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# PeopleSoft Enterprise CRM 9.1 Services Foundation PeopleBook

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October 2009

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# PeopleSoft CRM Services Foundation

## Preface

This preface discusses:

- PeopleSoft CRM application fundamentals.
- PeopleSoft CRM automation and configuration tools.
- PeopleSoft CRM business object management.
- PeopleSoft product and item management.
- PeopleTools PeopleBooks.

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## PeopleSoft CRM Application Fundamentals

The *PeopleSoft Enterprise 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 Enterprise 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.

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## PeopleSoft CRM Automation and Configuration Tools

The *PeopleSoft Enterprise 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 the application PeopleBook.

There are four parts to the *PeopleSoft Enterprise CRM 9.1 Automation and Configuration Tools PeopleBook*:

- 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), 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 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.

---

## PeopleSoft CRM Business Object Management

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

The *PeopleSoft Enterprise 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.

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## PeopleSoft Product and Item Management

The *PeopleSoft Enterprise 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.

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## PeopleTools PeopleBooks

Cross-references to PeopleTools documentation refer to the PeopleSoft Enterprise PeopleTools 8.50 PeopleBooks.

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## PeopleBooks and the Online PeopleSoft Library

A companion PeopleBook called PeopleBooks and the Online PeopleSoft 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 PeopleSoft online library including full-text searching and configuring a reverse proxy server.
- Understanding documentation integration and how to integrate customized documentation into the library.
- Glossary of useful PeopleSoft terms that are used in PeopleBooks.

You can find this companion PeopleBook in your PeopleSoft online library.

## **Part 1**

# **Getting Started**

## **Chapter 1**

### **Getting Started with PeopleSoft CRM Services Foundation**



## Chapter 1

# Getting Started with PeopleSoft CRM Services Foundation

This chapter provides an overview of PeopleSoft Services Foundation and discusses:

- PeopleSoft services foundation business processes.
- PeopleSoft services foundation implementation.

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## PeopleSoft Services Foundation Overview

This book discusses the common foundation objects that are shared among PeopleSoft Integrated FieldService, the call center applications (PeopleSoft Support, HelpDesk, HelpDesk for Human Resources, and Service Center for Higher Education), and industry solutions that leverage the functionality of these core applications. These objects are used in service orders and cases to provide solution management, integration with the Transaction Billing Processor, and geographical information lookup capabilities.

Solution management and integration with Transaction Billing Processor are available to PeopleSoft Integrated FieldService and most call center applications. Geographical information lookup, also known as the Environmental Systems Research Institute (ESRI) integration, is available to PeopleSoft Integrated FieldService and Support.

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## PeopleSoft Services Foundation Business Processes

This section discusses the business processes associated with solution, time management, integration with the Transaction Billing Processor, and ESRI integration. We discuss these business processes in the business process chapters in this PeopleBook.

### ***Solution Management Business Process***

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

### ***Time Management Business Process***

Time management enables users to log time for the work performed on cases. Field service technicians and managers use a different page that is embedded in the service order component

### ***Transaction Billing Processor Integration Business Process***

Transaction Billing Processor integration provides the ability to bill and book revenue through PeopleSoft Contracts for recurring and on-demand services and agreements. The fees sent to the Transaction Billing Processor include agreement fees, service order fees (including service, material, time, and expense fees), and case fees.

### ***ESRI Integration Business Process***

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

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## **PeopleSoft Services Foundation Implementation**

PeopleSoft Setup Manager enables you to review a list of setup tasks for your organization for the products 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.

PeopleSoft Integrated FieldService and call center applications provide component interfaces to help you load data from your existing system into PeopleSoft tables. Use the Excel to Component Interface utility with the component interfaces to populate the tables.

Each product's Getting Started chapter contains specific implementation and component interface information for that product. This PeopleBook includes information about solution management, time management, contracts and billing integration, and integration with ESRI.

See *Enterprise PeopleTools 8.50 PeopleBook: PeopleSoft Component Interfaces*.

### ***Other Sources of Information***

In the planning phase of the 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 of the *PeopleSoft CRM Application Fundamentals 9.1 PeopleBook* with information about where to find the most current version of each.

### ***See Also***

*PeopleSoft Enterprise CRM 9.1 Call Center Applications PeopleBook*, "Getting Started with PeopleSoft Enterprise CRM Call Center Applications"

*PeopleSoft Enterprise Integrated FieldService 9.1 PeopleBook*, "Getting Started with PeopleSoft Integrated FieldService"

## **Part 2**

# **Solution Management**

### **Chapter 2**

#### **Setting Up Solution Management**

### **Chapter 3**

#### **Managing Solutions**

### **Chapter 4**

#### **Using Solutions**



## Chapter 2

# Setting Up Solution Management

This chapter provides an overview of solution management setup and discusses how to:

- Set up solution management prompt tables.
- Define record-based search index templates.
- Set up solution history tracking.

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## Understanding Solution Management Setup

Solutions are resolutions to problems. They exist independently from the cases, service orders, defects, and email responses to which they can be applied.

This section discusses:

- Solution relationship types.
- Solution libraries.
- Solution search templates.
- Solution history.

## Solution Relationship Types

Solutions can be related to other solutions. You can relate solutions manually or automatically. When you relate solutions, you must qualify the relationship using a solution relationship type. Predefined types are *Similar* and *Duplicate*.

Solution relationship types, unlike case relationship types, are never hierarchical. The system uses the same relationship label for both solutions. (That is, if solution A is similar to solution B, then solution B is similar to solution A.)

## Solution Libraries

Solution libraries enable you to group solutions into functional areas within a setID. For example, you can create solution libraries for each of your product lines. This level of categorization improves search effectiveness in PeopleSoft call center applications. Solution for cases enables users to choose libraries to include in the search domain.

If desired, solutions may also be associated with multiple libraries. As long as a user has access to at least one of the libraries for a particular solution, the solution will be visible to that user.

Access to solution libraries from transactions can be limited by security settings defined for each library. An administrator can restrict library access to users and cases that meet certain criteria. These criteria vary by transaction, and can include user role, agent location, employee location, and customer region.

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**Note.** The following paragraphs describe ways in which access to solutions is not limited by the security settings defined for their corresponding library.

Branch scripts that end with a solution are exempt from any further check to see if users have access to that library. All users will be able to view these solutions.

Recommended actions that suggest solutions are also exempt from any checks for solution library access. Recommended actions can be set based on a quick code, AAF case update action, or AAF suggested action. In all these cases when a suggested action is a solution, there will be no additional security applied.

Solution security applies only to the solution search process: search results will include only solutions in the libraries to which users have access. This security does not apply to the attempted solutions grid in both the agent facing case and the self-service case. If a user has access to a case, he or she may see any solutions that were applied to the case (including those applied by any other user).

---

### **FAQ Libraries**

Selecting the Enable Solution Library as FAQ or Troubleshooting Guide in Self Service check box for a particular solution library makes that library available to internal agents using Frequently Asked Questions as well as external customers using the Frequently Asked Questions self-service page. For individual solutions within that library to be accessible for self service users, the solution's External FAQ check box must be selected for the corresponding library. Similarly, individual solutions within a library are accessible to internal agents if the solution's Internal FAQ check box has been selected for the corresponding library.

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**Note.** Self Service FAQ functionality is applicable to Customer Self Service and Employee Self Service for PeopleSoft Support, HelpDesk, HelpDesk for Human Resources, and Service Center for Higher Education customers. PeopleSoft Integrated FieldService does not utilize FAQ functionality.

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### **See Also**

*PeopleSoft Enterprise CRM 9.1 Call Center Applications PeopleBook, "Configuring Self-Service Applications"*

## **Solution Search Templates**

PeopleSoft CRM provides multiple versions of solutions. Different versions search different objects. For example, solutions for PeopleSoft Integrated FieldService searches only solutions and service orders, while solutions for cases also searches cases, troubleshooting scripts, defects and fixes.

You can use the solution and error message search collection in various ways. In the four PeopleSoft CRM call center applications (PeopleSoft Support, HelpDesk, HelpDesk for Human Resources, and Service Center for Higher Education), solution functionality is used to search for objects that can help resolve a case.

The agent-facing version searches solutions. It also searches cases, troubleshooting scripts, fixes, and defects which can lead the searcher to a solution. The self-service version searches only solutions. Both versions enable users to associate selected solutions with the case from which the solution search was invoked. The self-service version additionally enables self-service users to search for solutions outside the context of a case.

---

**Note.** To be searchable, an object must have a search index template that defines the fields included in the search collection. PeopleSoft delivers search index templates for solutions, cases, and troubleshooting scripts.

---

### **See Also**

*PeopleSoft Enterprise CRM 9.1 Automation and Configuration Tools PeopleBook*, "Setting Up Search Collections," Understanding PeopleSoft CRM Searching

*PeopleSoft Enterprise CRM 9.1 Automation and Configuration Tools PeopleBook*, "Setting Up Search Collections," Search Index Templates

*PeopleSoft Enterprise CRM 9.1 Automation and Configuration Tools PeopleBook*, "Setting Up Correspondence Templates," Template Architecture

*PeopleSoft Enterprise CRM 9.1 Automation and Configuration Tools PeopleBook*, "Setting Up Search Collections"

## **Solution History**

Solutions History is a system-delivered action type. Solutions History logs information into the History Page of the Solution component. This is a solution-specific action and cannot be used for other applications. You can determine which policy caused the history item to be logged since the policy name appears in the history grid. The details can contain terms, which are resolved at runtime. This action is usually invoked after a solution is saved.

The system uses Active Analytics Framework (AAF) to create solution history items. Terms are managed in the AAF data library. They point to disparate pieces of data residing in places like data warehouses, external databases, or operational environments. They are metadata that provide information about the physical data and can be resolved into actual data to be used in PeopleSoft CRM. When users send template-based letters or email, the system merges both static text and resolved data into the template to produce the final correspondence.

### **See Also**

*PeopleSoft Enterprise CRM 9.1 Automation and Configuration Tools PeopleBook*, "Working with Active Analytics Framework," Understanding AAF

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## **Setting Up Solution Management Prompt Tables**

To setup solution libraries, use the Solution Library Setup (RC\_SOLN\_LIB\_SETUP) and Solution Relationship Table (RC\_SOLN\_RLT\_TBL) components.

This section discusses how to:

- View search record types.
- Define solution relationship types.
- Define default solution templates.
- Define solution libraries.

---

**Note.** The Solution History Setup component is no longer in use.

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## Pages Used to Set Up Solution Management Prompt Tables

| <i>Page Name</i>           | <i>Definition Name</i> | <i>Navigation</i>   | <i>Usage</i>   |
|----------------------------|------------------------|---|--|
| Search Group Setup         | RC_SRCH_GRP_SETUP      | Set Up CRM, Product Related, Solution, Search Group Setup, Search Group Setup                 | Define how solutions are displayed on search results grid in Case, Self-Service, Service Order, and Defect page. |
| Solution Library           | RC_SOLN_LIB_SETUP      | Set Up CRM, Product Related, Solution, Solution Library, Solution Library                     | Create solution libraries.   |
| Security                   | RC_SOLN_LIB_SECUR      | Set Up CRM, Product Related, Solution, Solution Library, Security                             | Define solution library security.  |
| Solution Relationship Type | RC_SOLN_REL_TYPE       | Set Up CRM, Product Related, Solution, Solution Relationship Type, Solution Relationship Type | Define how solutions can be related.   |
| Default Solution Template  | RC_SOLN_TEMPLATE       | Set Up CRM, Product Related, Solution, Default Solution Template, Default Solution Template   | Define a default solution template for a SetID.  |

## Viewing Search Record Types

Access the Search Group Setup page (Set Up CRM, Product Related, Solution, Search Group Setup, Search Group Setup).

### Search Group Setup

**Search Group Name**

**Search Group ID** 3      **Search Group Name** SOLUTION ADVISOR + PRODUCTS

**Description** Solution Advisor + Products

**Records**

RC\_ASOLPRSRH\_VW  
RC\_CASE\_VW2  
RC\_PST\_VW  
RQ\_DEFECT\_VW  
RQ\_FIX\_VW

**Record Fields** Find | View All | First 1 of 5 Last

**Record** RC\_ASOLPRSRH\_VW      **Record Description** Solution

**ID Field** SOLUTION\_ID      **Title Field** SOLUTION\_SUMMARY

**Summary Field** SOLUTION\_DESCR      **Summary Length** 500

**Record Type** Solution

| Fields <span style="float: right;">Customize   Find   1-7 of 7 Last</span> |                  |                      |       |
|--|------------------|----------------------|-------|
| Include  | Field Name       | Field Description    | Order |
| <input checked="" type="checkbox"/>  | SOLUTION_DESCR   | Solution Details     | 3     |
| <input checked="" type="checkbox"/>  | SOLUTION_ID      | Solution ID          | 1     |
| <input checked="" type="checkbox"/>  | SOLUTION_SUMMARY | Solution Summary     | 2     |
| <input checked="" type="checkbox"/>  | SYMPTOM_DESCR    | Symptoms Description | 4     |
| <input checked="" type="checkbox"/>  | LIBRARY_ID       |                      |       |
| <input checked="" type="checkbox"/>  | PROD_DESCRLONG   |                      |       |
| <input checked="" type="checkbox"/>  | SETID            |                      |       |

[Modify System Data](#)

**This object is maintained by PeopleSoft.**

\* Required Field

Search Group Setup page

This page is used to configure which fields from the search results are displayed on the solution search results grid. On this page you can also view search record types based on the search group ID. The search record type description is used to display the record type on the resolution search result. The Field Description is used for displayed field labels.

This page is used for search result display purposes only. It is not used for Verity search. Search fields are configured from the Verity Search Index Template page.

## Defining Solution Relationship Types

Access the Solution Relationship Type page (Set Up CRM, Product Related, Solution, Solution Relationship Type, Solution Relationship Type).



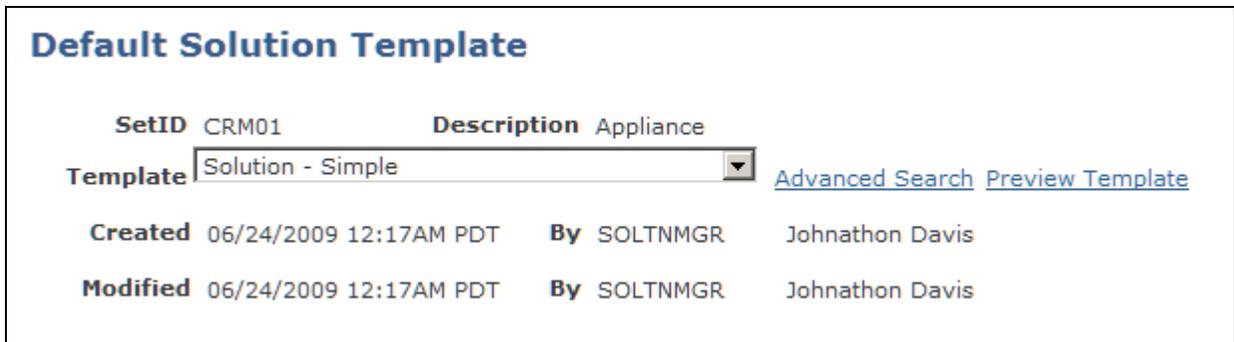
Solution Relationship Type page

**Solution Relationship Type** Enter a unique identifier for the relationship type.

**Relationship Name** and **Relationship Description** Enter a short and long description of the relationship. The short description appears on the pages where you establish and review solution relationships.

## Defining Default Solution Templates

Access the Default Solution Template page (Set Up CRM, Product Related, Solution, Default Solution Template, Default Solution Template).



Default Solution Template page

**SetID** The SetID for which the default solution template will apply.

**Template** Select the default template to be applied to solutions associated with this SetID.

## Defining Solution Libraries

Access the Solution Library page (Set Up CRM, Product Related, Solution, Solution Library, Solution Library).

The screenshot shows a web interface with two tabs: 'Solution Library' and 'Security'. The 'Security' tab is active. Below the tabs is a 'Library Details' section. It contains the following information:

- SetID:** CRM01
- Library ID:** DISH
- \*Name:** Dishwasher (text input field)
- Enable Solution Library as FAQ or Troubleshooting Guide in Self Service**
- Description:** Dishwasher (text area)
- Created:** 02/08/2002 4:48PM PST
- By:** SAMPLE
- Created By:** Burt Lee
- Modified:** 02/11/2002 2:47PM PST
- Modified By:** SAMPLE
- Modified By:** Burt Lee

At the bottom left of the form, there is a legend: \* Required Field.

Solution Library page

**Name** Enter a library name. If this library is associated with the library FAQ, then the name you enter is exposed to self-service users in the Customer Care - Frequently Asked Questions page.

**Enable Solution Library as FAQ or Troubleshooting Guide in Self Service** If the check box is selected, this solution library will be available to external customers using the Frequently Asked Questions page or the Troubleshooting Guide.

**See Also**

*PeopleSoft Enterprise CRM 9.1 Call Center Applications PeopleBook, "Configuring Self-Service Applications"*

## Defining Solution Library Security

Access the Security page (Set Up CRM, Product Related, Solution, Solution Library, Security).

Solution Library
Security

**Library ID** DISH  
**Library Name** Dishwasher

**Security Authorizations**

Use the grids below to restrict access to this solution library. Solution users must meet all criteria to gain access. When no criteria exist, users have full access.

| User Roles             |   | Customize   Find | First | 1-4 of 4 | Last |
|------------------------|---|------------------|-------|----------|------|
| *Role Name             | Description                               |                  |       |          |      |
| Support Agent - Core   | <a href="#">Agent for Core Support</a>    | +                | -     |          |      |
| Support App Admin      | <a href="#">Support Application Admin</a> | +                | -     |          |      |
| Field Service Agent    | <a href="#">Field Service Agent</a>       | +                | -     |          |      |
| Field Service Engineer | <a href="#">Field Service Engineer</a>    | +                | -     |          |      |

| Agent Location |                 | Customize   Find | First | 1 of 1 | Last |
|----------------|-----------------|------------------|-------|--------|------|
| *Location Code | Description     |                  |       |        |      |
| L00001         | National Office | +                | -     |        |      |

| Employee Location                        |             | Customize   Find | First | 1 of 1 | Last |
|--|-------------|------------------|-------|--------|------|
| *Location Code                           | Description |                  |       |        |      |
| <input style="width: 80%;" type="text"/> |             | +                | -     |        |      |

| Customer Region |                      | Customize   Find | First | 1-2 of 2 | Last |
|-----------------|----------------------|------------------|-------|----------|------|
| *Region ID      | Description          |                  |       |          |      |
| NORTHWEST       | Northwest            | +                | -     |          |      |
| NORTHCENTRAL    | North Central States | +                | -     |          |      |

**Security page**

Specify the combination of user role, agent location, employee location, and customer region that are required in order to have access to the solution library. If one or more categories are specified, all categories must be met to gain access to the solution library. A category with no conditions listed implies no restriction is imposed based on that category.

---

**Note.** The Agent Location, Employee Location, and Customer Region grids are only visible on this page if a relevant PeopleSoft product has been licensed. For example, the Employee Location grid is only visible if the HelpDesk, Self-Service HelpDesk, HR HelpDesk, Service Center for Higher Education, or Self-Service Service Center for Higher Education product has been installed.

---

**Note.** Users can choose not to associate a solution to a solution library by leaving the library field blank on the solution definition. Security is not applied to solutions with no library.

---

## ***User Roles***

**Role Name** Enter a PeopleSoft security role name to restrict access to this solution library to users with the specified role. An empty row indicates no role limitation is attached to this solution library.

## ***Agent Location***

**Location Code** Enter a location code to restrict access to this solution library to agents associated with the specified location. An empty row indicates no agent location limitation is attached to this solution library.

An agent's location is specified on the job tab of the worker component. If the agent has more than one job, then all jobs will be considered. A match on location for one job is sufficient to satisfy the agent location condition.

## ***Employee Location***

**Location Code** Enter a location code to restrict access to this solution library to employees associated with the specified location. An empty row indicates no employee location limitation is attached to this solution library.

An employee's location is specified on the job tab of the worker component. If the employee has more than one job, then all jobs will be considered. A match on location for one job is sufficient to satisfy the employee location condition.

## ***Customer Region***

**Region ID** Enter a region ID to restrict access to this solution library to cases whose customers are associated with the specified region. The customer region is retrieved from the customer site address. If no region is specified for the customer site address, or there is no site associated with the case, the contact address region is used. If no contact address region is available, the customer address region is used. If there is no region available for the customer address, no region will be considered for the transaction

Note that address definitions may be created without an associated region: if you wish to implement solution security based on customer region, make sure the relevant customer addresses are associated with a region.

An empty row indicates no customer region limitation is attached to this solution library.

## ***See Also***

*PeopleSoft Enterprise CRM 9.1 Call Center Applications PeopleBook, "Configuring Self-Service Applications"*

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## Defining Record-Based Search Index Templates

Define search index templates for the PeopleSoft CRM search collection. Use the Search Index Template page to define record-based search index templates and identify record fields to include in the search collection.

The Search Index Template page displays the collection that the search index template is associated with and is used to establish search collections and parameters that are used to build them on the Search Settings page.

Select the fields to include in the collection as searchable fields. When you configure solution search groups, only these fields are available for field-level searching.

### **See Also**

*PeopleSoft Enterprise CRM 9.1 Automation and Configuration Tools PeopleBook*, "Setting Up Search Collections," Defining Record-Based Indexes

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## Setting Up Solution History Tracking

Use AAF to define which events are captured in a solution's history.

### **See Also**

*PeopleSoft Enterprise CRM 9.1 Automation and Configuration Tools PeopleBook*, "Working with Active Analytics Framework," Configuring Actions in Policies

*PeopleSoft Enterprise CRM 9.1 Automation and Configuration Tools PeopleBook*, "Working with Active Analytics Framework," Configuring Case History Actions

## Chapter 3

# Managing Solutions

This chapter provides an overview of solutions and discusses how to:

- Create solutions.
- Relate solutions automatically.
- Update solution usage counts and linkages.
- Merge similar solutions.

---

## Understanding Solutions

Solutions are resolutions to problems. A well-established set of predefined solutions for common problems helps resolve customer problems quickly and efficiently.

This section discusses:

- Solution creation.
- Solution deactivation.
- Solution use in PeopleSoft CRM applications.
- Solution usage counts and linkages.

## Solution Creation

Solutions can be created manually or by merging solutions. You can create solutions:

- When a user creates a new text resolution for a case.

Within PeopleSoft call center applications and PeopleSoft Integrated FieldService users can use solutions to explain how problems were resolved for cases and service orders. When this occurs, the system uses the text to create a new solution of type *Adhoc*. Using PeopleSoft ERMS (email response management system) users can also attach solutions to emails in a way that's similar to the method users would use to attach solutions to cases and service orders. In quality management, users can search and associate solutions to defects.

- When a self-service user closes a call center case using a predefined reason.

If you do not associate solutions with the case closure reasons that you create, then the first time a self-service user closes a case using one of the predefined reasons, the system uses the reason description to create a new solution of type of *Canned*. The system associates this solution with the reason.

The only way to edit a solution is through the Solution component.

### **See Also**

*PeopleSoft Enterprise CRM 9.1 Call Center Applications PeopleBook*, "Configuring Self-Service Applications," Associating Solutions with Reasons for Closing Cases

## **Solution Deactivation**

Over time, even a well-managed solution set can end up with similar or duplicate solutions.

You deactivate a solution by giving it an expiration date. When you run the Update Solution Usage Counts process, the system sets the solution status to *Expired* in all solutions with dates passed the expiration dates.

You can associate an expired solution with a replacement solution. This is useful for solutions that explain a problem or suggest a temporary fix without resolving the problem. When a true solution becomes available, you can give the temporary solution an expiration date and cross-reference the new solution.

The ability to give a solution an expiration date is particularly important in call center applications. This is because there may be cases associated with a solution, and deleting or modifying the original solution compromises the data integrity. (Expired solutions that are associated with cases are still accessible from those cases, but they are no longer found by the solution search process.)

When you merge solutions, you create a master solution that supersedes one or more similar solutions. The status of the superseded solutions changes to *Superseded*, and the superseded solutions cross-reference the new master solution.

## **Solution Use in PeopleSoft CRM Applications**

Solutions can apply to problems tracked through service orders, call center cases, defects and resolutions, and email. Field service technicians and call center agents use solutions differently.

### ***Using Solutions in PeopleSoft Integrated FieldService***

PeopleSoft Integrated FieldService users may view existing solutions from service orders and add new ones as they resolve problems. PeopleSoft Integrated FieldService tracks which solutions are used for specific service orders. Field service technicians can both view solutions and enter new ones.

### ***Using Solutions in PeopleSoft Call Center Applications***

PeopleSoft Support, PeopleSoft HelpDesk, PeopleSoft HelpDesk for Human Resources, and Service Center for Higher Education users can relate solutions to cases.

PeopleSoft call center applications track not only the final solution to a case, but also failed solutions and other solutions considered. By tracking solution usage, you capture valuable information about your solution set.

Call center applications track solution usage by associating solutions to cases and using the solution Status field to indicate whether the solution solved the case. The interface is different in the agent-facing case page and the self-service case page, but the underlying data structures are the same for all users.

### ***Using Solutions in Quality Management***

Quality management enable you to track both the final solution (the one that resolved the caller's problem) and other solutions that were considered. By tracking all solution usage, you capture valuable information about the effectiveness of your solution set.

### ***Using Solutions***

Both field service technicians and call center users (agents and self-service users) can search for solutions using the Solutions page. Solutions for cases, service orders, and email provides search functionality, including the ability to associate a solution with the case, service order or email from which the search originated.

When you use Solutions page to search for solutions, search results are ranked by relevance. Relevance scores range from 1 to 100, with 100 representing the highest relevance.

A solution's relevance score is calculated based on how well the search criteria match the solution. The search index template for solutions determines which fields are searched to determine if there is a match.

Call center agents have additional ways of finding solutions for a case. They can or access the Solutions page and:

- Search the solutions on the Frequently Used Solutions page by product, by error code, or by category, type, and detail.
- Search for solutions on the FAQ (frequently asked questions) page.

### ***See Also***

*PeopleSoft Enterprise CRM 9.1 Automation and Configuration Tools PeopleBook*, "Setting Up Search Collections"

*PeopleSoft Enterprise Integrated FieldService 9.1 PeopleBook*, "Working with My Service Orders"

[Chapter 4, "Using Solutions," page 41](#)

*PeopleSoft Enterprise CRM 9.1 Call Center Applications PeopleBook*, "Managing Cases"

## **Solution Usage Counts and Linkages**

Because PeopleSoft call center and field service applications enable you to track the application of a solution to cases and service orders, the system can track resolution-related metrics for each solution.

This table describes the resolution metrics that are tracked:

| <b>Number</b>                       | <b>Description</b>  |
|-------------------------------------|---|
| Solved count                        | <p>Indicates how many cases or service orders the solution has resolved.</p> <p>This number is informational only; Solution Advisor displays this number to help you determine a solution's potential.</p> <p>This number increases by one every time that you set a solution status to <i>Successful Resolution</i>. The number decreases by one if you change the status of a solution formerly designated as successful.</p>   |
| Usage count                         | <p>Indicates how many cases or service orders that the solution has been associated with, regardless of whether the solution was successful.</p> <p>This number is a minor factor in determining the relevance score when you use Solution Advisor to search for solutions.</p> <p>This number increases by one every time that you associate the solution with a case or service order. The number decreases by one if you change the solution status to <i>Withdrawn</i>.</p> |
| Usage count by product              | <p>Indicates how many times the solution resolved cases or service orders for the products that are associated with the solution (these products are listed on the Related Actions page in the Solution component).</p> <p>This number is used to determine which solutions appear on the Frequently Used Solutions page.</p>   |
| Usage count by error                | <p>Works like usage count by product, but is based on the error message recorded for a case rather than on the product recorded for a case. This usage count pertains to the Frequently Used Solutions page and is used the same way that it is used for products.</p>  |
| Usage count by category/type/detail | <p>Works like usage count by product, but is based on the category, type, and details recorded for a case rather than on the product recorded for a case. This usage count pertains to the Frequently Used Solutions page and is used the same way that it is used for category, type, and details.</p>   |

The system normally maintains the solved count and the (overall) usage count by increasing and decreasing the values as you work with solutions. But you can reset the counts based using either a specified date range or all dates. To do this, run the Update Solution Usage Counts process. This process is also the only mechanism for updating the usage count by product, error, or category/type/detail.

---

## Creating Solutions

To define solutions, use the Solution (RC\_SOLUTION) component.

This section discusses how to:

- Define solutions.
- Track notes and attachments.

- Identify solution libraries.
- Manage relationships with cases, products, errors, and other solutions.
- Manage relationships with service orders, products and other solutions.
- Relate solutions.
- View solution history.

## Pages Used to Create Solutions

| <i>Page Name</i>           | <i>Definition Name</i> | <i>Navigation</i>  | <i>Usage</i>  |
|----------------------------|------------------------|--|---|
| Solution                   | RC_SOLN_DETAILS        | Solutions, Search Solutions, Solution  | Create and deactivate solutions.  |
| Solution - Notes           | RC_SOLN_NOTES          | Solutions, Search Solutions, Notes   | Add notes or attachments.   |
| Solution - Libraries       | RC_SOLN_LIBRARY        | Solutions, Search Solutions, Libraries   | Identify libraries to which the solution belongs. When users search for solutions using Solution Advisor, they can choose which libraries to search.  |
| Solution - Related Actions | RC_SOLN_SIMILAR        | Solutions, Search Solutions, Related Actions                                   | Review the solutions, cases, products, and errors, and category/type/detail, service orders, and business projects that are related to this solution, and create relationships with other solutions and products. |
| Relate Existing Solution   | RC_SOLREL_TYPE_SEC     | Click the Relate an Existing Solution button on the Case Related Actions page. | Identify a related solution and the relationship type.<br><b>Note.</b> This page is used for the both the case and service order related actions.   |
| Solution - History         | RC_SOLN_HISTORY        | Solutions, Search Solutions, History   | Review a history of important events in the life of the solution.   |
| Solution Summary           | RC_SOLN_SUMMARY        | Click the Summary link on the Solution page.                                   | View solution summary information for the current solution.   |

## Defining Solutions

Access the Solution page (Solutions, Search Solutions, Solution).

### Solution

|  |                       |
|--|-----------------------|
| <b>Solution ID</b> 301608                                  | <b>Usage Count</b> 0  |
| <b>Summary</b> Admission Instructions for Graduate Prog... | <b>Solved Count</b> 0 |

#### Details

|  |  |
|--|--|
| <b>*Type</b> <input type="text" value="Standard"/>     | <a href="#">Preview Solution</a>                       |
| <b>*Status</b> <input type="text" value="4 - Active"/> | <b>*Visibility</b> <input type="text" value="All"/>    |
| <b>Superseded By</b> <input type="text"/>              | <b>Expired or Superseded Date</b> <input type="text"/> |

Solution page (1 of 2)

**Description**

**\*Summary** Admission Instructions for Graduate Programs

**Keywords** Admission Graduate

**Symptoms**

**Template**  [Advanced Search](#) [Preview Template](#) [Apply Template](#)

**Details**

**Graduate Admission Instructions**

Each graduate program has different admission requirements and instructions, which you will access by clicking below on the school you wish to apply to. (In order to take courses as a non-degree student or a student-at-large, you must apply to the college you're interested in.)

[Graduate College of Liberal Arts](#)  
[Graduate College of Law](#)  
[Graduate College of Communications](#)

**For More Information**

Contact a Carpe Diem Admission representative to receive more information or to schedule a campus visit.

[Audit History](#)

Solution page (2 of 2)

**Note.** If you change the solution's type, you must rerun the Build Search Collection process to update the solution set. This provides users with accurate search results when trying to locate solutions to problems.

**Solved Count and Usage Count** Displays the number of cases that the solution is associated with and the number of cases that the solution successfully resolved. These numbers are updated when you run the Update Solution Usage Counts process.

**Type** Normally, select either *Standard* or *Workaround*.

Solutions created when agents enter an independent text resolution are given the type *Adhoc*. You can convert these to standard solutions by changing the type.

Solutions created when a agent or technician uses external content to resolve a case or service order are given a solution of type of *Link*. You can't manually create a solution of type of *Link*.

Solutions created when self-service users choose predefined case closure reasons are given the type of *Canned*.

**Preview Solution** Click to see a preview of the solution in a new browser window.

|                                   |  |
|-----------------------------------|--|
| <b>Status</b>                     | <p>Select from:</p> <p><i>Draft</i>: When a new adhoc solution is added to a case, the system creates a solution behind the scenes with a solution type of <i>Adhoc</i> and a solution status of <i>Draft</i>. Adhoc solutions, however, are not accessible through Solution Advisor.</p> <p><i>Submitted for Review</i>: When an agent clicks the Submit button on the Resolution Details page, the system changes the solution status from <i>Draft</i> to <i>Submitted for Review</i>.</p> <p><i>In Review</i>: Managers use this status to indicate that the adhoc solution is being reviewed for approval or denial.</p> <p><i>Active</i>: The solution is approved and available to agents.</p> <p><i>Denied</i>: The solution is denied for general use by agents.</p> <p><i>Expired</i>: The solution is no longer valid as of the expired or superseded date.</p> <p><i>Superseded</i>: The solution is no longer valid because another solution has replaced it.</p> |
| <b>Visibility</b>                 | <p>Select <i>All</i> if self-service users are allowed to view this solution. Select <i>Internal</i> to prevent self-service users from using this solution.</p> <hr/> <p><b>Note.</b> Users cannot search for internal solutions through PeopleSoft Self Service applications. If an internal solution is added to an agent facing case, however, it can be viewed from self service once it's added to the case.</p> <hr/> <p>See <i>PeopleSoft Enterprise CRM 9.1 Automation and Configuration Tools PeopleBook</i>, "Setting Up Search Collections."</p>   |
| <b>Path Detail</b>                | <p>The system displays this field when the type is File or Link. It includes a URL to the website or file where a solution resides.</p>  |
| <b>Superseded By</b>              | <p>When the solution status is <i>Superseded</i>, identify the replacement solution in this field.</p> <p>Selecting a replacement solution automatically sets the status to <i>Superseded</i>. Selecting a status other than <i>Superseded</i> clears the Superseded By field.</p> <p>When you merge solutions using the Merge Similar Solutions page, the system sets the status to Superseded and identifies the replacement solution automatically.</p>   |
| <b>Expired or Superseded Date</b> | <p>Enter the date the status was set to either <i>Expired</i> or <i>Superseded</i>.</p> <p>As delivered, the search index templates for solutions exclude solutions with an expired or superseded date after the collection build date. Therefore, these solutions are not accessible through Solution Advisor.</p>  |
| <b>Summary</b>                    | <p>Enter a short description of the solution.</p>  |
| <b>Keywords</b>                   | <p>Enter search keywords or a phrase for the solution.</p>   |
| <b>Symptoms</b>                   | <p>Enter a description of the problem that the solution addresses.</p>   |

|                       |   |
|-----------------------|---|
| <b>Template</b>       | Select a template package to be used for this solution.   |
| <b>Apply Template</b> | Click this button to apply the template package specified in the Template field to the solution. More than one template package can be applied to a solution: each time a template package is selected and applied, it will appear at the top of the solution Details area. |
| <b>Details</b>        | Enter the full explanation of how to solve the problem.   |
| <b>See Also</b>       |   |
|                       | <a href="#">Chapter 2, "Setting Up Solution Management," page 7</a>   |

## Tracking Notes and Attachments

Access the Solution - Notes page (Solutions, Solution, Notes).

The Solution - Notes page uses the standard PeopleSoft CRM interface for working with notes and attachments.

Attachments are visible on solution summary pages based upon the value of the Attachment Visibility field for the note with which it is associated. If the value of the field is *Internal*, the attachments are only visible on agent-facing pages: if the value is *All*, the attachments are also visible in self-service pages.

Regardless of the value of the Attachment Visibility field, solution notes themselves are never visible in self-service pages.

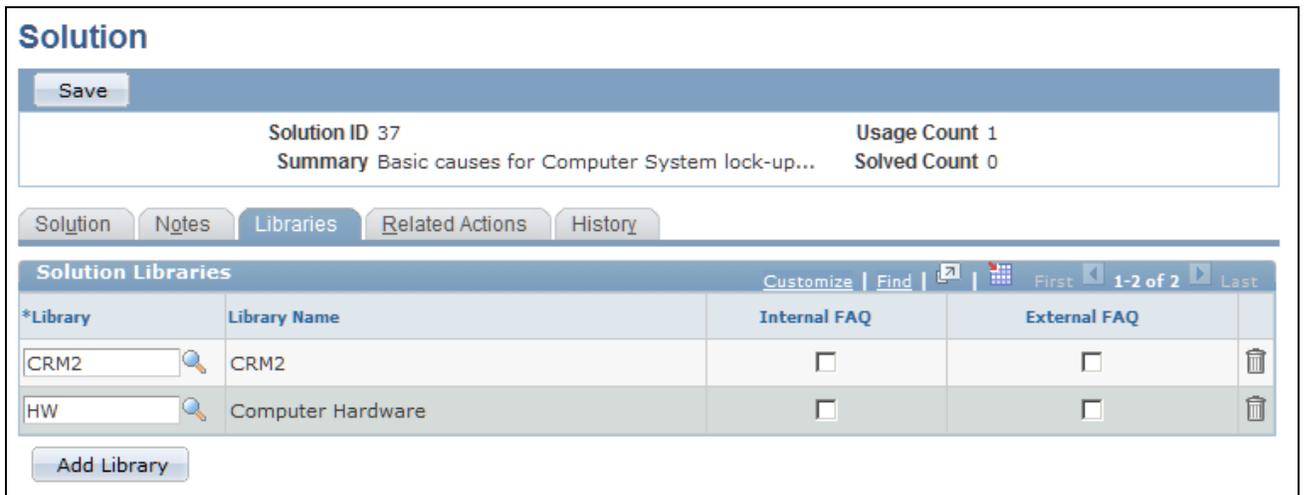
You would normally want attachments to have a visibility of *All* if they are files that a caller uses when applying the solution: for example, DLL files or BAT files that fix software problems.

### See Also

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

## Identifying Solution Libraries

Access the Solution - Libraries page (Solutions, Search Solutions, Libraries).



Solution - Libraries page

Libraries are only applicable to call center applications.

**Library** Select a library to which you wish to associate this solution

**Internal FAQ** Select this check box to make this solution available to agents searching Frequently Asked Questions on cases.

**External FAQ** Select this check box to make this solution available to external customers using the self-service Frequently Asked Questions page.

**See Also**

*PeopleSoft Enterprise CRM 9.1 Call Center Applications PeopleBook, "Configuring Self-Service Applications"*

*PeopleSoft Enterprise CRM 9.1 Call Center Applications PeopleBook, "Working with Self-Service Application Transactions"*

## Managing Relationships with Cases, Products, Errors, Service Orders and Other Solutions

Access the Solution - Related Actions page (Solutions, Search Solutions, Related Actions).

The screenshot shows the 'Solution' page for Solution ID 301368. The page has a 'Save' button and displays the solution summary: 'How do I apply for graduate school?'. It also shows 'Usage Count 0' and 'Solved Count 0'. Below this are tabs for 'Solution', 'Notes', 'Libraries', 'Related Actions', and 'History'. Under the 'Related Actions' tab, there are links for 'Solutions', 'Cases', 'Products', 'Errors', 'Category/Type', 'Service Orders', and 'Business Projects'. A 'Related Solutions' table is displayed with columns for 'Relationship Type', 'Solution ID', 'Solution Summary', 'Link Source', and 'Datetime Added'. The table contains one entry: a 'Similar' relationship with Solution ID '301608', Summary 'Admission Instructions for Graduate Programs', Link Source 'MAN', and Datetime Added '09/02/2009 2:32PM'. A 'Relate an Existing Solution' button is located below the table.

Solution - Related Actions page

Click the links below the tab to see different types of related actions in the grid.

### Solutions

This grid lists all solutions that are related to the current solution. You can relate solutions manually or create solution relationships by running the Related Solution process.

Click the Relate an Existing Solution button to access the Relate Existing Solutions page. Use this page to establish a relationship between the currently displayed solution and an existing solution.

This information appears for each related solution:

- The relationship type.
- The solution ID and summary.  
Click the solution ID to view the solution summary.
- The link source: MAN (manually created) or SYS (system-created).
- The date and time the relationship was created.

---

**Note.** You cannot relate an existing solution to an adhoc solution.

---

### Issues

Case relationships, or issues, are relevant only for call center applications. When you resolve a case, the system adds the newly resolved case to the solution's list of related cases.

This grid lists all cases to which the solution has been applied, regardless of whether the solution solved the case. The system maintains the list of related cases in real-time.

This information appears for each related case:

- The case ID and summary.  
Click the case ID to transfer to the case.
- A resolution status that indicates whether the solution resolved the case.

### **Products**

This grid lists all products for cases that the solution successfully resolved. You can relate products manually or use the Update Solution Usage Counts process to create additional relationships automatically.

This information appears for each related product:

- The product ID and description.
- A solved count that indicates the number of cases with this product that the solution resolved.
- The link source: MAN (manually created) or SYS (system-created).
- The date and time the relationship was created.

### **Errors**

Errors are relevant only to call center applications. This grid lists all errors for cases that the solution successfully resolved. You cannot add rows of data manually; you must use the Update Solution Usage Counts process to create additional relationships.

This information appears for each related error:

- The error ID and error message.
- A solved count that indicates the number of cases with this error that the solution resolved.
- The link source: MAN (manually created) or SYS (system-created).

Currently, you cannot create manual relationships.

### **Category/Type**

Categories, specialty types, and details are relevant only for call center applications. This grid lists all categories, types, and details for cases that the solution successfully resolved. You can change the specialty types and details listed for the category by selecting new values from the drop-down list boxes for the two fields.

This information appears for each related category/type/detail:

- The category, specialty type, and detail.
- A solved count that indicates the number of cases with this category/type/detail combination that the solution resolved.
- The link source: MAN (manually created) or SYS (system-created).

Currently, you cannot create manual relationships.

## Service Orders

Service order relationships are relevant only for PeopleSoft Integrated FieldService applications. When you complete a service order, the system adds the service order to the solution's list of related service orders.

## Business Projects

You can set up an AAF policy to launch a business project after a solution is saved for a case or service order. The business project is typically used to send notifications to solution managers or send worklist entries to specific employees. This grid lists all business projects associated with the solution.

This information appears for each business project that is related to the solution:

- The business project summary and status.

To access the Business Project Status page, click the View Details\Transfer icon for the Related Business Project.

- The date the business project was created and the person who created it

## See Also

[Chapter 3, "Managing Solutions," Relating Solutions Automatically, page 31](#)

[Chapter 3, "Managing Solutions," Updating Solution Usage Counts and Linkages, page 32](#)

[Chapter 4, "Using Solutions," Understanding Case, Service Order, and Defect Resolution, page 41](#)

## Relating Solutions

Access the Relate Existing Solution page (click the Relate an Existing Solution button on the Case Related Actions page).

Relate Existing Solution page

**Solution ID**                      Select the solution to relate to the current solution.

**Solution Relationship Type** Select from the values established on the Solution Relationship Type page.

**OK** Click this button to establish the relationship and return to the Solution - Related Actions page.

**See Also**

Chapter 2, "Setting Up Solution Management," Defining Solution Relationship Types, page 11

## Viewing Solution History

Access the Solution - History page (Solutions, Search Solutions, History).

**Solution**

Save Refresh Personalize

**Solution ID** 37 **Usage Count** 1  
**Summary** Basic causes for Computer System lock-up... **Solved Count** 0

Solution Notes Libraries Related Actions History

**Solution History** Customize Find View All First 1 of 1 Last

| Date              | Policy Name                | Action Taken   | Changed By |
|-------------------|----------------------------|--|------------|
| 06/24/2009 7:06AM | Solution Status is changed | Status of 37 has been changed from 4 - Active to 6 - Expired | Stu Marx   |

Solution - History page

**Policy Name** Displays the name of the policy that caused the history item to be logged. This information is usually recorded after the solution is saved.

---

**Note.** The components present in Active Analytics Framework (AAF) are used to build policies. The information that appears on this page is triggered after the solution is saved.

---

**Action Taken** Displays the name of the event. The description of the action comes from the description of the policy established in AAF.

**Changed By** The person who made the change that triggered the event.

**See Also**

*PeopleSoft Enterprise CRM 9.1 Automation and Configuration Tools PeopleBook*, "Working with Active Analytics Framework," Configuring Actions in Policies

## Relating Solutions Automatically

This section discusses how to create solution relationships automatically.

### Page Used to Relate Solutions Automatically

| Page Name                | Definition Name | Navigation  | Usage   |
|--------------------------|-----------------|---|---|
| Update Related Solutions | RC_REL_SOL_RUN  | Solutions, Update Related Solutions, Update Related Solutions | Run the Related Solutions (RC_RELA_SOL) process, which loops through every solution in the system. For each iteration of the search, the system creates relationships of type <i>Similar</i> between the base solution and similar solutions. |

### Creating Solution Relationships

Access the Update Related Solutions page (Solutions, Update Related Solutions, Update Related Solutions).

**Update Related Solutions**

Run Control ID: SOL\_UPD\_304 [Report Manager](#) [Process Monitor](#)

**Update Solution Attributes**

Score

Rows to return

Effective Dates:  All  From   Through  (Example: 12/31/2000)

Update Related Solutions page

The RC\_RELA\_SOL application engine process runs verity search against the summary of all solutions (specified by in the Effective Dates field) that are included in the process. For each matching solution that returns, this similar solution is linked to the base solution as related solution.

Adhoc solutions are excluded from this process.

- Score** Enter a score. When the system searches for similar solutions, solutions with a relevance score at or above the level that you specify here are considered a match.
  
- Rows to return** Enter the maximum number of solutions returned by the search process, and therefore the maximum number of solutions that will be related to the base solution.
  
- Effective Dates** Select *All* to include all solutions in the process.  
 Select *From* and *Through Dates* to enter from and through dates to limit search results to solutions created during the specified date range.

**See Also**

*Enterprise PeopleTools 8.50 PeopleBook: Using PeopleSoft Applications*

*Enterprise PeopleTools 8.50 PeopleBook: PeopleSoft Process Scheduler*

## Updating Solution Usage Counts and Linkages

Update usage counts using the Update Solution Usage Counts process.

### Page Used to Update Solution Usage Counts and Linkages

| <i>Page Name</i>             | <i>Definition Name</i> | <i>Navigation</i>   | <i>Usage</i>  |
|------------------------------|------------------------|---|---|
| Update Solution Usage Counts | RC_SOLN_RUN_CNTL       | Solutions, Update Solution Usage Counts, Update Solution Usage Counts | Run the RC_SOLN_USAG Application Engine process, which updates the solved count, usage count, and usage count by product for all solutions in the database. |

### Updating Usage Counts

Access the Update Solution Usage Counts page (Solutions, Update Solution Usage Counts, Update Solution Usage Counts).

## Update Solution Usage Counts

Run Control ID: UPD\_SOL\_003 [Report Manager](#) [Process Monitor](#)

**Update Solution Attributes**

Solution Usage Counts:  Solution Usage Counts  Update Product Search Table

Solution Usage by Product

Solution Usage by Error

Update Solution Usage by C/T/D

Create Solution Linkages:  Link Solution Products

Solution Error Link

Solution Cat/Typ/Det Link

Effective Dates:  All

From  Through  (Example: 12/31/2000)

Update Solution Usage Counts page

Running this process updates the usage counts that you select. It also updates the solution status to *Expired* for solutions that have had an expiration date in the past.

### ***Solution Usage Counts***

**Solution Usage Counts** Select to update usage counts and the solved counts.

**Solution Usage by Product** Select to update solution counts by product. The process does not affect existing product relationships where the link source is MAN.

**Solution Usage by Error** Select to update solution counts by error message. The process does not affect existing error relationships where the link source is MAN.

**Update Solution Usage by C/T/D** (update solution usage count by category/type/detail) Select to update solution counts by category, specialty type, and detail.

### ***Create Solution Linkages***

**Link Solution Products** Select to update the related products list for all solutions. The system creates relationships between cases and the products in the cases that the solution solved. It also creates relationships between service orders and the products in the service orders that the solution solved.

**Solution Error Link** Select to update the related errors list for all solutions. The system creates relationships between cases and the errors in the cases that the solution solved.

**Solution Cat/Typ/Det Link** (solution category/type/detail link) Select to update the related categories, types, and details lists for all solutions. The system creates relationships between cases and the category/type/details combination in the cases that the solution solved.  
Category/type/details counts are based on unique combinations of all three fields.

**Effected Dates**

These fields affect solution usage counts, not solution linkages.

**All** Select to count every use of the solution.

**From and Through** Select to count solution usage during a particular date range. If you select this option, specify the date range.

**See Also**

*Enterprise PeopleTools 8.50 PeopleBook: Using PeopleSoft Applications*

*Enterprise PeopleTools 8.50 PeopleBook: PeopleSoft Process Scheduler*

## Merging Similar Solutions

This section discusses how to:

- Search for similar solutions.
- Select solutions to merge.
- Perform the merge.
- Search for solutions.

## Pages Used to Merge Similar Solutions

| <i>Page Name</i>        | <i>Definition Name</i> | <i>Navigation</i>   | <i>Usage</i>  |
|-------------------------|------------------------|---|---|
| Merge Similar Solutions | RC_FIND_SIMLR_SOLN     | Solutions, Merge Similar Solutions, Merge Similar Solutions | Search for solutions similar to a solution that you identify. |

| <b>Page Name</b>                                 | <b>Definition Name</b> | <b>Navigation</b>   | <b>Usage</b>  |
|--|------------------------|---|---|
| Merge Similar Solutions - Search Results         | RC_FIND_SSOLN_RSLT     | Click the Search Similar Solutions button on the Merge Similar Solutions page.                                    | Review search results and select solutions to merge.                    |
| Merge Similar Solutions - Select Master Solution | RC_FND_SELECTMASTR     | Click the Merge Solutions button on the Merge Similar Solutions - Search Results page.                            | Select a solution to use as the master solution and complete the merge. |
| Solutions Search                                 | RB_SOLUTION_SEARCH     | Solutions, Keyword Solutions Search, Keyword Solutions Search, then click Advanced Search and More Search Options | Search for solutions based on the content of an existing solution.      |

## Searching for Similar Solutions

Access the Merge Similar Solutions page (Solutions, Merge Similar Solutions, Merge Similar Solutions).

Merge Similar Solutions page

- SetID** Select the setID of the solutions to be merged.
- Solution ID** Select the solution that you want to use to search for similar solutions.
- Include Solution Description** Select to search for similar solutions based on the description of the solution that you've identified. The system searches all the fields in the search collection.
- Include Symptoms** Select to search for similar solutions based on the symptoms that you entered in the Solution Summary page for the solution that you've identified. The system searches all the fields in the search collection.
- Search Similar Solutions** Click to initiate the search for similar solutions. Results appear on the Merge Similar Solutions - Search Results page.

**See Also**

*PeopleSoft Enterprise CRM 9.1 Automation and Configuration Tools PeopleBook, "Knowledge Management"*

**Selecting Solutions to Merge**

Access the Merge Similar Solutions - Search Results page (click the Search Similar Solutions button on the Merge Similar Solutions page).

**Merge Similar Solutions**

**Search Results**

SetID CRM02      Solution ID 41

Customize | Find | View All | First 1-10 of 50 Last

| Select                   | Score | Solution ID | Summary  | Added By | Date Added        |
|--------------------------|-------|-------------|--|----------|-------------------|
| <input type="checkbox"/> | 85%   | 41          | <a href="#">Fixing computer is low on disk space resources</a>                                   |          | 04/03/2001 9:33AM |
| <input type="checkbox"/> | 60%   | 68          | <a href="#">Steps to fix hard disk drive problems related to ITN Notebooks</a>                   |          | 04/03/2001 9:33AM |
| <input type="checkbox"/> | 55%   | 38          | <a href="#">Fixing problems related to Computer hangs while running a program</a>                |          | 04/03/2001 9:33AM |
| <input type="checkbox"/> | 55%   | 40          | <a href="#">Fixing problem relating to Computer hanging while playing a game</a>                 |          | 04/03/2001 9:33AM |
| <input type="checkbox"/> | 50%   | 43          | <a href="#">Fixing Display Settings on Personal Computers</a>                                    |          | 04/03/2001 9:33AM |
| <input type="checkbox"/> | 47%   | 36          | <a href="#">Upgrading Windows 98 or Windows 95 to Windows 2000 on Personal Computer</a>          |          | 04/03/2001 9:33AM |
| <input type="checkbox"/> | 43%   | 37          | <a href="#">Basic causes for Computer System lock-ups, hangs or freezes</a>                      |          | 04/03/2001 9:33AM |
| <input type="checkbox"/> | 42%   | 69          | <a href="#">Fixing ITN Notebook shutdown problems for Windows NT 4.0</a>                         |          | 04/03/2001 9:33AM |
| <input type="checkbox"/> | 38%   | 58          | <a href="#">Procedure for when the Monitor display is blank or unreadable when Windows start</a> |          | 04/03/2001 9:33AM |
| <input type="checkbox"/> | 37%   | 84          | <a href="#">Fixing Remote Scanning Failure for ITN Scanners</a>                                  |          | 04/03/2001 9:33AM |

[Check All / Clear All](#)

Merge Similar Solutions - Search Results page

**Select**                      Select to identify the solutions to merge. Use the Select All and Clear All links as data entry shortcuts.

**Score**                        Displays the relevance score calculated by Verity, which indicates how closely the solution matches the solution that you started with.

**Merge Solutions**            After you've selected the solutions to be merged, click to continue the merging process. The selected solutions appear on the Merge Similar Solutions - Select Master Solution page, where you can select one solution as the master solution and complete the merge.

**Return to Search** Click to return to the Merge Similar Solutions page.

## Performing the Merge

Access the Merge Similar Solutions - Select Master Solution page (click the Merge Solutions button on the Merge Similar Solutions - Search Results page).

**Merge Similar Solutions**

---

**Select Master Solution**

| Solutions                           |       |             |   |          |                   |
|-------------------------------------|-------|-------------|---|----------|-------------------|
| Select                              | Score | Solution ID | Summary   | Added By | Date Added        |
| <input checked="" type="checkbox"/> | 55%   | 38          | <a href="#">Fixing problems related to Computer hangs while running a program</a> |          | 04/03/2001 9:33AM |
| <input type="checkbox"/>            | 55%   | 40          | <a href="#">Fixing problem relating to Computer hanging while playing a game</a>  |          | 04/03/2001 9:33AM |

[Return To Search](#)

Merge Similar Solutions - Select Master Solution page

The column headings on this page are identical to those on the Merge Similar Solutions - Search Results page.

Select one of the solutions listed before you click one of these page elements:

**Use Selected as Master** Click to merge the solutions using the selected solution as the master solution. Attachments and products associated with the expired solutions are added to the master solution.

**Create New Solution** Click to clone the selected solution and merge the solutions using the newly created solution as the master solution. Attachments and products associated with the expired solutions are added to the new master solution.

**Return to Search** Click to return to the Merge Similar Solutions page without merging solutions.

When you merge solutions, all solutions other than the new master solution (either the selected solution or its clone) expire as of the date that you perform the merge. Each expired solution identifies the new master as the superseding solution, including the selected solution, if you cloned it to create the new master.

## Searching for Solutions

Access the Solutions Search page (Solutions, Keyword Solutions Search, Keyword Solutions Search, then click Advanced Search and More Search Options).

### Keyword Solution Search

Search Criteria

**With all the Words**   
**With the Exact Phrase**   
**With any of the Words**   
**Without the Words**

---

**Use Word Variations**   
**Rows to Display**

[Basic Search](#)    [Search Tips](#)    [Preferences](#)  
[Hide Search Options](#)

---

Search Domains

**Solution with Products**

Fields

|  |   |  |
|--|---|--|
| <input checked="" type="checkbox"/> Datetime Added       | <input checked="" type="checkbox"/> Added By    | <input checked="" type="checkbox"/> Last Modified    |
| <input checked="" type="checkbox"/> Last Maintained By   | <input checked="" type="checkbox"/> SetID       | <input checked="" type="checkbox"/> Solution Status  |
| <input checked="" type="checkbox"/> Solution Description | <input checked="" type="checkbox"/> Solution ID | <input checked="" type="checkbox"/> Solution Summary |

---

**Rows to Display**

[Basic Search](#)    [Search Tips](#)    [Preferences](#)  
[Hide Search Options](#)

Solutions Search page (1 of 2)

| Search Results |             |              |  |
|----------------|-------------|--------------|--|
| Score          | Solution ID | Content Type | Summary  |
| 94.00%         | 301120      | Solutions    | <a href="#">How to Map a Network Printer</a><br>In the Start Menu go to Start>Settings>Printers Double click the Add Printer button to launch the Add Printer Wizard. Selec... |
| 87.00%         | 75          | Solutions    | <a href="#">Map Network Printer</a><br>Map the network Printer   |

Solutions Search page (2 of 2)

### Search Criteria

Use the fields in this group box to enter information about the solution for which you are searching.

**Note.** For information on the way that the system uses the various fields in this section for solution searching, click the Search Tips link. To display the page to match your personal preference, click the Preferences link.

**Use Word Variations**    Select either *Alternate spellings* or *Include Synonyms* to indicate to the system that you want it to also look for solutions based on different spellings or words that are similar to the ones that you entered.

**Rows to Display**            Select the number of rows that you want the system to display after you click Search.

**More Search Options**       Click this link to display a list of check boxes that you can select to search by date and time added, last maintained by, solution description, added by, setID, solution ID, last modified, solution status, and solution summary.

### ***Search Domains***

Select the fields that you want the system to use to search for solutions. Before you click Search, however, you must enter the criteria by which you want the system search for the solution in the Search Criteria section at the top of the page.

For example, if you know the ID of the solution for which you were searching, you could enter it in one of the fields in the Search Criteria section and then select the Solution ID check box and click Search to locate the solution.

Or, if you know the date that the solution was last modified, you could enter the date in one of the Search Criteria fields, select the Last Modified check box and then click Search to find the solution.

### ***Search Results***

**Summary**                      Click the link under the summary field to view more details for the entry.



## Chapter 4

# Using Solutions

This chapter provides an overview of case, service order, and defect resolution and discusses how to find and attempt solutions.

---

**Note.** PeopleSoft's email response management system (ERMS) and many of its self-service applications also use solutions.

---

---

## Understanding Case, Service Order, and Defect Resolution

PeopleSoft Support, HelpDesk, HelpDesk for Human Resources, Service Center for Higher Education, Quality Management and Integrated FieldService applications enable you to track both the final solution (the one that resolved the caller's problem) and other solutions that were considered. By tracking all solution usage, you capture valuable information about the effectiveness of the solution set.

This section discusses:

- Resolved cases, service orders, and defects.
- Allowing multiple resolutions to resolve a case, service order, or defect.
- Attempted solutions.

---

**Note.** Currently, the style.lex file that comes with PeopleTools does not include special characters and it is not in the directory from which CRM copies style files. The BAT file that CRM constructs has a command to copy style files from `<PS_HOME>\verity\winx86\common\style\`. However, since PeopleTools does not put the style.lex file in the same directory with other style files and the delivered style.lex file does not include special characters, users cannot search for solutions using special characters.

---

## Resolved Cases, Service Orders and Defects

Solutions describe the ways you might be able to resolve the caller's problem. A solution can succeed or fail. When a solution resolves a case, service order, or defect, it is considered a resolution. Resolutions exist in the context of a case, service order, defect, or email only.

A resolved case is a case that's associated with a successful solution. A resolved case is not necessarily a closed case; the case status is independent of the solution status. You can use the Case Defaults page to set up a default status for resolved cases. If a default status exists, the system changes the status when you resolve the case.

---

**Note.** If no default exists, an agent must update the status manually. You can, however, close a case without a successful solution. You can do this if you have a solvable action that is related on the case; so a successful resolution isn't the only way to close a case.

---

On a service order the field service technician can record repair actions they have attempted and identify the actions that were successful. The system feeds the successful actions data to the solution database, so that a technician's repair actions become available to other technicians. The result of these solutions when added to the solution database is that new, more efficient and effective solutions become available to the entire work force.

In PeopleSoft Quality Management, a technician can select a fix ID or search for and add a solution to indicate what they have done to resolve the customer's problem.

### **See Also**

*PeopleSoft Enterprise CRM 9.1 Call Center Applications PeopleBook*, "Defining Call Center Business Units and Display Template Options"

*PeopleSoft Enterprise Integrated FieldService 9.1 PeopleBook*, "Defining Business Units in PeopleSoft Integrated FieldService"

## **Allowing Multiple Resolutions to Resolve a Case, Service Order, or Defect**

You can use more than one solution to resolve a case, service order, or defect. If you use multiple solutions, more than one can have the solution status of successful.

To allow more than one successful resolution, you must configure it on the Business Unit setup pages for PeopleSoft Support, HelpDesk, HelpDesk for Human Resources, and Service Center for Higher Education. For PeopleSoft Integrated FieldService and Quality Management you do not need to configure the system to allow multiple resolutions.

Because you set up the system to close the case automatically when a solution is successful, PeopleSoft has made these modifications to this process:

- The automatic closing of the case on the solution status field is a save event.

This enables the user to change the status on more than one resolution before the case, service order, or defect is closed.

- The status field is editable even when the case is closed if the status is *In Consideration* or *Failed*, so the agent, technician, or manager can identify other solutions as successful.

The system makes any resolution with the status of *Successful* read only.

---

**Note.** This is only applicable when cases are configured to allow multiple resolutions; otherwise, the system makes all the statuses read only after the case is closed.

---

## **Attempted Solutions**

This section discusses:

- Attempted solution grids.
- Methods for finding solutions.
- Resolution statuses.
- Resolution process.
- Managing attempted solutions.

### Attempted Solution Grids

The Case page includes two grids, the Solutions grid and the Attempted Solutions grid. The Solutions grid is used to search for solutions and the Attempted Solutions grid includes solutions considered for the case.

**Case** 06/24/2009 7:48:13AM PDT My Time Zone

Save | Print | Spell Check | 360 360-Degree View | 360 360-Degree Search | >> Personalize

**Case ID** 220326 **Status** Open - New Case  
**Customer** Anonymous **Contact**  
**Summary** Getting errors when installing router dr... **Contact Method**  
**Open Cases** 1 **Customer Value** Gold ★★★★★

Case | Solution (2) | Summary | Notes (0) | Tasks (0) | Case History | Related Cases (0) | ▶

**Attempted Solutions** Customize | Find | 1-2 of 2

| Select                   | ID     | Description  | Date Modified               | Added By | *Resolution Status |
|--------------------------|--------|--|-----------------------------|----------|--------------------|
| <input type="checkbox"/> | 301266 | Router losing configuration during reboot<br>This solution explains what causes a router to appear to lose its configuration if it is r... | 06/24/2009<br>7:49:35AM PDT | Stu Marx | In Consideration   |
| <input type="checkbox"/> | 301236 | Troubleshooting tips for router hang<br>This solution helps troubleshoot a router that is not responding, the cause, and what shou...      | 06/24/2009<br>7:49:05AM PDT | Stu Marx | In Consideration   |

Check All / Clear All

Email View Solve

Solutions Considered for this Case grid

The Solutions page of the Quality Management component includes the Attempted Solutions grid that lists the solutions, solution IDs, date modified and status of all solutions that may resolve the defect or implement the enhancement.

### Methods for Finding Solutions

There are four ways to find and attempt potential solutions in the Solutions grid on the Solutions page for cases.

For service orders there are three ways to find and attempt potential solutions using the Solutions grid on the Solutions page.

For quality management there are two ways to find and attempt potential solutions using the Attempted Solutions grid on the Solutions page.

---

**Note.** When searching for solutions, expired solutions do not show up in search result.

---

This table describes the methods that are used to find and attempt solutions:

| <b>Page</b> | <b>Tab</b>  | <b>Description</b>  |
|-------------|---|---|
| Solution    | Search<br>Used for cases, service orders, and quality management. | <p>Enter text to search for solutions that might relate to the case and then click the Search button.</p> <p>In the search results, click the Select check box for the solutions that are most likely to resolve the problem and then click the Attempt or Solve button.</p> <p>Alternatively, from the search results you can click the desired solution's Description link to open the Resolution Details page for that solution, and then click the Attempt or Solve toolbar button on that page.</p> <p>The system adds the selected solutions into the Attempted Solutions grid. You can choose to use the basic, advanced, or more search options modes when searching for solutions.</p> |
| Solution    | FAQ<br>Used for cases only.                                       | <p>Select the library of frequently asked questions that are most likely to resolve the problem associated with the case.</p> <p>The system displays a list of solutions.</p> <p>Select a solution and then click the Attempt or Solve button.</p> <p>The system adds the selected solutions to the Attempted Solutions grid.</p>   |
| Solution    | Frequently Used Solution<br>Used for cases only.                  | <p>Select the type of solutions that are most likely to resolve the problem associated with the case.</p> <p>The system displays a list of solutions.</p> <p>Select a solution and then click the Attempt or Solve button.</p> <p>The system adds the selected solutions to the Attempted Solutions grid.</p>   |
| Solution    | Enter New Solution<br>Used for both cases and service orders.     | <p>Enter text that describes the solution that you used to resolve the problem.</p> <p>Click the Attempt or Solve button.</p> <p>The system adds the selected solutions into the Attempted Solutions grid.</p>  |

### **Resolution Statuses**

Each solution attempt is associated with one of these statuses:

- *In Consideration.*

You have not suggested this solution. The solution is in the list and is available when you're ready to try it.

- *Waiting on Customer.*

You have suggested this solution, but you don't know whether the solution worked.

- *Failed Resolution.*

The caller or technician attempted the solution, but the solution did not solve the problem.

- *Successful Resolution.*

The solution solved the problem.

---

**Note.** Successful statuses can be applied to multiple solutions based on the way the business unit is set up.

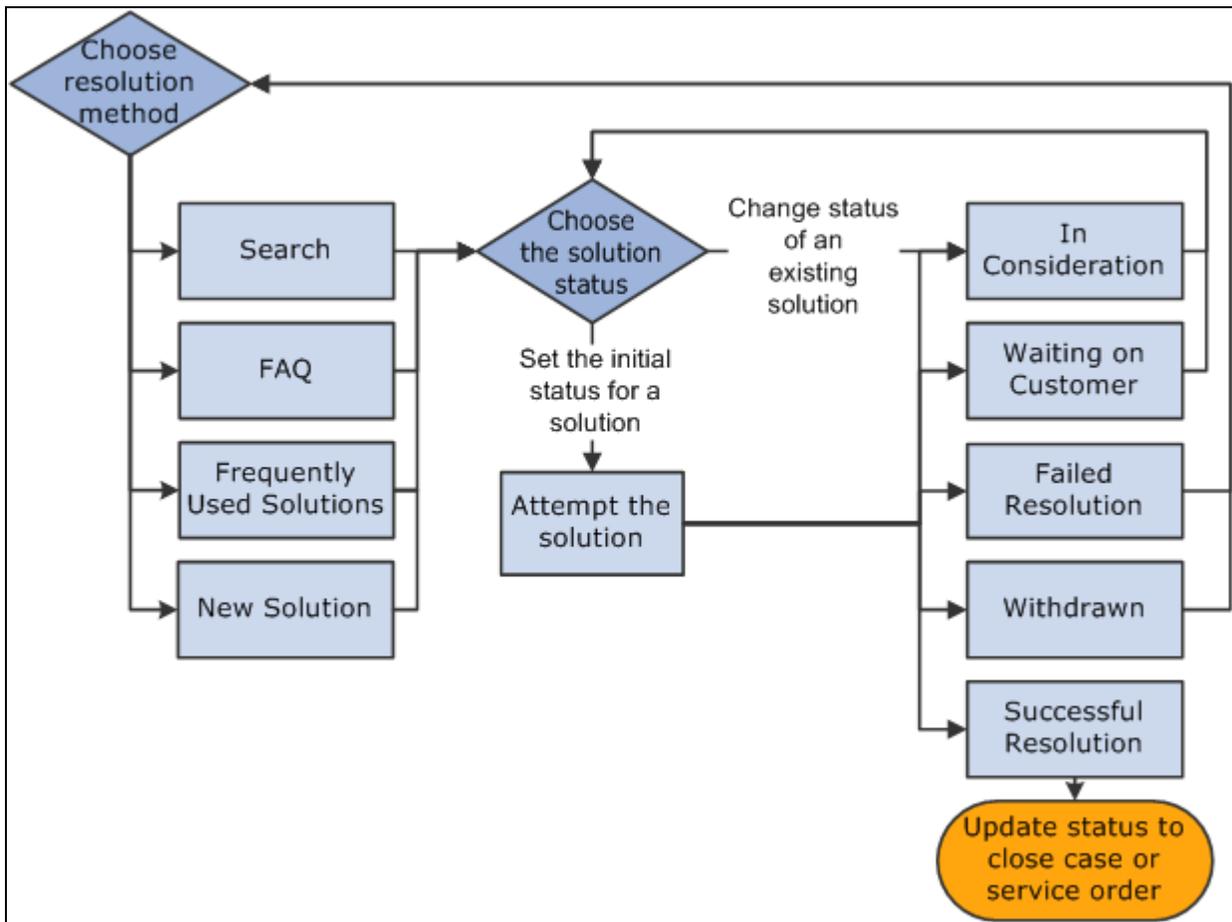
---

- *Withdrawn.*

The solution should not have been associated with the case, service order, or defect and is to be disregarded in all solution-related metrics. Selecting *Withdrawn* does not remove the solution entirely. It informs the system that it shouldn't have been there in the first place. *Withdrawn* solutions are ignored in solution usage statistics and are not visible through self-service.

### ***Resolution Process***

This graphic illustrates the resolution process for cases. For PeopleSoft Integrated FieldService and Quality Management successful resolutions do not change the status of the service order or the defect.



### Resolution process

There are other methods of attempting a solution from a page other than the Case or Service Order page. You can launch a troubleshooting guide (a type of script) directly from the solution search grid or the Related Actions page. Or, if the case is a child of another case, you can set up Active Analytics Framework (AAF) to cascade the successful resolution from the parent to the child. This is not applicable to service orders, however.

---

**Note.** You can use the Case Update Action in AAF to automatically resolve a case.

---

### ***Managing Attempted Solutions***

Once you've added solutions to the Attempted Solutions grid for the case, service order, or defect, you can initiate one or more of these actions:

- Update the solution status.
- View the solution details.

The Solutions grids show summary information about each solution. Click the summary text to display the Resolution Details page. On the Resolution Details page, you can see the full text of the solution, and you can add notes or attachments to the solution.

- Email the solution.

Often the most efficient way to communicate a solution to a caller, manager, or technician is to send an email with the solution text. If necessary, you can add attachments to the email. When sending an outbound notification for a solution, any attachments associated to the solution's notes will be made available to send as an attachment to the email,

- Solve the case by selecting one or more solutions; then click the Solve button. This changes the status to *Successful Resolution*. Or, you can change status on the attempted solution grid directly.

---

**Note.** Solve is not available for Service Orders and Quality Management.

---

- View the text of the solution by selecting one ore more solution and then click the View button.
- Click the Add a New Note button to the right of the solution description to add notes to the solution.

---

**Note.** PeopleSoft Quality users can view solution details only. They cannot update solution statuses. They also cannot add resolution notes or attachments from the Resolution Details page.

---

### **See Also**

*PeopleSoft Enterprise CRM 9.1 Call Center Applications PeopleBook*, "Processing Cases," Managing Related Actions

[Chapter 2. "Setting Up Solution Management," page 7](#)

[Chapter 3. "Managing Solutions," page 17](#)

*PeopleSoft Enterprise CRM 9.1 Automation and Configuration Tools PeopleBook*, "Working with Active Analytics Framework," Configuring Actions in Policies

---

## **Finding and Attempting Solutions**

This section provides an overview of solutions and discusses how to:

- Search for solutions.
- Use FAQs to search for solutions.
- Use frequently used solutions.
- Enter new solutions.
- Email solutions.
- Review details of attempted solutions.
- View external content solutions.
- Add resolution notes and attachments.

## Understanding Solutions

This section discusses:

- Solution library security.
- Solution advisor searches.
- FAQs.
- Frequently used solutions.
- New solution creation.
- Adhoc solutions.
- Customer notification.
- External content and Verity searching.
- How external content works.

### ***Solution Library Security***

When selecting solutions for a transaction, only solutions from authorized solution libraries (or solutions that are not associated with any library) will be available. Solution library security is defined on the Solution Library Security page.

The solution library security requirements vary by transaction, as shown in the following table.

| <b><i>Transaction</i></b>                                 | <b><i>Solution Library Security Factors Considered</i></b>        |
|---|---|
| Support Case  | User Role, Agent Location, and Customer Region                    |
| Self-Service Support Case                                 | User Role and Customer Region.                                    |
| HelpDesk and HR HelpDesk Case                             | User Role, Agent Location, and Employee Location                  |
| Self-Service HelpDesk and HR HelpDesk Case                | User Role and Employee Location.                                  |
| Service Order   | User Role and Customer Region                                     |
| Inbound Email   | User Role, Agent Location, and Customer Region                    |
| Defect  | User Role   |
| Service Center for Higher Education Case                  | User Role, Employee Location, Agent Location, and Customer Region |
| Self-Service Case for Service Center for Higher Education | User Role, Employee Location, and Customer Region                 |

## Solution Searches

The Solution page has three search modes: basic, advanced, and more search options:

- Basic Search

This is a Verity search that looks at all objects in the search collection. The system ranks the search results by percentage according to how close the match is. It contains these characteristics:

- Basic search is the default when the user selects the tab, unless the user has changed his preferences.
- The value in the Search field automatically changes to the problem summary value if it is not set yet. Click the Search button to launch a Verity search against all domains in the search collection. Domains can include solutions, cases, fixes, defects, troubleshooting guides, internet sites, intranet sites and file servers.

---

**Note.** Click the Search button to launch a Verity search against all the domains that are defined in the user's preferences. There is additional logic that the system uses to display the search text on the Case page. The system first tries to pull information from the quick code, then from the previous search (the saved search), and then the problem summary.

---

- When the system performs a search, the text is stored as a keyword so that the next time the user opens the page, the previously used search text is automatically entered.
- The system displays a message listing common or stop words that were not included in the search (examples are *the*, *a*, *and*, *or* and so on) above the search results, if they were set as a configuration option at the component level during implementation.

- **Advanced Search**

Includes a series of text boxes used to perform a natural language internet-type search. Advance search gives you the ability to perform these types of searches:

- **With all the Words:** Works like a logical AND. All of the words must be in the text for which you are searching. The system returns all the solutions where all the words are present irrespective of which fields they are in within the record. For example, if you entered *Error 3029 Vantive*, the system does not return solutions where the record only has either *Error* or *3029* or *Vantive*. The system returns solutions that have all three words in the record. Two words can be in the solution description, however, and one word can be in the product.
- **With the Exact Phrase:** The exact phrase must appear in the text for which you are searching.
- **With any of the Words:** Works like a logical OR. If any of the words in the search text appear, the system returns results.
- **Without the Words:** None of the search text entered can appear in the text for which you are searching.
- **Restrict by Product:** Enables you to restrict solutions by product. Although Restrict by Product appears in the list of solution fields in the advanced search, it is different from the other fields in the list because a solution can be related to many products, and therefore product is not a single searchable field in the Solution table.
- **Use Word Variations:** Select one of the options to expand the search using different spellings of words or synonyms.

---

**Note.** These are additional search options available, but they are delivered as hidden out of the box: *Words in a Sentence* and *Words in a Paragraph*. You can enable or disable these options through user preferences options.

---

See *PeopleSoft Enterprise CRM 9.1 Automation and Configuration Tools PeopleBook*, "Setting Up Search Collections," Configuring Search Options.

- **Rows to Display:** Controls the number of rows in the search results grid.

## **FAQs**

The FAQ tab displays a predefined list of solutions that the agent can choose from to resolve the case. If the FAQ check box is selected during implementation on the solution setup page, then the solution qualifies as an FAQ.

The Library field contains a list of libraries with associated solutions that have been identified as FAQ.

The results grid displays a list of the solutions that have been set up for the library selected. FAQs are sorted by the date and time that they were last modified on the solution so that the user sees the most up-to-date solutions first.

---

**Note.** This feature is only used for PeopleSoft call center applications (PeopleSoft HelpDesk, Support, and HelpDesk for Human Resources).

---

## **Frequently Used Solutions**

The Frequently Used Solution tab lists frequently used solutions by type: either *All*, *Category/Type/Detail*, *Error*, or *Product*.

Solutions are sorted based on their solved counts. For example, the solution that solved the most cases for the product on the current case would be first, and so on. This tab must be turned on when you are configuring the system during implementation.

Prior to using Frequently Used Solutions, you must first run the Update Solution Usage Counts process (RC\_SOLN\_USAG) and then update the search collection by running the Build Search Collection process (RB\_SRCH\_BLD). The relationships between solutions and products are not included in the Verity search collection until the Build Search Collection is run.

The Frequently Used Solution tab lists the solved count for each solution. Note that if solution counts have been updated for multiple types (such as *Category/Type/Detail* and *Product*), the solved count displayed on this tab when viewing Type = *All* will be a summation of the solved counts for each of the other individual types.

---

**Note.** This feature is only used in PeopleSoft call center applications (PeopleSoft HelpDesk, Support and HelpDesk for Human Resources, and verticals).

---

See *PeopleSoft Enterprise CRM 9.1 Automation and Configuration Tools PeopleBook*, "Setting Up Search Collections."

See [Chapter 3, "Managing Solutions," page 17.](#)

## **New Solution Creation**

If a user is unable to locate an existing solution, they can use the New Solution tab to enter a new solution (which will be created with a type of *Adhoc*). When the user enters a new solution and clicks the Attempt button, the system inserts the solution into the Attempted Solutions grid with the status of *In Consideration*. If they click the Solve button, the system inserts the solution in the grid with the status of *Successful*.

---

**Note.** The Attempt and Solve button are visible and applicable on all sections and tabs on the Solutions page, not just new solutions. This feature is not used in PeopleSoft Quality Management.

---

## **Adhoc Solutions**

When a new *Adhoc* solution is first created, the solution status is set to *Draft* on the Solutions Details page.

Changing the solution status from *Draft* to *Submitted for Review* indicates that the Solution is ready for manager review. PeopleSoft, however, does not deliver an AAF policy to take action or send notification when the solution status changes. You must configure an AAF policy to send a notification or create a business project to start the solution approval process if this type of notification is desired.

See *PeopleSoft Enterprise CRM 9.1 Automation and Configuration Tools PeopleBook*, "Working with Active Analytics Framework."

## Customer Notification

When a solution is in the status of *Waiting on Customer* you may want to send a notification to the customer. For example, an agent suggests two solutions on a an open case. One solution has the status of *In Consideration* and the other solution has the status of *Waiting on Customer*. When the agent saves the case, you could set up an AAF policy that sends a notification to the case contact with the solution details for the solution that is in the *Waiting on Customer* status.

To set up such a policy, use these parameters:

| <b>Parameter</b> | <b>Value</b>   |
|------------------|--|
| Term Name        | Case Resolution Status                               |
| Trigger Point    | After a Support Case is Saved                        |
| Condition        | Case Solution Status is equal to Waiting on Customer |
| Actions          | Notify case contact via email                        |

---

**Note.** You can use AAF policies to send multiple notifications to the case contact when the case has more than one solution with the status of *Waiting on Customer*.

---

## External Content and Verity Searching

Included in the Verity search options is external content searching using the intranet, internet, and file servers. The system includes external link matches in the Verity search results, if you have enabled it during your implementation.

When external content solutions appear in the search results grid, the description includes a link that opens the external content in a new window. If the external content is a file, it opens in the appropriate application. The user can turn external search on or off by selecting or clearing the external content domain on the Advanced Search - More Search Options page.

When a user selects multiple items from the search grid, it transfers the user to the Solution Detail page. If external content is selected, it displays as a link with a description. Users can navigate into the solution to see the details or click Attempt or Solve to solve the case, service order, or defect.

## How External Content Works

Whenever a technician or agent uses external content to resolve a service order or case, the system creates a solution type of *Link* or *File* in the background to represent it. The next time an external content search is used and the same content is found and used, the system checks to see whether a solution already exists for it and uses the existing solution by matching the URL or FILE path in summary.

Here's how it works:

1. Verity indexes HTTP files and documents (Word docs, text files, PDF files, and so on) in addition to regular solutions in the database.

For example you can index PeopleSoft Planet Intranet and do keyword searches on those files.

2. When you search on external content (HTTP or File) and then click an item in the results set, the system opens a new browser with the actual external content using the URL in your browser; so if you index something on the Planet PeopleSoft website, it opens the page on the website; or it will open the actual PDF or Word document.
3. When you attempt one of the solutions using external content, the system create a solution behind the scenes and then attempts the solution to the case.
4. When you attempt one of external content solutions, the system looks in the database to see if the external content has already been created as a solution.

It does this by comparing the URL of the external content to the existing solutions that were created from external content. If it has already been created, it uses the existing solution and attempts it. If it is the first time that user has attempted the external content solution and there is no existing solution for it, it creates a new solution and attempts it.

5. When you open an attempted solution that has external content on the attempted solutions grid, it opens the solution.

The system does not open the actual external content. This is different than step 2 where, if you click the external content solution from the search results grid, it opens the actual external content. In this case, it opens the solutions detail page and displays is a link with the URL. If you click the URL, the system opens the actual external content.

## Common Elements Used in This Section

|                |  |
|----------------|--|
| <b>Select</b>  | Select the check box next to the solution that you want to either attempt, use as a solution, or view and then click the appropriate button that corresponds to the action that you want to take.                                  |
| <b>Attempt</b> | Click this button to attempt the solution that you selected. The system adds the solution to the Attempted Solutions grid for the service order, case, or defect with the status of <i>In Consideration</i> .                      |
| <b>Solve</b>   | Click this button to use the solution that you selected to resolve the issue. The system adds the solution to the Attempted Solutions grid for the service order, case or defect with the status of <i>Successful Resolution</i> . |
| <b>View</b>    | Click this button to view the solution that you selected. The system displays the Resolution Details page.   |
| <b>Search</b>  | Click to search for solutions that match the search criteria or text that you entered.   |

## Pages Used to Find and Attempt Solutions

| <i>Page Name</i>        | <i>Definition Name</i>                              | <i>Navigation</i>  | <i>Usage</i>  |
|-------------------------|---|--|---|
| Solution                | RF_SO_SOLN<br>RC_CASE_SOLN<br>RQ_DEFECT_SOL_LNK2    | <ul style="list-style-type: none"> <li>Support, Add Case, Solutions</li> <li>HelpDesk, Add Case, Solutions</li> <li>FieldService, Add Service Order, Solutions</li> <li>Quality Management, Add Defect, Solutions</li> </ul> | Find and attempt solutions to resolve cases, service orders, and defects. |
| Outbound Notification   | RB_EM_OB_NOTIFY                                     | Select a solution from the Attempted Solutions grid and then click the Email button.   | Email solution information to customers or contacts.                      |
| Resolution Details      | RC_CASE_SOL_SUM<br>RF_SO_SOL_SUM<br>RQ_DFCT_SOL_SUM | Click a solution summary on the Case page, Service Order page, or Quality Management page.   | Review details of attempted solutions.                                    |
| Solutions               | RC_SOLN_SUMMARY                                     | Click a solution summary on the Case page, Service Order page, or Quality Management page for an external content solution of type link or file  | View resolution details.  |
| Case - Resolution Notes | RC_CASE_RSLN_NOTE                                   | Click the Add Resolution Note or Attachment button on the Solutions Detail page (in attempted solutions mode).   | Add notes and attachments that are associated with a resolution.          |

## Searching for Solutions

Access the Solution - Search page. (for support cases go to Support, Search Cases, Solution.) This example shows the page in Advanced Search mode with More Search Options enabled. Click the Advanced Search link on the Search tab, and then click the More Search Options link.)

**Case**
06/24/2009 10:13:01AM CDT My Time Zone

Save | Print | Spell Check | 360 360-Degree View | 360 360-Degree Search | >> Personalize

|  |  |
|--|--|
| <b>Case ID</b> New                             | <b>Status</b> Open - New Case              |
| <b>Customer</b> <a href="#">MD Engineering</a> | <b>Contact</b> <a href="#">Sujay Bandy</a> |
| <b>Summary</b> Network printer issue           | <b>Contact Method</b> 800/222-7000(334)    |
| <b>Open Cases</b> 1                            | <b>Customer Value</b> Gold ★★★★★           |

Case | **Solution (1)** | Summary | Notes (0) | Tasks (0) | Case History | Related Cases (0) |

**Attempted Solutions**
Customize | Find | | 1 of 1

| Select                   | ID | Description  | Date Modified                | Added By   | *Resolution Status |
|--------------------------|----|--|------------------------------|------------|--------------------|
| <input type="checkbox"/> | 77 | Install Printer Software<br><small>Install your printer software</small> | 06/24/2009<br>10:25:12AM CDT | Fred Dobbs | In Consideration   |

[Check All / Clear All](#)

Search | **FAQ** | Frequently Used Solutions | New Solution

**Search Criteria**

**With all the Words**

**With the Exact Phrase**

**With any of the Words**

**Without the Words**

---

**Restrict by Product**

**Use Word Variations**

**Rows to Display**

[Basic Search](#)
[Search Tips](#)
[Preferences](#)

[Create New Solution](#)
[Hide Search Options](#)

Solution - Search page (1 of 3)

**Search Domains**

**Solution with Products**

**Fields**

|  |  |  |
|--|--|--|
| <input checked="" type="checkbox"/> Solution Library | <input checked="" type="checkbox"/> Product list for searching | <input checked="" type="checkbox"/> Solution Description |
| <input checked="" type="checkbox"/> Solution ID      | <input checked="" type="checkbox"/> Solution Summary           | <input checked="" type="checkbox"/> Symptoms Description |

**Libraries**

|   |                                       |                                |
|---|---------------------------------------|--------------------------------|
| <input checked="" type="checkbox"/> CRM2              | <input type="checkbox"/> Financials 2 | <input type="checkbox"/> HRMS2 |
| <input checked="" type="checkbox"/> Computer Hardware |                                       |                                |

---

**Call Center Case**

**Fields**

|   |  |  |
|---|--|--|
| <input checked="" type="checkbox"/> Case ID | <input checked="" type="checkbox"/> Product ID         | <input checked="" type="checkbox"/> Problem Description        |
| <input checked="" type="checkbox"/> Summary | <input checked="" type="checkbox"/> Last Maintained By | <input checked="" type="checkbox"/> Site Identification Number |

---

**Rows to Display**

[Basic Search](#)
[Search Tips](#)
[Preferences](#)

[Create New Solution](#)
[Hide Search Options](#)

Solution - Search page (2 of 3)

**Your search returned 2 result(s).**

[Customize](#) | [Find](#) | [View All](#) | [Print](#) | [Grid](#) | [First](#) | [1-2 of 2](#) | [Last](#)

| Select                   | Score% | Type     | ID | Description  |
|--------------------------|--------|----------|----|--|
| <input type="checkbox"/> | 89     | Solution | 72 | <a href="#">Testing the Self-test verification for ITN Printers</a><br>1. Verify that the printer can print a self-test page (print a self-test page from the printer's control panel). 2. If the self-test page prints...<br><span style="float: right;"><a href="#">More like this...</a></span> |
| <input type="checkbox"/> | 87     | Solution | 75 | <a href="#">Map Network Printer</a><br>Map the network Printer<br><span style="float: right;"><a href="#">More like this...</a></span>   |

L

▶ **Audit History**

Solution - Search page (3 of 3)

### Attempted Solutions

This section displays the number of solutions that have been attempted.

Select the solution that you want to either attempt or that you have used to resolve the problem. To move the solution to the Attempted Solutions grid, either click the Attempt or Solve button. The system assigns it an appropriate status.

To email the solution to a customer, employee or agent, select the solution in the Attempted Solutions grid and click the Email button. The system displays the Outbound Notification page and the selected solution is prepopulated in the message area. Any attachments belonging to the solution's notes will be made available on the Outbound Notification page, where you may choose to add the attachment to the email by selecting the associated Include check box.

To view a solution, select it and then click the View button. The system displays the Resolution Details page. You can also click the solution description link to open the solution detail. From there you can attempt, solve, and add notes to the solution.



Click the Add a New Note button to access the Resolution Notes page. The button changes slightly based on whether a note exists for the resolution or not.

If there are no notes attached to the resolution, the system displays the Add a New Note button. If there are already notes attached to the resolution, the system displays the View Notes button. The Add a New Note button only shows up in the Attempted Solutions grid, not in the search results grid.

### ***Search Criteria***

The Search Criteria section is shown in the advanced search mode with the More Search Options link selected. In addition to the Advanced Search mode, you can access the Basic Search by clicking the Basic Search link. Information on using these search options is detailed in the Understanding Solutions section.

To narrow a search and improve performance, you can choose which of the available solution libraries to include in the search. Select the corresponding check box for each desired library to include it in the search. Conversely, deselect a library check box to exclude that library from the search. You can click the Preferences link to define and store which of your available libraries should be selected by default each time a case is opened.

## **Using FAQs to Search for Solutions**

Access the Solution - FAQ page. (for support cases go to Support, Search Cases, Solution. Select FAQ tab.)

**Case** 06/24/2009 7:52:06AM PDT My Time Zone

Save | Print | Spell Check | 360 360-Degree View | 360 360-Degree Search | >> Personalize

**Case ID** 220326 **Status** Open - New Case  
**Customer** Anonymous **Contact**  
**Summary** Getting errors when installing router dr... **Contact Method**  
**Open Cases** 1 **Customer Value** Gold ★★★★★

Case | Solution (0) | Summary | Notes (0) | Tasks (0) | Case History | Related Cases (0) | ▶

**Attempted Solutions**

There are no attempted solutions for this Case

Search | FAQ | Frequently Used Solutions | New Solution

**Frequently Asked Questions**

Library Router

Your search returned 10 result(s). Customize | Find | View All | First 1-10 of 10 Last

| Select                   | ID     | Description   |
|--------------------------|--------|---|
| <input type="checkbox"/> | 301269 | <a href="#">Buffer tuning for GBI routers</a><br>Buffer tuning allows you to modify the way a router allocates buffers from its available memory, and helps prevent packet drops during a temporary bur... <a href="#">More like this...</a>                          |
| <input type="checkbox"/> | 301267 | <a href="#">How can I determine the IP address and mask on the router?</a><br>Look for the IP address command under the Ethernet interface in your configuration. Here is an example of how to find the IP address: Router>enabl... <a href="#">More like this...</a> |

Solution - FAQ page

### Library

Select the library that you want to use to search for solutions. Once you find a solution, select it and use the Attempt, Solve, or View buttons to indicate the action that you want to take. To open the Resolution Details page, click the Summary link

## Using Frequently Used Solutions

Access the Solution - Frequently Used Solutions page (for support cases go to Support, Search Cases, Solution. Select Frequently Used Solutions tab.)

**Note.** Users can only search on active solutions. Solutions that are categorized as either canned or adhoc do not appear in searches on the Frequently Used Solutions page for both agents and self-service users.

**Case** 06/26/2009 5:44:26AM PDT My Time Zone

Save | Print | Spell Check | 360 360-Degree View | 360 360-Degree Search | >> Personalize

Case ID 1 Status Open - New Case  
 Customer Savannah Lee Contact Savannah Lee  
 Summary The Ice Maker is broken. Contact Method 642/467-8912(8129)  
 Open Cases 3 Customer Value Gold ★★★★★

Case Solution (1) Summary Notes (0) Tasks (0) Case History Related Cases (0)

**Attempted Solutions** Customize | Find | 1 of 1

| Select                   | ID | Description  | Date Modified               | Added By | *Resolution Status |
|--------------------------|----|--|-----------------------------|----------|--------------------|
| <input type="checkbox"/> | 22 | <a href="#">How to fix if the refrigerator runs too long?...</a><br>Before making a service appointment, answer these questions: ... | 04/11/2001<br>3:28:32PM PDT |          | In Consideration   |

Check All / Clear All

L Email View Solve

Search FAQ Frequently Used Solutions New Solution

**Frequently Used Solutions**

Type All

Solution - Frequently Used Solutions page (1 of 2)

Your search returned 1 result(s). Customize | Find | View All | First 1 of 1 Last

| Select                   | Solved Count | ID | Description  |
|--------------------------|--------------|----|--|
| <input type="checkbox"/> | 2            | 16 | Steps to remove frost build-up on the inside of the refrigerator.<br>If you have a manual defrost unit, frost build-up is normal in humid weather. Simply defrost the unit during humid months and limit usage.<br><a href="#">More like this...</a> |

L Attempt Solve View

Save Case Escalate Case Match Cases

Audit History

Solution - Frequently Used Solutions page (2 of 2)

**Type** Select the type of solution that you want the system to use for the search. Once you find a solution, select it and then click the Attempt, Solve, or View button to indicate the action that you want to take. To open the Resolution Details page, click the Summary link.

## Entering New Solutions

Access the Solutions - New Solution page (for support cases go to Support, Search Cases, Solution. Select New Solutions tab).

The screenshot shows the 'Case' page with the following details:

- Case ID:** New
- Customer:** MD Engineering
- Summary:** Can't use CD drive
- Open Cases:** 3
- Status:** Open - New Case
- Contact:** Sujay Bandy
- Contact Method:** 800/222-7000(334)
- Customer Value:** Gold ★★★★★

The 'New Solution' tab is active, showing a rich text editor with the following text:

Use commercially available CD read/write head cleaner according to manufacturer's directions and try again

Buttons at the bottom include: Attempt, Solve, Save Case, Escalate Case, Match Cases, and Audit History.

Solutions - New Solution page

Enter text describing the solution that you are either attempting or have used to resolve the problem. Click either the Attempt or the Solve button to send the solution to the Attempted Solutions grid, where it is assigned a status of either *In Consideration* or *Successful Resolution*.

## Emailing Solutions

Access the Outbound Notification page (select a solution from the Attempted Solutions grid and then click the Email button).

### Outbound Notification

History Select One...

Send | Send Later | Send and Solve | Add Recipients | Add Attachments

#### Recipients

| To                       | CC                       | BCC                      | Name           | Email Address                     | ID     | Email                               | Worklist                            |  |
|--------------------------|--------------------------|--------------------------|----------------|-----------------------------------|--------|-------------------------------------|-------------------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Kyle Warner    | kwarner@warnerhousehold_htech.com | 400062 | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |  |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Alex Zulli     |                                   | 400011 | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |  |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | ROUTER SUPPORT |                                   | ROUTER | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |  |

#### Transaction Summary

|   |   |
|---|---|
| <b>Created On</b> 10/22/2002 2:32AM PDT                                 | <b>Details</b> Router hanging. There is no traffic through the packets. |
| <b>Case ID</b> 220345   |   |
| <b>Customer</b> Kyle Warner   |   |
| <b>Contact</b> Kyle Warner  |   |
| <b>Summary</b> Router hanging. There is no traffic through the packets. |   |
| <b>Status</b> Open - New Case   |   |
| <b>Priority</b> Medium  |   |

Outbound Notification page (1 of 2)

**Message Details**

**From** support@rt.peoplesoft.com

**Template** [Dropdown] [Advanced Search](#) [Preview Template](#) [Apply Template](#)

**Subject** Your Case 220345 has been Resolved

**Message**

Dear Valued Customer -

Your Case 220345 has been resolved. Please review the below Resolution for your case to see that it resolved your problem. If we do not hear from you we will assume that it did.

Details for Case 220345:

Case Summary: Router hanging. There is no traffic through the packets.

Solution Summary: Troubleshooting tips for router hang

[Add Closing Template](#)  **Include URL**

**Worklist Details**

\*Priority Medium [Dropdown] Action [Dropdown]

### Outbound Notification page (2 of 2)

Any attachments from the solution's notes will be automatically added to the Solution Attachments grid on the Outbound Notification page. Select the Include check box for any such attachments that you want to be sent with the email.

See *PeopleSoft Enterprise CRM 9.1 Automation and Configuration Tools PeopleBook*, "Sending Manual Notifications," Sending Manual Notifications From CRM Transactions.

## Reviewing Details of Attempted Solutions

Access the Resolution Details page (click a solution summary on the Case page, Service Order page, or Quality Management page).

### Resolution Details

Solve | Add Resolution Note | Return |

**Solution ID** 301368      **Visibility** All  
**Usage Count** 0      **Solved Count** 0

#### Solution

**Summary** [How do I apply for graduate school?](#)

**Symptoms** Applying for graduate school at the University

**Details** Students interested in applying for graduate school at the University can contact the Office of Graduate Admissions for general information about applying. More specific program information can be obtained from the specific graduate department you are interested in studying.

#### Solution Notes

Customize | Find | View All | | First 1 of 1 Last

| Summary  | Visibility | Added By   | Date Added        |
|--|------------|------------|-------------------|
| <a href="#">2010 Business School Graduate Level Certificates</a> | Internal   | Fred Dobbs | 09/03/2009 8:57AM |

#### Solution Attachments

Customize | Find | View All | | First 1 of 1 Last

| File Name  | File Description | Added By   | Date Added        |
|--|------------------|------------|-------------------|
| <a href="#">Graduate Admissions 2010 Business School.txt</a> |                  | Fred Dobbs | 09/03/2009 8:59AM |

#### Related Solutions

Customize | Find | View All | | First 1 of 1 Last

| Relationship | Solution ID | Solution Summary   |
|--------------|-------------|--|
| Similar      | 301608      | <a href="#">Admission Instructions for Graduate Programs</a> |

#### Resolutions Details page

Use the Resolutions Details page to view the details of a solution, add solution notes and attachments, add resolution notes, and submit adhoc solutions for management approval.

#### Toolbar Area

- Add Resolution Note** Click to add a resolution note that is specific to this solution attempt.
- Attempt and Solve buttons** If the solution has not been attempted, an Attempt button and a Solve button (Solve for Case only) appear. Choose the desired action to attempt or solve the transaction using this solution. (Once the solution has been attempted or solved, these buttons no longer appear.)
- Solve button** If the solution is an *Adhoc* solution in *Draft* status, the Submit button appears. Once the *Adhoc* solution has been submitted, this button no longer displays on the toolbar.
- Usage Count** Indicates the number of times the solution was used to help resolve cases.
- Solved Count** Indicates the number of times the solution was used to successfully solve cases.

**Solution**

|                 |   |
|-----------------|---|
| <b>Summary</b>  | The Solution summary is a link to the full solution definition. |
| <b>Symptoms</b> | Displays the symptoms as listed on the solution definition.     |
| <b>Details</b>  | Displays the details as listed on the solution definition.      |

**Solution Notes**

To add a new solution note, click the Summary link in the Solution region of the page. The Solution page opens in a new window. Click the Notes tab to add a note to the solution.

**Solution Attachments**

To add a new solution note, click the Summary link in the Solution region of the page. The Solution page opens in a new window. Click the Notes tab to add a note to the solution. Click the Add Note button. When you are finished adding your note, click the Add an Attachment link at the bottom of the Add a Note section.

**Related Solutions**

To add a new related solution, click the Summary link in the Solution region of the page. The Solution page opens in a new window. Click the Related Actions tab. Then click the Relate an Existing Solution button to relate a similar solution.

---

**Note.** You cannot relate an existing solution to an independent text or adhoc solution.

---

**Resolution Notes**

This group box appears with data only if the solution is associated with resolution notes.

|                |   |
|----------------|---|
| <b>Summary</b> | Click the note's summary link to display note details on the Resolution Notes page. |
|----------------|---|

To add a new resolution note, click the Add Resolution Note button in the toolbar. The system displays the Resolution Notes page.

**Viewing External Content Solutions**

Access the Solution page. (Solutions, Search Solutions, Solution)

**Solution**

Save

**Solution ID** 301610 **Usage Count** 1  
**Summary** <http://www.oracle.com/us/products/applic...> **Solved Count** 1

Solution Notes Libraries Related Actions History

**Details**

\*Type  [Preview Solution](#)

\*Status  \*Visibility

Superseded By  Expired or Superseded Date

Solution page (1 of 2)

**Description**

\*Summary

[View Details](#)

Keywords

Symptoms

Template  [Advanced Search](#) [Preview Template](#) [Apply Template](#)

**Details**

Built for the IBM iSeries platform, Oracle's JD Edwards World delivers the same advanced functionality available to larger enterprises, not a stripped down version of a larger solution. With a greater than 99 percent software quality and 99.7 percent sys

[Audit History](#)

Solution page (2 of 2)

The solution type for external content solutions is either *Link* or *File*.

Whenever a technician or agent uses external content to resolve a service order or case, the system creates a solution type of *Link* or *File* in the background to represent it.

When external content solutions appear in the search results grid, the description includes a link that opens the external content in a new window. If the external content is a file, it opens in the appropriate application.

## Adding Resolution Notes and Attachments

Access the Resolution Notes page (click the Add Resolution Note or Attachment button on the Solutions Detail page (in attempted solutions mode).

**Case**

### Resolution Notes

Find | View All | First 1 of 2 Last

**\*Subject** Instructions for mapping to network printer

**Details**

Format
Font
Size
B I U abc

Refer to attached file to find detailed instructions about mapping to network printers.

body

**\*Visibility** Internal

**Note Type**

**Added By** Stu Marx

**Added** 06/24/2009 1:07PM PDT

Customize |

| File Name   | File Description               | Added By | Date Added        |
|---|--------------------------------|----------|-------------------|
| <a href="#">Updated User Instructions June 2008.txt</a> | Mapping Instructions (updated) | Stu Marx | 06/24/2009 1:05PM |

Attach a File

Save Resolution Note
[Return to Resolution details](#)
[Return to Case](#)

Resolution Notes page

Resolution notes created on this page are intermingled with notes on the Notes pages in PeopleSoft Integrated FieldService, PeopleSoft Support, PeopleSoft HelpDesk, and PeopleSoft HelpDesk for Human Resources.

PeopleSoft CRM provides a similar interface for working with notes and attachments across all the components that use this functionality. You can access resolution notes from the Attempted Solutions grid and the Notes page.

### See Also

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

## **Part 3**

# **Transaction Billing Processor Integration**

## **Chapter 5**

### **Setting Up an Integration to the Transaction Billing Processor**



## Chapter 5

# Setting Up an Integration to the Transaction Billing Processor

This chapter provides an overview of PeopleSoft Customer Relationship Management (PeopleSoft CRM) integration with the Transaction Billing Processor, lists common elements used in this chapter, and discusses how to:

- Set up integrations to the Transaction Billing Processor.
- Work with on-demand billing.
- Set up sales and use tax for third-party tax vendors.

---

## Understanding PeopleSoft CRM Integration with the Transaction Billing Processor

This section discusses:

- Billing and contracts functionality.
- Agreements and entitlements.
- PeopleSoft CRM transactions.
- Cost category definitions.
- Pricing and invoicing.
- Reason codes.
- Tax calculations.
- Workforce synchronization.
- Item definition price types.
- Service order reports.
- Accounting rules.
- Financial profiles of customers.
- Delivered enterprise integration points (EIPs).

- Fields populated in the Transaction Billing Processor.
- Contracts interface tables.
- Transactional billing plans.

**See Also**

*PeopleSoft Enterprise Contracts PeopleBook, "Working with the Transaction Billing Processor"*

## Billing and Contracts Functionality

PeopleSoft Integrated FieldService, PeopleSoft Order Capture, and PeopleSoft CRM call center applications can integrate with the Transaction Billing Processor or any third-party billing applications to:

- Send agreement, service order, and case fees to the Transaction Billing Processor.
- Send order capture service and product agreement information to the Transaction Billing Processor.
- Generate invoices for services, cases and agreement fees.
- Manage and book revenue to the appropriate general ledger accounts for recurring and one-time purchases of services and products.

Users can take advantage of the feature-rich billing functionality that is available through PeopleSoft Contracts, such as revenue recognition, billing cycle, and schedule details.

This PeopleSoft application also provides the ability to apply the appropriate surcharges and taxation to billable amounts and process the information using user-defined invoice formats.

---

**Note.** PeopleSoft CRM FieldService and Call Center do not calculate surcharges and taxes. These transactions are computed in the Transaction Billing Processor.

---

**See Also**

*PeopleSoft Enterprise Billing PeopleBook, "Structuring Bills"*

## Agreements and Entitlements

Agreement information resides in PeopleSoft CRM. The system sends it to the Transaction Billing Processor for integration with PeopleSoft Billing and General Ledger. If you integrate PeopleSoft CRM with the Transaction Billing Processor, PeopleSoft CRM sends all agreement-based and on-demand transactions through to the Transaction Billing Processor.

PeopleSoft CRM sends transactions to the Transaction Billing Processor when a user changes the status to *Active*. The timing for billing is decided by PeopleSoft Contracts and Billing based on the options set on the Recurring Bill Schedule page.

In preparation for the integration to the Transaction Billing Processor, PeopleSoft CRM includes statuses and start and end dates on the agreement lines. To control the states that an agreement can move through during the agreement life cycle, PeopleSoft includes change control logic on the agreement status. PeopleSoft CRM uses the same status values that are used in the Transaction Billing Processor. The *Pending Activation* and *Action Required* statuses are, however, unique to PeopleSoft CRM.

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**Note.** The integration to the Transaction Billing Processor only works with PeopleSoft CRM release 8.9 and above and PeopleSoft Financials and Supply Chain Management release 8.81 and above.

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## ***Agreement Statuses***

Here are the PeopleSoft Integrated FieldService and PeopleSoft Support agreement statuses:

### ***Pending***

Use this status when you create an agreement but you have not completed entering information into the agreement. This status enables you to save an agreement without initiating validation checking.

### ***Pending Activation***

An agreement is in the *Pending Activation* status when its data entry is complete and manager approval is obtained. Changing the status to the *Pending Activation* status triggers the message that is sent to the Transaction Billing Processor.

From this status, the system attempts to create a contract. If no errors occur, the contract is created in the *Active* status.

The agreement remains in *Pending Activation* status until the associated contract's billing and revenue plans are set to *Ready* status.

When the contract line is ready for billing and revenue, the Transaction Billing Processor sends a message to PeopleSoft CRM and the system moves the agreement from *Pending Activation* to *Active* status automatically so that PeopleSoft CRM can send transactions to the Transaction Billing Processor for processing. When the Contract and the Contract line is created, it is automatically created with a Billing and Revenue plan status of *Ready* and hence the message is sent to CRM without any user intervention.

### ***Action Required***

An agreement is in a status of *Action Required* when a failure occurs on the contract activation in the Transaction Billing Processor. If the error occurs in the Transaction Billing Processor, it sends an error message to PeopleSoft CRM indicating that the agreement will remain in a status of *Action Required*. It remains in this status until the status changes to *Pending Activation* after you add the correct information to the agreement.

If the billing or revenue plan could not be set to *Ready* status, the Transaction Billing Processor sends an error message to PeopleSoft CRM indicating what information is missing or incorrect so that the appropriate areas can be corrected and another attempt can be made to put the billing plan or revenue plan in *Ready* status. In this case the system create a new contract.

Once the billing and revenue plan are in *Ready* status, then the system sets the agreement and contract automatically to *Active* status.

If any information on the agreement was missing or incorrect, or if a server was down at the time of transmission, the agreement remains in *Action Required* status.

**Active** If no errors exist for the agreement in the *Pending Activation* status, then the agreement is set to *Active* status. This occurs automatically after a contract is created and set to the *Active* status and a billing and revenue plan are created in the *Ready* status. The contract can now accept transactions from the agreement in PeopleSoft CRM.

**Closed** A contract can be set to the *Closed* status when the agreement and agreement lines associated with the contract are in *Closed* status and all transactions associated with the agreement have been sent to billing and revenue.

When the Bill Plan or Revenue Plan is attempted to be completed or canceled, the system checks that the agreement and agreement lines associated with the contract are closed and that no service orders or cases are pending. If agreement lines are not closed or pending service orders and cases exist, the system displays an error message.

---

**Note.** You cannot initiate the closure of a contract from the CRM side.

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The agreement becomes read-only when the status is set to *Closed* for the agreement.

---

**Note.** A contract can no longer accept transactions from PeopleSoft CRM once it has been closed. The *Pending Activation* and *Action Required* statuses are available only when you select Contracts Integration on the Installation page for PeopleSoft Integrated FieldService.

---

### See Also

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

## PeopleSoft CRM Transactions

These are all the transactions PeopleSoft CRM sends to the Transaction Billing Processor:

- Agreement Fee (including renewal and uplift/discount).
- Order Capture Service Product (including recurring, service product fee, and one time except not on demand).
- On Demand (including case fee, uplift/discount, service order fee, and service order fee uplift discount).
- Agreement Based (including case fee, uplift/discount, service order fee, and service order uplift/discount).
- Service Order (including labor fee, labor fee uplift/discount, material fee, material fee uplift/discount, expenses, expenses uplift/discount).

---

**Note.** The transactions with uplifts and discounts are sent to the customer on the same invoice as the fee. They appear as separate bill lines; therefore, they are considered separate transactions.

---

## Cost Category Definitions

To retrieve the correct rate for a worker's time, you must define cost category types using the Cost Category Definition page within the Service Level component. Cost category types are set based on the service level, which defines the service provider's hours of operation.

The Service level setup page is used to configure a customer's hours of operation. For example, a service provider might define their hours of operation to be:

- Straight hours.  
Monday through Friday 8:00 a.m. to 5 p.m.
- Overtime hours.  
Monday through Thursday 5:00 p.m. to 8:00 a.m.
- Weekends.  
Friday 5:00 p.m. to Monday 8:00 a.m.

Once you tie cost categories to the days and hours of operation, then the system can apply the correct rate to the provider group or provider group member. The Cost Category Definition page enables you to define the cost category for the service level hours of operation defined on the service level page. You can override begin and end times, select different cost categories, and enter multiple values for a given day.

In addition, you must define cost categories for workers to account for the cost of labor time to your company. You set up these cost categories using the Provider Group and Provider Group Member definition pages in the Workforce component.

When technicians enter their hours in the time log based on that day and time, the system retrieves the correct rate from the member cost categories.

### See Also

*PeopleSoft Enterprise CRM 9.1 Application Fundamentals PeopleBook*, "Setting Up and Managing Agreements and Warranties," Defining Service Levels

*PeopleSoft Enterprise CRM 9.1 Application Fundamentals PeopleBook*, "Setting Up and Maintaining Provider Groups and Group Members," Establishing Cost Categories for Workers

## Pricing and Invoicing

To price cases for a call center agent's time or to implement pricing based on a flat fee per case, which is based on the price defined on the agreement, PeopleSoft CRM uses pricing logic that automatically calculates the number of hours upon saving a case.

You can also price and invoice prepaid services by time or the number of service orders or cases initiated through PeopleSoft Integrated FieldService and Support.

Additionally, the PeopleSoft system has incorporated pricing features within the Service Order component to enable pricing for the billable elements of a service (material, time, and expense fees) and to synchronize the service price of the materials from PeopleSoft Supply Chain Management (PeopleSoft SCM) with the information that resides on the service order.

You can also apply a service fee to cases and services orders.

The system retrieves the correct price from the Item Definition page in PeopleSoft CRM when the technician records material used at the customer site on the service order. The sum of the material used is calculated and summed up with the total cost of labor, expense charges, and service fees.

The system displays the material price, labor, expense, service charges, and total values separately. However, when sending information to PeopleSoft Contracts for billing, the system sends the individual transaction values so that they can be displayed separately on the invoice.

The service manager or contracts administrator can increase or decrease the sum of labor, material, and expense charges and recalculate fees to generate new service order totals. Surcharges and taxation are not, however, included in this total. These fees are calculated by billing and included on the invoice to the customer. You don't, however, need an agreement to bill a flat fee for a case.

The integration begins with the Transaction Billing Processor when a user sets the status to *Pending Activation* for an agreement or service. The system creates a corresponding contract and contract line in PeopleSoft Contracts through the Transaction Billing Processor. Transactions such as service orders, service agreements, and case details are sent from PeopleSoft CRM to the Transaction Billing Processor and stored in the Contracts Interface tables. The Transaction Billing Processor uses PeopleSoft Contracts rate-based functionality and bills charges on an as-incurred basis. The transaction information is then forwarded to PeopleSoft Billing as bill lines for invoice generation. The Transaction Billing Processor manages the appropriate timing of sending these transactions to PeopleSoft Billing.

### **See Also**

*PeopleSoft Enterprise CRM 9.1 Application Fundamentals PeopleBook*, "Defining Pricing Information for Services and Support Offerings"

*PeopleSoft Enterprise Integrated FieldService 9.1 PeopleBook*, "Creating and Managing Service Orders," Managing Service Orders

## **Reason Codes**

PeopleSoft CRM uses reason codes on the Agreement and Billing pages for service orders and cases to provide an informational reason as to why an adjustment was made to the fees.

The prompt values for the Reason field are from the Reason Code table (RB\_REASON\_CD). To facilitate the integration with the Transaction Billing Processor, the PeopleSoft application uses reason codes to further describe billing adjustments. When you set up reason codes, you also need to specify the correct reason type to make the reasons available within the transactions.

For service order billing, you can specify reason codes for adjustments of service fees, material, time, expenses, and additional adjustments for the total cost of the service order. For agreement billing, you can specify reason codes for adjustments of service fees, product fees, service and product fees, and additional adjustments to the agreement fee total. For cases, you can specify reason codes for case fees and time-based fees.

All reason code types enable the end user to choose predefined reason codes from the Reason Code table (PS\_RB\_REASON\_CD). If the reason codes in the database are not adequate for the user to make a billing adjustment, end users can click the Other link and enter their own reason in the Detail field.

### See Also

*PeopleSoft Enterprise CRM 9.1 Call Center Applications PeopleBook*, "Setting Up Call Center Prompt Tables," Setting Up Reason Codes

## Tax Calculations

For PeopleSoft CRM transactions that require value-added tax (VAT), the system sends the ship from location along with the address associated with the customer or the location where the product was shipped to the Transaction Billing Processor.

If VAT is set up for the services or products, the system determines whether VAT is required and performs the tax calculations to include on the invoice.

The system applies taxes during billing invoice finalization for VAT) and sales and use taxes (SUT). Rarely are both applied at the same time; however, the PeopleSoft application provides the flexibility to handle both taxes for those countries where both taxes apply.

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**Note.** PeopleSoft Order Capture uses third-party tax calculation routines for Sales and Use tax as well as VAT tax calculations and does not use Simple Tax. Also, any taxes calculated by PeopleSoft Order Capture are recalculated in PeopleSoft Billing.

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See *PeopleSoft Enterprise CRM 9.1 Order Capture Applications PeopleBook*, "Setting Up PeopleSoft Order Capture," Defining Tax Installation Options.

A service provider can use two methods of determining sales and use taxes that can be applied to a case, service order, and agreement fee transactions:

- Simple Tax (PeopleSoft tax)

If the customer is tax exempt, users can link to the Tax Parameters page from the Billing page on the service order, case, or agreement and then select the Tax Exempt check box. Customers should inform the service provider if they are exempt from taxes and provide their tax certificate number. If a user selects the Tax Exempt check box, they must also enter the tax certificate number.

Since the exemption certificates are synced, the exemption certificate is prompted from the customer exemption table. However, it does not have to exist in the customer exemption table. PeopleSoft CRM does not perform a validation. If a user creates new addresses for a company, consumer, or site, the user can select a tax code from the prompt. When the company, consumer, or site is selected for an agreement fee, service order fee, or case fee transaction, the newly created address and tax code are sent to the Transaction Billing Processor with the transaction.

- Third-Party Tax (Vertex or Taxware).

See [Chapter 5, "Setting Up an Integration to the Transaction Billing Processor," Setting Up Sales and Use Tax for Third-Party Tax Vendors, page 107.](#)

When the Transaction Billing Processor sends the transaction to PeopleSoft Billing for invoicing, final taxes are calculated at the time of invoice finalization using either of these methods. For PeopleSoft Billing to calculate the taxes for service order transaction (including service fees, labor, materials, and expenses) or case transactions (case fee or labor fee), specific tax fields must be populated and sent along with the transaction.

The fields that need to be populated are dependent on the tax methodology used, either PeopleSoft Tax or Third-Party Tax. PeopleSoft Billing handles the information for PeopleSoft CRM services.

For transactions that are sent from PeopleSoft Integrated FieldService or PeopleSoft Support, most of the values are provided by default from within PeopleSoft CRM transactions and passed on to the Transaction Billing Processor.

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**Note.** PeopleSoft Billing derives some tax calculation information from the contract line in PeopleSoft Contracts. Also, you can override most fields on the billing plan. PeopleSoft CRM also uses order acceptance location, order origin location, and storage location for third-party tax calculations.

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If billable transactions for PeopleSoft Integrated FieldService and PeopleSoft Support require VAT, use the links on these PeopleSoft CRM setup pages to access the VAT Treatment page in PeopleSoft SCM:

- Service Types
- Cost Category
- Case Type
- Item
- Item Group

To add SUT information, access the Tax Parameters page in PeopleSoft CRM from the billing pages within the agreement, service order, or case. You can also access the Tax Parameters Definitions page in PeopleSoft CRM by selecting Set Up CRM, Common Definitions, Tax Parameter Definitions.

### **See Also**

*PeopleSoft Enterprise Order to Cash Common Information PeopleBook, "Maintaining General Customer Information," Setting Up Tax-Exempt Certificate Information*

*PeopleSoft Enterprise Order to Cash Common Information PeopleBook, "Maintaining General Customer Information," Adding General Customer Information, Entering Customer VAT Information*

*PeopleSoft Enterprise Application Fundamentals PeopleBook, "Defining Financials and Supply Chain Management Common Definitions," Defining Sales and Use Tax Authorities and Codes*

*PeopleSoft Global Options and Reports PeopleBook, "Working with VAT"*

## **Workforce Synchronization**

To apply revenue to the correct general ledger accounts for the time an agent or field service technician spends on a case or service order, the Workforce EIP (WORKFORCE\_SYNC) and the Business Unit HR Sync EIP (BUS\_UNIT\_HR\_SYNC) from PeopleSoft Human Resources Management retrieves the human resources business unit and the general ledger business unit for every worker.

The system stores the general ledger business unit information within the person data structure. The Business Unit HR Sync EIP (BUS\_UNIT\_HR\_SYNC) from PeopleSoft HCM maps the human resource business unit information to the general ledger business unit.

This links the general ledger business unit to the call center agent or field service technician. To accomplish this, PeopleSoft created two fields in the Worker component for the general ledger business unit.

### See Also

*PeopleSoft Enterprise CRM 9.1 Application Fundamentals PeopleBook, "Workforce Management"*

## Item Definition Price Types

The Item Definition page contains two pricing fields: Service Price and Service Exchange Amount. The service price is what the field technician charges the customer for using an item, regardless of whether it is an install or repair. The service exchange amount is what the customer is credited when a part is removed. This charge is deducted from the service price.

For example, a company has a service price of 10.00 USD for a new PC chip. The service exchange amount is set to 4.00 USD. When the field technician removes the part (item) from the installed product and replaces it with a new item, then the new chip costs 6.00 USD. In this case, the service exchange amount (4.00 USD) is subtracted from the service price (10.00 USD).

These fields map to the PeopleSoft Supply Chain Management pricing fields (created specifically for pricing items in PeopleSoft Integrated FieldService). When the item price is synchronized with the item master, the system checks the appropriate fields for item definitions. The price and currency code are exposed on the Item Definition page when an integration with PeopleSoft SCM exists but they are not available for update. Therefore, the currency and price cannot be modified on the Item Definition page.

However, if the items are not synchronized with PeopleSoft SCM, the administrator may enter price information on the Item Definition page. To stay in sync with the Item Definition page in PeopleSoft SCM, the same fields and labels are used in PeopleSoft CRM.

The system displays these fields on the Item Definition page in PeopleSoft CRM:

- Currency Code

This field prompts on the Currency Code table (CURRENCY\_CODE\_TABLE). The administrator can select the currency code for each item because items can have different currency codes. This field is not required.

- Service Price

Enter an amount for the item. This field is not required.

- Service Exchange Amount

Enter an amount for the item if it is being exchanged for a newer or working item. This field is not required.

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**Note.** These prices are only used within the service order when calculating the pricing for materials.

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**See Also**

*PeopleSoft Enterprise Managing Items PeopleBook, "Defining Items"*

*PeopleSoft Enterprise CRM 9.1 Product and Item Management PeopleBook, "Defining Items"*

**Service Order Reports**

PeopleSoft Integrated FieldService provides two reports that are used to detail the services that have to be performed for a service order and provide expense details to customers.

Here are descriptions of the reports:

- Service Order Estimate Report.

Once a technician enters time, material, and expense information in a service order, the contract administrator, service manager, or technician may generate a report to provide to the customer for services performed. This report is an estimate of the amount that is planned for the job. It includes all activities with the planned start and stop dates and times, the status of each activity, the charge for performing the service, and any materials that are going to be used. There is a comments section that the technician can use to report actual material and labor if it is different than what was specified on the report. This report does not include taxes and surcharges and it is not a bill. To launch the report from the Service Order page, the user clicks the Estimate Report button on the toolbar.

- Service Order Detail Report.

This report is used by technicians to list all of the work needed to fulfill the requirements of the service order. To launch the report from the Service Order or My Service Order page, the user clicks the Detail Report button on the toolbar.

**See Also**

*PeopleSoft Enterprise Integrated FieldService 9.1 PeopleBook, "PeopleSoft Integrated FieldService Reports"*

**Accounting Rules**

To define the various attributes of an agreement, service order, or case that should be sent to specific revenue accounts, set up accounting rules in the Transaction Billing Processor during implementation.

The integration to the Transaction Billing Processor enables users to manage and book their revenue by posting revenue accounting entries to their general ledger for agreement fees and services rendered, which are entered on service orders and cases.

For accounting purposes, these fields must be populated in the Contracts Interface table by PeopleSoft CRM:

|                           |   |
|---------------------------|---|
| <b>Transaction Source</b> | Indicates the origin of the transaction. For example, if the value is <i>CRM</i> , it tells the system that the transaction is from PeopleSoft CRM. |
|---------------------------|---|

|  |  |
|--|--|
| <b>From GL Unit</b> (from general ledger unit)         | The source general ledger business unit (GLBU). Enter the source PeopleSoft General Ledger business unit. With the exception of employee-related transactions (service orders), this value should always be the same as the value in the GL Business Unit field.   |
| <b>GLBU</b> (general ledger business unit)             | The PeopleSoft General Ledger business unit defines where the accounting entry is booked. The system populates this field from various sources based on the type of transactions: <i>Agreement Fee Transactions</i> , <i>Service Order Transactions</i> , or <i>Support Case Transactions</i> .  |
| <b>Transaction Type</b> and <b>Transaction Subtype</b> | These fields, which reside in the Transaction Billing Processor, are system-defined codes that identify whether the transaction is an agreement, service order, or support case. This field is critical for Transaction Billing Processor to know the type of accounting. Accounting rules setup is different depending on this field. |
| <b>Accounting Date</b>                                 | This field is populated with the transaction date if no date is sent from PeopleSoft CRM.  |
| <b>Department</b>                                      | This field is optional. Use a wild card with this value in the accounting rules to use the department sent from PeopleSoft CRM in the revenue accounting entry.  |

**See Also**

*PeopleSoft Enterprise Contracts PeopleBook, "Setting Up the Transaction Billing Processor"*

*PeopleSoft Enterprise Contracts PeopleBook, "Working with PeopleSoft Project Costing," Setting Up Rules and Exceptions for Organizational Sharing*

*PeopleSoft Enterprise Project Costing PeopleBook, "Setting Up Accounting for Projects," Defining Accounting Rules*

**Financial Profiles of Customers**

The 360-degree view integration to PeopleSoft Accounts Receivable provides the ability to display financial profiles of the customer for agreement-based service fees and service order and case transactions.

Customer profile information that is applicable to the services integration to the Transaction Billing Processor includes: statement number, statement date, statement currency, statement total, bill to customer, outstanding balance, and past due balance.

For invoice data, PeopleSoft CRM sends a request application message to PeopleSoft Billing. PeopleSoft Billing sends a response application message to PeopleSoft CRM with the information that appears under the 360-Degree View tree. In addition, once invoices and payments appear on the 360-Degree View tree for a customer, you can click an invoice or payment to access PeopleSoft Billing, where you can view more details on the invoice.

**See Also**

*PeopleSoft Enterprise CRM 9.1 Application Fundamentals PeopleBook*, "Setting Up the 360-Degree View,"  
Setting Up the 360-Degree View Tree

**Delivered EIPs**

This table lists the EIPs that PeopleSoft CRM delivers to facilitate the integration of PeopleSoft CRM applications to PeopleSoft Financial Management Services (PeopleSoft FMS), PeopleSoft Enterprise Service Automation (PeopleSoft ESA), PeopleSoft Supply Chain Management (PeopleSoft SCM), and PeopleSoft Human Capital Management (PeopleSoft HCM).

**Note.** The database code for PeopleSoft Financials and Supply Chain Management is FSCM.

| <b>Queue Name</b> | <b>Description</b>  | <b>Message and Service Operation Name</b>                                      | <b>Directions of Integration</b>                 | <b>Technology</b>   |
|-------------------|---|--|--|---------------------|
| FO_SYNC           | Sends tax code definitions from PeopleSoft FSCM to CRM.   | TAX_HEADER_TBL_FULLSYNC  | FSCM → CRM                                       | Application Message |
| HR_SETUP          | Maps PeopleSoft HCM business units to general ledger business units.  | BUS_UNIT_HR_SYNC<br>BUS_UNIT_HR_FULLSYNC                                       | HCM → CRM  | Application Message |
| CONTRACT          | Synchronizes request and response messages from PeopleSoft CRM and Contracts for pending activities about agreements, transactions, invoicing, and contracts. | CONTRACT_REQUEST<br>CONTRACT_RESPONSE<br>CONTRACT_TXN<br>PENDING_ACTIVITY      | CRM → ESA<br>CRM ← ESA<br>CRM → ESA<br>CRM ↔ ESA | Application Message |
| SERVICE           | Synchronizes messages from PeopleSoft CRM to Contracts for accounting definitions, VAT, and VAT drivers.  | SERVICE_SYNC<br>SERVICE_FULLSYNC<br>SERVICE_TYPE_SYNC<br>SERVICE_TYPE_FULLSYNC | CRM → ESA  | Application Message |

| <b>Queue Name</b> | <b>Description</b>   | <b>Message and Service Operation Name</b>  | <b>Directions of Integration</b> | <b>Technology</b>   |
|-------------------|--|--|----------------------------------|---------------------|
| COST_CATEGORY     | Synchronizes cost categories (called labor type in PeopleSoft FSCM) from PeopleSoft CRM to Contracts for accounting definitions and VAT drivers. | COST_CATEGORY_SYNC<br>COST_CATEGORY_FULLSYNC                                     | CRM → ESA                        | Application Message |
| CASE              | Synchronizes case types and accounting definition information from PeopleSoft CRM to Contracts.  | CASE_TYPE_SYNC<br>CASE_TYPE_FULLSYNC<br>SOURCE_SYNC<br>SOURCE_FULLSYNC           | CRM → ESA                        | Application Message |
| ENTERPRISE_SETUP  | Synchronizes schedule information from PeopleSoft Financials to CRM for agreement information and revenue recognition.                           | SCHEDULE_SYNC<br>SCHEDULE_FULLSYNC   | FMS → CRM                        | Application Message |
| BI_SETUP          | Synchronizes bill types and bill sources from PeopleSoft SCM to CRM for contract transactions.   | BILL_TYPE_SYNC<br>BILL_TYPE_FULLSYNC<br>BILL_SOURCE_SYNC<br>BILL_SOURCE_FULLSYNC | SCM → CRM                        | Application Message |
| VAT_TRANSFER      | Generates request and response messages from PeopleSoft CRM to global VAT to generate VAT defaults.  | VAT_TRANSFER_REQ<br>VAT_TRANSFER_RESP  | SCM ↔ CRM                        | Application Message |
| PAY_TERMS         | Synchronizes messages from PeopleSoft FSCM to CRM for payment terms.   | PAY_TERMS_SYNC<br>PAY_TERMS_FULLSYNC   | SCM → CRM                        | Application Message |

| <b>Queue Name</b> | <b>Description</b>  | <b>Message and Service Operation Name</b> | <b>Directions of Integration</b> | <b>Technology</b>   |
|-------------------|---|---|----------------------------------|---------------------|
| AGREEMENT         | Generic message that synchronizes agreement information with third-party vendors.             | AGREEMENT_SYN<br>C                        | FieldService —><br>External      | Application Message |
| SERVICE_ORDER     | Generic message that synchronizes service order billing information with third-party vendors. | SERVICE_ORDER_<br>BILLING_SYNC            | FieldService —><br>External      | Application Message |

## Fields Populated in the Transaction Billing Processor

This section discusses:

- Contract header
- Contract line
- Billing plan
- Revenue plan
- Tax parameters

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**Note.** PeopleSoft CRM sends fields to the Transaction Billing Processor to create the contract, contract line, and revenue and billing plans. Many of these fields can be changed manually on the contract. If you want to change a field after contract activation has taken place, you must create an amendment using the Transaction Billing Processor amendment functionality.

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### **Contract Header**

These fields must be populated in the contract header. These values are sent from the PeopleSoft CRM agreement. These fields can be overridden on the contract header once they are populated from the CRM agreement:

- Bill To Contact
- Bill To Customer
- Bill To Address
- Purchase Order ID

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**Note.** This field is not required and it is populated from the Billing Plan at a Contract Line.

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- Payment Terms

- Sold To Customer

These fields cannot be overridden on the contract header:

- Sold To Customer
- CA Business Unit
- Currency Code

This table lists additional fields that are required on the contract header and the source from which the system retrieves the value for the field:

| <b>PeopleSoft Contracts Field Name</b>                            | <b>Source</b>   |
|---|---|
| Bill Type<br><b>Note.</b> This field is sent from PeopleSoft CRM. | PeopleSoft Contracts Business Unit.   |
| Legal Entity  | PeopleSoft Contracts Business Unit.   |
| Contract Signed Date  | The system populates this field with the current date. PeopleSoft CRM must send this date to override the default contract signed date. |
| Contract Type   | PeopleSoft Contracts Business Unit.   |
| Exchange Rate Type  | PeopleSoft Contracts Business Unit.   |

### **Contract Line**

These fields that must be populated in the contract line. These values are sent from the PeopleSoft CRM agreement or on-demand service order/case. The list contains fields that can be overridden on the contract line once they are populated from the CRM agreement.

These fields can be overridden on the contract line:

- Line Description
- Ship From Location (source = PeopleSoft Contracts business unit)
- Start Date
- End Date

---

**Note.** Except for Line Description, these fields are not sent from PeopleSoft CRM.

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The Currency Code field cannot be overridden on the contract line. The source for the currency code is the contract header.

## Billing Plan

These fields that must be populated in the billing plan. These values are sent from the PeopleSoft CRM agreement or on-demand service order/case. The list contains fields that can be overridden on the billing plan once they are populated from the CRM agreement.

These fields can be overridden on the contract line:

- Bill To Contact
- Bill To Customer
- Bill To Address

These fields appear on the Billing Plan General page. The system populates the fields on this page upon contract creation. This table shows the source from which each field is populated, if the value can be changed in the billing plan in the Transaction Billing Processor, and if the field can be overridden by transactions sent from PeopleSoft CRM:

| <b>Billing Plan Field</b>   | <b>PeopleSoft Contracts Source</b> | <b>Changeable?</b> | <b>Can Be Overwritten by CRM on Transaction?</b> |
|---|------------------------------------|--------------------|--|
| Billing Notes<br><b>Note.</b> You can create a note in the Transaction Billing Processor and attach that note to a billing plan. It can be sent to PeopleSoft Billing as part of the generated invoice. | Manual process                     | Yes                | Yes  |
| Contract Number   | Contract header                    | No                 | No   |
| Billing Plan Number   | Billing plan                       | No                 | No   |
| Billing Method  | Contract line                      | No                 | No   |
| Currency Code   | Contract header                    | No                 | No   |
| Bill Plan Description   | Contract header                    | Yes                | No   |

Other fields on the Billing Plan General page, such as the Billing Inquiry, Billing Specialist, Billing Authority, Cycle ID, Bill By ID, and Invoice Form can be added to the billing plan manually or left blank.

## Revenue Plan

A contract line is linked to a revenue plan to recognize revenue. The required revenue plan fields populate automatically during contract creation and cannot be overwritten from the transaction data that is sent from PeopleSoft CRM. The revenue plan fields are managed entirely from the contract.

These fields are required for the Revenue Plan page. The table shows the source from which each field is populated. These fields cannot be overridden by transactions sent from PeopleSoft CRM:

| <b>Revenue Plan Field</b> | <b>PeopleSoft Contracts Source</b> |
|---------------------------|------------------------------------|
| Contract Number           | Contract header                    |
| Sold To Customer          | Contract header                    |
| Business Unit             | Contract header                    |
| Revenue Method            | Contract Line                      |
| Currency Code             | Contract header                    |
| Revenue Plan Description  | Contract header                    |
| Hold (flag)               | Revenue Plan                       |
| Events                    | Contract header                    |

---

**Note.** If a credit hold exists on a customer in PeopleSoft CRM, you must put the revenue plan for the contract on hold by selecting the Hold check box on the Revenue Plan page to prevent transactions from processing. If you select the Hold check box, then you must release the hold manually when you are ready to recognize revenue for the customer.

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While every created contract line has a revenue plan, recurring fees do not use the revenue plan for revenue recognition. Revenue plans build a deferred revenue schedule associated with the billing transactions. In addition, on-demand transactions do not need a revenue plan to recognize revenue. PeopleSoft Billing manages revenue for on-demand transactions. PeopleSoft Billing also manages the revenue method for all on-demand and recurring transactions.

To ensure that your customers are billed properly, you should also validate the billing plan and revenue plan details in PeopleSoft Contracts.

### **Tax Parameters**

PeopleSoft CRM sends tax parameter information for agreements to the Transaction Billing Processor. The Transaction Billing Processor stores the CRM tax information in the Contract Interface tables (INTFC\_CA) and passes this information on to PeopleSoft Billing for processing. The Billing Plan General - Tax Parameters tab is not available for CRM contracts.

These tax fields are passed from PeopleSoft CRM to the contract interface tables:

- Ship From Location
- Tax Code
- Tax Group
- Transaction Type
- Transaction Sub Type
- Exemption Certificate

- Physical Nature
- Order acceptance location.
- Order origin location.
- Storage location.

PeopleSoft CRM sends fields to the Transaction Billing Processor to create the contract, contract line, and revenue and billing plans. Many of these fields can be changed manually on the contract. In addition, the Transaction Billing Processor receives sales and use and VAT tax parameters if they are sent by PeopleSoft CRM.

Transaction Billing Processor interface tables (INTFC\_CA, INTFC\_CA2, INTFC\_CA\_HDR, and INTFC\_CA\_NOTE) are duplicates of the Billing interface tables. However, the first two keys on the billing table, INTFC\_ID and INFC\_LINE\_NUM, have been changed to the single key CA\_TXN\_ID on the Transaction Billing Processor tables.

### **See Also**

*PeopleSoft Enterprise Contracts PeopleBook, Processing PeopleSoft Contracts Billing*

*PeopleSoft Enterprise Billing PeopleBook, Entering Bills Online*

## **Contracts Interface Tables**

The Contracts interface tables store the transactions from PeopleSoft CRM. The first two keys on the billing table, INTFC\_ID and INFC\_LINE\_NUM, have been changed to the single key CA\_TXN\_ID on the Transaction Billing Processor tables.

### ***PeopleSoft Integrated FieldService and Support***

PeopleSoft CRM sends service order transaction information, case transaction information, and service agreement fees to be billed or accounted for to the Transaction Billing Processor interface tables.

### ***PeopleSoft Order Capture***

PeopleSoft Order Capture sends these fields to the Transaction Billing Processor for every transaction:

- Sold to Customer.
- Sold To Contact.
- Sold To Address.
- Contract Business Unit.

The Transaction Billing Processor sends these fields to PeopleSoft Order Capture as a response:

- Contract Number
- Contract Line Number

- PeopleSoft Contracts Business Unit
- Error Status
- Error Message

## Transactional Billing Plans

The system creates a billing plan with an *As-incurred* billing method for the service transactions sent from PeopleSoft CRM to PeopleSoft Contracts. Pricing occurs in PeopleSoft CRM for all services on the agreement, such as service order transactions, service agreement fees, and cases. Contract lines within an agreement-related contract are linked to the billing plan. Although these billing plans contain rules defined by default upon contract creation, you can manually override the system defaults.

This table presents source and override information for the fields on the billing plan:

| <i>Field</i>          | <i>CA Source</i> | <i>Override on Billing Plan?</i> | <i>Override from CRM Transaction?</i> |
|-----------------------|------------------|----------------------------------|---------------------------------------|
| Billing Notes         | Manual Process   | Yes                              | Yes                                   |
| Contract #            | Contract Header  | No                               | No                                    |
| Billing Plan #        | Billing Plan     | No                               | No                                    |
| Billing Method        | Contract Line    | No                               | No                                    |
| Currency Code         | Contract Header  | No                               | No                                    |
| Bill Plan Description | Contract Header  | Yes                              | No                                    |

You can link only CRM lines to a billing plan created from CRM transactions. You cannot mix lines with different transaction sources on the billing plan. For example, you cannot link a CRM contract line with a Project Costing contract line.

PeopleSoft Integrated FieldService, PeopleSoft Support, and PeopleSoft Order Capture send credit card information to the Transaction Billing Processor. The Transaction Billing Processor does not validate the credit card numbers.

## Common Elements Used in This Chapter

### **Agreement**

A PeopleSoft CRM agreement is a list of obligations to which a service provider has agreed or committed to the customer. The agreement lines listed on the agreement include services and products covered by the agreement, information about who or what customer locations can request service, and the level of service that is provided, which includes restore time, response time, prime period of maintenance, and service coverage (time, material, and expense).

|                                  |  |
|----------------------------------|--|
| <b>Agreement Pricing</b>         | Agreement pricing records define the fee paid for a specific service or support offering. The agreement price is defined when the agreement is issued to the customer. PeopleSoft CRM also enables you to initiate recurring charges for which a customer might pay a monthly or quarterly fee.                  |
| <b>Agreement Service Pricing</b> | Agreement service pricing records define what the customer pays when the work associated with the service or support offering on the agreement is performed. This record includes the price paid per transaction covered by the agreement line.  |
| <b>Billing Plan</b>              | When the system creates a contract, it also generates a billing plan that is linked to a contract line. The billing plan determines how a transaction should be billed. It contains customer billing information, billing method (for example, as-incurred), and status of the billing plan.                     |
| <b>Contract Amendment</b>        | A contract amendment is any change made to an active contract for which you are altering the fundamental obligations and entitlements of the contract.   |
| <b>Deferred Revenue</b>          | Deferred revenue helps to create and send invoices for products or services that are to be delivered in the future or over a range of time. You may use deferred revenue to generate accounting entries that defer revenue recognition based on a revenue recognition date and proration method that you select. |
| <b>General Ledger</b>            | General ledger is where all of the journal entries are posted. Journal Generator populates the general ledger with accounting entries (for example, accounts receivable and revenue entries).  |
| <b>Location</b>                  | Select the location of the store where the order is to be purchased. This field is used for tax vendor exceptions and reporting.   |
| <b>Order Acceptance Location</b> | Select the location where the order is to be accepted. The system uses this field to determine tax jurisdiction.   |
| <b>Order Origin Location</b>     | Select the location where the order originated. The system uses this field to determine tax jurisdiction.  |
| <b>Rate Based Contract Line</b>  | A rate based contract line is a transaction-based offering (or an ad hoc offering) that the Transaction Billing Processor picks up and sends to PeopleSoft Billing.  |
| <b>Revenue Plan</b>              | When the system creates a contract, a revenue plan is also created and associated with a contract line. You can create revenue plans either automatically or manually. The contract line, however, must be linked to the revenue recognition plan to recognize revenue.  |
| <b>Revenue Recognition</b>       | Revenue recognition occurs when the system sends revenue information to the general ledger and it is counted in the revenue projection for the accounting period.  |
| <b>Store Location</b>            | Enter the address of the store location.   |

---

**Note.** If you are using a third-party tax vendor, the entry in this field should match the store location code in Vertex or Taxware.

---

## Setting Up Integrations to the Transaction Billing Processor

To define agreement options, time types, and tax parameters, use the Agreement Options (RF\_AGR\_OPTIONS), Time Type (RF\_TIME\_TYPE), and Tax Parameters (RF\_TAX\_PARAM) components.

This section discusses how to:

- Establish billing and pricing options.
- Map agreement setIDs with contracts and general ledger business units.
- Set up time types for PeopleSoft Integrated FieldService.
- Set up billing options for PeopleSoft Integrated FieldService.
- Set up billing options for PeopleSoft Call Center.
- Set up billing options for PeopleSoft Order Capture.
- Define tax parameters.

---

**Note.** You must activate the messages, queue statuses, service operations, and routings (from the EIP chart discussed previously) to use the integration to the Transaction Billing Processor.

---

### See Also

[Chapter 5, "Setting Up an Integration to the Transaction Billing Processor," Delivered EIPs, page 80](#)

## Pages Used to Set Up Integrations to the Transaction Billing Processor

| <i>Page Name</i>            | <i>Definition Name</i> | <i>Navigation</i>  | <i>Usage</i>   |
|-----------------------------|------------------------|--|--|
| Billing and Pricing Options | RB_INTEGRATION         | Set Up CRM, Install, Installation Options, Billing and Pricing Options | Turn on integration to the Transaction Billing Processor for PeopleSoft Integrated FieldService, Call Center, and Order Capture. Enable pricing for service order and cases. |
| Agreement Options           | RF_AGR_OPTIONS         | Set Up CRM, Common Definitions, Agreement Options, Agreement Options   | Map the agreement setIDs with the business units for both the Transaction Billing Processor and PeopleSoft General Ledger.   |

| <b>Page Name</b>                    | <b>Definition Name</b> | <b>Navigation</b>   | <b>Usage</b>   |
|-------------------------------------|------------------------|---|--|
| Time Types                          | RF_TIME_TYPE           | Set Up CRM, Product Related, FieldService, Time Type, Time Types  | Establish the defaults for the types of time that are billable for the business units being set up under the selected setID. |
| Billing Options                     | RF_BU_BILL_OPTIONS     | Set Up CRM, Business Unit Related, FieldService Definition, Billing Options   | Set up billing options for PeopleSoft Integrated FieldService.   |
| Business Unit Billing Details       | BUS_UNIT_RC_BI_SEC     | Set Up CRM, Business Unit Related, Call Center Definition, Options<br><br>Select Bill for Cases and then click the Details link.<br><br>(Note that you must have Billing enabled or this link will not appear.) | Set up billing options for PeopleSoft call center applications.  |
| Order Capture Definition - Internal | BUS_UNIT_RO1           | Set Up CRM, Business Unit Related, Order Capture Definition, Internal   | Set up billing options for PeopleSoft Order Capture.   |
| Tax Parameter Definitions           | RF_TAX_PARAM           | Set Up CRM, Common Definitions, Tax Parameter Definition, Tax Parameter Definition  | Set up sales and use taxes for service, material, labor, expenses, and cases for third-party tax vendors.                    |

## Establishing Billing and Pricing Options

Access the Billing and Pricing Options page (Set Up CRM, Install, Installation Options, Billing and Pricing Options).

The screenshot shows the 'Billing and Pricing Options' page. It features a navigation bar with five tabs: 'General Options', 'Calendar Options', 'Alt Character', 'Anonymous Object', and 'Billing and Pricing Options'. The 'Billing and Pricing Options' tab is selected. Below the navigation bar, there are three distinct sections, each with a blue header and a white body containing checkboxes:

- FieldService Options:** Contains two checked checkboxes: 'Send Billing Transactions to Contracts' and 'Calculate Price on Service Orders'.
- Call Center Options:** Contains two checked checkboxes: 'Send Billing Transactions to Contracts' and 'Calculate Price on Case'.
- Order Capture Options:** Contains one checked checkbox: 'Send Billing Transactions to Contracts'.

Billing and Pricing Options page

---

**Note.** No installation options exist for third-party integration since no method of determining what validation checking is required on the system to receive agreement, service order, or case data exists.

---

**Send Billing Transactions to Contracts**

Select this check box to send agreement fee billing date, service order billing data, case fees, and order information to the Transaction Billing Processor for billing and accounting.

The system sends agreement fees, case fees, or service order fees to the Transaction Billing Processor when the case or service order is closed. For PeopleSoft Order Capture, the system sends the information to the Transaction Billing Processor when you submit the order. These options are not available without customizing the application.

**Calculate Price on Service Orders**

Select this check box if you want the system to price on-demand and agreement-based service orders.

**Calculate Price on Case**

Select this check box if you want the system to price agreement- and on-demand cases.

## Mapping Agreement SetIDs with Contracts and General Ledger Business Units

Access the Agreement Options page (Set Up CRM, Common Definitions, Agreement Options, Agreement Options).

| Agreement Options                                 |                         |                  |               |                            |          |     |
|---|-------------------------|------------------|---------------|----------------------------|----------|-----|
| Options   |                         |                  |               |                            |          |     |
| Agreement Options   Billing Options   Tax Options |                         |                  |               |                            |          |     |
| *SetID  | Contracts Business Unit | GL Business Unit | Location Code | Location Description       | Schedule |     |
| CRM01   | US003                   | US003            | US120         | CRM APPLIANCE MAIN OFFICE  |          | + - |
| CRM02   | US001                   | US001            | US130         | CRM Hardware/Software Main |          | + - |
| CRM03   | US002                   | US001            | KUNY00        | Corporation Headquarters   |          | + - |

Agreement Options page

### Agreement Options Tab

Use the fields within this tab to map the agreement setIDs to the business units for both the Transaction Billing Processor and PeopleSoft General Ledger.

This mapping links the agreement to the corresponding contract. The system uses the existing business unit EIP to obtain all contracts and general ledger business units from the PeopleSoft FSCM database.

**SetID** Enter the setID that you want to use with the agreements that you create for integration to the Transaction Billing Processor.

**Contracts Business Unit** Enter the business unit that you want to use to create contracts in the Transaction Billing Processor.

The Transaction Billing Processor business unit must be tied to the agreement to facilitate the proper creation of a contract and to enable the appropriate default values to be selected when the contract is created.

**GL Business Unit** (general ledger business unit) Enter the general ledger business unit that you want associated with the setID. The GL Business Unit field is required for contracts integration with PeopleSoft Global to send revenue to the appropriate general ledger account.

**Location Code** The location code prompts from the Location table (LOCATION\_TBL ) in PeopleSoft CRM and returns a location code. The system sends the country and state information to the Transaction Billing Processor with the agreement transaction. This information is needed to calculate VAT tax rates. The location table in PeopleSoft CRM is synced with the location table in the PeopleSoft FSCM database (two-way).

**Schedule** Select the schedule by which you want to report revenue recognition.

---

**Note.** When the system creates the agreement, it uses the setID, the contracts business unit, and the general ledger business unit from the Agreement Options page.

---

### ***Billing Options Tab***

Use the fields within this tab to map the agreement setID to the bill type and the bill source.

For example, if the CRM01 setID identifies the bill type and bill source as a SERVICE, then the system sends the information to the Transaction Billing Processor to override the Bill Source and Bill Type fields on the Transaction Billing Processor billing plan.

**Bill Type** Select the bill type that you want associated with the setID.  
The bill type prompts on all bill type identifier codes that are synced from PeopleSoft Billing to PeopleSoft CRM. The bill type code is a user-defined value in PeopleSoft Billing.

**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 synced from PeopleSoft Billing to PeopleSoft CRM. The bill source code is a user-defined value in PeopleSoft Billing.

---

**Note.** You can use both the Bill Type and Bill Source fields to define bill by identifiers in PeopleSoft Billing. If CRM overrides the Bill Type and Bill Source fields on the Transaction Billing Processor billing plan with values defined in the CRM Billing Options page, then depending on the Bill By Identifier hierarchy in Billing, these values may be used to control the way that the invoices can be grouped.

On the Billing Options page, the Bill Type and Bill Source fields are optional. If they are not set in PeopleSoft CRM, the billing plan in the Transaction Billing Processor sets these fields based on the contracts business unit. PeopleSoft Billing still determines the bill by identifiers that are used based on its bill by identifier hierarchy.

---

### ***Tax Options Tab***

Use the fields within this tab to indicate where the order originated, where it will be accepted, and where the store is located. This information is used for tax purposes.

## **Setting Up Time Types for PeopleSoft Integrated FieldService**

Access the Time Types page (Set Up CRM, Product Related, FieldService, Time Type, Time Types).

### Time Types

SetID CRM01

| *Time Type | *Short Description | *Description           | Billable                            |  |
|------------|--------------------|------------------------|-------------------------------------|--|
| 001        | Activity           | Service Order Activity | <input checked="" type="checkbox"/> |  |
| 002        | Break              | Break Time             | <input type="checkbox"/>            |  |
| 003        | Wait               | Wait Time              | <input checked="" type="checkbox"/> |  |
| 004        | Travel             | Travel Time            | <input checked="" type="checkbox"/> |  |

Time Types page

Use this page to establish time types and indicate to the system which time types are billable. The system uses this information on the Billing Options page when you are setting up business units. If you enter one or more time types for a given setID, all PeopleSoft Integrated FieldService business units that use that setID as a default inherit the time types for the setID, including the billable flag.

For example, if you select the *Billable* check box for the *Break* time type, the system selects it as billable in the Time Type grid on the Billing Options page for the PeopleSoft Integrated FieldService business unit.

**Time Type** Enter a number by which you want to order the time type that you are entering. The numbers that you enter determine the order in which the time types appear on the Billing Options page.

**Short Description and Description** Enter the short and long description of the time type.

**Billable** Select if you want to set the default to billable for the time type.

---

**Note.** If the installation option is not set to *Calculate Price on Service Orders*, then the system hides the Business Unit - Billing Option page, which contains the billable fields that you are entering on this page.

---

## Setting Up Billing Options for PeopleSoft Integrated FieldService

Access the Billing Options page (Set Up CRM, Business Unit Related, FieldService Definition, Billing Options).

FieldService Business Unit
Billing Options

**Billing Information**

**\*Contracts Business Unit**

**\*GL Business Unit**  CRMCO APPLIANCES

**Bill Type**

**Bill Source**

**Material Billable**

**Expense Billable**

| Time Type |                                     |
|-----------|-------------------------------------|
| Type      | Billable                            |
| Activity  | <input checked="" type="checkbox"/> |
| Break     | <input type="checkbox"/>            |
| Wait      | <input checked="" type="checkbox"/> |
| Travel    | <input type="checkbox"/>            |
| Test      | <input type="checkbox"/>            |

**Tax Information**

**Order Origin Location**

**Order Acceptance Location**

**Location**

**Store Location**

Billing Options page

### ***Billing Information***

Use the fields within this group box to enter the information that is needed for PeopleSoft Integrated FieldService to integrate with the Transaction Billing Processor. To apply revenue to the correct general ledger account for service order fees, link the business units for PeopleSoft Integrated FieldService, Contracts, and General Ledger. This information is included in the contract transaction message that the system sends to the Transaction Billing Processor when the service order closes.

---

**Note.** You can link only one general ledger business unit to a service order. You cannot override the GL Business Unit field from the service order. The system does not display this field on the Service Order page in PeopleSoft Integrated FieldService.

---

**Contracts Business Unit** Enter the contracts business unit that you want to use for billing.

- GL Business Unit** Enter the general ledger business unit that you want to use for billing.
- The prompt values for this field include all business units for all product lines. Populating this field enables mapping between the general ledger business unit and the field service business unit.
- The Service Order page does not display the general ledger business unit or contracts business unit. When a service order closes, the system sends the general ledger business unit, contracts business unit, and contract ID to the Transaction Billing Processor with other transaction information.
- Bill Type** Select the bill type that you want associated with the business unit.
- The prompt values for the Bill Type field include all bill type identifier codes that are sent from PeopleSoft Billing to PeopleSoft CRM.
- Bill Source** Enter the bill source that you want to associate with the business unit.
- The prompt values for the Bill Source field include all bill source identifier codes that are sent from PeopleSoft Billing to PeopleSoft CRM.
- 
- Note.** The system sends the Bill Type and Bill Source fields with every service order transaction if one or both are set on the FieldService Business Unit - Billing Options page.
- 
- Material Billable and Expense Billable** Select the check boxes that you want to use for billing purposes on service orders for the business unit that you are defining.
- If you select the Send Billing Transaction to Contracts and Calculate Price on Service Orders check boxes on the Installation Options page, then the system automatically selects the Material Billable and Expense Billable check boxes.
- The system administrator, however, can override these values by clearing the check boxes.
- Time Type and Billable** Select the Billable check box to make the time type a billable item on the service order for the business unit.
- Default time types are based on the setup of the time types. If you enter one or more time types for a given setID, all PeopleSoft Integrated FieldService business units that use that setID as the default setID inherit the time types of the setID, including the billable option. You can, however, override time types for a business unit.
- For example, if the time type for Break is not set to billable on the Time Types page, then the system does not display it in the Time Type section on this page.

### ***Tax Information***

Use the fields on this tab to indicate where the order originated, where it will be accepted, and where the store is located. This information is used for tax purposes. The Order Origin Location, Order Acceptance Location, and Location fields prompt from the Location table (LOCATION\_TBL), which is sent to PeopleSoft CRM through an EIP from PeopleSoft HCM and PeopleSoft FSCM.

**Note.** PeopleSoft Billing uses the fields in the Tax Information group box for integration to Vertex and Taxware, which are third-party tax vendors. Please refer to the setup for sales and use tax for third-party tax vendors for details on the function and behavior of each third-party tax field. These third-party tax fields are always blank when you first create a PeopleSoft Integrated FieldService business unit.

### See Also

*PeopleSoft Enterprise Integrated FieldService 9.1 PeopleBook*, "Defining Business Units in PeopleSoft Integrated FieldService," Defining FieldService Business Units

Chapter 5, "Setting Up an Integration to the Transaction Billing Processor," [Setting Up Sales and Use Tax for Third-Party Tax Vendors](#), page 107

## Setting Up Billing Options for PeopleSoft Call Center

Access the Business Unit Billing Details page (Set Up CRM, Business Unit Related, Call Center Definition, Options. Select Bill for Cases and then click the Details link).

**Business Unit Billing Details**

|                            |                |
|----------------------------|----------------|
| <b>Business Unit</b> COM01 | Communications |
|----------------------------|----------------|

**Billing Information**

|                                |         |  |                |
|--------------------------------|---------|--|----------------|
| <b>On Demand Price By</b>      | Case    |  |                |
| <b>Currency Code</b>           | USD     |  | US Dollar      |
| <b>Rate Type</b>               | CRRNT   |  | Current Rate   |
| <b>Contracts Business Unit</b> | COM01   |  | Communications |
| <b>GL Business Unit</b>        | COM01   |  | Communications |
| <b>Bill Type</b>               | CA      |  | CONTRACTS      |
| <b>Bill Source</b>             | SERVICE |  | Service        |

**Tax Information**

|                                  |          |  |                                |
|----------------------------------|----------|--|--------------------------------|
| <b>Order Origin Location</b>     | MAINHQ   |  | GBAI Main Office - Headquarter |
| <b>Order Acceptance Location</b> | COMSHIP  |  | California Shipping Location   |
| <b>Location</b>                  | COMSHIP  |  | California Shipping Location   |
| <b>Store Location</b>            | 123 MAIN |  |                                |

Business Unit Billing Details page

## Billing Information

Use the fields within this group box to enter the information that is needed for the integration to the Transaction Billing Processor.

- On Demand Price By** Select either *Hour* or *Case*.
- This field provides the flexibility to price case transactions by hour or by case. For example, if you have a New York business unit and a California business unit, the New York unit could price a case by flat fee while the California unit could price the case by the total number of hours that an agent spends working on a case. This field is blank when you enter the page for the first time.
- Currency Code** Enter the currency that you want to use for billing purposes for the business unit that you are defining.
- Rate Type** Select the exchange rate type that is used to calculate monetary transaction amounts in alternate currencies.
- Contracts Business Unit** Enter the contracts business unit that you want to use for billing.
- GL Business Unit** Enter the general ledger business unit that you want to use for billing.
- The prompt values for this field include all business units for all product lines. Populating this field enables mapping between the general ledger business unit and the call center business unit.
- The Case page does not display the general ledger business unit. It does display the contracts business unit, which appears by default from the agreement. When a case closes, the system sends the general ledger business unit, contracts business unit, and contract ID to the Transaction Billing Processor with other transaction information.
- Bill Type** Select the bill type that you want associated with the business unit.
- The prompt values for this field include all bill type identifier codes that are sent from PeopleSoft Billing to PeopleSoft CRM. The bill type code is a user-defined value in PeopleSoft Billing. Sample data includes *SVC* (Service), *CASE*, and *CRM\_ORDER*.
- Bill Source** Enter the bill source that you want associated with the business unit.
- The Bill Source field prompts on all bill source identifier codes that are sent from PeopleSoft Billing to PeopleSoft CRM. The bill source code is a user-defined value in PeopleSoft Billing. Sample data includes *SERVICE*, *OES* (Order Entry System), and *GSO* (General Service Orders).

---

**Note.** The system sends the Bill Type and Bill Source fields with every transaction if one or both are set up on the Business Unit Billing Details page.

---

See *PeopleSoft Enterprise CRM 9.1 Call Center Applications PeopleBook*, "Defining Call Center Business Units and Display Template Options," Defining Call Center Business Units.

### Tax Information

Use the fields on this tab to indicate where the order originated, where it will be accepted, and where the store is located. This information is used for tax purposes. The Order Origin Location, Order Acceptance Location, and Location fields prompt from the Location table (LOCATION\_TBL), which is sent to PeopleSoft CRM through an EIP from PeopleSoft HCM.

**Note.** The fields in the Tax Information group box are used by PeopleSoft Billing for integration to Vertex and Taxware, which are third-party tax vendors. Please refer to the setup for sales and use tax for third-party tax vendors for details on the function and behavior of each third-party tax field. These third-party tax fields are always blank when you first create a business unit for a PeopleSoft call center application.

See [Chapter 5, "Setting Up an Integration to the Transaction Billing Processor," Setting Up Sales and Use Tax for Third-Party Tax Vendors, page 107.](#)

## Setting Up Billing Options for PeopleSoft Order Capture

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

| Internal   | Self Service | Communications |
|--|--------------|----------------|
| <p><b>Business Unit</b> COM01</p> <p>*Description <input type="text" value="Communications"/> *Status <input type="text" value="Open"/></p> <p>*Short Description <input type="text" value="COM01"/> <input type="checkbox"/> Default Business Unit</p> <p><input type="checkbox"/> Submit Confirmation <input checked="" type="checkbox"/> Show Communications Tab</p>                        |              |                |
| <p><b>Business Unit</b></p> <p>FieldService <input type="text" value="COM01"/> Marketing <input type="text" value="COM01"/></p> <p>Order Management <input type="text" value="COM01"/> Proposal Management <input type="text"/></p> <p>Contracts <input type="text" value="COM01"/> General Ledger <input type="text"/></p>  |              |                |
| <p><b>Tax Settings</b></p> <p>*Tax Vendor <input type="text" value="None"/> <a href="#">Test Tax Interlink</a> Company <input type="text" value="PSFT"/></p> <p>Order Origin <input type="text" value="California Shipping Location"/> Division <input type="text"/></p> <p>Order Acceptance <input type="text" value="California Shipping Location"/> Store Location <input type="text"/></p> |              |                |

Order Capture Definition - Internal page (1 of 3)

| Order Capture                 |  |
|-------------------------------|--|
| *Freight Vendor               | None <input type="button" value="Test Freight"/>           |
| Ship From                     | California Shipping Location                               |
| Preferred Carrier             | UPS 2nd Day Air  |
| Quote Conversion Warning      | No Warning   |
| *Site Address Includes        | Customer Bill To Addresses                                 |
| Fulfillment Specialist Email  |  |
| Catalog Refresh (Minutes)     |  |
| Bill Type Identifier          |  |
| Default Service Duration      | Months   |
| Order Level Adjustments       | Do Not Prorate Adjustments                                 |
| Subscription Term             |  |
| Non-submitted Order Valid For | <input type="checkbox"/>                                   |
|                               | <input type="checkbox"/> Allow Line AAF Processing         |
| Agreement Coverage Grid       | Always Populate Grid                                       |
| *Card Vendor                  | None   |
| *Source                       | Storefront   |
| Sub Source Code               |  |
| Capture Priority              |  |
| Base Currency                 | US Dollar  |
| Rate Type                     | Average  |
| Credit Rating Value           |  |
| Quote Valid For               | 30   |
| Days Quote Due                | 10   |
| Bill Source                   |  |
| Quote Conversion              | Convert to Order and Subm                                  |
| Schedule                      |  |
| Clone Options                 |  |
|                               | <input type="checkbox"/> Copy Line Adjustment              |
|                               | <input checked="" type="checkbox"/> Copy Header Adjustment |
| Order Change Notifications    |  |
| Accepted                      | Notify Nobody  |
| Partially Accepted            | Notify Nobody  |
| Rejected                      | Notify Nobody  |
| Advisor Dialogs               |  |
|                               | <input type="checkbox"/> Display Session Information       |

Order Capture Definition - Internal page (2 of 3)

| Bulk Order   |   |
|--|---|
| Consumer Hierarchy   | CONS_HIERARCHY <input type="button" value="Search"/>  |
| Organization Hierarchy   | CUST_HIERARCHY <input type="button" value="Search"/>  |
|  | <input checked="" type="checkbox"/> Multiple Orders Per Recipient                           |
| Fulfillment  |   |
| <input type="checkbox"/> Fulfillment Logging                     | Product Availability Display <input type="button" value="Search"/> Display Highest Quantity |
| Catalog Display Options  |   |
| <input checked="" type="checkbox"/> Display By Customer          | Customer Priority <input type="button" value="Search"/> 2                                   |
| <input checked="" type="checkbox"/> Display By Partner Contact   | Partner Priority <input type="button" value="Search"/> 3                                    |
| <input checked="" type="checkbox"/> Display By User              | User Priority <input type="button" value="Search"/> 1                                       |
|  | <input type="checkbox"/> Display Browse Catalog   |
|  | Max Rows Returned <input type="button" value="Search"/> 250                                 |
| Order Submission   |   |
| <input checked="" type="checkbox"/> Allow Future Dated Orders    | Submission Mode <input type="button" value="Search"/> Only Queue Future Dated Or            |
| <input type="checkbox"/> Allow Temporary Services                | Price Order <input type="button" value="Search"/> Price as Lines Added                      |
| <input type="checkbox"/> Line Dates Editable on Order            | Initial List Price <input type="button" value="Search"/> Pricing Engine                     |
| <input checked="" type="checkbox"/> Use Lead Time for Start Date |   |
| Modified   | 07/20/2009 4:51PM PDT SAMPLE  |

Order Capture Definition - Internal page (3 of 3)

To set up billing options for PeopleSoft Order Capture, you must establish values for the Contracts, General Ledger, Bill Type, Bill Source, and Default Service Duration fields.

|  |  |
|--|--|
| <b>Contracts</b>   | Enter the contracts business unit that you want to use for billing.  |
| <b>General Ledger</b>  | Enter the general ledger business unit that you want to use for billing. The prompt values for this field include all business units for all product lines. Populating this field enables mapping between the general ledger business unit and the order capture business unit.  |
| <b>Bill Type Identifier</b>  | Select the bill type that you want associated with the business unit.<br><br>The prompt values for this field include all bill type identifier codes that are sent from PeopleSoft Billing to PeopleSoft CRM. The bill type code is a user-defined value in PeopleSoft Billing. Sample data includes <i>SVC</i> (Service), <i>CASE</i> , and <i>CRM_ORDER</i> .                              |
| <b>Bill Source</b>   | Enter the bill source that you want associated with the business unit.<br><br>The Bill Source field prompts on all bill source identifier codes that are sent from PeopleSoft Billing to PeopleSoft CRM. The bill source code is a user-defined value in PeopleSoft Billing. Sample data includes <i>SERVICE</i> , <i>OES</i> (Order Entry System), and <i>GSO</i> (General Service Orders). |
| <hr/>  |  |
| <b>Note.</b> The system sends the Bill Type and Bill Source fields with every transaction if one or both are set up on the Business Unit Billing Details page. |  |
| <hr/>  |  |
| <b>Default Service Duration</b>  | Enter the default duration for service products. This value is used to calculate the service end date for service products ordered through order capture by adding the duration to the service start date. The duration specified in the order capture business unit is used when the duration on the product definition is blank.   |

For more information on setting up billing options, refer to this PeopleBook:

**See Also**

*PeopleSoft Enterprise CRM 9.1 Order Capture Applications PeopleBook*, "Defining Order Capture Business Units"

## Defining Tax Parameters

Access the Tax Parameter Definitions page (Set Up CRM, Common Definitions, Tax Parameter Definition, Tax Parameter Definition).

**See Also**

[Chapter 5, "Setting Up an Integration to the Transaction Billing Processor," Page Used to Set Up Sales and Use Tax for Third-Party Tax Vendors, page 109](#)

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## Working with On-Demand Billing

This section provides an overview of on-demand billing and discusses how to set up on-demand billing transactions.

### Understanding On-Demand Billing

This section discusses:

- Overview
- Setup
- Contract creation and processing
- Integration points
- Error handling

---

**Note.** On-demand billing is specific to PeopleSoft CRM FieldService and CRM Support.

---

#### **Overview**

On-demand billing provides back office processing for one-time fee transactions for service orders and cases. These transactions are not linked to agreements. The fees are usually one-time fees that are billed to the customer. Through an integration with the Transaction Billing Processor, you can bill and book revenue for on-demand service fees for cases and service orders.

---

**Note.** PeopleSoft CRM enables the system to bill on-demand transactions through the Transaction Billing Processor. The same messages and interface tables are used. Revenue recognition for on-demand transactions is managed by PeopleSoft Billing through the Contracts Billing Interface (CA\_BI\_INTFC) process.

---

Here is an overview of the on-demand functionality:

- Through PeopleSoft Contracts, on-demand cases and service orders are processed through the Transaction Billing Processor and General Ledger for billing and revenue.
- PeopleSoft CRM identifies a transaction as on demand when passing the transaction from PeopleSoft CRM to the Transaction Billing Processor.
- Closure of a service order or case in PeopleSoft CRM triggers the sending of transaction information from PeopleSoft CRM to the Transaction Billing Processor.

PeopleSoft CRM determines whether a new contract is created or if an existing contract is used based on the sold to customer. PeopleSoft CRM requests one on-demand contract per sold to customer and PeopleSoft Contracts business unit mapping.

- The Transaction Billing Processor launches the revenue and billing processes immediately after the on-demand transaction loads into the contract staging table (INTERFACE\_CA) without any manual intervention.

- If a failure occurs during the creation of the contract or during processing of the on-demand transaction, the system does not create the contract or process the transaction.

The system sends an error message to PeopleSoft CRM with the failure reason. In this case, you must resubmit the transaction.

---

**Note.** The Transaction Billing Processor allows no visibility to on-demand contract lines in any components, processes, or reports. Deferred revenue is not applicable for on-demand transactions.

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### **Setup**

To implement on-demand transaction processing, you must set up:

- PeopleSoft Contracts business units.
- Contract statuses.
- Accounting definitions.
- Accounting rules.
- Billing plan detail template (optional).

Before creating on-demand contracts, set up the contract business unit and contract status. Additionally, you must set up the accounting rules for on-demand transactions to ensure that the system allows only one *REV* row per transaction. You must also select the Transaction Billing check box on the Installed Products page.

You have the option to create a billing plan detail template to populate or override the fields on the billing plan. Select the billing plan detail template on the Contract Definition - BU Options page. If you select a template on this page, the billing plan detail template populates or overrides the corresponding fields on the billing plan when the billing plan is created.

### **Contract Creation and Processing**

PeopleSoft Integrated FieldService and Support send one-time fee transactions to the Transaction Billing Processor to use the contracts functionality to bill and book revenue. The Transaction Billing Processor initiates billing processing and completes both revenue and billing processing for on-demand transactions.

The system completes these steps to create and process on-demand transactions through the Transaction Billing Processor:

1. If the service order or case is not covered by an agreement, the system sends the transaction to the Transaction Billing Processor as an on-demand transaction when a PeopleSoft CRM Support case or FieldService service order is closed.
2. The first time PeopleSoft CRM creates an on-demand service order or case, the system searches for the sold to customer or PeopleSoft Integrated FieldService or Support business unit to map to the PeopleSoft Contracts business unit and contract number.

If the search does not find a mapping, PeopleSoft CRM sends a contract request message (CONTRACT\_REQUEST) to the Transaction Billing Processor to create a new on-demand contract. PeopleSoft CRM sends a contract request message only when the system needs to create a new contract. The request message from PeopleSoft CRM specifies the transaction type (service order or case).

3. The Transaction Billing Processor creates an on-demand contract and sends a contract response message (CONTRACT\_RESPONSE) to PeopleSoft CRM providing the contract business unit, contract number, contract line number, error status, and error message.

The system creates the contract and contract lines, including an *As-incurred* billing plan, using the CA\_HDR\_CI component interface. On success, the Transaction Billing Processor responds to PeopleSoft CRM with the new contract number.

4. On receipt of the contract response message, PeopleSoft CRM sends the transaction to the Transaction Billing Processor through a transaction message (CONTRACT\_TXN) with all necessary data for the invoicing and booking revenue.

In the transaction message, the contract number identifies a particular contract. Each transaction is unique and is marked by its own transaction ID (CA\_TXN\_ID). For all future transactions for the same sold to customer, only the transaction (through the transaction message) is sent to the Transaction Billing Processor.

5. the Transaction Billing Processor retrieves the transaction data and loads the on-demand transaction from PeopleSoft CRM into the contract staging tables (INTFC\_CA).

Loading the contract staging tables triggers both the revenue process to apply the revenue to the appropriate account and billing process to generate the invoice to run. The transaction populates the contract interface tables, initiates the Billing Interface process (CA\_BI\_INTFC), and prepares the transaction for billing processing. Revenue recognition is handled by PeopleSoft Billing.

If errors occur during processing, the system sends a reply message to PeopleSoft CRM containing the contract business unit, contract number, contract line number, CRM identifier, and status indicating that the process failed.

If the transaction posts successfully to both PeopleSoft General Ledger and PeopleSoft Billing, the system sends a reply message to PeopleSoft CRM containing the contract business unit, contract number, contract line number, CRM identifier, and status indicating that the process succeeded. The response message is CONTRACT\_RESPONSE for both request and transaction messages, and it contains the appropriate success and failure codes and descriptions.

6. The CRM transaction changes the billing status from *submitted* to *completed*. This action marks the end of the PeopleSoft CRM processing. Contracts that are created for on-demand transactions are not visible in the front end on the Transaction billing Processor.
7. PeopleSoft Billing runs the Billing Interface and Finalization processes.

### **Integration Points**

These are the four major steps in the integration process between PeopleSoft CRM and PeopleSoft Contracts for on-demand contracts:

1. Create a billing plan.
2. Create a contract.
3. Populate the Contracts interface tables.
4. Process billing.

Creating a billing plan, creating a contract, and populating the interface table are the same steps that occur with agreement-based processing. These steps use the contract request (CONTRACT\_REQUEST and CONTRACT\_RESPONSE) and transaction (CONTRACT\_TXN) messages. The last step, process billing, differs from agreement-based transactions since billing for on-demand contracts takes place immediately through PeopleSoft Billing.

With agreement-based billing, you have control over the billing plan in PeopleSoft Contracts, and you can make changes to the contract before it goes to PeopleSoft Billing for processing. The on-demand process uses the same integration points as agreement-based transactions.

### **Error Handling**

Errors can occur during the contract and billing plan creation process, when the system loads the staging table, or when the system runs the revenue and billing processes. The Transaction Billing Processor initiates billing processing and sends the transactions to PeopleSoft Billing. PeopleSoft Billing completes both the revenue and billing processing for on-demand transactions.

Here is how the system handles errors:

- If a failure occurs during contract creation, the system creates the contract in a *cancelled* status and a response is sent back to PeopleSoft CRM with a message stating the nature of the error.

Once you correct the error manually, you must resubmit the transaction.

- If a contract was successfully created and is ready for billing, but the transaction fails to populate the contract interface tables, the transaction is not created, and the response message sends an error message back to PeopleSoft CRM stating the cause of the error.

Once you correct the problem manually, you must resubmit the transaction. PeopleSoft CRM resubmits only the Contract Transaction message since the contract has already been created.

- If errors are triggered during the revenue or billing processes, each process sends a response message back to PeopleSoft CRM with the failure and message.

Once you correct the problem manually, you must resubmit the transaction. PeopleSoft CRM resubmits only the Contract Transaction message since the contract has already been created.

## **Setting Up On-Demand Transactions**

This section lists the pages used to set up on demand transactions in PeopleSoft Financials and Supply Chain Management.

### **Pages Used for Setting Up On-Demand Transactions**

| <b>Page Name</b>                             | <b>Definition Name</b> | <b>Navigation</b>  | <b>Usage</b>   |
|--|------------------------|--|--|
| Installation Options -<br>Installed Products | INSTALLATION_FS        | Set Up Financials/Supply Chain, Install, Installation Options<br><br>Click the Products link in the General Options group box. | Select the Contracts Transaction Billing check box to indicate that this product is installed on the system. |

| <b>Page Name</b>                     | <b>Definition Name</b> | <b>Navigation</b>   | <b>Usage</b>  |
|--------------------------------------|------------------------|---|---|
| Contracts Definition - BU Definition | BUS_UNIT_TBL_CA        | Set Up Financials/Supply Chain, Business Unit Related, Contracts, Contracts Definition, BU Definition | Create a new PeopleSoft Contracts business unit definition or manage an existing business unit.   |
| Contracts Definition - BU Options    | BUS_UNIT_OPT_CA        | Set Up Financials/Supply Chain, Business Unit Related, Contracts, Contracts Definition, BU Options    | Select a bill plan template ID to use to override the fields on the billing plan (optional). If you select a template on this page, when the billing plan is created the billing plan detail template overrides the corresponding fields on the billing plan. |
| Contract Status                      | CA_STATUS_PNL          | Set Up Financials/Supply Chain, Product Related, Contracts, General Options, Contract Status          | Define contract statuses and map them to processing statuses. The system uses the contract status to control all processing that can occur against a contract.  |
| CRM Accounting Rules                 | CA_ACCT_CRM            | Customer Contracts, Create and Amend, CRM Acct Distribution   | Define the accounting rules to apply to PeopleSoft CRM transactions. Set up the accounting rules for on-demand transactions to ensure that the system enables only one <i>REV</i> row per transaction.  |

## Setting Up Installation Options

Access the Installation Options - Installed Products page (Set Up Financials/Supply Chain, Install, Installation Options). Then click the Products link in the General Options group box).

Select the Contracts Transaction Billing check box to indicate that this product is installed on the system.

### See Also

*PeopleSoft Enterprise Components for FSCM PeopleBook "Administering the Framework," Setting Log and Installation Options."*

## Creating new PeopleSoft Contracts Business Unit Definitions

Access the Contracts Definition - BU Definition page (Set Up Financials/Supply Chain, Business Unit Related, Contracts, Contracts Definition, BU Definition).

For detailed instructions, refer to the *PeopleSoft Enterprise Contracts PeopleBook*.

**See Also**

*PeopleSoft Enterprise Contracts PeopleBook, "Defining PeopleSoft Contracts Business Units"*

## Selecting a Bill Plan Template ID

Access the Contracts Definition - BU Options page (Set Up Financials/Supply Chain, Business Unit Related, Contracts, Contracts Definition, BU Options).

For detailed instructions, refer to the *PeopleSoft Enterprise Contracts PeopleBook*.

**See Also**

*PeopleSoft Enterprise Contracts PeopleBook, "Defining PeopleSoft Contracts Business Units"*

## Setting Up Contract Statuses

Access the Contract Status page (Set Up Financials/Supply Chain, Product Related, Contracts, General Options, Contract Status).

For detailed instructions, refer to the *PeopleSoft Enterprise Contracts PeopleBook*.

**See Also**

*PeopleSoft Enterprise Contracts PeopleBook, "Structuring Contracts"*

## Setting Up CRM Accounting Rules

Access the CRM Accounting Rules page (Customer Contracts, Create and Amend, CRM Acct Distribution).

For detailed instructions, refer to the *PeopleSoft Enterprise Contracts PeopleBook*.

**See Also**

*PeopleSoft Enterprise Contracts PeopleBook, "Setting Up the Transaction Billing Processor"*

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## Setting Up Sales and Use Tax for Third-Party Tax Vendors

This section provides an overview of the tax setup for third-party tax vendors, lists the common elements used in this section, and discusses how to set up sales and use tax for third-party tax vendors.

To enter sales and use tax, use the Tax Parameters (RF\_TAX\_PARAM) component. To load data into the tables for this component, you can also use the RF\_TAX\_PARAM component interface.

## Understanding Tax Setup for Third-Party Tax Vendors

Use the Tax Parameter Definitions page to integrate with third-party tax vendors, such as Taxware or Vertex. The system passes the values in the fields that appear on the page to the Transaction Billing Processor with every PeopleSoft CRM transaction and uses the values during invoice finalization when the taxes are calculated.

You can calculate Sales and Use Tax in one of two ways in PeopleSoft Billing, either the third-party tax calculations or the PeopleSoft internal tax calculation. Basically, the tax code and the address overrides are used for calculating taxes through the PeopleSoft internal system.

The data required for the internal tax calculation is sent through the integration with the Transaction Billing Processor. If the Billing business unit on the SCM side is configured for the PeopleSoft internal tax calculation, it calculates the taxes. It is basically the tax code.

You can define fields for each type of transaction (agreement fees, service order fees, and case fees) independent of each other. Use the fields listed in the next section only if you have a third-party integration with either Taxware or Vertex.

### See Also

*Enterprise PeopleTools 8.50 PeopleBook: Integration Broker*

*Enterprise PeopleTools 8.50 PeopleBook: PeopleSoft Integration Broker Testing Utilities and Tools*

*Enterprise PeopleTools 8.50 PeopleBook: PeopleSoft Business Interlinks*

## Common Elements Used in This Section

|                          |  |
|--------------------------|--|
| <b>Product Tax Group</b> | <p>Identify special tax-related charge information associated with individual transaction lines. For example, a laptop computer for the hearing impaired might receive a better rate than a laptop computer that doesn't have a feature for the hearing impaired.</p> <p>The values for this field come from the Product Group table. You may, however, enter free-form values. This is not a required field, so you may leave it blank.</p> <p>See <i>PeopleSoft Enterprise CRM 9.1 Product and Item Management PeopleBook</i>, "Product and Item Management."</p> <hr/> <p><b>Note.</b> These values should match the values defined by either Taxware or Vertex. As the administrator, you must enter the values accurately because no interface exists to verify that the tax group is a valid Taxware product code or Vertex product group.</p> <hr/> |
|--------------------------|--|

- Transaction Type** Determines how a vendor can calculate taxes. For example, the State of Illinois charges a six percent sales tax for purchases. This field includes these translate values: *Rental*, *Sales*, and *Service*. It is not a required field and may be left blank.
- Transactions Sub Type** Use for reporting purposes with the Vertex product only. This field is tied to the Transaction Type field and has predefined translate values that include *Expense*, *Freight*, *Misc*, *None*, *Property*, *Rental*, and *Service*. It is not required and may be left blank.

## Page Used to Set Up Sales and Use Tax for Third-Party Tax Vendors

| <i>Page Name</i>          | <i>Definition Name</i> | <i>Navigation</i>  | <i>Usage</i>  |
|---------------------------|------------------------|--|---|
| Tax Parameter Definitions | RF_TAX_PARAM           | Set Up CRM, Common Definitions, Tax Parameter Definition, Tax Parameter Definition | Set up sales and use taxes for service, material, labor, expenses, and cases for third-party tax vendors. |

## Setting Up Sales and Use Tax for Third-Party Tax Vendors

Access the Tax Parameter Definitions page (Set Up CRM, Common Definitions, Tax Parameter Definition, Tax Parameter Definition).

### Tax Parameter Definitions

SetID CRM01

[Service](#) | [Material](#) | [Labor](#) | [Expense](#) | [Support](#) | [All](#)

**Service Sales and Use Tax** Customize | Find | View All | First 1-2 of 2 Last

| *Service Type | Service ID | Service    | Product Tax Group | Transaction Type | Transaction Sub Type |   |
|---------------|------------|------------|-------------------|------------------|----------------------|---|
| Repair        | APP0000006 | Repair A/C | A/C               | Service          | Service              | 🗑 |
| PM            | APP0000001 | PM for A/C | A/C               | Service          | Expense              | 🗑 |

Add Service Sales and Use Tax

**Material Sales and Use Tax** Customize | Find | View All | First 1 of 1 Last

| Item Group      | Item ID | Product Tax Group | Transaction Type | Transaction Sub Type |   |
|-----------------|---------|-------------------|------------------|----------------------|---|
| AIR CONDITIONER | 10009   | A/C               | Service          | None                 | 🗑 |

Add Material Sales and Use Tax

**Labor Sales and Use Tax** Customize | Find | View All | First 1 of 1 Last

| *Cost Category | Product Tax Group | Transaction Type | Transaction Sub Type |   |
|----------------|-------------------|------------------|----------------------|---|
| Travel         | A/C               | Service          | None                 | 🗑 |

Add Labor Sales and Use Tax

Tax Parameter Definitions page (1 of 2)

**Expense Sales and Use Tax** Customize | Find | View All | First 1 of 1 Last

| *Expense Type | Product Tax Group | Transaction Type | Transaction Sub Type |   |
|---------------|-------------------|------------------|----------------------|---|
| Mileage       | A/C               | Service          | Expense              | 🗑 |

Add Expense Sales and Use Tax

**Support Sales and Use Tax** Customize | Find | View All | First 1 of 1 Last

| *Product      | Case Type   | Source | Product Tax Group | Transaction Type | Transaction Sub Type |   |
|---------------|-------------|--------|-------------------|------------------|----------------------|---|
| Air Cond, Fan | Service Rel | PHONE  | A/C               | Service          | None                 | 🗑 |

Add Support Sales and Use Tax

Tax Parameter Definitions page (2 of 2)

### **Service Sales and Use Tax**

Select the service type and service ID for which you want to enter tax information. To add additional rows of information, click the Add Service Sales and Use Tax button.

### **Material Sales and Use Tax**

Select the item group and item ID for which you want to enter tax information. To add additional rows of information, click the Add Material Sales and Use Tax button.

***Labor Sales and Use Tax***

Select the cost category for which you want to enter tax information. To add additional rows of information, click the Add Labor Sales and Use Tax button.

***Expense Sales and Use Tax***

Select the expense type for which you want to enter tax information. To add additional rows of information, click the Add Expense Sales and Use Tax button.

***Support Sales and Use Tax***

Select the product and case type for which you want to enter tax information. To add additional rows of information, click the Add Support Sales and Use Tax button.



## **Part 4**

# **ESRI Integration**

## **Chapter 6**

### **Setting Up ESRI Integration**



## Chapter 6

# Setting Up ESRI Integration

This chapter provides overviews of geographical information systems, Environmental Systems Research Institute (ESRI) integration, and ESRI processes and discusses how to:

- Set up Integration Broker for ESRI integration.
- Set up integration flags.
- Set up ESRI integration.
- Access the Map Dashboard.
- View the Map Dashboard.
- View geocode errors.

---

## Understanding Geographical Information Systems

ESRI is a geographical information system (GIS) and mapping software solution. Using ESRI's mapping and GIS software, you can spatially enable the geographical data. The GIS can be an effective way to explain events, predict outcomes, or plan strategies.

The cornerstone of GIS is location information. Addresses are actually the most common form of location information. An address specifies a location in much the same way as a geographic coordinate does. But, addresses are merely text strings containing a house number, street name, direction, and postal code. The GIS needs a mechanism to calculate geographic location coordinates such as latitude and longitude before you can display them on a map.

Use address geocoding to display tabular data containing addresses as points on a map.

Use geocodes and ESRI mapping functionality to generate incident-related maps that are tailored to your business needs. For example, you can use this functionality to show:

- Incidents or cases of the same type on a map.
- All types of incidents in a given area.

---

**Note.** For information on installing the ESRI software, refer to the installation documentation that was provided by ESRI when you purchased the ESRI software.

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## Understanding ESRI Integration

Setting up ESRI integration is a two-step process:

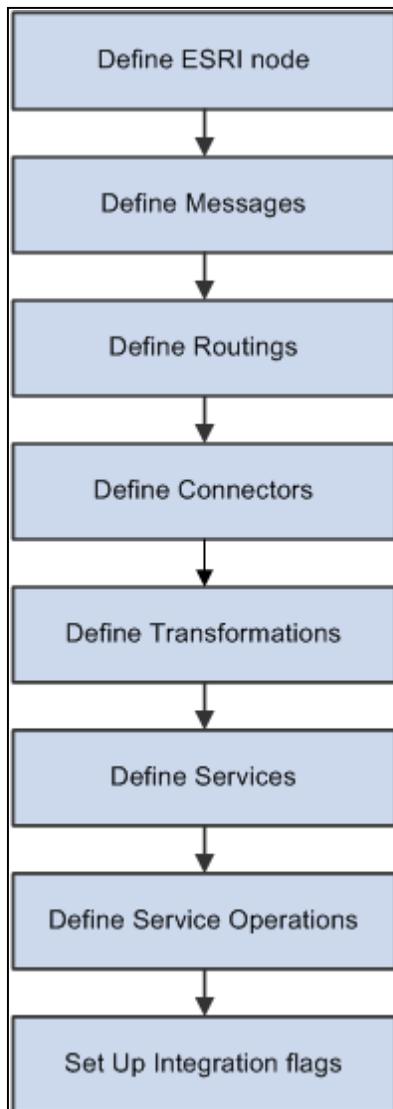
1. Set up Integration Broker for address geocoding, map extent, and map integrations.
2. Set up the integration with ESRI for map and query definitions.

---

**Note.** PeopleSoft Customer Relationship Management (CRM) integrates with ArcIMS 4.0 and ArcIMS 9.0. ArcIMS provides the foundation for distributing high-end GIS and mapping services using the internet. ArcIMS software enables users to integrate local data sources with internet data sources for display, query, and analysis in an easy-to-use web browser.

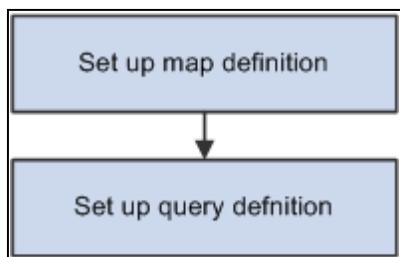
---

This flowchart illustrates the steps that you follow to set up Integration Broker for the ESRI integration:



Integration Broker setup for the ESRI integration

This flowchart illustrates the steps you follow to set up the ESRI integration:



ESRI integration setup

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## Understanding ESRI Processes

Once ESRI is installed and you have set up the integrations, three processes occur on an ongoing basis: geocode retrieval, map service information updating, and map generation.

This section discusses:

- Geocode addresses
- Map service information
- Map generation

### Geocode Addresses

PeopleSoft CRM stores geocodes for all consumer and company addresses, case addresses or locations, and service order addresses or locations. You can enter either an absolute address, which requires address and the postal code, or an intersection, which requires two cross streets and an optional postal code.

Geocoding is available for U.S. addresses only.

---

**Note.** The Geocode Integration check box on the Installation Options page must be selected to enable geocode address functionality.

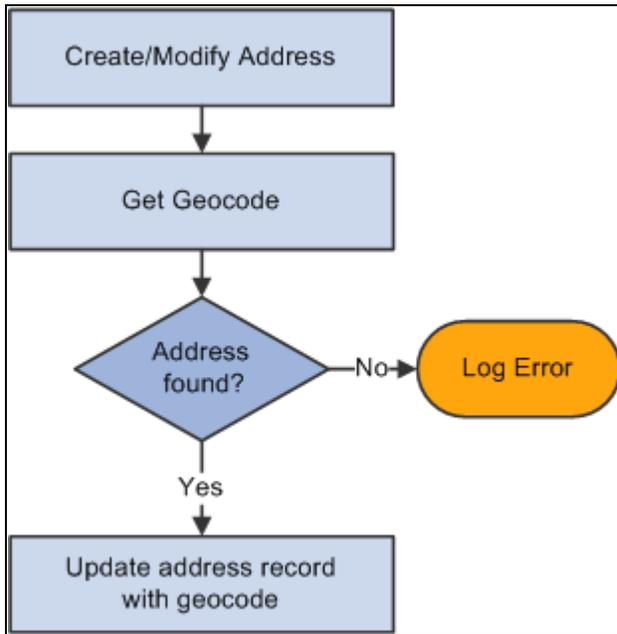
---

You have two options for obtaining geocode addresses:

- Synchronous, real-time connection with ESRI.
- Scheduled batch job that runs periodically.

You can obtain geocodes from ESRI in synchronous real time. When you create or modify an address, the system calls ESRI to get the geocode. If the geocode is found, the system updates the address record with the geocode. If no geocode is found, the system logs an error.

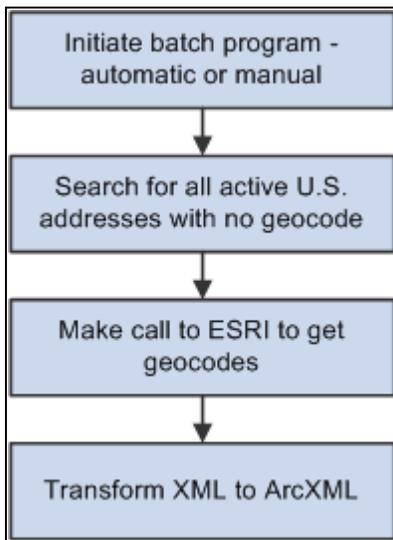
This flowchart illustrates the request process for synchronous geocode addresses:



Request process flow for synchronous geocode addresses

Geocodes for addresses can be obtained by a scheduled job that runs periodically. When you first set up the system, use this method to retrieve geocodes for addresses. You can also run this process periodically to pick up any addresses that do not have geocodes. The address record is updated with geocodes obtained from the ESRI system. The system transforms the address or intersection information from XML to ArcXML and sends it to ESRI.

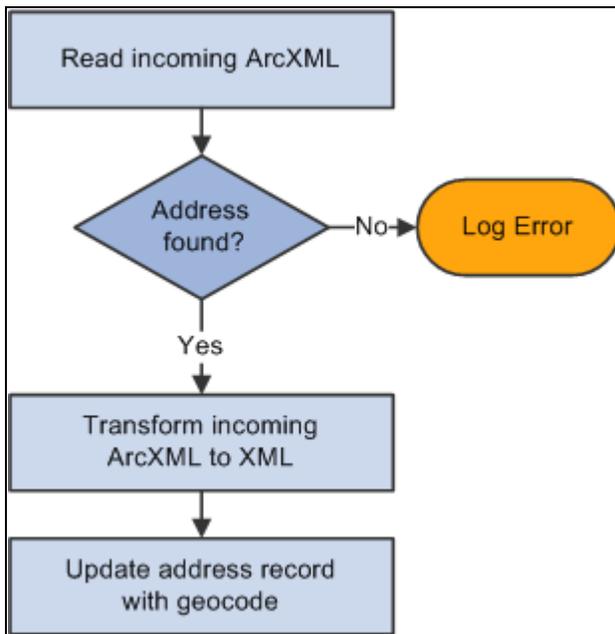
This flowchart illustrates the outbound process flow for obtaining geocode addresses using a batch process:



Request process flow for batch geocode addresses

ESRI publishes the geocode for the address or intersection. If no geocode is found, an error is logged. If a corresponding geocode is found, the PeopleSoft system transforms the incoming ArcXML sent by ESRI to XML. The address record is updated with the geocode.

This flowchart illustrates the inbound process flow for geocode retrieval:



Reply process flow for geocode addresses

The RBG\_GEO\_CODE\_US channel is used for the PeopleSoft ESRI integration. This table lists the EIPs for geocode retrieval:

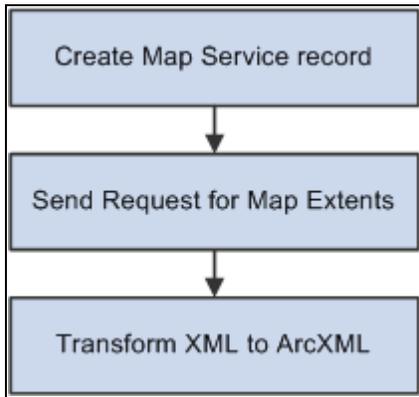
| <i>EIP Name</i>            | <i>Description</i>                | <i>Message Name</i>      | <i>Direction of Integration</i> | <i>Technology</i>  |
|----------------------------|-----------------------------------|--------------------------|---------------------------------|--------------------|
| Request Message Definition | Address information               | RBG_SYNC_ADDRESS_US_MSG  | CRM → ESRI                      | Integration Broker |
| Reply Message Definition   | Geocode for the requested address | RBG_SYNC_GEO_CODE_US_MSG | ESRI → CRM                      | Integration Broker |

## Map Service Information

Each map that is available in the system is called a map service. You can use one map or a number of different maps, depending on your business needs. For example, you can access a city map, a state map, and a map of the U.S. The number of map services to which you can subscribe is not restricted.

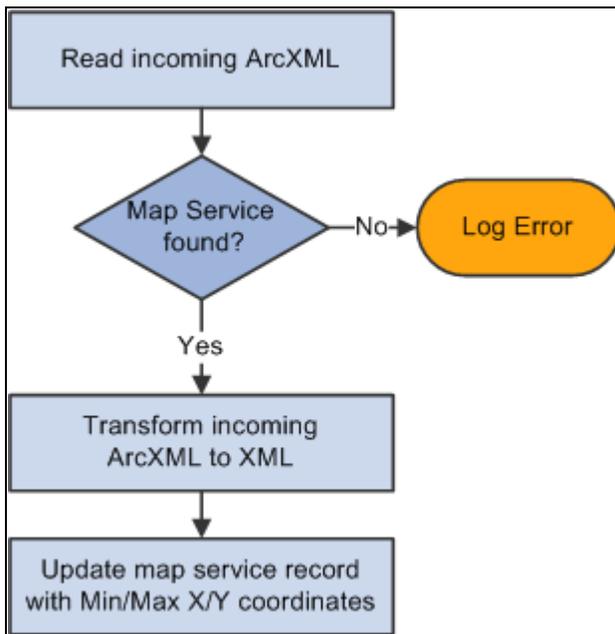
In addition to setting up the map services to which you have subscribed, ESRI defines the minimum and maximum extents to be used when zooming in and out on the Map Dashboard.

You create the map service record in the Map Definition component. The PeopleSoft system transforms the XML to ArcXML and sends the map service information to ESRI. This flowchart illustrates the outbound process flow for map service information:



Request map service information process flow

ESRI sends the map service information and the PeopleSoft system reads the incoming ArcXML. If the map service is found, the PeopleSoft system transforms the ArcXML to XML and updates the map service record with the minimum and maximum extents. The minimum and maximum X and Y coordinates appear on the Map Definition page. This flowchart illustrates the inbound process flow for updating the map service record:



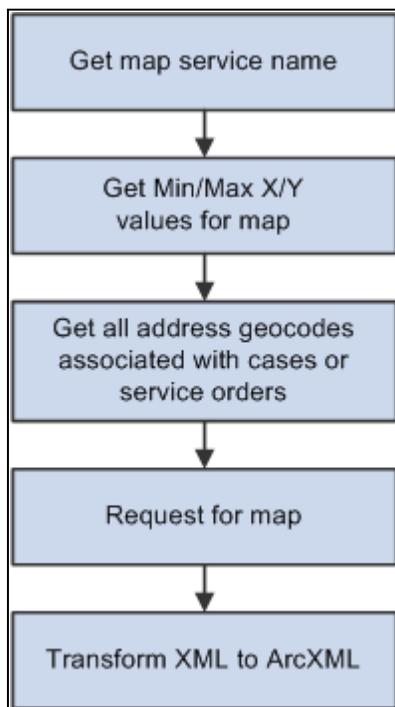
Reply map service information process flow

The RBG\_GEO\_CODE\_US channel is used for the PeopleSoft ESRI integration. This table lists the EIPs for map service information:

| <i>EIP Name</i>            | <i>Description</i>  | <i>Message Name</i>   | <i>Direction of Integration</i> | <i>Technology</i>  |
|----------------------------|---|-----------------------|---------------------------------|--------------------|
| Request Message Definition | Service map information to obtain map coordinates from ESRI | RBG_MAP_EXT_REQ_MSG   | CRM → ESRI                      | Integration Broker |
| Reply Message Definition   | Minimum/Maximum X/Y coordinates of the service map          | RBG_MAP_EXT_REPLY_MSG | ESRI → CRM                      | Integration Broker |

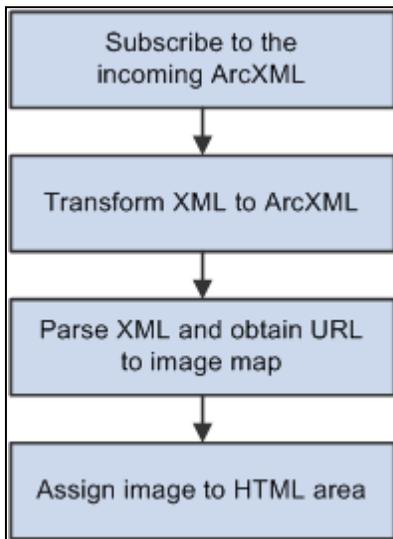
## Map Generation

This integration is used to send a list of geocodes from either a case or service order search. A request XML is sent to the ESRI system to generate a map with geocodes that appear as dots. The PeopleSoft system gets the map service name, the minimum and maximum extents for the map, and all address geocodes associated with cases or service orders. It sends the message in ArcXML. This flowchart illustrates the outbound process flow for generating the map:



Request map generation process flow

The ESRI system responds with a URL to the image map based on the map service and geocodes. The map appears on the PeopleSoft page. This graphic illustrates the outbound process flow for generating the map:



Reply map generation process flow

The RBG\_GEO\_CODE\_US channel is used for the PeopleSoft ESRI integration. This table lists the EIPs for map generation:

| <i>EIP Name</i>            | <i>Description</i>  | <i>Message Name</i> | <i>Direction of Integration</i> | <i>Technology</i>  |
|----------------------------|---|---------------------|---------------------------------|--------------------|
| Request Message Definition | Service map information and list of geocodes to be displayed on the map | RBG_MAP_REQ_MSG     | CRM —> ESRI                     | Integration Broker |
| Reply Message Definition   | URL to the generated image map  | RBG_MAP_REPLY_M SG  | ESRI —> CRM                     | Integration Broker |

## Setting Up Integration Broker for ESRI Integration

PeopleSoft CRM uses Integration Broker to send and receive messages for the ESRI integration. Before setting up the integrations for the geocode, map extent, and map integrations, read the *Enterprise PeopleTools 8.50 PeopleBook: Integration Broker*.

This section does not provide details on Integration Broker; instead, it provides directions for setting up the geocode, map extent, and map integrations.

This section discusses how to:

- Define the ESRI node.
- Define messages.
- Define routings.

- Define connectors.
- Define transformations.
- Define services.
- Define service operations.
- Review routing definitions for service operations.

### See Also

*Enterprise PeopleTools 8.50 PeopleBook: Integration Broker*

## Pages Used to Set Up the ESRI Integration

| <b>Page Name</b>       | <b>Definition Name</b> | <b>Navigation</b>  | <b>Usage</b>  |
|------------------------|------------------------|--|---|
| Node Definitions       | IB_NODE                | PeopleTools, Integration Broker, Integration Setup, Nodes, Node Definitions                    | Define the ESRI node.   |
| Message Definition     | IB_MESSAGE_BUILDER     | PeopleTools, Integration Broker, Integration Setup, Messages, Message Definition               | Define messages for address geocoding, map extents, and maps.             |
| Routing Definitions    | IB_ROUTINGDEFN         | PeopleTools, Integration Broker, Integration Setup, Routings, Routing Definitions              | Define routings for address geocoding, map extents, and maps.             |
| Connector Properties   | IB_ROUTINGDEFNCON      | PeopleTools, Integration Broker, Integration Setup, Routings, Connector Properties             | Define node connectors for address geocoding, map extents, and maps.      |
| Parameters             | IB_ROUTINGDEFNDOC      | PeopleTools, Integration Broker, Integration Setup, Routings, Parameters                       | Define node transformations for address geocoding, map extents, and maps. |
| Services               | IB_SERVICEDEFN         | PeopleTools, Integration Broker, Integration Setup, Services, Services                         | Define services for address geocoding, map extents, and maps.             |
| Find Service Operation | IB_OPERATION           | PeopleTools, Integration Broker, Integration Setup, Service Operations, Find Service Operation | Find service operations for address geocoding, map extents, and maps.     |

| Page Name | Definition Name | Navigation  | Usage  |
|-----------|-----------------|---|--|
| Routings  | IB_SERVICERTNGS | Click the Service Operation link on the Find Service Operation page. Then click Routings. | Review the routing definitions of the service operation. This includes name, version, routing type, sender node, receiver, node, direction, and status |

## Defining the ESRI Node

Access the Node Definitions page (PeopleTools, Integration Broker, Integration Setup, Nodes, Node Definitions).

The screenshot shows the 'Node Definitions' page with the following configuration for the 'ESRI' node:

- Node Name:** ESRI
- \*Description:** 3rd party - ESRI Node
- \*Node Type:** External
- \*Authentication Option:** None
- \*Default User ID:** VP1
- WSIL URL:** (empty)
- Hub Node:** (empty)
- Master Node:** (empty)
- Company ID:** (empty)
- IB Throttle Threshold:** (empty)
- Image Name:** (empty)
- Codeset Group Name:** (empty)
- External User ID:** (empty)
- External Password:** (empty)
- External Version:** (empty)

Additional options on the right side:

- Default Local Node
- Local Node
- Active Node
- Non-Repudiation
- Segment Aware

Buttons on the right: Copy Node, Rename Node, Delete Node.

Buttons at the bottom: Save, [Contact/Notes](#), [Properties](#).

Node Definitions page

Your ESRI node definition should look similar to the example shown here.

**See Also**

*Enterprise PeopleTools 8.50 PeopleBook: Integration Broker*

*Enterprise PeopleTools 8.50 PeopleBook: Integration Broker Administration*

**Defining Messages**

Access the Message Definition page (PeopleTools, Integration Broker, Integration Setup, Messages, Message Definition).

Message Definition
Schema

**Warning:** Structure references work records.

**Message:** RBG\_MAP\_EXT\_REPLY\_MSG

**Version:** VERSION\_1

**Description:**

**Owner ID:**

**Comments:**

Explanation

Schema Exists: No

Part Message

Exclude Description in Schema

Single Level 0 Row

Include Namespace

Suppress Empty XML Tags

**Message Type**

Rowset-based

Nonrowset-based

Container

Service Operation References

[View Records Only](#)    [View Included Fields Only](#)    [Add Record to Root](#)

Left | Right

---

- [-] RBG\_MAP\_EXT\_REPLY\_MSG
  - [-] RBG MAP EXT WRK
    - ✓ [RBGMAPMAXX\\_STR](#)
    - ✓ [RBGMAPMAXY\\_STR](#)
    - ✓ [RBGMAPMINX\\_STR](#)
    - ✓ [RBGMAPMINY\\_STR](#)
    - [RBGMAPSERVICE](#)

[Return to Search](#)

Message Definition page (RBG messages)

Message Definition page (ESRI messages)

**Note.** The system does not display the Service Operation References and Add Record to Root links on the Message Definition pages for ESRI messages. Also, the system does not display links to the message record and message fields on the Message Definition pages for ESRI messages.

These messages are used for the integration:

| <i>Message Name</i>      | <i>Description</i>  |
|--------------------------|---|
| RBG_MAP_EXT_REPLY_MSG    | Reply message from ESRI with map extents.                                   |
| RBG_MAP_EXT_REQ_MSG      | Request message from PSFT for map extents.                                  |
| RBG_MAP_REPLY_MSG        | Reply message for ESRI with the map.  |
| RBG_MAP_REQ_MSG          | Request message from PSFT for map.  |
| RBG_SYNC_ADDRESS_US_MSG  | Request message from PSFT to get the geocode of an address or intersection. |
| RBG_SYNC_GEO_CODE_US_MSG | Reply message from ESRI with the geocode of an address or intersection.     |

To re-configure these messages for your business operation, click the link under the Message Name field. The system displays the Message Definition page. Use the fields on the pages to make any necessary changes or add new information.

These messages are used to contain the transformed request or reply messages.

| <b>Message Name</b>    | <b>Description</b>  |
|------------------------|---|
| ESRI_ADDRESS_US_MSG    | Transformed request message to get the geocode of an address or intersection. |
| ESRI_GEO_CODE_US_MSG   | Transformed reply message with geocode of an address or intersection.         |
| ESRI_MAP_EXT_REPLY_MSG | Transformed reply message from ESRI with map extents.                         |
| ESRI_MAP_EXT_REQ_MSG   | Transformed request message for map extents.                                  |
| ESRI_MAP_REPLY_MSG     | Transformed reply message from ESRI with the map.                             |
| ESRI_MAP_REQ_MSG       | Transformed request message for map.  |

To re-configure these messages for your business operation, click the link under the Message Name field. The system displays the Message Definition page. Use the fields on the pages to make any necessary changes or add new information.

### **See Also**

*Enterprise PeopleTools 8.50 PeopleBook: Integration Broker*

## **Defining Routings**

Access the Routing Definitions page (PeopleTools, Integration Broker, Integration Setup, Routings, Routing Definitions).

The screenshot shows the 'Routing Definitions' page with the following configuration details:

- Routing Name:** MAP\_EXTENTS\_ROUTING
- \*Service Operation:** RBG\_MAP\_EXT\_REQ\_MSG
- Version:** VERSION\_1
- \*Description:** ESRI EXTENT ROUTING
- Comments:** Routing for ESRI Extents
- \*Sender Node:** PSFT\_CR
- \*Receiver Node:** ESRI
- Operation Type:** Synchronous
- Object Owner ID:** Government Base Objects
- \*Log Detail:** Header and Detail
- Active:**  Active
- System Generated:**  System Generated
- User Exception:**  User Exception

Buttons: [Graphical View](#),

Routing Definitions page

Before you access this page, enter *Map* in the Routing Name field and click Search. These routings appear as search results:

| <b>Routing Name</b> | <b>Description</b>                               |
|---------------------|--|
| MAP_EXTENTS_ROUTING | Routing for Service Map Extents.                 |
| MAP_GEOCODE_ROUTING | Routing for geocoding an address or intersection |
| MAP_ROUTING         | Routing for getting a Map.                       |

To re-configure these routings for your business operation, click the link under the Routing Name field. The system displays the Routing Definitions page. Use the fields on the pages to make any necessary changes or add new information.

## Defining Connectors

Access the Connector Properties page (PeopleTools, Integration Broker, Integration Setup, Routings, Connector Properties).

Routing Definitions Parameters **Connector Properties** Routing Properties

**Routing Name:** MAP\_EXTENTS\_ROUTING

**Service Operation:** RBG\_MAP\_EXT\_REQ\_MSG

**Service Operation Version:** VERSION\_1

**Gateway ID:** LOCAL

**Connector ID:** HTTPTARGET

| Property ID  | Property Name    | Value                             |
|--------------|------------------|-----------------------------------|
| HEADER       | sendUncompressed | Y                                 |
| HTTPPROPERTY | Method           | POST                              |
| PRIMARYURL   | URL              | http://<ESRI_SERVER_NAME>/service |

Save

Connector Properties page

Access the Connector Properties page for each of these routings:

| <b>Routing Name</b> | <b>Description</b>        |
|---------------------|---------------------------|
| MAP_EXTENTS_ROUTING | Routing for ESRI extents. |
| MAP_GEOCODE_ROUTING | Geocode routing for map.  |
| MAP_ROUTING         | ESRI routing for map.     |

To re-configure the connector properties for these routings, use the fields on the pages to make any necessary changes or add new information.

**PRIMARYURL**

Use the examples below to enter a URL in the PRIMARYURL field:

- MAP\_EXTENTS\_ROUTING

*http://<ESRI-SERVER NAME>/servlet/com.esri.esrimap.Esrimap?ServiceName=SFBusiness*

- MAP\_GEOCODE\_ROUTING

*http://<ESRI-SERVER NAME>.peoplesoft.com:7001/servlet/com.esri.esrimap.Esrimap?ServiceName=SFBusiness&CustomService=Geocode*

- MAP\_ROUTING

*http://<ESRI-SERVER NAME>/servlet/com.esri.esrimap.Esrimap?ServiceName=SFBusiness*

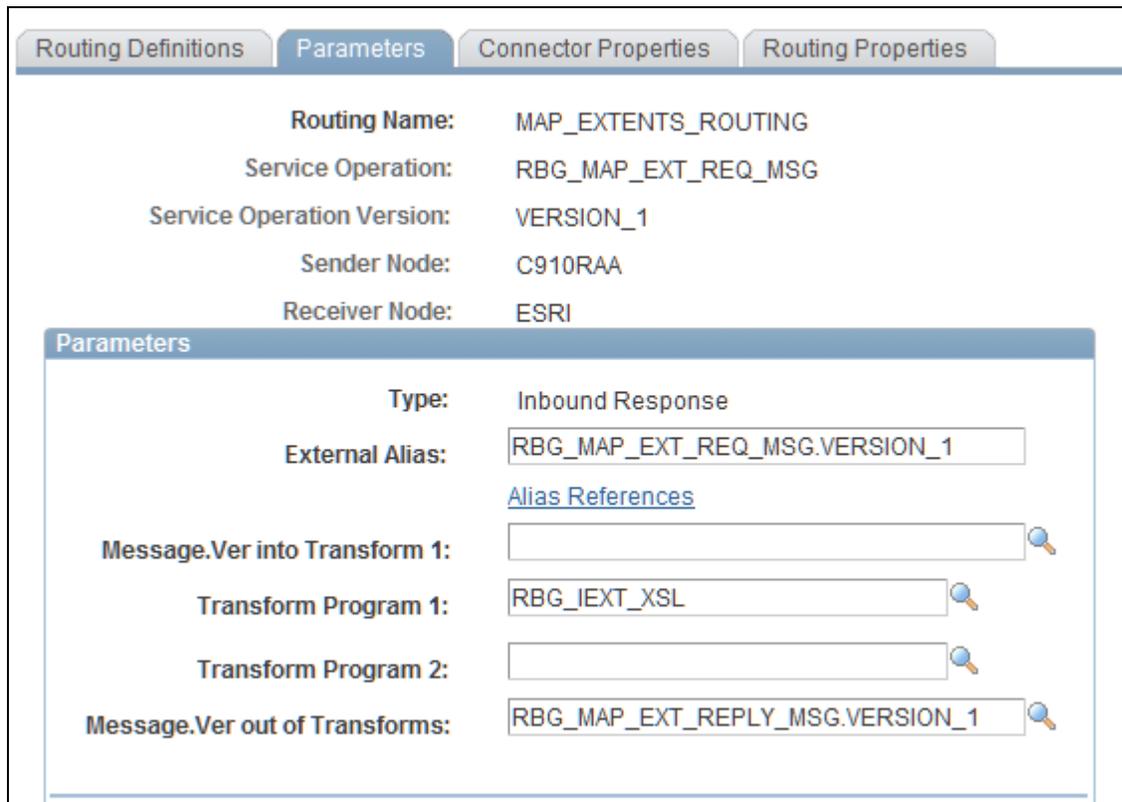
---

**Note.** You must substitute your map service for the *ServiceName* parameter and the name of your server for *<ESRI-SERVER NAME>*.

---

## Defining Transformations

Access the Parameters page (PeopleTools, Integration Broker, Integration Setup, Routings, Parameters).



Parameters page (1 of 2)

|                                       |  |
|---------------------------------------|--|
| <b>Type:</b>                          | Outbound Request   |
| <b>External Alias:</b>                | RBG_MAP_EXT_REQ_MSG.VERSION_1  |
|                                       | <a href="#">Alias References</a> <a href="#">WS Security</a>   |
| <b>Message.Ver into Transform 1:</b>  | <input type="text"/>            |
| <b>Transform Program 1:</b>           | RBG_OEXT_XSL                    |
| <b>Transform Program 2:</b>           | <input type="text"/>            |
| <b>Message.Ver out of Transforms:</b> | ESRI_MAP_EXT_REQ_MSG.VERSION_1  |
| <input type="button" value="Save"/>   |  |

Parameters page (2 of 2)

Access the Parameters page for each of these routings:

| <b>Routing Name</b> | <b>Description</b>            | <b>Outbound Request Transform Program 1</b> | <b>Inbound Request Transform Program 1</b> |
|---------------------|-------------------------------|---|--|
| MAP_EXTENTS_ROUTING | Routing for Map extents.      | RBG_OEXT_XSL                                | RBG_IEXT_XSL                               |
| MAP_GEOCODE_ROUTING | Routing for Address geocoding | RBG_ADDR_XSL                                | RBG_GEO_XSL                                |
| MAP_ROUTING         | Routing for Map               | RBG_OMAP_XSL                                | RBG_IMAP_XSL                               |

To re-configure the transformations for these routings, use the fields on the pages to make any necessary changes or add new information.

## Defining Services

Access the Services page (PeopleTools, Integration Broker, Integration Setup, Services, Services).

## Services

**Service:** RBG\_MAP\_EXT\_REQ\_MSG

**\*Description:**

**Comments:**

Transformed Request message from PSFT fro Map Extents

**Service Alias:**

**Object Owner ID:**

**\*Namespace:**

[Link Existing Operations](#)      [View WSDL](#)

**Service Operations**

**Service Operation:**

**Operation Type:**

**Existing Operations** [Customize](#) | [Find](#) | [View All](#) | | [First](#) | 1 of 1 | [Last](#)

Operation    Message Links   

| Operation.Default Version                     | Description                    | Active                              | Operation Type                         |
|---|--------------------------------|-------------------------------------|--|
| <a href="#">RBG_MAP_EXT_REQ_MSG.VERSION 1</a> | Request message for Map Extent | <input checked="" type="checkbox"/> | Synch <input type="button" value="-"/> |

Services page

These services are used for the integration:

| <b>Service</b>          | <b>Description</b>  |
|-------------------------|---|
| RBG_MAP_EXT_REQ_MSG     | Service to get the extents of a Map Service.              |
| RBG_MAP_REQ_MSG         | Service to get a Map.                                     |
| RBG_SYNC_ADDRESS_US_MSG | Service to get the geocode of an address or intersection. |

To re-configure these services for your business operation, click the link under the Service field. The system displays the Service page. Use the fields on the pages to make any necessary changes or add new information.

**Note.** You must change the URL in the Namespace field so it coincides with your business for both the RBG and ESRI messages.

## Defining Service Operations

Access the Find Service Operation page (PeopleTools, Integration Broker, Integration Setup, Service Operations, Find Service Operation).

| Service                 | Service Operation       | Operation Type | Operation Alias |
|-------------------------|-------------------------|----------------|-----------------|
| RBG_MAP_EXT_REQ_MSG     | RBG_MAP_EXT_REQ_MSG     | Synchronous    |                 |
| RBG_MAP_REQ_MSG         | RBG_MAP_REQ_MSG         | Synchronous    |                 |
| RBG_SYNC_ADDRESS_US_MSG | RBG_SYNC_ADDRESS_US_MSG | Synchronous    |                 |

Find Service Operation page

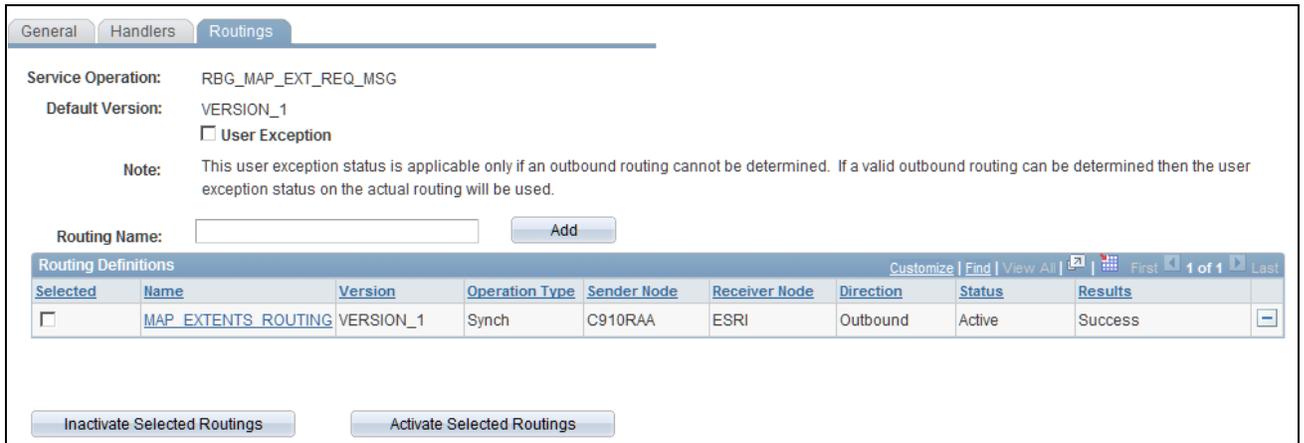
Enter *RBG* in the Service field, and click Search. These services appear as search results:

| <b>Service</b>          | <b>Service Operation</b> | <b>Operation Type</b> |
|-------------------------|--------------------------|-----------------------|
| RBG_MAP_EXT_REQ_MSG     | RBG_MAP_EXT_REQ_MSG      | Synchronous           |
| RBG_MAP_REQ_MSG         | RBG_MAP_REQ_MSG          | Synchronous           |
| RBG_SYNC_ADDRESS_US_MSG | RBG_SYNC_ADDRESS_US_MSG  | Synchronous           |

Click the link under the Service Operation field and then click the Routings tab to view the routing definitions associated with the service operation.

## Reviewing Routing Definitions for Service Operations

Access the Routings page (Click the Service Operation link on the Find Service Operation page. Then click Routings.).



Routings page

## Setting Up Integration Flags

Three integration flags must be selected for the ESRI integration to work effectively. To implement ESRI, select integration flags for the geocode, map extent, and map integrations.

This section discusses how to:

- Select the geocode integration flag.
- Select the map extent and map integration flags.

## Pages Used to Set Up Integration Flags

| <i>Page Name</i>     | <i>Definition Name</i> | <i>Navigation</i>  | <i>Usage</i>   |
|----------------------|------------------------|--|--|
| Installation Options | RB_INSTALLATION        | Set Up CRM, Install, Installation Options, General Options, Installation Options | Select the flag for geocode integration.             |
| Map Services         | RBG_MAP_HDR_PG         | Set Up CRM, Common Definitions, Integration Rules, Map Services, Map Services    | Select the flags for map extent and map integration. |

## Selecting the Geocode Integration Flag

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

| General Options  |   |
|--|---|
| Country  | USA  United States  |
| Exchange Rate Type                                       | CRRNT  Current Rate   |
| Market   | Global  |
| Agreement Renewal Lead Time                              | 90 Days   |
| <input type="checkbox"/> Collector/Credit Analyst Req.   | <input checked="" type="checkbox"/> 360-Degree Search Context |
| <input checked="" type="checkbox"/> Geo Code Integration |   |

Installation Options - General Options page

Select the Geo Code Integration check box.

**Note.** After you save the page, you must clear the cache and reboot the application server.

## Selecting the Map Extent and Map Integration Flags

Access the Map Services page (Set Up CRM, Common Definitions, Integration Rules, Map Services, Map Services).

| Map Services   |   | Query Definition  |                       |
|--|---|---|-----------------------|
| <b>Vendor Information</b>                              |   |   |                       |
| Market   | Global  | <input checked="" type="checkbox"/> Enable Map Extent Integration |                       |
| GIS Vendor Name  | ESRI  | <input checked="" type="checkbox"/> Enable Map Integration        |                       |
| Description  | Map Service definition to integrate PeopleSoft CRM and ESRI - ArcIMS. |   |                       |
| <b>Services</b>  |   |   |                       |
| Map Service  | SFBusiness  | <input checked="" type="checkbox"/> Active Map Service            |                       |
| Description  |   |   |                       |
| Request Message  | RBG_MAP_EXT_REQ_MSG   | <input checked="" type="checkbox"/> Default Map Service           |                       |
| <input type="button" value="Get Map Service Extents"/> |   |   |                       |
| Map Minimum X  | -122.513400000000000000   | Map Minimum Y   | 37.708200000000000000 |
| Map Maximum X  | -122.30313928571400000000   | Map Maximum Y   | 37.832500000000000000 |
| Modified   | 04/09/2004 9:39AM PDT GOVADMIN  |   |                       |

Map Services page

Select the Enable Map Extent Integration and Enable Map Integration check boxes.

## Setting Up ESRI Integration

To set up ESRI Integration, use the Map Setup (RBG\_MAP\_SETUP) component.

You must define the ESRI map services to which you subscribe. You can define one or more map services to be used in PeopleSoft CRM. The map services that you define appear as options on the case and service order components. On the Query Definition page, you define the components that support map-related queries.

This section discusses how to:

- Set up map services.
- Set up query definition.

### Pages Used to Set Up ESRI Integration

| <i>Page Name</i> | <i>Definition Name</i> | <i>Navigation</i>   | <i>Usage</i>  |
|------------------|------------------------|---|---|
| Map Services     | RBG_MAP_HDR_PG         | Set Up CRM, Common Definitions, Integration Rules, Map Services, Map Services     | Define the GIS vendor and the map services that you are using.  |
| Query Definition | RBG_MAP_QRY_PG         | Set Up CRM, Common Definitions, Integration Rules, Map Services, Query Definition | Define the components used for map-related queries. As delivered, map-related queries are enabled for case and service order. |

### Setting Up Map Services

Access the Map Services page (Set Up CRM, Common Definitions, Integration Rules, Map Services, Map Services).

---

**Note.** The previous section includes an example of the Map Services page.

---

|   |  |
|---|--|
| <b>Market</b>   | Displays market defaults from the search page.   |
| <b>GIS Vendor Name</b><br>(geographical information system vendor name) | Enter the name of the GIS vendor.  |
| <b>Description</b>  | Enter a description of the service defined on this page.   |
| <b>Enable Map Extent Integration</b>                                    | Select to enable map extent integration. Map extent information determines the boundaries for zooms and pans. You must select this check box to enable the Get Map Service Extents button in the Services group box. |

**Enable Map Integration** Select to enable the publishing of maps to the PeopleSoft CRM system.

### Services

|   |  |
|---|--|
| <b>Map Service</b>  | Enter each map service that is to be used. The user can select the appropriate map service from the Map Dashboard search. Map services are set up on the ESRI site.  |
| <b>Description</b>  | Enter a description of the map service.  |
| <b>Request Message</b>  | Enter the message to be sent to ESRI to request the service.   |
| <b>Active Map Service</b>   | Select to make the map service active.   |
| <b>Default Map Service</b>  | Select to use the map service as the default.  |
| <b>Get Map Service Extents</b>  | Click to get the extents for the map service that you are defining. This sends a request to ESRI for the map service extent data and populates the map extent information on the page. The Get Map Service Extents button only works if you have selected Enable Map Extent Integration. |
| <b>Map Minimum X</b><br>(minimum X coordinate),<br><b>Map Maximum X</b><br>(maximum X coordinate),<br><b>Map Minimum Y</b><br>(minimum Y coordinate),<br>and <b>Map Maximum Y</b><br>(maximum Y coordinate) | After you request the map service extents, the system populates the minimums and maximums for the X and Y coordinates. This data establishes the boundaries for zooms and pans. Latitude and longitude appears in degrees.   |

## Setting Up Query Definition

Access the Query Definition page (Set Up CRM, Common Definitions, Integration Rules, Map Services, Query Definition).

Map Services Query Definition

GIS Vendor Name ESRI Market Global

Query Information Find | View All First 1 of 2 Last

Component Information

\*Query Name CASE  Active Query

\*Component Interface RC\_CASE\_CI  Default Query

Name

\*Component Name RC\_CASE

\*Base Record RBG\_CASE\_GEO\_VW

Copy Fields Customize Find | View All First 1-15 of 15 Last

| From Record | From Field    | To Record       | To Field      | Active                              |   |   |
|-------------|---------------|-----------------|---------------|-------------------------------------|---|---|
| RC_CASE     | BUSINESS_UNIT | RBG_CASE_GEO_VW | BUSINESS_UNIT | <input checked="" type="checkbox"/> | + | - |
| RC_CASE     | CASE_ID       | RBG_CASE_GEO_VW | CASE_ID       | <input type="checkbox"/>            | + | - |
| RC_CASE     | CASE_TYPE     | RBG_CASE_GEO_VW | CASE_TYPE     | <input checked="" type="checkbox"/> | + | - |
| RC_CASE     | CREATION_DATE | RBG_CASE_GEO_VW | CREATION_DATE | <input type="checkbox"/>            | + | - |
| RC_CASE     | MARKET        | RBG_CASE_GEO_VW | MARKET        | <input type="checkbox"/>            | + | - |

Query Definition page (1 of 2)

|                |             |                 |             |                                     |   |   |
|----------------|-------------|-----------------|-------------|-------------------------------------|---|---|
| RC_CASE        | RC_CATEGORY | RBG_CASE_GEO_VW | RC_CATEGORY | <input checked="" type="checkbox"/> | + | - |
| RC_CASE        | RC_DETAIL   | RBG_CASE_GEO_VW | RC_DETAIL   | <input checked="" type="checkbox"/> | + | - |
| RC_CASE        | RC_PRIORITY | RBG_CASE_GEO_VW | RC_PRIORITY | <input type="checkbox"/>            | + | - |
| RC_CASE        | RC_STATUS   | RBG_CASE_GEO_VW | RC_STATUS   | <input type="checkbox"/>            | + | - |
| RC_CASE        | RC_SUMMARY  | RBG_CASE_GEO_VW | RC_SUMMARY  | <input type="checkbox"/>            | + | - |
| RC_CASE        | RC_TYPE     | RBG_CASE_GEO_VW | RC_TYPE     | <input type="checkbox"/>            | + | - |
| DERIVED_RD_GUI | CITY        | RBG_INCI_ADD_VW | CITY        | <input type="checkbox"/>            | + | - |
| DERIVED_RD_GUI | COUNTRY     | RBG_INCI_ADD_VW | COUNTRY     | <input type="checkbox"/>            | + | - |
| DERIVED_RD_GUI | POSTAL      | RBG_INCI_ADD_VW | POSTAL      | <input checked="" type="checkbox"/> | + | - |
| DERIVED_RD_GUI | STATE       | RBG_INCI_ADD_VW | STATE       | <input type="checkbox"/>            | + | - |

Modified 04/19/2004 9:17AM PDT GOVADMIN

\* Required Field

Query Definition page (1 of 2)

**Query Name** Enter a name for the query. The query name is selected on the Map Dashboard search page.

|                                 |  |
|---------------------------------|--|
| <b>Component Interface Name</b> | Enter the component interface that provides access to the component.   |
| <b>Component Name</b>           | Enter the name of the component on which you want to perform the query. PeopleSoft CRM is delivered set up to query on cases and service orders. |
| <b>Base Record</b>              | Enter the name of the base record for the component.   |
| <b>Active Query</b>             | Select to enable the query definition.   |
| <b>Default Query</b>            | Select to use this query as the default.   |

### **Copy Fields**

In the Copy Fields group box, define the fields that you want to appear in the case or service order-related information grid that appears under the map on the Map Dashboard page. For example, in a service order-related query, you may want to display the business unit, service order ID, consumer name, city, postal code, state, service order status, and service order priority. Each of these rows corresponds to a point shown on the map.

|                    |   |
|--------------------|---|
| <b>From Record</b> | Select the record name from which to retrieve the data. |
| <b>From Field</b>  | Select the field name from which to retrieve the data.  |
| <b>To Record</b>   | Select the record name in the destination table.        |
| <b>To Field</b>    | Select the field name in the destination table.         |
| <b>Active</b>      | Select to enable the copying of the specified fields.   |

---

## **Accessing the Map Dashboard**

Using the Map Dashboard search page, you can create customized searches to display the data. You can access the Map Dashboard search page from the agent view, navigation bar, Case page, or Service Order page.

This section discusses how to access the Map Dashboard.

### **Pages Used to Access the Map Dashboard**

| <b>Page Name</b>      | <b>Definition Name</b> | <b>Navigation</b>   | <b>Usage</b>  |
|-----------------------|------------------------|---|---|
| Map Dashboard - Query | RBG_VIEW_MAP_PG        | From the left navigation, click the Map Dashboard link on the menu. | Define the criteria for the search. You can search on one or more fields to define the results. |

| <b>Page Name</b>    | <b>Definition Name</b> | <b>Navigation</b>  | <b>Usage</b>  |
|---------------------|------------------------|--|---|
| Map Dashboard - Map | RBG_VIEW_MAP_PG        | <ul style="list-style-type: none"> <li>On the Case page, click the Map Dashboard button on the toolbar.</li> <li>On the Service Order page, click the Map Dashboard link.</li> </ul> | Click the button on the Case page or the link on the Service Order page to go directly to the Map Dashboard. The system carries forward all of the values that you defined in the Query Definition setup. |

## Accessing the Map Dashboard

Access the Map Dashboard - Query page (from the left navigation, click the Map Dashboard link on the menu).

The screenshot shows the 'Map Dashboard' interface. At the top, there is a blue header with the text 'Map Dashboard'. Below this is a section titled 'Query' with a light blue background. Inside the 'Query' section, there are two dropdown menus. The first is labeled '\*Search' and has 'CASE' selected. The second is labeled 'Map Service' and has 'SFBusiness' selected.

Map Dashboard - Query page (1 of 2)

The screenshot shows a search interface with a title bar 'Search'. At the top, there is a 'Use Saved Search' dropdown menu. Below it are two buttons: 'Map It' and 'Clear'. To the right are three links: 'Save Search Criteria' (with a document icon), 'Delete Saved Search' (with a trash icon), and 'Personalize Search' (with a magnifying glass icon). The main area contains a list of search criteria, each with a dropdown menu and a text input field. The criteria are: Business Unit, Case ID, Customer Name, Contact Name, Date Created, Problem Summary, Case Status, Case Type, Case Priority, Category, Specialty Type, Detail, City, State, Postal Code, and Country. The 'Date Created' field has a calendar icon, and the 'Problem Summary' field has a 'begins with' dropdown. At the bottom, there are two buttons: 'Map It' and 'Clear', and three links: 'Save Search Criteria', 'Delete Saved Search', and 'Personalize Search'.

Map Dashboard - Query page (2 of 2)

**Note.** Users must specify a business unit, setID, and market on the Overall Preferences page under Set Up CRM, Security, User Preferences in order to access the map dashboard.

|                             |  |
|-----------------------------|--|
| <b>Search</b>               | Select <i>Case</i> or <i>Service Order</i> .   |
| <b>Map Service</b>          | The map service appears by default to the map that you defined on the Map Definition page. You can select from a list of available map services. The map services are configured on the ESRI site. |
| <b>Use Saved Search</b>     | Select a saved search from the list.   |
| <b>Map It</b>               | Click the Map It button to submit the search and generate the map.   |
| <b>Save Search Criteria</b> | Click the link to save the search criteria.  |
| <b>Personalize Search</b>   | Click the link to display a list of search fields. You can select the fields that will appear on the search page.  |

---

## Viewing the Map Dashboard

The Map Dashboard presents a graphical and tabular representation of the search results.

This section discusses how to:

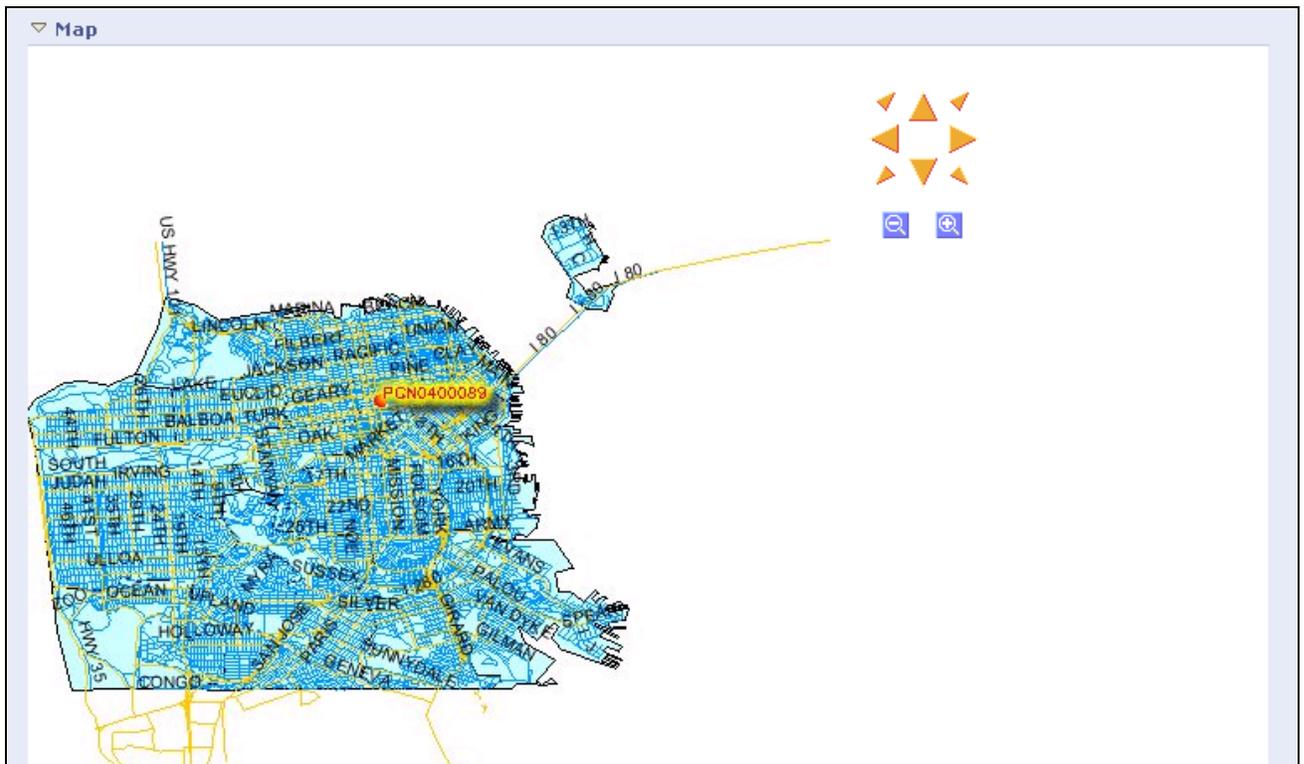
- View the Map Dashboard.
- View case-related information on the Map Dashboard.
- View service order-related information on the Map Dashboard.

### Pages Used to View the Map Dashboard

| <i>Page Name</i>    | <i>Definition Name</i> | <i>Navigation</i>                               | <i>Usage</i>  |
|---------------------|------------------------|---|---|
| Map Dashboard - Map | RBG_VIEW_MAP_PG        | Click Map It on the Map Dashboard - Query page. | Use this page to view the map and tabular data generated by the search. |

### Viewing the Map Dashboard

Access the Map Dashboard - Map page (on the Case page, click the Map Dashboard button on the toolbar).



Map Dashboard - Map page

Use the directional arrows and zoom in and zoom out buttons to navigate to the areas on the map that you want to view.

## Viewing Case-Related Information on the Map Dashboard

Access the Map Dashboard - Cases page (from the left navigation, click Map Dashboard, then select *Case* in the Search field of the Query section of the page to search for Cases).

The Cases grid displays details of the case-related information that appears on the map. Click the Case ID link to navigate to the case details.

## Viewing Service Order-Related Information on the Map Dashboard

Access the Map Dashboard - Service Orders page (from the left navigation, click Map Dashboard, then select *Service Order* in the Search field of the Query section of the page to search for Service Orders).

The Service Orders grid displays details of the service order-related information that appears on the map. Click the Service Order ID link to navigate to the service order details.

---

## Viewing Geocode Errors

If the ESRI system cannot return a valid geocode for the address that is published, the system create an error log.

This section discusses how to view geocode errors.

## Page Used to View Geocode Errors

| <i>Page Name</i>  | <i>Definition Name</i> | <i>Navigation</i>                                   | <i>Usage</i>  |
|-------------------|------------------------|---|---|
| Geocode Error Log | CM_GEO_ERR_LOG_PG      | Customers CRM, Geocode Error Log, Geocode Error Log | View addresses that do not generate valid geocodes. |

## Viewing Geocode Errors

Access the Geocode Error Log page (Customers CRM, Geocode Error Log, Geocode Error Log).

### Geocode Error Log

Error Log

|   |                        |
|---|------------------------|
| <b>CM ID</b> 160537361041040311094374023084 | <b>Status</b>          |
| <b>Address Type</b> Address                 | <b>City</b> Dublin     |
| <b>Address Line 1</b> 3454 Owens drive      | <b>State</b> CA        |
| <b>Address Line 2</b>                       | <b>Country</b> USA     |
| <b>Date Created</b> 04/05/2004 7:07PM       | <b>Created By</b> PSEM |
| <b>Description</b>                          |                        |

|                 |                       |      |
|-----------------|-----------------------|------|
| <b>Modified</b> | 04/05/2004 7:07PM PDT | PSEM |
|-----------------|-----------------------|------|

Geocode Error Log page

This page displays addresses that do not generate valid geocodes.

## Appendix A

# PeopleSoft CRM Solution Management Reports

This appendix provides an overview of PeopleSoft CRM Solution Management reports and enables you to view a summary table of all reports.

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**Note.** For samples of these reports, see the Portable Document Format (PDF) files that are published on CD-ROM with the documentation.

---

### See Also

*Enterprise PeopleTools 8.50 PeopleBook: PeopleSoft Process Scheduler*

*Enterprise PeopleTools 8.50 PeopleBook: Using PeopleSoft Applications*

---

## PeopleSoft CRM Solution Management Reports: A to Z

This table lists the two solution management reports that are shared by PeopleSoft Support, PeopleSoft HelpDesk, and PeopleSoft Integrated FieldService.

### Solutions Usage

| <b>Report ID and Report Name</b> | <b>Description</b>   | <b>Navigation</b>                                    | <b>Run Control Page</b> |
|----------------------------------|--|--|-------------------------|
| RCC2012<br>Solution Usage        | This report lists solutions that were used in cases created during the specified date range. For each solution, the report shows the solution usage count, solved count, and success rate. | Solutions, Reports, Solutions Usage, Solutions Usage | RUN_RCC2012             |

## Top Ten Solutions By Product

| <i>Report ID and Report Name</i>        | <i>Description</i>  | <i>Navigation</i>  | <i>Run Control Page</i> |
|---|---|--|-------------------------|
| RCC2014<br>Top Ten Solutions By Product | <p>For each included product, this report lists the ten solutions that most often resolved cases that were created during the specified date range.</p> <p>For each solution, the report shows the number of cases solved for that product.</p> | Solutions, Reports, Top Ten Solutions By Product, Top Ten Solutions By Product | RUN_RCC2014             |

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