes to the port-in details on the order and resubmits the order.

      iv. Increases the retry count by 1 after the worklist notification is received and returns to the top of the loop to try again.

3. If port-in details are valid, it calls the RO_SERVICEMGT_ADDSUBMIT service operation to create a service management order (with Port-In action) and have it submitted, which launches the *Service Management Port In* business process to continue the porting procedure.

   See and Appendix A, "Order Capture Delivered Business Processes and Web Services," Service Management Port In Process Flow, page 764.

4. Copies the input payload to the output data.

5.   Notifies the *Communications New Order* business process that the *Mobile Number Portability* business process is complete.

The *Mobile Number Portability* business process ends.

Note. If the MNP order is cancelled, the status of the installed products does not change.

Change Service Process Flow

This process is initiated when a service management order for communications is created with a line action of *Change.* Also, it gets initiated from the *Service Management Suspend and Change Service* business process as a subbusiness process.

See and <u>Appendix A, "Order Capture Delivered Business Processes and Web Services," Service Management Suspend and Change Service Process Flow, page 755.</u>

The following graphic illustrates the *Change Service* process flow, which performs necessary tasks for *change-related* service requests such as changing phone numbers, removing products, adding products and update attribute information:
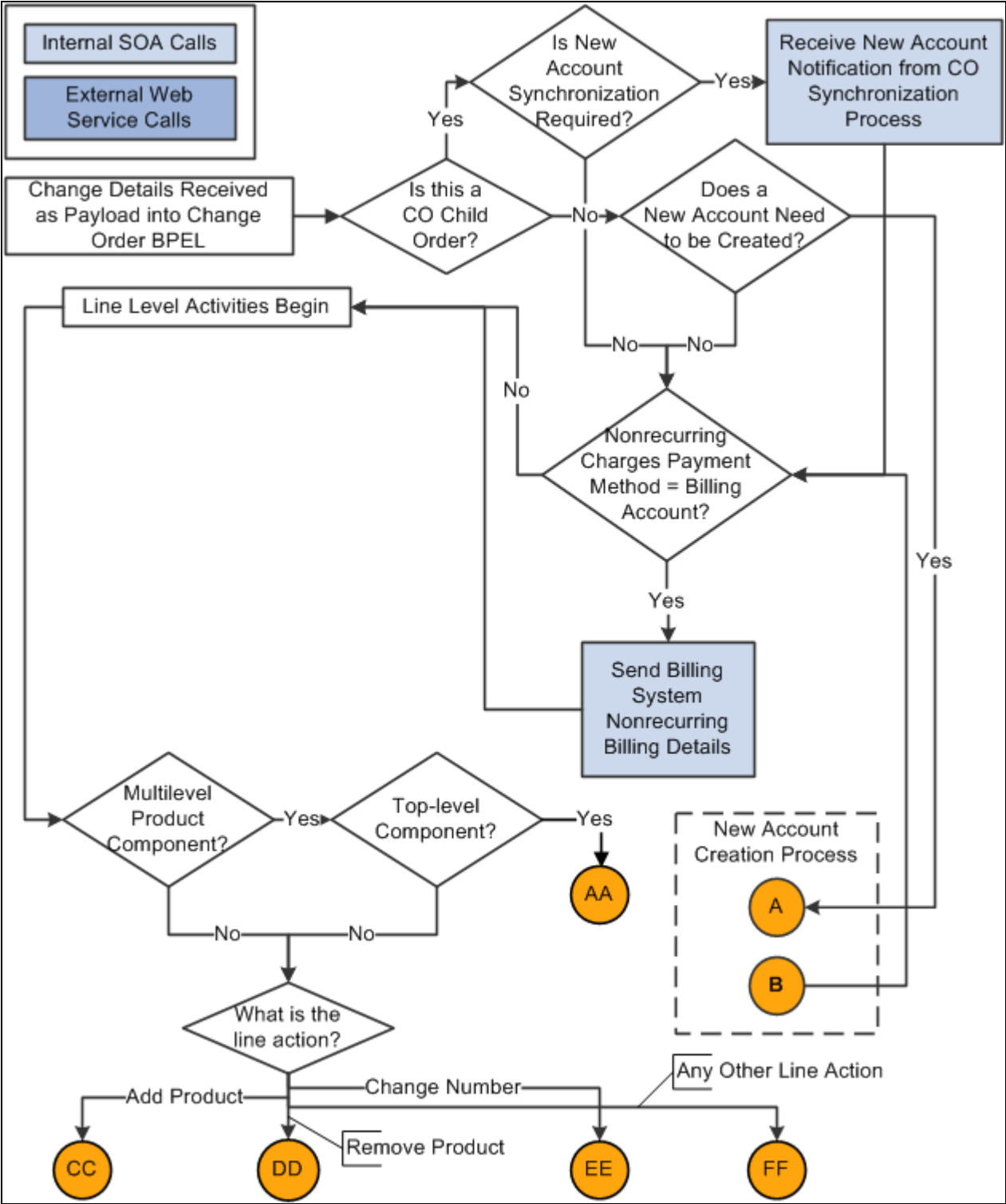
Change service process flow (1 of 5)
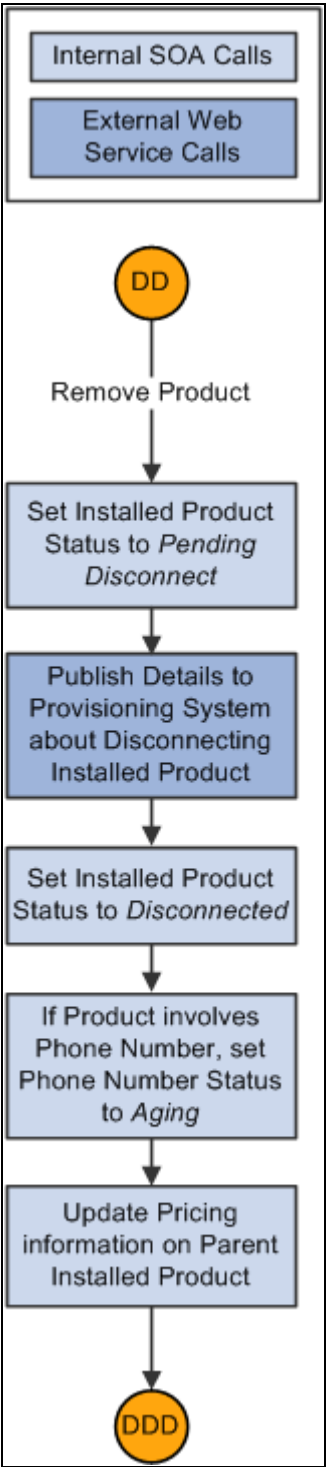
Portion of the change service process flow for removing products (2 of 5)
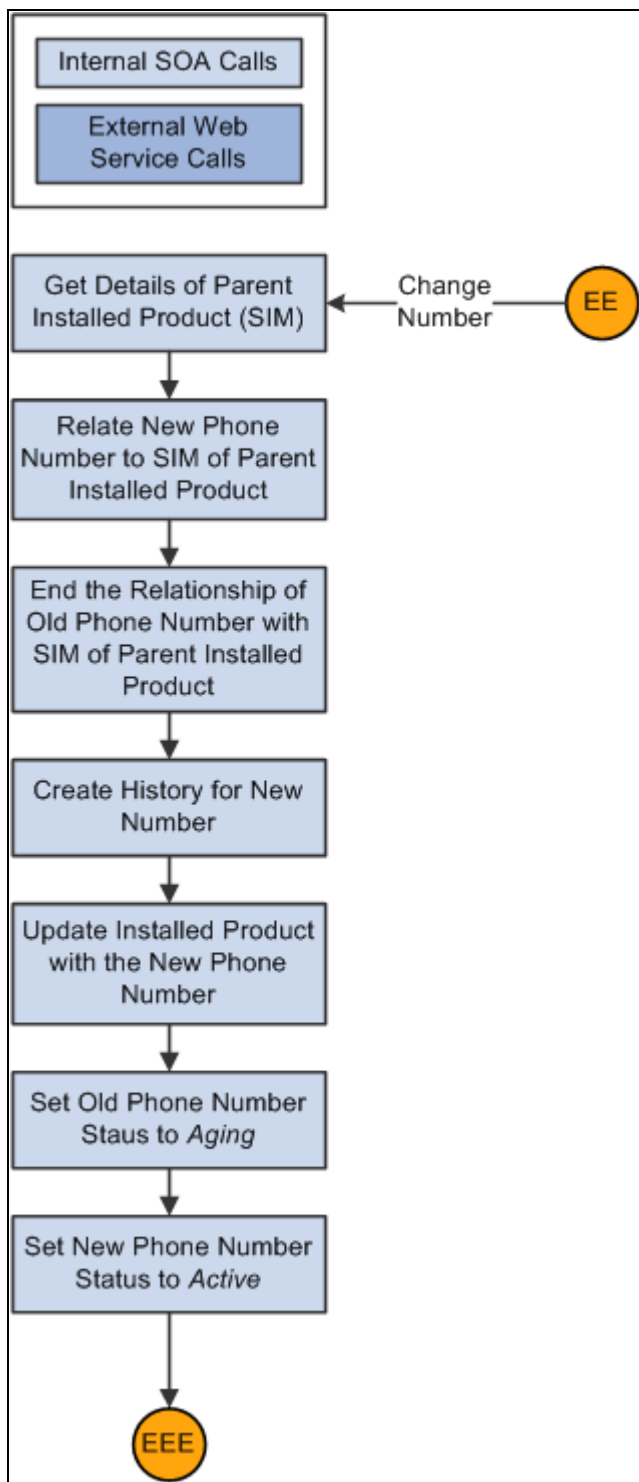
Portion of the change service process flow for changing phone numbers (3 of 5)
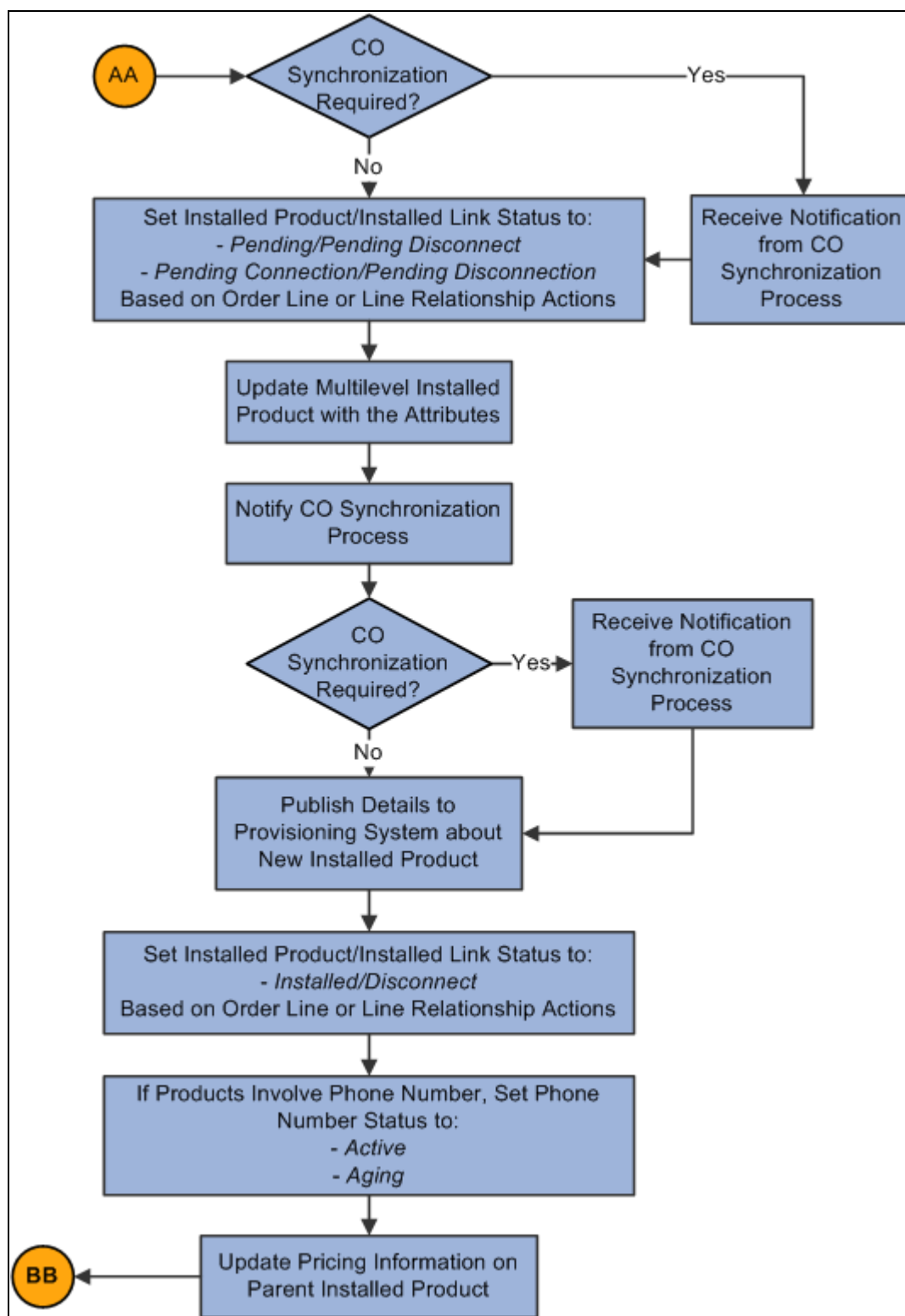
Portion of the change service process flow for updating installed products in convergent orders (4 of 5)
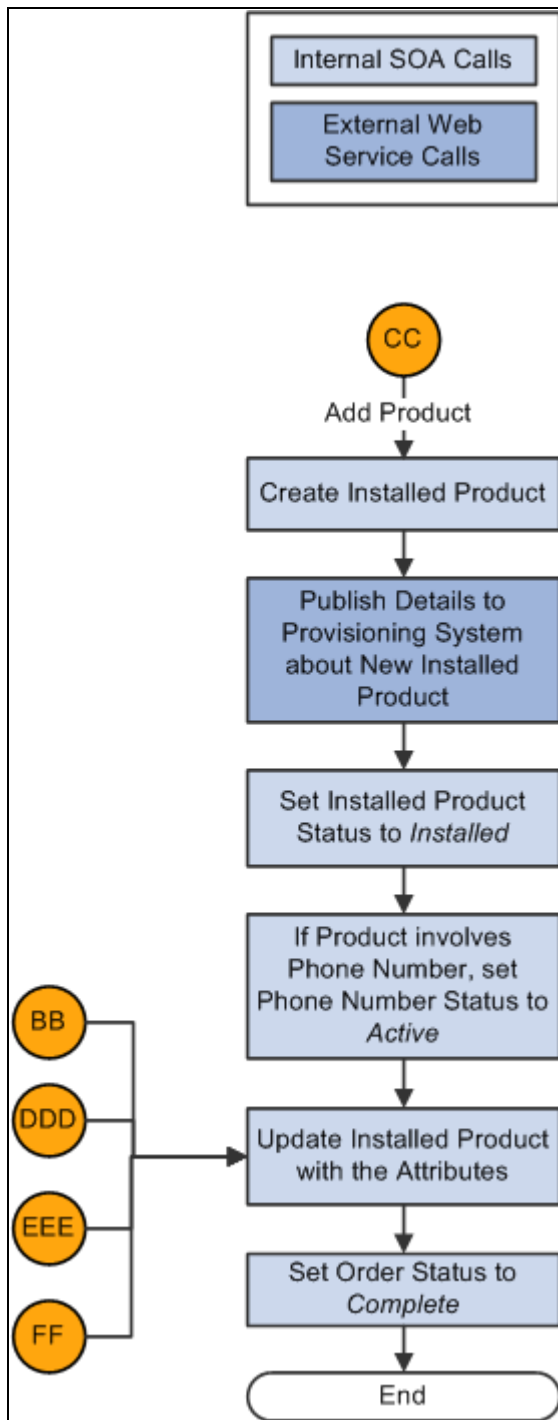
Portion of the change service process flow for adding products and updating respective statuses (5 of 5)

When this business process is initiated, it:

1. Checks if the new service management order that is be created is a child order of a convergent order.

   If yes, any new billing account is to be created at the context of its parent convergent order. In other words, new accounts are not created as part of the *Change Service* process instances that are invoked for child orders.

   If no, any new billing account (if requested in the service management order) is to be created at the context of the new service management order.

   • If the account should be created at the context of the parent convergent order, the process determines if it should wait for the *New Account* notification message from the parent *Convergent Order Synchronization* process flow before moving on to the next step.

   • If the account should be created at the context of the new service management order, the process checks if the New Account option is enabled in the service management order.

     If the option is enabled, the process then triggers the *New Account Creation* subbusiness process, which performs customer credit check and creates billing accounts.

     See and Appendix A, "Order Capture Delivered Business Processes and Web Services," New Account Creation Process Flow, page 769.

2. Checks if the payment method selected for nonrecurring charges is by billing account.

   If yes, the process sends the billing system details about the nonrecurring payment.

   If no, go to the next step.

3. Checks if the first line item of the service management order has an action of *Change* or *SuspendAndChange*.

   Note. Steps 6 through 9 are line-level activities.

4. Checks if any line item is for a multilevel product component.

    All multilevel product components line items are processed in a single flow, in other words, these components are updated as a whole in one single step to sustain the integrity of the multilevel product bundle. Updates include operations on the installed links and installed product attributes.

    •   If yes, continue to check if the multilevel installed product is a top-level component in its multilevel product bundle. Processing for multilevel product components is initiated from the top-level component order line.

        The system first checks if the convergent order synchronization process needs to be invoked. This process is required if there are product components that are migrated from an existing contract to this contract to be updated by this change service process instance, which is currently put on hold until the installed source contract has been set in pending status. The change service process instance resumes once it receives a notification from the synchronization process.

        Next, it sets the statuses of installed product and installed link to the *Pending* status, and updates the attribute values for the installed product that are captured in the configuration session. If the change action includes changing an attribute or changing an outgoing link of an installed product, the change service process (the SetPendingStatus step) calls the MLPBModifyService web service to set the corresponding installed product status to *Pending Modification.* When the update is complete, the SetInstalledOrDisconnectStatus step calls the same web service to set the installed product status to *Installed.* It also captures any change in billing account assignment for installed products that are split billing-enabled.

        In the case of a change of service for an installed commitment, the same status update applies the installed commitment, its installed links and its commitment contract, followed by an update to the start and end dates of the commitment contract.

        If the service management order is a *target* order of a product component migration, this step also performs migration-specific actions for migrated installed products, for example, creating a *child of* link between the migrated installed product (commercial component) to the new commercial parent, creating a *sells* link between the migrated installed product (functional component) to the new commercial atomic offer, or changing installed product information (owner, installation site, or billing account).

        Then, it notifies the CO (convergent order) synchronization process, which checks again if synchronization is required for this order. The synchronization process is required in the case where some installed links sourcing from the current order mandate that some pending installed products (in other child orders of the same convergent order) have to be created first. After the synchronization process completes, it sends a notification to the change service process instance, a message is sent to provisioning system about the updated multilevel installed product. If synchronization is not required, the message is sent to the provisioning system without awaiting any notification.

        Subsequently, the statuses of installed products and installed product links are updated based on the selected line or line relationship action, followed by the update on pricing of the service management order and phone number status, if the installed product is associated with a phone number. Lastly, the Change Service process sets the status of the service management order to *Complete.*

        Note. In the case of a change of service for an installed commitment, the same status update applies the installed commitment, its installed links and its commitment contract, followed by an update to the start and end dates of the commitment contract.

    •   If no, move to the next step.

5. Checks the action of every line item other than the first one.

6. If line item action is of type *Change Number,* it:

    • Obtains the parent installed product details through an internal web service call.

    • Relates the new phone number to the SIM of the parent installed product.

    • Ends the relationship between the old phone number and the SIM of the parent installed product through an internal web service call.

    • Creates the history for new phone number through an internal web service call.

    • Updates the installed product for the product with the new phone number through an internal web service call.

    • Sets the status of the old phone number to *Aging* through an internal web service call.

    • Sets the status of the new phone number to *Active* through an internal web service call.

7. If line item action is of type *Remove Product,* it:

    • Sets the installed product status to *Pending Disconnect* through an internal web service call.

    • Publishes details to the external provisioning system about disconnecting the installed product through an external web service call.

    • Sets the installed product status to *Disconnected* through an internal web service call.

    • If the removed product has a phone number, sets the phone number status to *Aging* through an internal web service call.

    • Updates the pricing on the parent installed product through an internal web service call.

8. If line item action is of type *Add Product,* it:

    • Creates an installed product through an internal web service call.

    • Publishes details to the external provisioning system about the new installed product through an external web service call.

    • Sets the installed product status to *Installed* through an internal web service call.

    • If the added product has a phone number, sets the phone number status to *Active* through an internal web service call.

9. For all line items within this order (those that are in any of the mentioned action type and those that are not), the process updates the attributes of their installed products accordingly.

    The information is available on the order as well.

10. The status of the order is changed to *Completed,* which also takes care of updating all the line statuses to *Completed* if they are not already in the *Completed,Cancelled,* or *Shipped* status.

The *Change Service* business process ends.

Prepaid to Postpaid Account Conversion Process Flow

This process is called from the *Service Management Activate Service* business process. The following graphic illustrates the *Prepaid to Postpaid Account Conversion* process flow, which performs numerous tasks, such as closing down the prepaid account, moving its installed products to the new postpaid account, notifying the prepaid billing system to transfer any balances (if applicable), and linking the prepaid and postpaid accounts to maintain history:

See and

Note. This business process applies to accounts that pay for non-multilevel product bundles *only* and does not apply to account conversion for multilevel product bundles.
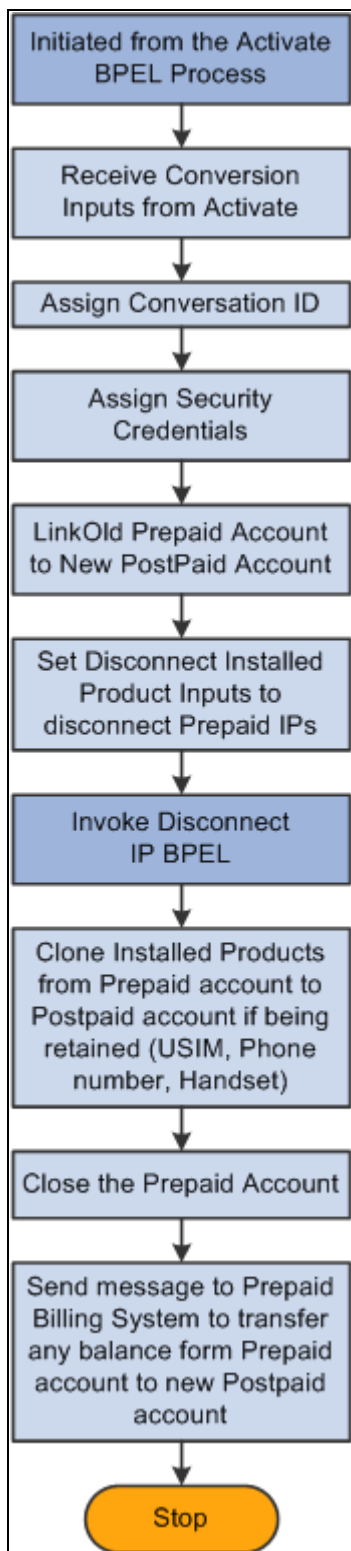
Prepaid to Postpaid Account Conversion process flow initiated from the Service Management Activate Service business process

When this business process is initiated, it:

1. Calls the RBT_ACCT_LINK (Link Accounts) service operation of the delivered Billing Account web service to establish the link between the old prepaid and new postpaid accounts.

2. Invokes the *Service Management Disconnect Service* business process to disconnect the installed products of the prepaid account.

3. Calls the RBT_ACCT_CONVERT (Complete Account Conversion) service operation of the delivered Billing Account web service to clone any installed products that are carried over from the prepaid account to the postpaid account.

   Products that can be moved include the USIM (UMTS Subscriber Identity Module), phone number, and handset.

4. Calls the RBT_ACCT_UPDT (Update Account) service operation of the delivered Billing Account web service to set the status of the prepaid account to *Closed.*

5. Sends a message to the prepaid billing system to transfer and balances on the prepaid account to the postpaid account.

   As delivered, the prepaid billing system is simulated by the PrepaidBillingSystemWebService business process. Customers need to replace it with their own integration partner.

The *Prepaid to Postpaid Account Conversion* business process ends, and returns the control back to the *Service Management Activate Service* business process.

See and

PAC Request Process Flow

This process is initiated from service management orders in which the PAC request action is performed. It validates if a PAC is issued. If a PAC is issued, the installed product is updated with the information. If not, the service management order is updated with a note.

The following graphic illustrates the *PAC Request* process flow that is used to perform PAC validation:
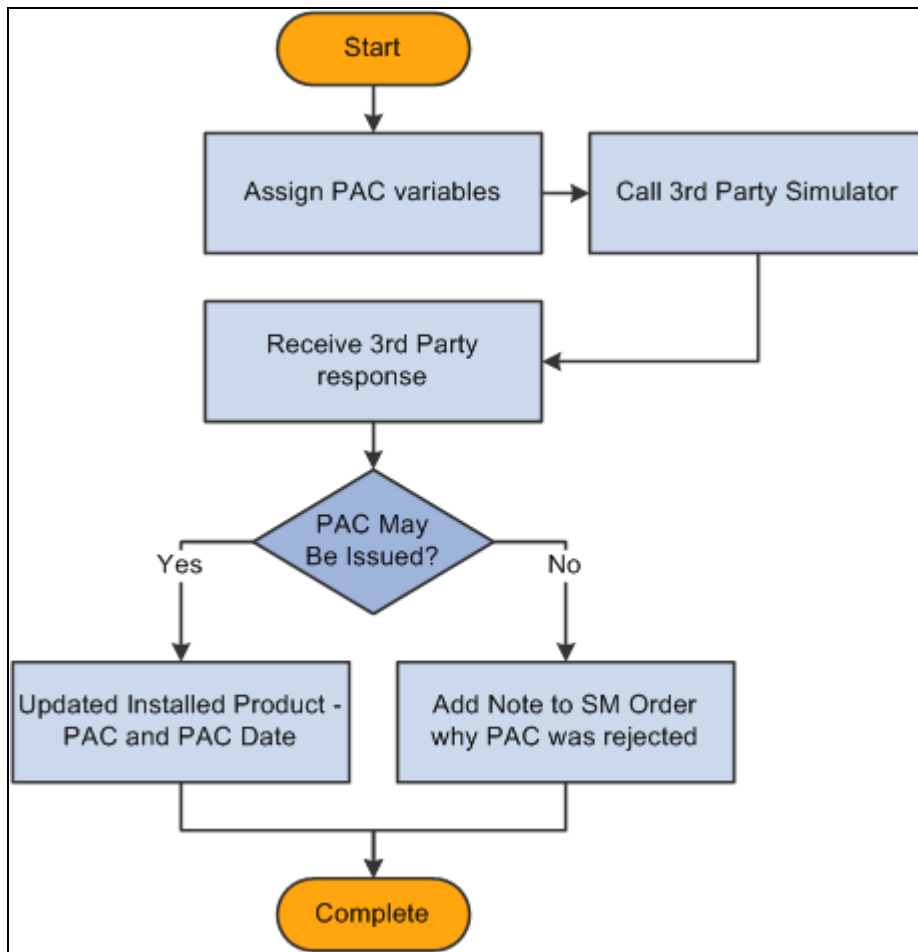
PAC Request process flow for validating port-in authorization code

When this business process is initiated, it:

1. Copies payload values into the PAC validation simulator message.

   With this data, it calls a third-party web service called MNPThirdPartySimulator (it is a placeholder that customers need to replace with their own web services). The simulator responds with an outcome of *true* or *false.*

   A reason for denial is provided in the response if the outcomes is *false.*

2. If the outcome is true, calls the RF_INST_PROD_UPDATE (Update Installed Product) service operation of the delivered Installed Product web service to update the PAC value and the PAC expiration date.

   ```
   PAC expiration date = current date + 30 days
   ```

   See and *PeopleSoft CRM 9.1 Product and Item Management PeopleBook*, "Product Delivered Web Services," Delivered Web Services.

3. If the outcome is false, calls the RO_SERVICEMGT_ADDNOTE service operation to add a note to the service management order stating the reason for denying the PAC request.

The *PAC Request* business process ends.

Service Management Activate Service Process Flow

This process can be called from service management orders (activate service) or new orders. The following graphic illustrates the Service Management Activate Service process flow, which performs numerous activation tasks, such as updating the phone number, updating the SIM, invoking the *Prepaid to Postpaid Account Conversion* business process, updating the installed product status, and communicating with both the provisioning and billing systems:

See and <u>Appendix A, "Order Capture Delivered Business Processes and Web Services," Prepaid to Postpaid Account Conversion Process Flow, page 743.</u>
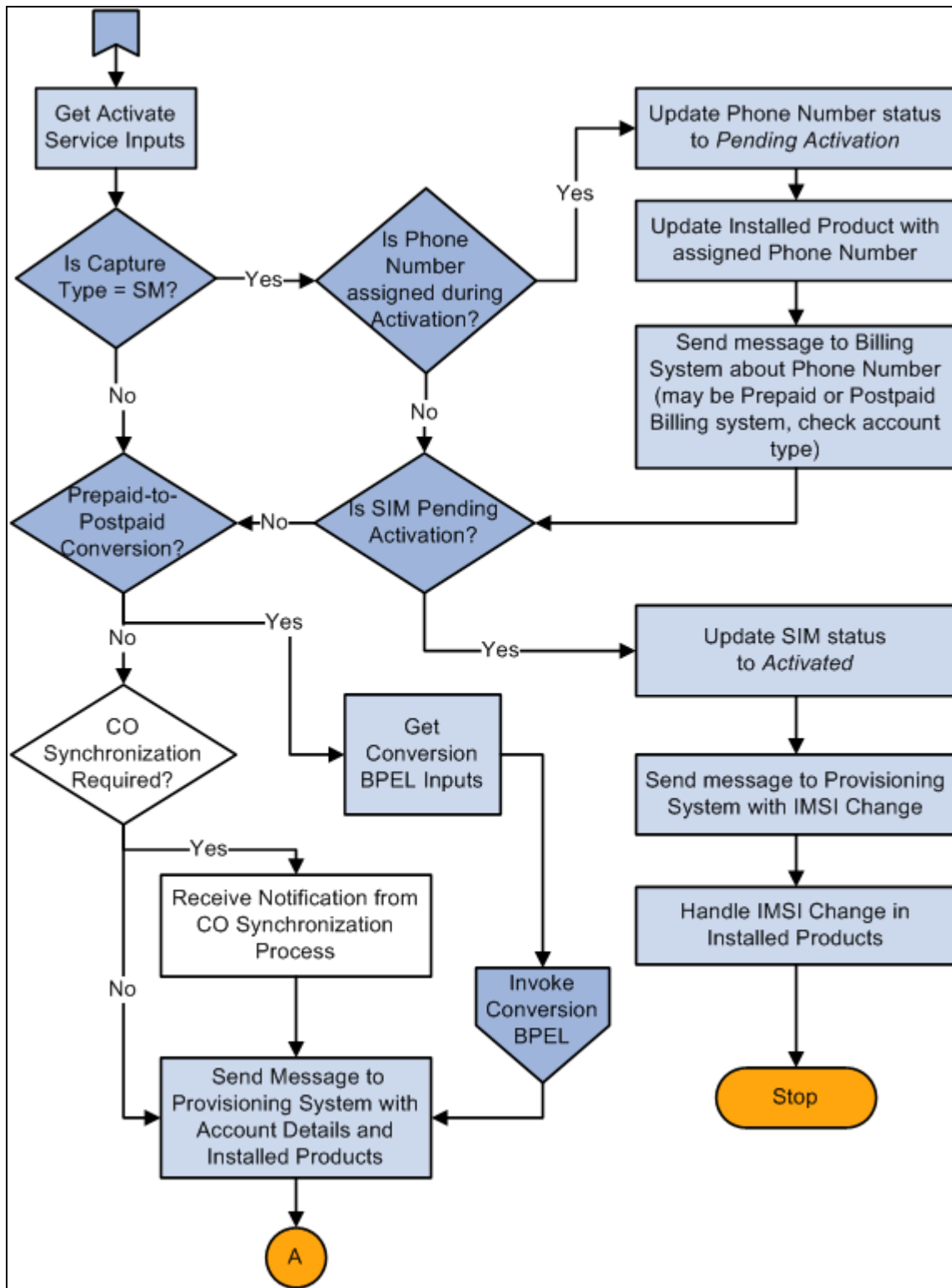
Service Management Activate Service process flow for updating service information in CRM and external billing and provisioning systems (1 of 2)
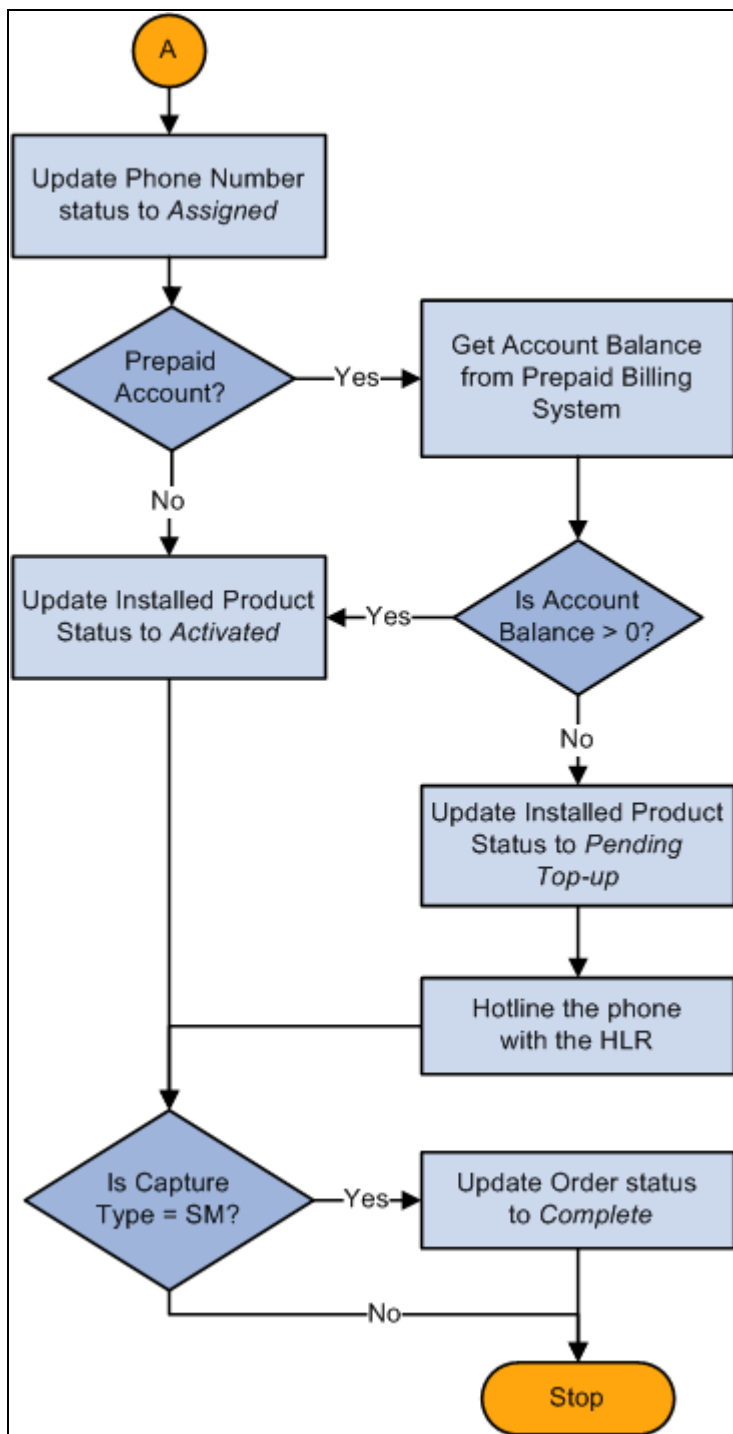
Service Management Activate Service process flow for updating service information in CRM and external billing and provisioning systems (2 of 2)

When this business process is initiated, it:

- Calls the RO_SERVICEMGT_GETACTSRVCMSG (Get Activate Service Message) service operation of the delivered RO_SERVICEMGT (Service Management) web service to get inputs for the RBTActivateService business process.

- If it is a service management order, performs the following activities:

    - If the phone number is assigned during activation:

        First, it calls the RO_NUMMGT_SETNUMBERSTATUS (Set Number Status) service operation of the delivered RO_NUMMGT (Number Management) web service to update the phone number status to *Pending Activation.*

        Then, it calls the RF_INST_PROD_UPDATE (Update Installed Product) service operation of the delivered RF_INST_PRODUCT (Installed Product) web service to update the phone number on the installed products.

        Next, it calls the BillingActivateServiceRequest service operation of a third-party web service (BillingSimulator) to notify them about the phone number.

    - If the SIM is in pending activation:

        First, it calls the RO_NUMMGT_SETSIMSTATUS (Set SIM Card Status) service operation of the delivered RO_NUMMGT_SETSIMSTATUS (Number Management) web service to the update SIM status to *Activated.*

        Then, it calls the ProvisioningActivateRequest service operation of the third-party web service (ProvisioningSimulator) to notify them of SIM change. Then, it calls the RO_SERVICEMGT_IMSI_CHG (IMSI change operation) service operation of the delivered RO_SERVICEMGT (Service Management) web service to update SIM on installed products.

        Lastly, this service activation business process stops.

        See and *PeopleSoft CRM 9.1 Product and Item Management PeopleBook*, "Product Delivered Web Services," Delivered Web Services.

- If the order is for prepaid to postpaid conversion, performs the following activities:

    - It calls the RO_SERVICEMGT_GETDISSRVCMSG (Get Disconnect Service Details) service operation of the delivered RO_SERVICEMGT (Service Management) web service to get inputs for the ConvertPreToPostPaid business process.

    - It calls the delivered RBTConvertPreToPostPaid business process to convert the product from prepaid to postpaid.

- Checks if the convergent order synchronization needs to be performed.

    Important! This step is applicable only if the current order has sibling orders (from the same parent convergent order) that are dependent on it. For example, in a convergent order where two products with the *brings and removes* line relationship, the target child order depends on the source child order and a *brings and removes* installed link cannot be established until the installed products for both child orders are created.

    A notification message is sent from the convergent order synchronization process when it's completed. The Service Management Activate Service process moves on to the next step upon the receipt of this notification.

- Calls the ProvisioningActivateRequest operation of the third-party web service (ProvisioningSimulator) to publish information about account details and installed products.

- Calls the RO_NUMMGT_SETNUMBERSTATUS (Set Number Status) service operation of the delivered RO_NUMMGT (Number Management) web service to set the phone number status to *Assigned.*

- If order is for a prepaid account, calls the AccountBalanceRequest operation of the third-party web service (BillingSimulator) to get the account balance.

- If the account balance is greater than zero *or* it is not a prepaid account, calls the RF_INST_PROD_UPDATE (Update Installed Product) service operation of the delivered RF_INST_PRODUCT (Installed Product) web service to update the installed product status to *Activated.*

  Note. The RF_INST_PROD_UPDATE service operation also updates the status of existing installed links for multilevel installed products. If the installed product is created for a commitment product, this service operation updates the status of the installed commitment, its installed links and its commitment contract to *Activated,* followed by updating the start and end dates of the commitment contract based on the current date this service activation process runs.

- If the account balance is equal to zero *and* it is a prepaid account, performs the following activities:

  - Calls the RF_INST_PROD_UPDATE (Update Installed Product) service operation of the delivered RF_INST_PRODUCT (Installed Product) web service to update the installed product status to *Pending Top-Up.*

  - Calls the HotlineRequest operation of the third-party web service (HotlineSimulator).

- If it is a service management order, calls the RO_ORDER_COMPLETE (Order Completion) service operation of the delivered RO_ORDER (Order) web service to change the order status to *Complete.*

  Important! For multilevel product bundles, the order status change applies to both service management orders and simple orders.

The *Service Management Activate Service* business process ends.

See and *PeopleSoft CRM 9.1 Product and Item Management PeopleBook*, "Product Delivered Web Services," Delivered Web Services.

Service Management Suspend Service Process Flow

The *Service Management Suspend Service* process performs various tasks on service management orders for suspending services, which includes notifying billing and provisioning systems, updating install product statuses, processing lost or stolen handsets, and creating up-sell or cross-sell email and leads, as illustrated in the following graphic:
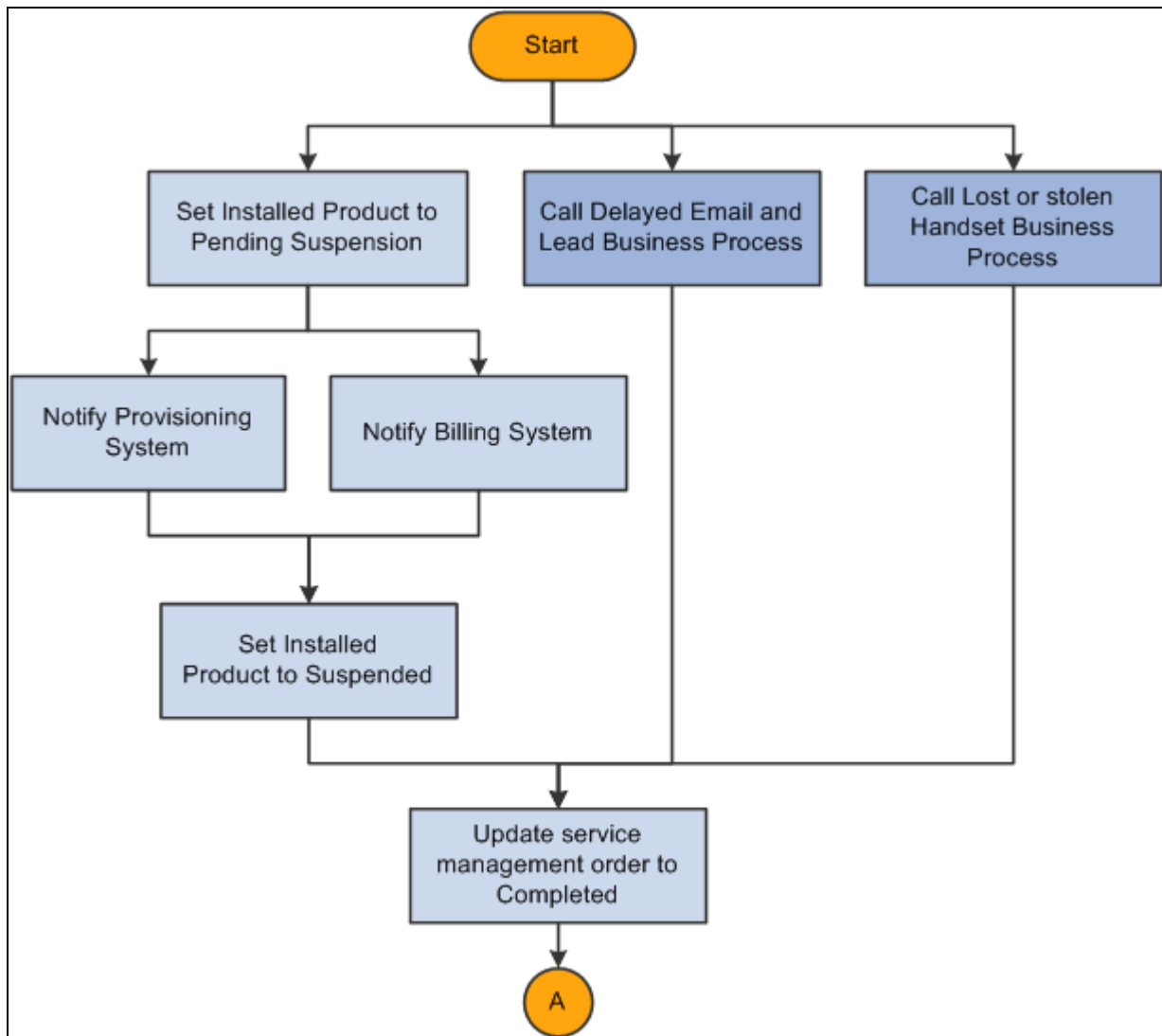
Service Management Suspend Service process flow for handling service suspension requests

This diagram illustrates the *Delayed Email and Lead* process flow, which creates an up-sell or cross-sell sales lead targeting the customer with the suspended service and sends an email notification:
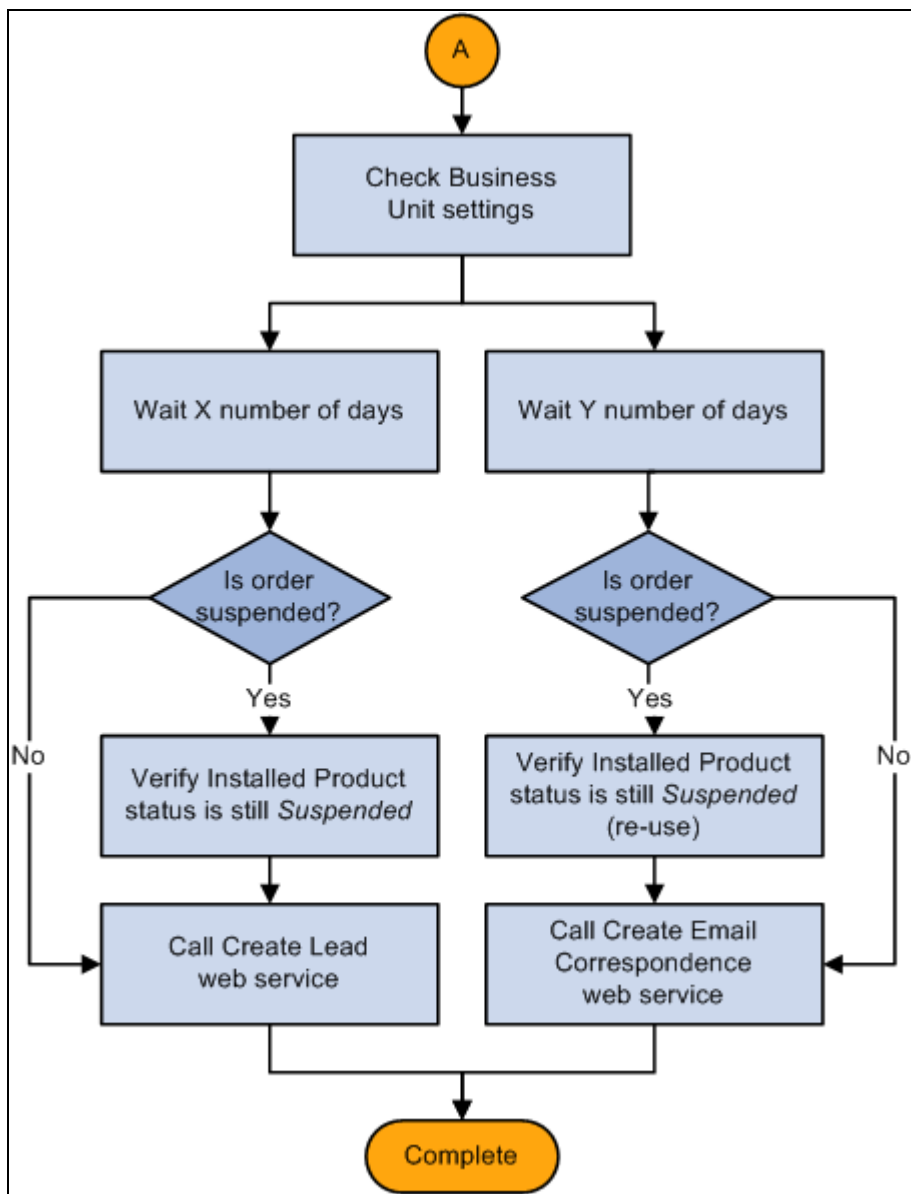
Delayed Email and Lead process flow for creating a sales lead and sending an email notification to customer with the suspended service

When this business process is initiated, it performs these high-level tasks in parallel:

- Suspends the customer's service.

    1. It updates the high-level installed product or installed service status to *Pending Suspension.*

        This is accomplished using the RF_INST_PROD_UPDATE (Update Installed Product) service operation of the delivered Installed Product web service.

    2. It publishes a message to both the billing (prepaid or postpaid) and provisioning systems notifying them of the service suspension.

        This activity contains three stub processes: Prepaid Billing System, Postpaid Billing System, and Provisioning System.

        Note. Customers need to replace stub processes with actual web services that interact with their billing and provisioning systems.

        ---

    3. It waits for the first response message from either the billing or provisioning system.

    4. It updates the high-level installed product or installed service status to *Suspended.*

        This is accomplished using the RF_INST_PROD_UPDATE (Update Installed Product) service operation of the delivered Installed Product web service.

- Processes up-sell or cross-sell lead and email.

    This is a conditional activity that is based on the business unit settings and whether or not a replacement handset has already been purchased by the customer.

    It initiates the *Delayed Email and Lead* subbusiness process, which creates a lead and an email in parallel:

    1. Creates lead:

        i. Waits x number of days before the process continues (if specified in the business unit settings).

        ii. Validates that the service is still in the status of *suspended.*

        This is accomplished using the RF_INST_PROD_GET (Get Installed Product) service operation of the delivered Installed Product web service.

        iii. Creates a lead.

        This is accomplished using the RSF_LEAD_CREATE (Create Lead) service operation of the delivered Sales web service.

    2. Creates email:

        i. Waits y number of days before the process continues (if specified in the business unit settings).

        ii. Validates that the service is still in the status of *suspended.*

        This is accomplished using the RF_INST_PROD_GET (Get Installed Product) service operation of the delivered Installed Product web service.

        iii. Creates an email correspondence request.

        This is accomplished using the delivered CMF_WS_ENABLE web service.

- Processes lost or stolen handset.

  This is a conditional activity that is based on the customer's reason for suspending the service.

  It initiates the *Lost or Stolen Handset* business process. This process consists of sending a message to the Equipment Identity Registry (EIR) system to blacklist the lost or stolen handset and is documented separately.

  See and <u>Appendix A, "Order Capture Delivered Business Processes and Web Services," Lost or Stolen Handset Process Flow, page 763.</u>

After all parallel tasks are completed, the process updates the service management order status to *Complete.* This is accomplished using the RO_ORDER_COMPLETE (Order Completion) service operation of the delivered Order web service.

The *Service Management Suspend Service* business process ends.

See and *PeopleSoft CRM 9.1 Business Object Management PeopleBook*, "Business Object Delivered Web Services." and *PeopleSoft Sales 9.1 PeopleBook*, "Sales Delivered Business Processes and Web Services," Delivered Web Services. and *PeopleSoft CRM 9.1 Automation and Configuration Tools PeopleBook*, "Delivered Web Services and Service Operations."

Service Management Suspend and Change Service Process Flow

This process is a combination of the *Suspend Service* and *Change Service* business processes. It is invoked from service management orders, supporting all the capabilities provided by each of the two standalone processes. The *Suspend Service* and *Change Service* business processes are executed in serial order, as illustrated in the following graphic:
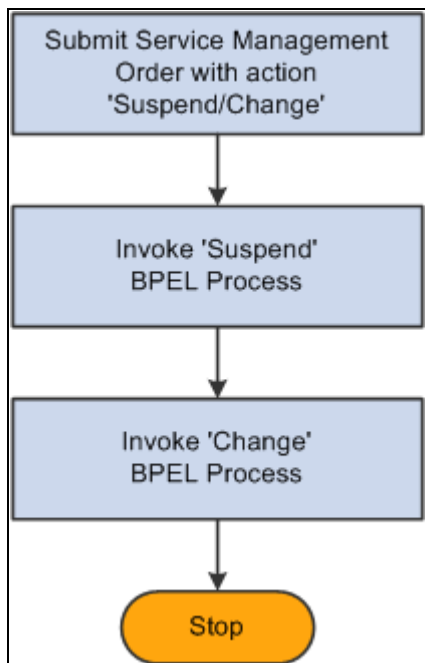
Service Management Suspend and Change Service process flow for executing the Suspend Service process prior to the Change Service process

When this business process is initiated, it performs two high-level tasks in serial:

1. Suspends the customer's service.

    See and <u>Appendix A, "Order Capture Delivered Business Processes and Web Services," Service Management Suspend Service Process Flow, page 751.</u>

2. Changes the customer's service.

    See and <u>Appendix A, "Order Capture Delivered Business Processes and Web Services," Change Service Process Flow, page 734.</u>

The *Service Management Suspend and Change Service* business process ends.

Service Management Resume Service Process Flow

The process performs various tasks on service management orders for resuming services, which includes notifying billing and provisioning systems, updating install product statuses, processing previously lost or stolen handsets, and creating up-sell or cross-sell email and leads, as illustrated in the following graphic:
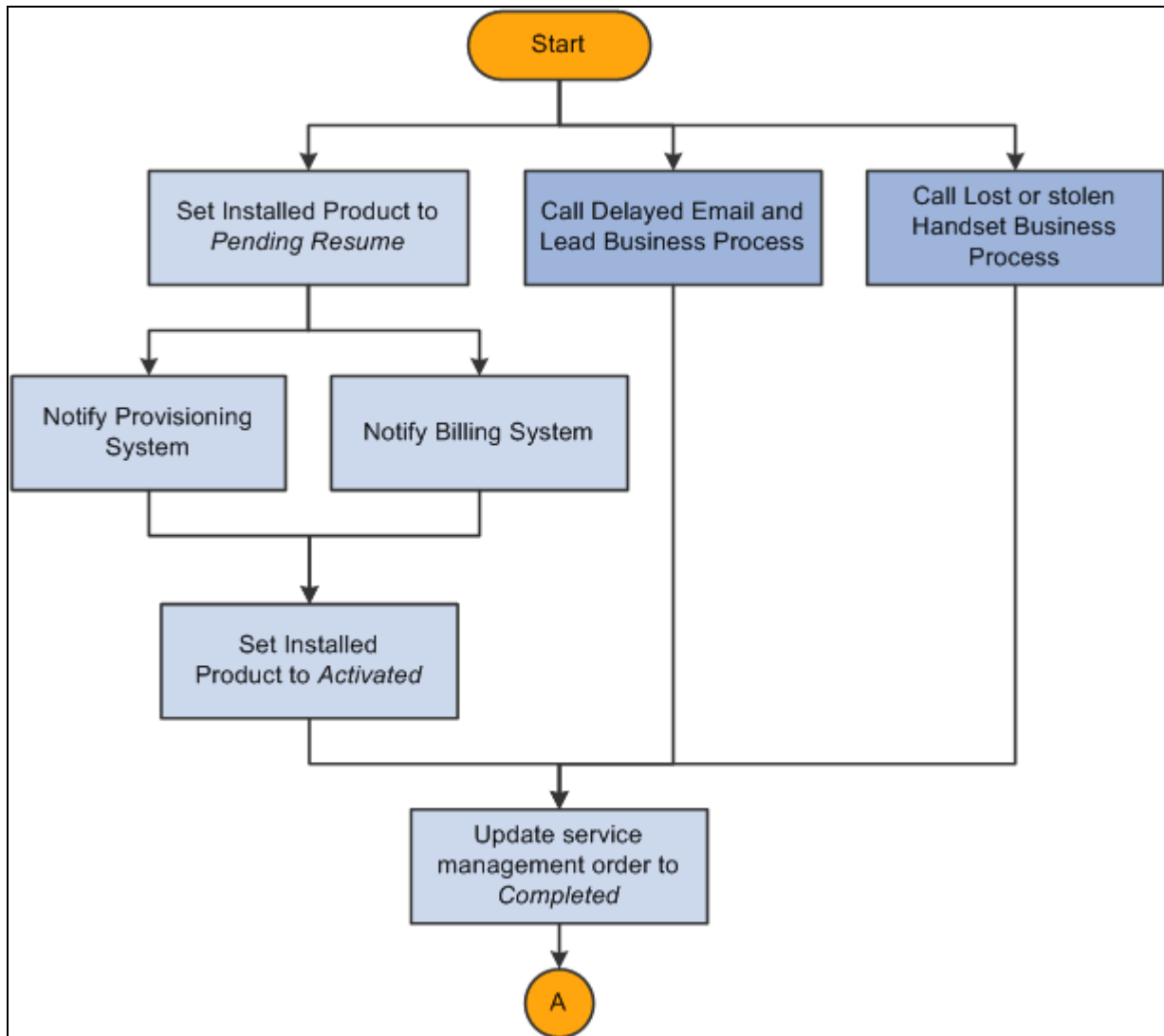
Service Management Resume Service process flow for handing service resumption requests

This diagram illustrates the *Delayed Email and Lead* process flow:
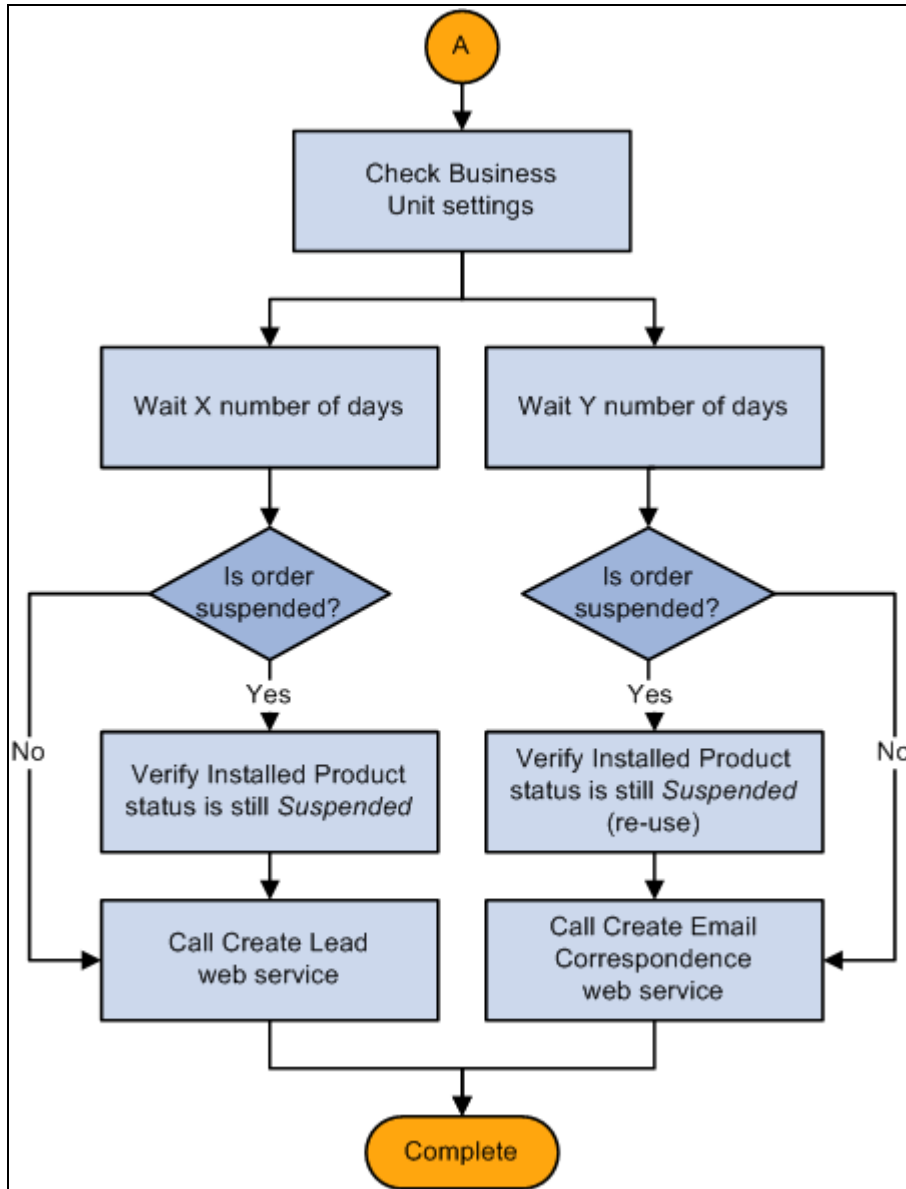
Delayed Email and Lead process flow for creating a sales lead and sending an email notification to customer with the request to resume service

When this business process is initiated, it performs these high-level tasks in parallel:

- Resumes the customer's service.

    1. It updates the high-level installed product or installed service status to *Pending Resume.*

        This is accomplished using the RF_INST_PROD_UPDATE (Update Installed Product) service operation of the delivered Installed Product web service.

    2. It publishes a message to both the billing (prepaid or postpaid) and provisioning systems notifying them of the service resumption.

        This activity contains three stub processes: Prepaid Billing System, Postpaid Billing System, and Provisioning System.

    3. It waits for the first response message from either the billing or provisioning system.

    4. It updates the high-level installed product or installed service status to *Activated.*

        This is accomplished using the RF_INST_PROD_UPDATE (Update Installed Product) service operation of the delivered Installed Product web service.

- Processes up-sell or cross-sell lead and email.

    This is a conditional activity that is based on the business unit settings.

    It initiates the Lead and Email subbusiness process, which creates a lead and an email in parallel:

    1. Creates lead:

        i. Waits *x* number of days before the process continues (if specified in the business unit settings).

        ii. Creates a lead.

        This is accomplished using the RSF_LEAD_CREATE (Create Lead) service operation of the delivered Sales web service.

    2. Create Email:

        i. Wait Y number of days before the process continues (if specified in the business unit settings).

        ii. Create an email correspondence request. This is accomplished using the delivered CMF_WS_ENABLE web service.

- Process previously lost or stolen handset.

    This is a conditional activity that is based on the customer's reason for resuming the service.

    It initiates the *Lost or Stolen Handset* business process. This process consists of sending a message to the EIR system to whitelist the found handset and is documented separately.

    See and <u>Appendix A, "Order Capture Delivered Business Processes and Web Services," Lost or Stolen Handset Process Flow, page 763.</u>

After all parallel tasks are completed, the process updates the service management order status to *Complete.* This is accomplished using the RO_ORDER_COMPLETE (Order Completion) service operation of the delivered Order web service.

See Also

PeopleSoft Sales 9.1 PeopleBook, "Sales Delivered Business Processes and Web Services," Referral or Lead-Related Business Process Flow

PeopleSoft CRM 9.1 Automation and Configuration Tools PeopleBook, "Delivered Web Services and Service Operations," Delivered Web Services

PeopleSoft CRM 9.1 Product and Item Management PeopleBook, "Product Delivered Web Services," Delivered Web Services

Service Management Disconnect Service Process Flow

This process performs various tasks on service management orders for disconnecting services, which include notifying billing and provisioning systems, updating install product statuses, processing lost or stolen handsets, and creating up-sell or cross-sell email and leads, as illustrated in the following graphic:
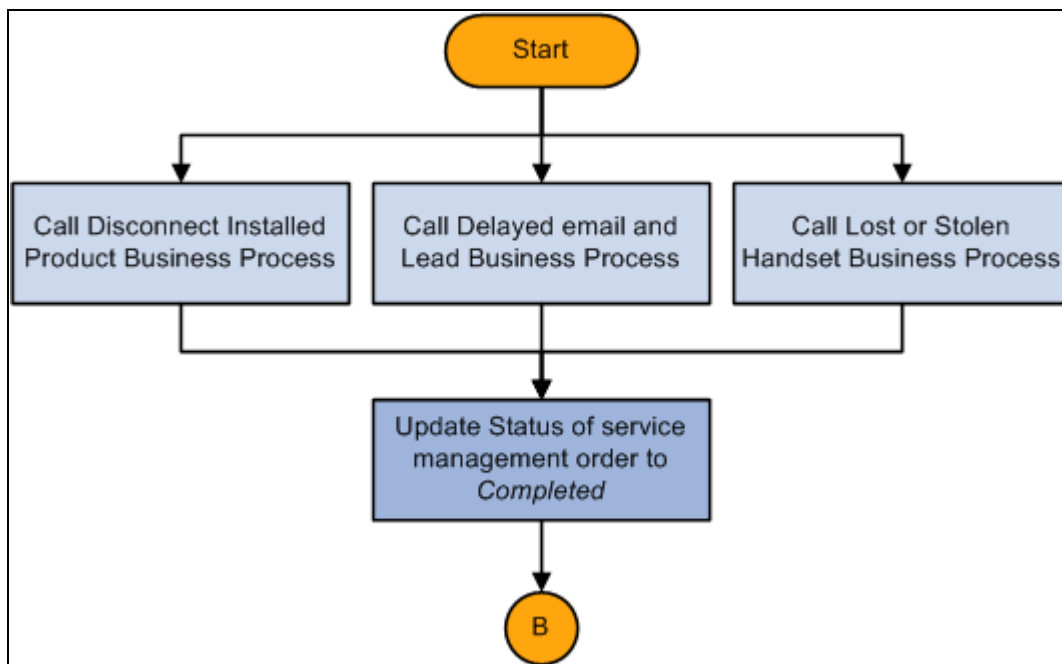
Disconnect Service process flow for handing request to disconnect services (1 of 2)
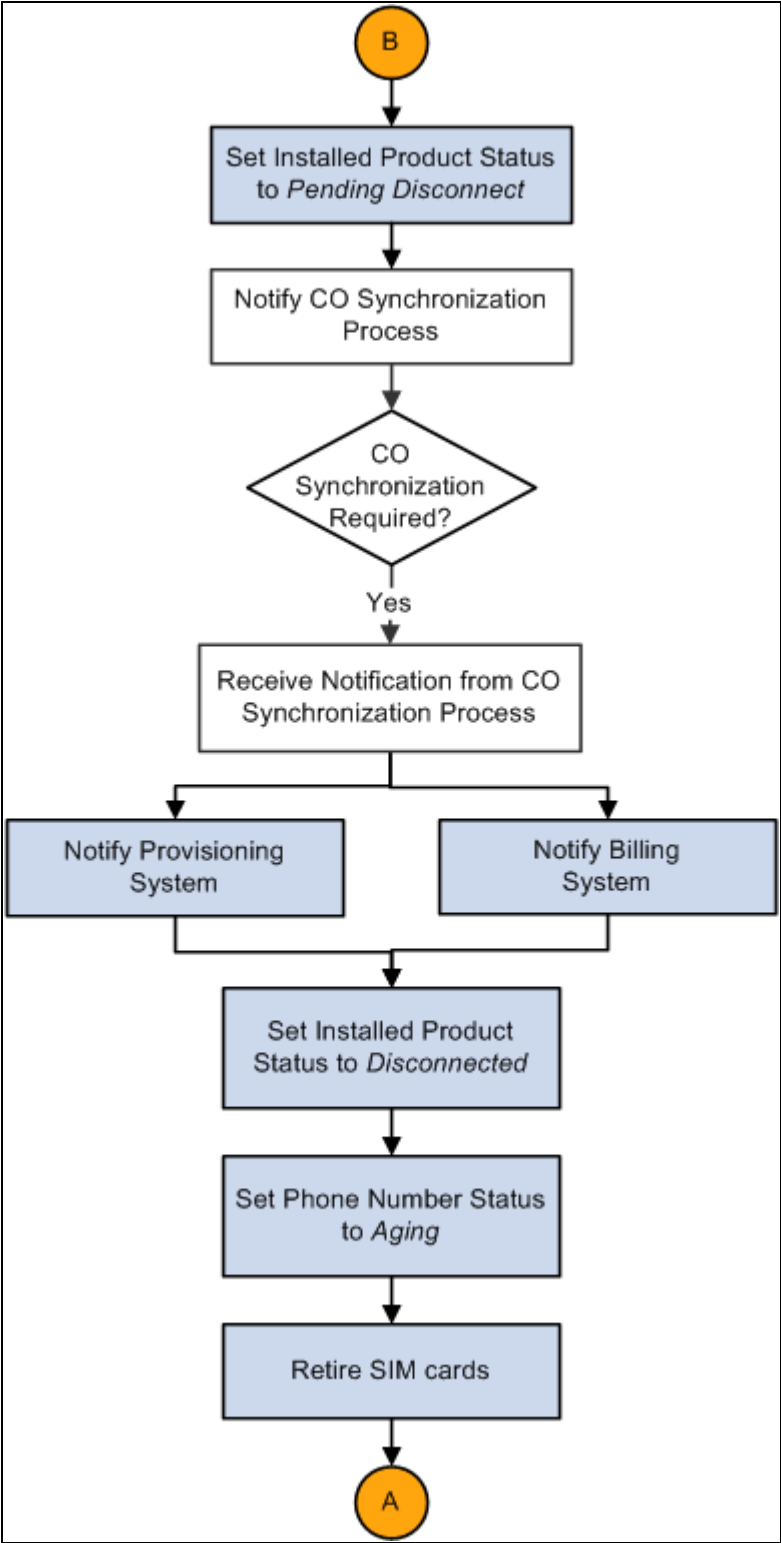
Disconnect Service process flow for handing request to disconnect services (2 of 2)

This diagram illustrates the *Delayed Email and Lead* process flow:
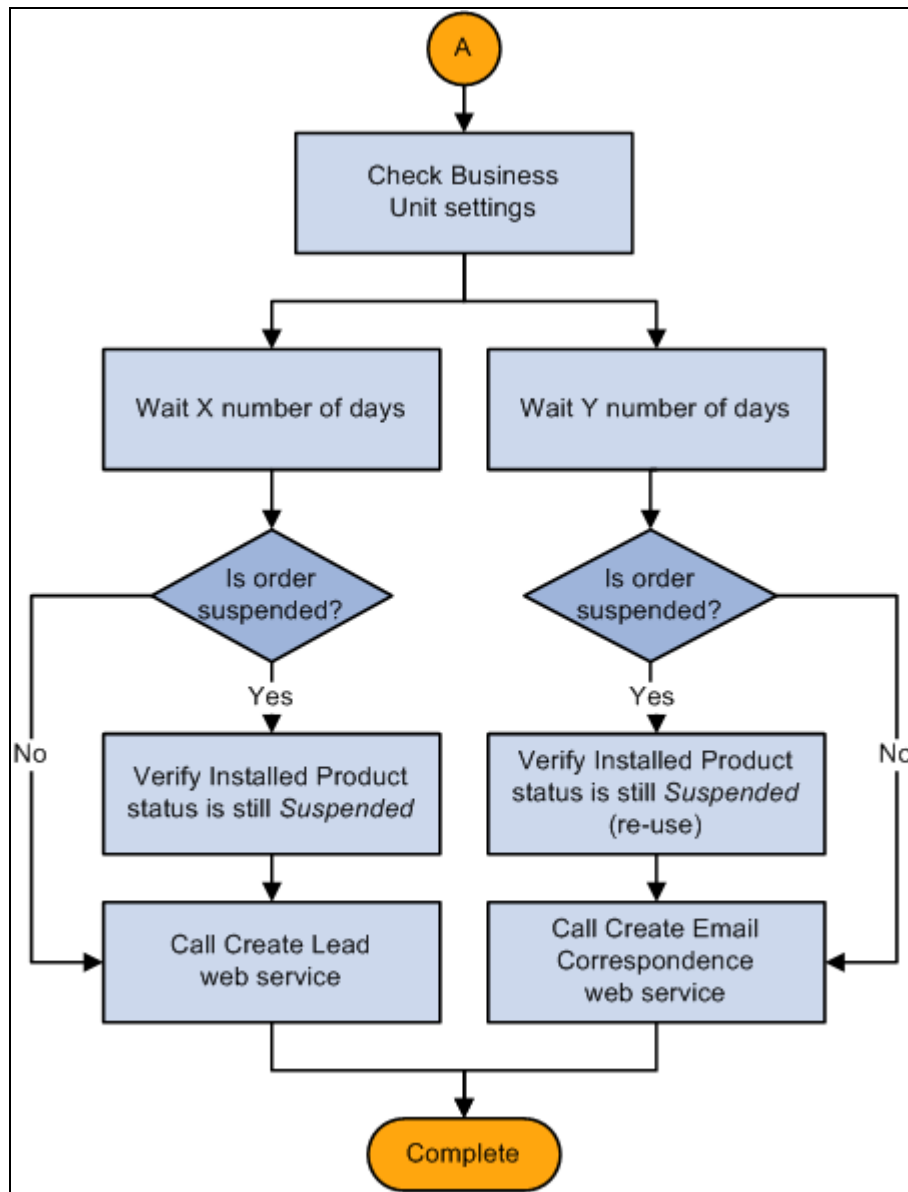
Delayed Email and Lead process flow for creating a sales lead and sending an email notification to customer with the request to disconnect service

When this business process is initiated, it performs these high-level tasks in parallel:

- Disconnects the customer's service.

  This is accomplished by invoking a business process called *Disconnect Installed Product,* which performs the following tasks:

  1. Updates the high-level installed product or installed service status to *Pending Disconnect.*

     This is accomplished using the RF_INST_PROD_UPDATE (Update Installed Product) service operation of the delivered Installed Product web service.

     Note. For multilevel installed products, the RF_INST_PROD_UPDATE service operation also updates the status of the related installed link.

     ---

  2. Sends a notification to the CO synchronization process, which invokes the synchronization process. This step applies if the service management order contains product components that are migrated to a different multilevel contract in another order (which is processed by a different BPEL business process).

     The disconnect service process instance is put on hold until it receives a message from the CO synchronization process, confirming that a message has been sent to the provisioning system from the target contract.

  3. Publishes a message to both the billing (prepaid or postpaid) and provisioning systems notifying them of the service disconnection.

     This activity contains three stub processes: Prepaid Billing System, Postpaid Billing System, and Provisioning System.

  4. Waits for the first response message from either the billing or provisioning system.

  5. Updates the high-level installed product or installed service status to *Disconnected.*

     This is accomplished using the RF_INST_PROD_UPDATE (Update Installed Product) service operation of the delivered Installed Product web service.

     Note. The RF_INST_PROD_UPDATE service operation also updates the status of existing installed links for multilevel installed products. If the installed product is created for a commitment product, this service operation updates the status of the installed commitment, its installed links and its commitment contract to *Disconnected.*

     ---

  6. Sets any disconnected phone numbers that are associated with the service to *aging.*

     This is accomplished using the RO_NUMMGT_SETAGING (Set Number to Aging) service operation of the delivered Number Management web service.

  7. Retires any SIM cards that are associated with the disconnected service.

     This is accomplished using the RO_NUMMGT_SETSIMSTATUS (Set SIM Card Status) service operation of the delivered Number Management web service.

- Processes up-sell or cross-sell lead and email.

  This is a conditional activity that is base on the business unit settings.

  It initiates the *Delayed Email and Lead* subbusiness process, which creates a lead and an email in parallel:

  1. Creates lead:

     i. Waits *x* number of days before the process continues (if specified in the business unit settings).

     ii. Creates a lead.

     This is accomplished using the RSF_LEAD_CREATE (Create Lead) service operation of the delivered Sales web service.

  2. Creates email:

     i. Waits *y* number of days before the process continues (if specified in the business unit settings).

     ii. Creates an email correspondence request.

     This is accomplished using the delivered CMF_WS_ENABLE web service.

- Processes lost or stolen handset.

  This is a conditional activity that is based on the customer's reason for disconnecting the service.

  It initiates the *Lost or Stolen Handset* business process. This process consists of sending a message to the EIR system to blacklist the lost or stolen handset and is documented separately.

After all parallel tasks are completed, the process updates the service management order status to *Complete.* This is accomplished using the RO_ORDER_COMPLETE (Order Completion) service operation of the delivered Order web service.

The *Service Management Disconnect Service* business process ends.

See Also

PeopleSoft Sales 9.1 PeopleBook, "Sales Delivered Business Processes and Web Services," Referral or Lead-Related Business Process Flow

PeopleSoft CRM 9.1 Automation and Configuration Tools PeopleBook, "Delivered Web Services and Service Operations," Delivered Web Services

Lost or Stolen Handset Process Flow

This process handles lost, stolen, or found handsets that are associated with customers' services. A handset is blacklisted if it is lost or stolen. A handset is whitelisted if it is found.

Note. *Lost or Stolen Handset* is a subbusiness process that is called from these main business processes: *Service Management Disconnect Service, Service Management Suspend Service,* and *Service Management Resume Service* business processes.

The following graphic illustrates the *Lost or Stolen Handset* process flow that blacklists lost or stolen handsets and whitelists found handsets:
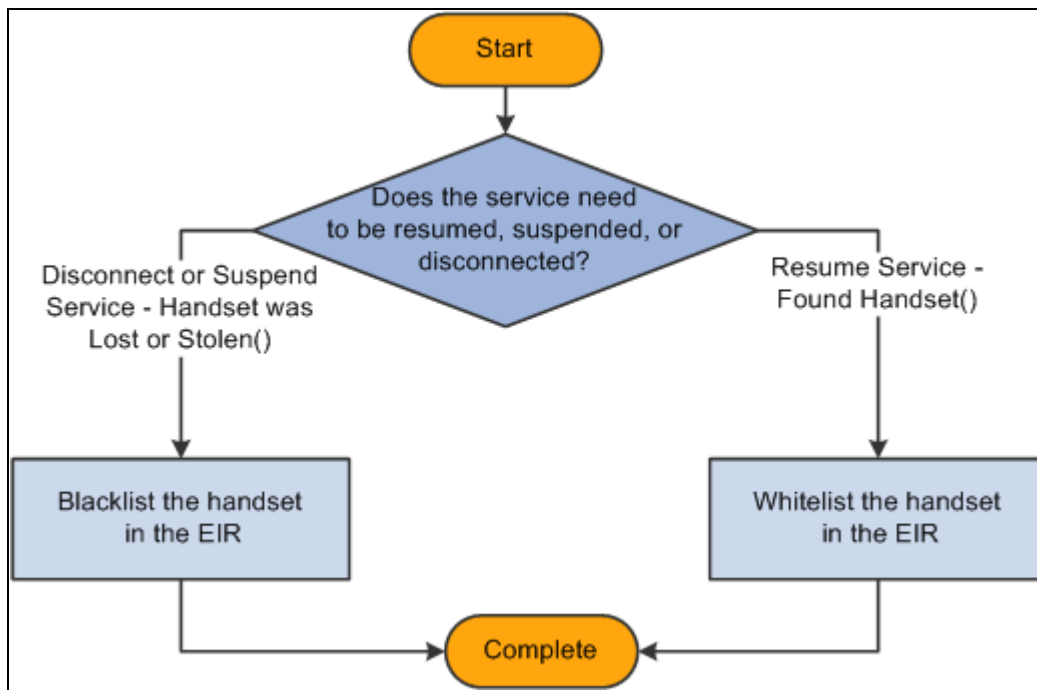
Lost or Stolen Handset process flow for handling lost or stolen and found handsets

When this business process is initiated, it:

1. Verifies the make, model, and serial number of the handset provided.

2. Blacklists the handset in the Equipment Identity Registry (EIR) registry, if the handset is being reported as lost or stolen and service is being suspended or disconnected.

   If the handset is being reported as found and the service is being resumed, the process whitelists the handset in the EIR registry.

3. Returns control to the calling business process.

The EIR is delivered as a stub web service, which represents a customer's or a third-party EIR service.

Service Management Port In Process Flow

This process is initiated from service management orders which contain the *Port In* action. The process controls the flow of business events involved in porting in a phone number from one wireless carrier to another. This process is only executed after a separate process has successfully validated all customer account, address, phone and billing information, and it is illustrated in the following graphic:
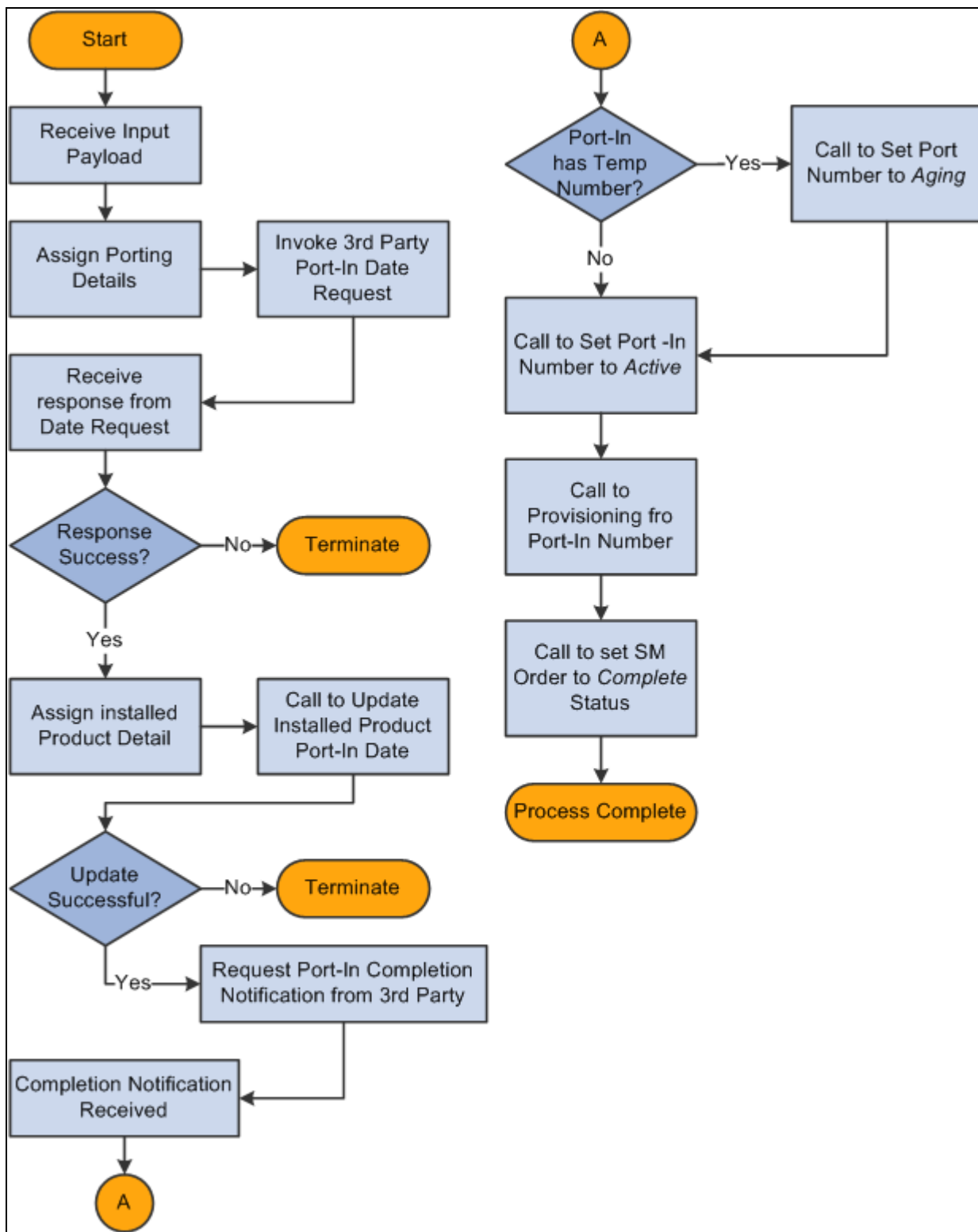
Service Management Port In process flow for handling service requests to port in phone number from another wireless service provider

When this business process is initiated, it:

1. Copies payload values into a PortIn Date Request message.

   With this data, it then calls a stub process (a placeholder for a third-party web service) called PortInDateRequest. This is an asynchronous call. The third-party web service responds with an agreed port-in date.

2. Processes the response that is received from the third-party system.

   - If the response indicates that the number porting procedure cannot happen, this process logs the exception message and ends.

   - If the response returns a port-in date successfully, it calls the RF_INST_PROD_UPDATE (Update Installed Product) service operation of the delivered Installed Product web service to update the port-in date on the installed product.

     If the update fails, this process logs a message and ends.

3. Calls a third-party web service to request the port in completion notification.

   This is a stub process (a placeholder for a third-party web service) called PortInCompleteNotification. This is an asynchronous process.

   When the Complete Notification response is received, the third-party system has completed its part of the porting process. Remaining porting tasks continue in the CRM system.

4. If a temporary number is assigned to the port-in, calls the RO_NUMMGT_SETAGING (Set Number to Aging) service operation of the delivered Number Management web service to release this temporary number back to inventory with the standard aging.

5. Calls the RO_NUMMGT_SETNUMBERSTATUS (Set Number Status) service operation of the delivered Number Management web service to set the port-in number to *Active.*

6. Calls the ProvisioningChgRequest service operation from the delivered RBTProvisioningSimulator placeholder to let an external billing system know that the port-in number is now active.

7. Sets the service management order status to *Complete* by calling the RO_ORDER_COMPLETE (Order Completion) service operation of the delivered Order web service.

The *Service Management Port In* business process ends.

See and *PeopleSoft CRM 9.1 Product and Item Management PeopleBook*, "Product Delivered Web Services," Delivered Web Services.

Convergent Order Synchronization Process Flow

This process synchronizes child orders in convergent orders so that any updates to installed links that span across more than one child order can be completed successfully. It is initiated after the submission of a convergent order and that the synchronization among its child orders are deemed necessary. The information of the process instance is passed onto the child orders so they can maintain communications with the process while it is in progress. Process payload contains all the information on child order dependencies and is used to orchestrate child orders of the convergent order.

For orders that are created to handle package migrations, this process is often called to synchronize child orders:

- Before installed products involved are set to the *Pending* status.

- Before messages are sent to the provisioning system.

For more information, refer to the *Order Fulfillment for Package Migration* discussion under the Understanding Package Migration Requests section.

See and Chapter 24, "Working with Orders for Multilevel Product Bundles," Understanding Package Migration Requests, page 611.

Note. The convergent order synchronization process is called by these business processes: Communication New Order Process, Change Service Process, Service Management Activate Process, and Disconnect Service Process.
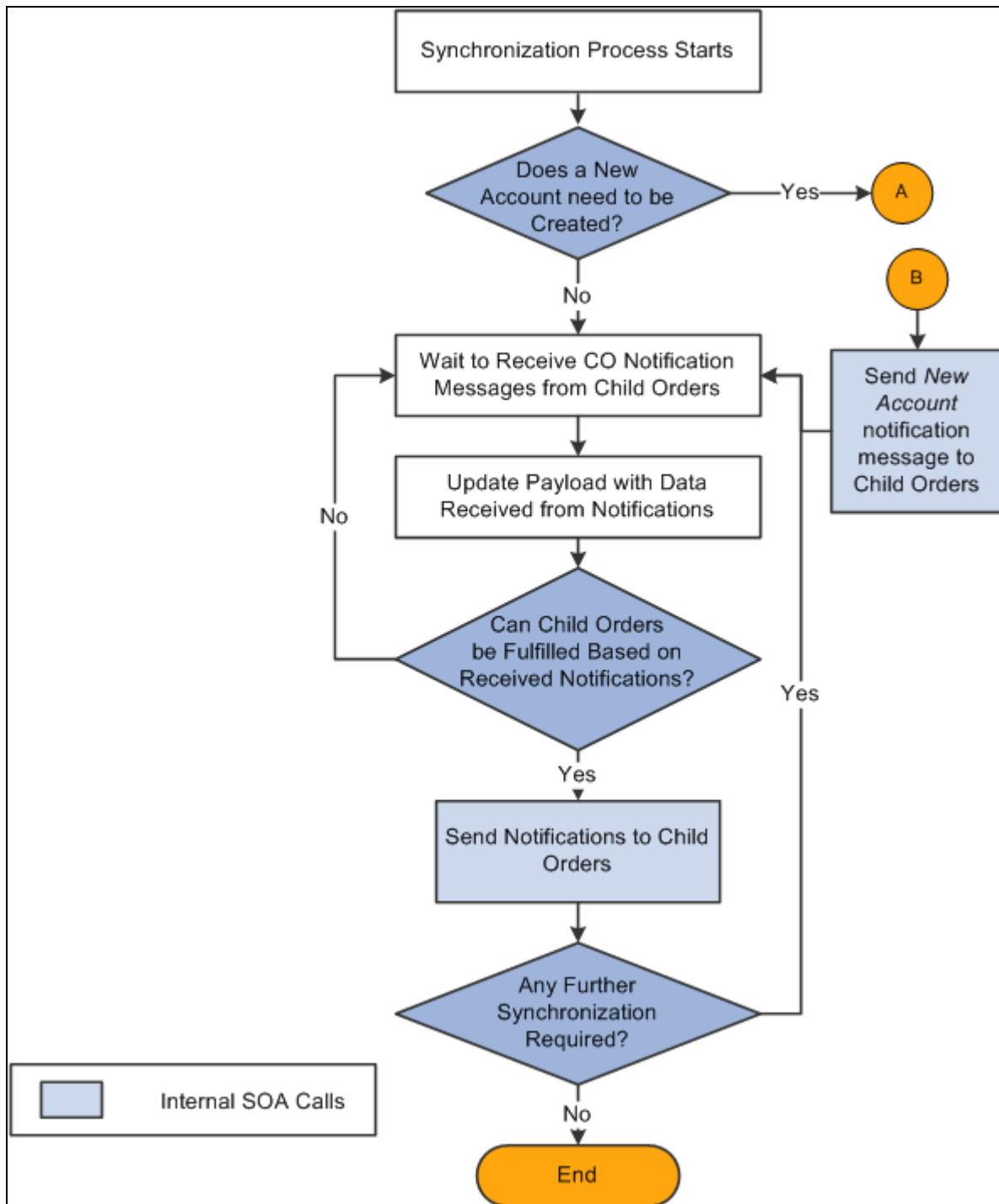
Convergent order synchronization process

When this process is initiated, it:

1. Check if a new account is marked for creation in the convergent order.

    If yes, this process triggers the *New Account Creation* process, which creates the new accounts needed for the order. During this time, all processing for child orders is put on hold until notifications are returned, which confirm the successful creation of the accounts. The *New Account Creation* process generates all new accounts within the parent synchronization process to enable the same new accounts to be reused across multiple child orders.

    See and Appendix A, "Order Capture Delivered Business Processes and Web Services," New Account Creation Process Flow, page 769.

    If no, this process moves on the next step.

2. Waits on receiving notifications from individual child orders acknowledging that pending installed products have been created successfully for the products on the orders, and updates payload with the information received in the notifications.

3. Checks if any child orders (with installed products created for them) is ready to be fulfilled or provisioned based on the notifications it receives in the previous step.

    If yes, it sends a notification message to each of them individually.

    If no, the synchronization process starts over from step 2.

4. Checks if any further synchronization is needed for the convergent order.

    If yes, the synchronization process starts over from step 2.

    If no, the synchronization process ends.

New Account Creation Process Flow

This business process is responsible for creating billing accounts. It is a subbusiness process and has to be triggered by another standalone business process, which can be one of these processes:

*   *Convergent Order Synchronization* process.

*   *Communications New Order* process.

*   *Change Service* process.

This diagram illustrates the *New Account Creation* business process flow:
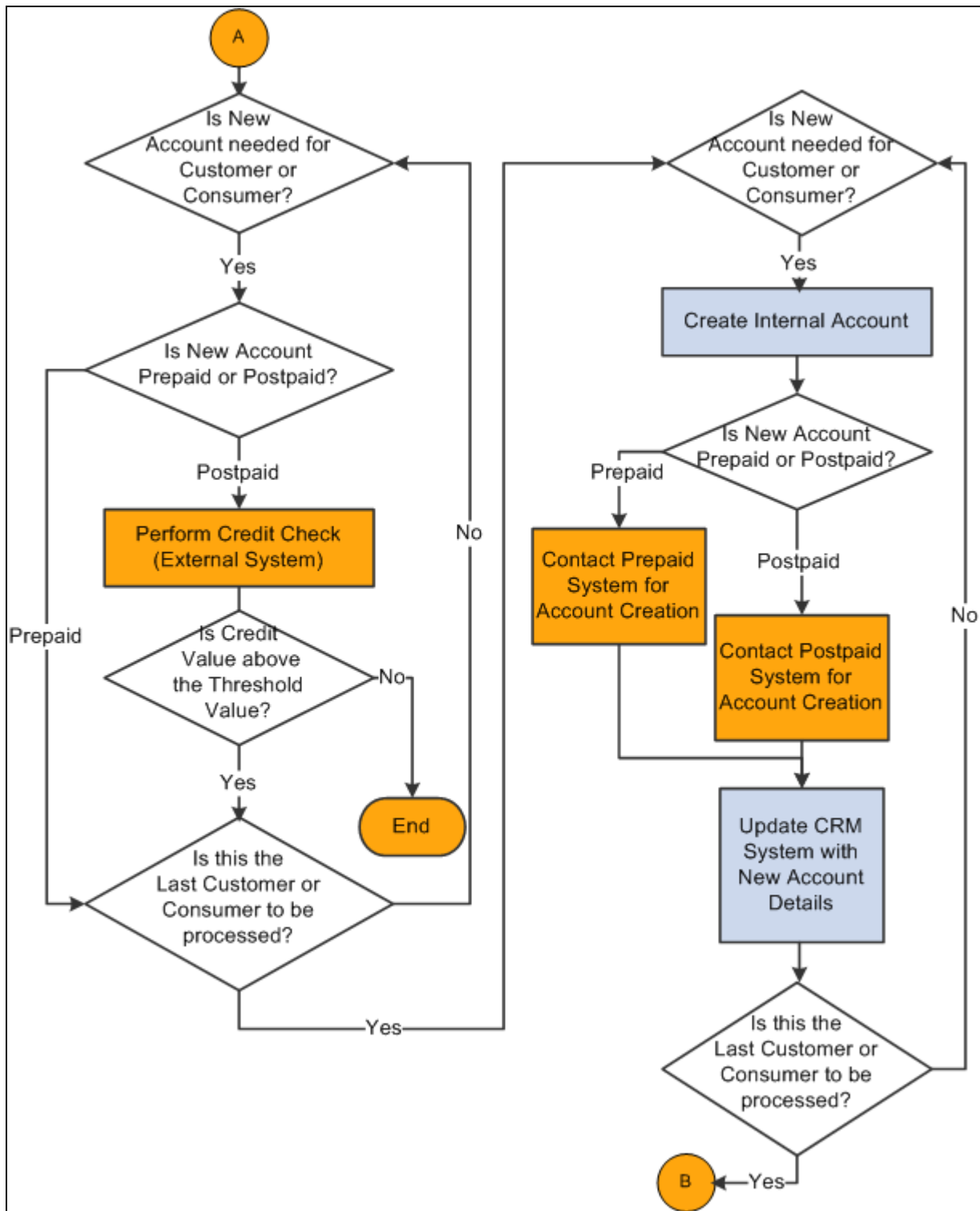
New Account Creation process flow

Note. At any given instance, a calling process only triggers the *New Account Creation* process *once* regardless of the number of new accounts that need to be created.

The *New Account Creation* process contains two loops, one for performing credit check and the other for creating the actual accounts. Before accounts are created, the process calls for credit validations (to be performed by an external web service) to ensure that the credit values are equal or higher than the predefined threshold value and that it would not get terminated half way due to negative credit check result for some of the order's bill-to customers.

After all the requested accounts are created, the process ends by sending a synchronization notification to the calling process so that the rest of the calling process, which is put on hold during the account creation procedure, can continue.

1. Checks if the new account to be created is a prepaid or postpaid one.

   If it's a prepaid account, no credit check is required. Go to the next step.

   If it's a postpaid account, the process calls an external web service to perform credit check. If the credit check does not meet the threshold value that is defined for the business process, the business process is terminated and the web service returns a failure notice to the calling business process.

2. Checks if any more of bill-to customers or consumers are in line to be processed. This loop continues until all customers with a new account request in the order are processed.

3. Creates an account in the CRM system through an internal web service call.

   This applies to both prepaid and postpaid accounts.

4. Creates an account in the prepaid or postpaid billing system, depending on whether this is a prepaid or postpaid account.

   The account creation is done through an external web service call. After the account is created successfully, the external billing system sends the CRM system a response with the newly created account in the Active status.

    If the account is created with a nonactive status, the business process waits for a defined period of time for the account to become active.

   At the end, the account information is sent to the CRM system through an internal web service call to update the order as well as the corresponding internal billing account.

   This account creation loop continues until all new accounts in the order are generated.

The account creation process ends and it returns the new account notification to the calling business process.

See and Appendix A, "Order Capture Delivered Business Processes and Web Services," Communications New Order Process Flow, page 724. and Appendix A, "Order Capture Delivered Business Processes and Web Services," Change Service Process Flow, page 734. and Appendix A, "Order Capture Delivered Business Processes and Web Services," Convergent Order Synchronization Process Flow, page 766.

Use of Sub and Stub Business Processes in Delivered Business Processes

This table lists the subbusiness processes and stub business processes that are used in each of the delivered Order Capture business process (an *x* marks the inclusion of the sub or stub business process in the corresponding main business process):

Sub Business Process	Communications New Order (ROTelcoNewOrder)	Change Service (RBTChangeService)	Prepaid to Postpaid Account Conversion (RBTConvertPreToPostPaid)	Mobile Number Portability (ROMobileNumberPortability)	PAC Request (ROPacRequest)	Lost or Stolen Handset (RBTLostStolenHandset) Note: It is a sub business process	Service Management Activate Service (RBTActivateService)	Service Management Suspend Service (RBTSuspendService)	Service Management Suspend and Change Service (RBTSuspendAndChangeService)	Service Management Resume Service (RBTResumeService)	Service Management Disconnect Service (RBTDisconnectService)	Service Management Port In (SMPortInOrderProcess)	Convergent Order Synchronization (ROConvergentOrder)
Change Service (RBTChangeService)									x				
ExceptionHandlingAndLogging		x											
Lost or Stolen Handset (RBTLostStolenHandset)								x		x	x		
Mobile Number Portability (ROMobileNumberPortability)	x												
Prepaid to Postpaid Account Conversion (RBTConvertPreToPostPaid)							x						
RBTNewProduct	x												
RBTNewService	x												
Service Management Activate Service (RBTActivateService)	x												
Service Management Delayed Email & Lead (RBTDelayedEmailLead)								x		x	x		

Use of sub and stub business processes in delivered Order Capture business processes (1 of 3)

	Sub/Stub Business Process	Communications New Order (ROTelcoNewOrder)	Change Service (RBTChangeService)	Prepaid to Postpaid Account Conversion (RBTConvertPreToPostPaid)	Mobile Number Portability (ROMobileNumberPortability)	PAC Request (ROPacRequest)	Lost or Stolen Handset (RBTLostStolenHandset) Note: It is a sub business process	Service Management Activate Service (RBTActivateService)	Service Management Suspend Service (RBTSuspendService)	Service Management Suspend and Change Service (RBTSuspendAndChangeService)	Service Management Resume Service (RBTResumeService)	Service Management Disconnect Service (RBTDisconnectService)	Service Management Port In (SMPortInOrderProcess)	Convergent Order Synchronization (ROConvergentOrder)
Sub Business Process	Service Management Disconnect Service (RBTDisconnectService)			x										
Sub Business Process	Service Management Port In (SMPortInOrderProcess)													
Sub Business Process	Service Management Suspend Service (RBTSuspendService)									x				
Sub Business Process	New Account Creation (CreateNewAccounts)	x	x											x
Stub Process	Billing Simulator							x						
Stub Process	CreditCheck Service	x												
Stub Process	EIRService						x							
Stub Process	FulfillmentSystem Service	x												
Stub Process	Hotline Simulator							x						

Use of sub and stub business processes in delivered Order Capture business processes (2 of 3)

Main Business Process		Communications New Order (ROTelcoNewOrder)	Change Service (RBTChangeService)	Prepaid to Postpaid Account Conversion (RBTConvertPreToPostPaid)	Mobile Number Portability (ROMobileNumberPortability)	PAC Request (ROPacRequest)	Lost or Stolen Handset (RBTLostStolenHandset) Note: It is a sub business process	Service Management Activate Service (RBTActivateService)	Service Management Suspend Service (RBTSuspendService)	Service Management Suspend and Change Service (RBTSuspendAndChangeService)	Service Management Resume Service (RBTResumeService)	Service Management Disconnect Service (RBTDisconnectService)	Service Management Port In (SMPortInOrderProcess)	Convergent Order Synchronization (ROConvergentOrder)
Stub Process	MNPThirdPartySimulator					x								
	MNPWPRSimulator				x									
	PortInCompleteNotification												x	
	PortInDateRequest												x	
	PostpaidBillingSystem	x												
	PrepaidBillingSystem	x		x										
	RBTDisconnectInstalledProduct											x		
	RBTExternalBillingSystemService								x		x	x		
	RBTPrepaidBillingSystemService								x		x	x		
	RBTProvisioningSimulator		x					x					x	
	RBTProvisioningSystemService								x		x	x		

Use of sub and stub business processes in delivered Order Capture business processes (3 of 3)

Delivered Web Services

This section discusses:

- The Agreement web service.

- The Billing Account web service.

- The Order web service.

- The Phone Number Administration web service.

- The Service Management web service.

- The Service Order web service.

See Also

PeopleSoft CRM 9.1 Automation and Configuration Tools PeopleBook, "Working with Business Processes and Web Services," Understanding Web Services

Agreement

PeopleSoft delivers the Agreement Creation For Order service operation for the Agreement (RO_AGREEMENT) web service. This operation creates agreements for orders. It takes a capture ID and returns a successful status if the agreement is created. The service operation handler takes care of validating the various requirements before the agreement is created. An error message is returned if the operation fails.

This table provides the technical name, operation type, and messages names of the Agreement Creation For Order service operation:

Service Operation	Operation Type	Request Message	Response Message
Agreement Creation For Order (RO_AGREEMENT_CRE ATE_FOR_ORDER)	Synchronous	RO_AGREEMENT_CREA TE_REQ	RO_AGREEMENT_CREA TE_RES

Billing Account

PeopleSoft delivers these service operations for the Billing Account (RBT_BILLING_ACCOUNT) web service:

• Complete Account Conversion.

  This operation takes a prepaid billing account number that needs to be converted to postpaid account and returns a successful status if the account conversion is completed. An error message is returned if the operation fails

• Link Accounts.

  This operation takes the numbers of two billing accounts (for example, a prepaid account and a postpaid account) to be linked, and returns a successful status if the account linkage is built. An error message is returned if the operation fails.

• Update Account.

  This operation takes a billing account number and the status to which the account needs to be updated, and returns a successful status if the status update is completed. An error message is returned if the operation fails.

• Create Billing Account.

  This operation takes a capture ID and returns the number of the billing account that is created for that order.

This table provides the technical names, operation type, and message names of the service operations that are related to the Billing Account web service:

Service Operation	Operation Type	Request Message	Response Message
Complete Account Conversion (RBT_ACCT_CONVERT)	Synchronous	RBT_ACCT_CONVERT_ REQ	RBT_ACCT_CONVERT_ RES
Link Accounts (RBT_ACCT_LINK)	Synchronous	RBT_ACCT_LNK_REQ	RBT_ACCT_LNK_RES
Update Account (RBT_ACCT_UPDT)	Synchronous	RBT_ACCT_UPDT_REQ	RBT_ACCT_UPDT_RES

Service Operation	Operation Type	Request Message	Response Message
Billing Account Create (RBT_BILLING_ACCOU NT_CREATE)	Synchronous	RBT_CREATE_BACCT_ REQ	RBT_CREATE_BACCT_ RES

Order

PeopleSoft delivers these service operations for the Order (RO_ORDER) web service:

*   Order Completion.

    This operation sets the status of the order to *Completed.* It also sets the status of all line items in the order to *Completed* if they are not already in the *Completed, Canceled* or *Shipped.* It takes a capture ID and returns a successful status if the order is set to completed. An error message is returned if the operation fails.

*   Create Installed Product for Order.

    This operation creates installed products for orders. It also creates relationships amongst all the created installed products. It takes a capture ID and returns a successful status if the installed product is created. An error message is returned if the operation fails.

*   Order Shipment Notification.

    This operation receives advanced shipping notices (ASNs) for orders from an external fulfillment system. It takes care of updating the line item status of the received shipment to *Shipped.* It also establishes the relationship between the line item and the line item-SIM records.

*   Relate Services to SIM.

    This operation associates SIMs with installed services. It takes an setID, installed service ID, and ICCID, and returns a successful state if the association is complete. An error message is returned if the operation fails.

This table provides the technical name, operation type, and message names of the service operations that relate to the Order web service:

Service Operation	Operation Type	Request Message	Response Message
Order Completion (RO_ORDER_COMPLET E)	Synchronous	RO_ORDER_COMPLETE _REQ	RO_ORDER_COMPLETE _RES
CreateInstalledProductForO rder (RO_ORDER_INSTALLE D_PRODUCT_CRT)	Asynchronous Request/Response	RO_ORDER_INSTALLED _PRODUCT_REQ Queue: ORDER_QUEUE	RO_ORDER_INSTALLED _PRODUCT_RES Queue: ORDER_QUEUE
Order Shipment Notification (RO_ORDER_NOTIFYSH IPMENT)	Asynchronous - One Way	RO_ORDER_NOTIFYSHI PMENT_REQ Queue: ORDER_QUEUE	N/A

Service Operation	Operation Type	Request Message	Response Message
Relate Services to SIM (RO_ORDER_RLT_INST_SVCS_TO_SIM)	Synchronous	RO_ORDER_RLT_TO_SIM_REQ	RO_ORDER_RLT_TO_SIM_RSP

Phone Number Administration

PeopleSoft delivers these service operations for the Phone Number Administration (RO_NUMMGT) web service:

- Add Number History.

  This operation generates history details for phone numbers. It takes inputs such as customer ID, customer's role type ID, contact ID, contact's role type ID, and phone number, and returns a successful status if the operation is completed. An error message is returned if the operation fails. This operation can be used whenever a phone number is assigned to a customer.

- End Number to SIM Relationship.

  This operation disassociates phone numbers from their related ICCIDs (Integrated Circuit Card Identifier), which are serial numbers of the SIM cards. It takes a phone number and its related ICCID, and returns a successful status if the operation is completed. An error message is returned if the operation fails.

  This operation can be used whenever a phone number is no longer in service or transferred to another SIM or ported out to a different carrier.

- Set Number to Aging.

  This operation changes the status of a phone number to *aging.* It takes a phone number and returns a successful status if the operation is completed. An error message is returned if the operation fails.

  This operation can be used when a phone number is either disconnected or released by an external carrier.

- Set Number Status.

  This operation sets the status of a phone number. It takes a phone number and the status to which the phone number needs to be set, and returns a successful status if the status update is completed. An error message is returned if the operation fails.

  This operation can be used to set the status of the phone number during the life cycle of a phone number.

- Set SIM Card Status.

  This operation sets the status of a SIM card. It takes an ICCID and the status to which the ICCID needs to be set, and returns a successful status if the status update is completed. An error message is returned if the operation fails.

  This operation can be used to set the status of the SIM card during the life cycle of a SIM.

- Relate a Number to a SIM.

  This operation assigns phone numbers to SIMs. It takes a phone number and an ICCID, and returns a successful status if the phone number is linked to the ICCID. An error message is returned if the operation fails.

  This operation is can be used whenever a phone number is activated on a SIM.

This table provides the technical names, operation type, and message names of the service operations that are related to the Phone Number Administration web service:

Service Operation	Operation Type	Request Message	Response Message
Create Number History (RO_NUMMGT_CREATE _HISTORY)	Synchronous	RO_NUMMGT_HISTO RY_REQ	RO_NUMMGT_HISTORY_RES
End Number Relationship (RO_NUMMGT_END_SIM _RELATIONSHIP)	Synchronous	RO_NUMMGT_END_R ELATE_REQ	RO_NUMMGT_END_RELATE_RES
Set Number to Aging (RO_NUMMGT_SETAGIN G)	Synchronous	RO_NUMMGT_SETAG ING_REQ	RO_NUMMGT_SETAGING_RES
Set Number Status (RO_NUMMGT_SETNUM BERSTATUS)	Synchronous	RO_NUMMGT_SETNU MSTATUS_REQ	RO_NUMMGT_SETNUMSTATUS_ RES
Set SIM Card Status (RO_NUMMGT_SETSIMS TATUS)	Synchronous	RO_NUMMGT_SETSI MSTATUS_REQ	RO_NUMMGT_SETSIMSTATUS_R ES
Relates a Number to a SIM (RO_NUMMGT_SIMREL ATE)	Synchronous	RO_NUMMGT_RELAT E_REQ	RO_NUMMGT_RELATE_RES

Service Management

PeopleSoft delivers these service operations for the Service Management (RO_SERVICEMGT) web service:

- Add Install Product.

  This operation creates installed products for service management, for lines with the *Add* action code. It takes a capture ID and line number, and returns a successful status if the operation is completed. An error message is returned if the operation fails.

- Service Management - Add Note to Order.

  This operation adds notes to service management orders. It takes inputs such as the capture ID, notes summary, note details, note type, and the visibility option, and returns a successful status if the note is added. An error message is returned if the operation fails.

  Note that this operation may also be used on non-Service Management orders.

- Service Management - Add and Submit Order.

  This operation adds and submits service management orders. It takes inputs such as the business unit, customer BO ID, install product ID, action, action reason, associated capture ID, start and end dates, and returns the status of the operation, as well as the capture ID and status of the new order if the operation is completed. An error message is returned if the operation fails.

- Get Activate Service Message.

  This operation gets the inputs for the *Service Management Activate Service* business process. It takes the capture ID as input and returns the message structure that the *Service Management Activate Service* business process requires to activate a service.

- Get Attribute for an Installed Product.

  This operation takes a capture ID and line number and returns the attribute information of the installed product for the corresponding line item.

- Get Disconnect Service Details.

  This operation gets the inputs for a call to the *Prepaid to Postpaid Account Conversion* business process. It is called by the *Activate Service* business process immediately before it calls the *Prepaid to Postpaid Account Conversion* business process. This operation takes an account ID and returns information about this account that has disconnected its service.

- IMSI (International Mobile Subscriber Identity) Change Operation.

  This operation is used when the SIM on a service is changed. It sets the installed product status for the old SIM to be *Disconnected* and the installed product status for the new SIM to be *Installed*. It moves all child install products from the old SIM to the new SIM and ends the relationship between the old SIM and the phone number. It takes a capture ID and returns a successful status if the operation is completed. An error message is returned if the operation fails.

- Remove Installed Product.

  This operation removes installed products from service management orders, for lines with the *Remove* action code. It takes a capture ID and line number and returns a successful status if the operation is completed. An error message is returned if the operation fails.

- Update Service Management Order Status.

  This operation updates the status of service management orders. It takes a capture ID, a line number, and current status code, and returns a successful status if the operation is completed. An error message is returned if the operation fails.

- Modify Multilevel Product Bundle.

  This operations performs modifications to multilevel installed products and installed links based on line actions selected in the service order. It may add or remove products and links and perform migrations as needed. It takes a capture ID and in response updates multilevel product hierarchy.

The Get New Service Message service operation is not being used.

This table provides the technical names, operation type, and message names of the service operations that are related to the Service Management web service:

Service Operation	Operation Type	Request Message	Response Message
Add Install Product by Capture (RO_SERVICEMGT_ADD INSTPROD)	Synchronous	RO_WS_SM_DS_REQ	RO_WS_SM_OUTPUT_D S_RES
ServiceMgt - Add Note to Order (RO_SERVICEMGT_ADD NOTE)	Synchronous	RO_SERVICEMGT_ADD NOTE_REQ	RO_SERVICEMGT_ADD NOTE_RES
Service Mgt Add & Submit Order (RO_SERVICEMGT_ADD SUBMIT)	Synchronous	RO_SERVICEMGT_ADD SUB_REQ	RO_SERVICEMGT_ADD SUB_RES
Get Activate Service Message (RO_SERVICEMGT_GET ACTSRVCMSG)	Synchronous	RBT_GET_ACTSRVC_M SG_REQ	RBT_GET_ACTSRVC_M SG_RES
ROServiceMgtGetAttr (RO_SERVICEMGT_GET ATTR)	Synchronous	RO_WS_SM_DS_REQ	RF_INST_PROD_UPDAT E_REQ
Get Disconnect Service Details (RO_SERVICEMGT_GET DISSRVCMSG)	Synchronous	RO_SERVICEMGT_CON VERT_DIS_REQ	RO_SERVICEMGT_CON VERT_DIS_RES
IMSI change operation (RO_SERVICEMGT_IMSI _CHG)	Synchronous	RBT_IMSI_CHG_REQ	RBT_IMSI_CHG_RES
Remove Installed Product (RO_SERVICEMGT_RM VINSTPROD)	Synchronous	RO_WS_SM_RMV_REQ	RO_WS_SM_RMV_OUTP UT_DS_RES
ServiceMgt Update Order Status (RO_SERVICEMGT_UPD STATUS)	Synchronous	RO_SERVICEMGT_UPD STATUS_REQ	RO_SERVICEMGT_UPD STATUS_RES
MLPBModifyService (RO_SERVICEMGT_MLP B_CRT)	Asynchronous Request/Response	RO_MLPB_CH_DS_REQ	RO_MLPB_CH_DS_RES

Service Order

PeopleSoft delivers the Service Order Create service operation for the Service Order (RO_SERVICE_ORDER) web service. This operation creates service orders for the orders. The service operation handler takes care of validating various requirements for the creation of service orders and subsequently creates them. It takes a capture ID and returns a successful status if the status update is completed. An error message is returned if the operation fails.

This table provides the technical name, operation type, and messages names of the service operation that is related to the Service Order web service:

Service Operation	Operation Type	Request Message	Response Message
Service Order Create (RO_SERVICE_ORDER)	Asynchronous Request/Response	RO_SERVICE_ORDER_CREATE_REQ	RO_SERVICE_ORDER_CREATE_RES

Viewing Message Elements

You can view the elements and fields that are included in each operation message through PeopleTools.

To view a list of field names and aliases for a particular message:

1. Select PeopleTools, Integration Broker, Integration Setup, Messages.

2. Enter the name of the message that you want to view in the Message Name field and click Search.

    The Message Definition page appears.

3. Click the message name link under the Parts grid.

    The system opens the Message Definition page in a new browser. This step is required only if you selected a *container* message. If you selected a *parts* message in step 2 above, proceed directly to step 4.

    Note. The system utilizes both *container* messages and *parts* messages. A *container* message may contain one or more parts. The *parts* message has the actual list of data fields.

4. Click the plus sign next to the table name at the bottom of the page to view the fields and aliases associated with the message.

Index

Symbols

A

B

C

F

G

H

M

N

Q

R

S

T