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PeopleSoft Enterprise Online Marketing 9 PeopleBook

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Contents

Part 1
PeopleSoft Online Marketing User Guide

Chapter 7

Chapter 8
Deploying and Managing Online Dialogs...**133**

Chapter 9
Using PeopleSoft Online Marketing Event Wire..**151**

ix

Part 2
PeopleSoft Online Marketing Administration

Chapter 10

Chapter 13
Email Response Processor...**211**

Chapter 14
Importing and Exporting Dialogs...**223**

Part 3
PeopleSoft Online Marketing Integration

Chapter 15
Understanding the Online Marketing Event Wire Setup

Chapter 16
Event Wire API Reference

Contents

About This PeopleBook

PeopleSoft Enterprise PeopleBooks provide you with the information that you need to implement and use PeopleSoft Enterprise applications from Oracle.

This preface discusses:

* PeopleSoft Enterprise application prerequisites.
* Application fundamentals.
* Documentation updates and printed documentation.
* Additional resources.
* Typographical conventions and visual cues.
* Comments and suggestions.
* Common elements in PeopleBooks.

Note. PeopleBooks document only elements, such as fields and check boxes, that require additional explanation. If an element is not documented with the process or task in which it is used, then either it requires no additional explanation or it is documented with common elements for the section, chapter, PeopleBook, or product line. Elements that are common to all PeopleSoft Enterprise applications are defined in this preface.

PeopleSoft Enterprise Application Prerequisites

To benefit fully from the information that is covered in these books, you should have a basic understanding of how to use PeopleSoft Enterprise applications.

You might also want to complete at least one introductory training course, if applicable.

You should be familiar with navigating the system and adding, updating, and deleting information by using PeopleSoft Enterprise menus, pages, or windows. You should also be comfortable using the World Wide Web and the Microsoft Windows or Windows NT graphical user interface.

These books do not review navigation and other basics. They present the information that you need to use the system and implement your PeopleSoft Enterprise applications most effectively.

Application Fundamentals

Each application PeopleBook provides implementation and processing information for your PeopleSoft Enterprise applications.

For some applications, additional, essential information describing the setup and design of your system appears in a companion volume of documentation called the application fundamentals PeopleBook. Most product lines have a version of the application fundamentals PeopleBook. The preface of each PeopleBook identifies the application fundamentals PeopleBooks that are associated with that PeopleBook.

The application fundamentals PeopleBook consists of important topics that apply to many or all PeopleSoft Enterprise applications. Whether you are implementing a single application, some combination of applications within the product line, or the entire product line, you should be familiar with the contents of the appropriate application fundamentals PeopleBooks. They provide the starting points for fundamental implementation tasks.

Documentation Updates and Printed Documentation

This section discusses how to:

• Obtain documentation updates.

• Download and order printed documentation.

Obtaining Documentation Updates

You can find updates and additional documentation for this release, as well as previous releases, on Oracle's PeopleSoft Customer Connection website. Through the Documentation section of Oracle's PeopleSoft Customer Connection, you can download files to add to your PeopleBooks Library. You'll find a variety of useful and timely materials, including updates to the full line of PeopleSoft Enterprise documentation that is delivered on your PeopleBooks CD-ROM.

Important! Before you upgrade, you must check Oracle's PeopleSoft Customer Connection for updates to the upgrade instructions. Oracle continually posts updates as the upgrade process is refined.

See Also

Oracle's PeopleSoft Customer Connection, http://www.oracle.com/support/support_peoplesoft.html

Downloading and Ordering Printed Documentation

In addition to the complete line of documentation that is delivered on your PeopleBook CD-ROM, Oracle makes PeopleSoft Enterprise documentation available to you via Oracle's website. You can:

• Download PDF files.

• Order printed, bound volumes.

Downloading PDF Files

You can download PDF versions of PeopleSoft Enterprise documentation online via the Oracle Technology Network. Oracle makes these PDF files available online for each major release shortly after the software is shipped.

See Oracle Technology Network, http://www.oracle.com/technology/documentation/psftent.html.

Ordering Printed, Bound Volumes

You can order printed, bound volumes of selected documentation via the Oracle Store.

See Oracle Store, http://oraclestore.oracle.com/OA_HTML/ibeCCtpSctDspRte.jsp?section=14021

Additional Resources

The following resources are located on Oracle's PeopleSoft Customer Connection website:

Resource	Navigation
Application maintenance information	Updates + Fixes
Business process diagrams	Support, Documentation, Business Process Maps
Interactive Services Repository	Support, Documentation, Interactive Services Repository
Hardware and software requirements	Implement, Optimize + Upgrade; Implementation Guide; Implementation Documentation and Software; Hardware and Software Requirements
Installation guides	Implement, Optimize + Upgrade; Implementation Guide; Implementation Documentation and Software; Installation Guides and Notes
Integration information	Implement, Optimize + Upgrade; Implementation Guide; Implementation Documentation and Software; Pre-Built Integrations for PeopleSoft Enterprise and JD Edwards EnterpriseOne Applications
Minimum technical requirements (MTRs)	Implement, Optimize + Upgrade; Implementation Guide; Supported Platforms
Documentation updates	Support, Documentation, Documentation Updates
PeopleBooks support policy	Support, Support Policy
Prerelease notes	Support, Documentation, Documentation Updates, Category, Release Notes
Product release roadmap	Support, Roadmaps + Schedules
Release notes	Support, Documentation, Documentation Updates, Category, Release Notes
Release value proposition	Support, Documentation, Documentation Updates, Category, Release Value Proposition
Statement of direction	Support, Documentation, Documentation Updates, Category, Statement of Direction
Troubleshooting information	Support, Troubleshooting
Upgrade documentation	Support, Documentation, Upgrade Documentation and Scripts

Typographical Conventions and Visual Cues

This section discusses:

- Typographical conventions.
- Visual cues.
- Country, region, and industry identifiers.
- Currency codes.

Typographical Conventions

This table contains the typographical conventions that are used in PeopleBooks:

Typographical Convention or Visual Cue	Description
Bold	Indicates PeopleCode function names, business function names, event names, system function names, method names, language constructs, and PeopleCode reserved words that must be included literally in the function call.
Italics	Indicates field values, emphasis, and PeopleSoft Enterprise or other book-length publication titles. In PeopleCode syntax, italic items are placeholders for arguments that your program must supply. We also use italics when we refer to words as words or letters as letters, as in the following: Enter the letter *O*.
KEY+KEY	Indicates a key combination action. For example, a plus sign (+) between keys means that you must hold down the first key while you press the second key. For ALT+W, hold down the ALT key while you press the W key.
`Monospace font`	Indicates a PeopleCode program or other code example.
" " (quotation marks)	Indicate chapter titles in cross-references and words that are used differently from their intended meanings.
. . . (ellipses)	Indicate that the preceding item or series can be repeated any number of times in PeopleCode syntax.
{ } (curly braces)	Indicate a choice between two options in PeopleCode syntax. Options are separated by a pipe (	).

Typographical Convention or Visual Cue	Description
[ ] (square brackets)	Indicate optional items in PeopleCode syntax.
& (ampersand)	When placed before a parameter in PeopleCode syntax, an ampersand indicates that the parameter is an already instantiated object. Ampersands also precede all PeopleCode variables.

Visual Cues

PeopleBooks contain the following visual cues.

Notes

Notes indicate information that you should pay particular attention to as you work with the PeopleSoft Enterprise system.

Note. Example of a note.

If the note is preceded by *Important!,* the note is crucial and includes information that concerns what you must do for the system to function properly.

Important! Example of an important note.

Warnings

Warnings indicate crucial configuration considerations. Pay close attention to warning messages.

Warning! Example of a warning.

Cross-References

PeopleBooks provide cross-references either under the heading "See Also" or on a separate line preceded by the word *See.* Cross-references lead to other documentation that is pertinent to the immediately preceding documentation.

Country, Region, and Industry Identifiers

Information that applies only to a specific country, region, or industry is preceded by a standard identifier in parentheses. This identifier typically appears at the beginning of a section heading, but it may also appear at the beginning of a note or other text.

Example of a country-specific heading: "(FRA) Hiring an Employee"

Example of a region-specific heading: "(Latin America) Setting Up Depreciation"

Country Identifiers

Countries are identified with the International Organization for Standardization (ISO) country code.

Region Identifiers

Regions are identified by the region name. The following region identifiers may appear in PeopleBooks:

• Asia Pacific

• Europe

• Latin America

• North America

Industry Identifiers

Industries are identified by the industry name or by an abbreviation for that industry. The following industry identifiers may appear in PeopleBooks:

• USF (U.S. Federal)

• E&G (Education and Government)

Currency Codes

Monetary amounts are identified by the ISO currency code.

Comments and Suggestions

Your comments are important to us. We encourage you to tell us what you like, or what you would like to see changed about PeopleBooks and other Oracle reference and training materials. Please send your suggestions to your product line documentation manager at Oracle Corporation, 500 Oracle Parkway, Redwood Shores, CA 94065, U.S.A. Or email us at appsdoc@us.oracle.com.

While we cannot guarantee to answer every email message, we will pay careful attention to your comments and suggestions.

Common Elements Used in PeopleBooks

As of Date	The last date for which a report or process includes data.
Business Unit	An ID that represents a high-level organization of business information. You can use a business unit to define regional or departmental units within a larger organization.
Description	Enter up to 30 characters of text.
Effective Date	The date on which a table row becomes effective; the date that an action begins. For example, to close out a ledger on June 30, the effective date for the ledger closing would be July 1. This date also determines when you can view and change the information. Pages or panels and batch processes that use the information use the current row.

Once, Always, and **Don't Run**	Select Once to run the request the next time the batch process runs. After the batch process runs, the process frequency is automatically set to Don't Run.
	Select Always to run the request every time the batch process runs.
	Select Don't Run to ignore the request when the batch process runs.
Process Monitor	Click to access the Process List page, where you can view the status of submitted process requests.
Report Manager	Click to access the Report List page, where you can view report content, check the status of a report, and see content detail messages (which show you a description of the report and the distribution list).
Request ID	An ID that represents a set of selection criteria for a report or process.
Run	Click to access the Process Scheduler request page, where you can specify the location where a process or job runs and the process output format.
SetID	An ID that represents a set of control table information, or TableSets. TableSets enable you to share control table information and processing options among business units. The goal is to minimize redundant data and system maintenance tasks. When you assign a setID to a record group in a business unit, you indicate that all of the tables in the record group are shared between that business unit and any other business unit that also assigns that setID to that record group. For example, you can define a group of common job codes that are shared between several business units. Each business unit that shares the job codes is assigned the same setID for that record group.
Short Description	Enter up to 15 characters of text.
User ID	An ID that represents the person who generates a transaction.

PeopleSoft Online Marketing Preface

This preface discusses:

• PeopleSoft CRM application fundamentals.

• PeopleSoft CRM automation and configuration tools.

• PeopleSoft CRM business object management.

• PeopleSoft CRM product and item management.

• PeopleTools PeopleBooks.

Note. This PeopleBook documents only page elements that require additional explanation. If a page element is not documented with the process or task in which it is used, then either it requires no additional explanation or it is documented with common elements for the section, chapter, PeopleBook, or product line.

PeopleSoft Application Fundamentals

The *PeopleSoft Enterprise CRM 9 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 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 how to administer workers who perform tasks such as support or field service in PeopleSoft CRM. It includes information on competency management and assigning workers to tasks.

• Interactions and 360-Degree Views.

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

• Self-Service for Customers.

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

• Relationship Management.

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

• Entitlement Management.

This part discusses setting up agreements and warranties.

• SmartViews.

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

See Also

PeopleSoft Enterprise CRM 9 Application Fundamentals PeopleBook

PeopleSoft CRM Automation and Configuration Tools

The *PeopleSoft Enterprise CRM 9 Automation and Configuration Tools PeopleBook* discusses automation and configuration tools that are common to multiple CRM applications. This is an essential companion to your application PeopleBook.

The *PeopleSoft Enterprise CRM 9 Automation and Configuration Tools PeopleBook* contains these parts:

- Correspondence Management.

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

- Automation Tools.

  This part discusses PeopleSoft CRM workflow, the Active Analytics Framework (AAF), 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 Natural Language Processing (NLP) and 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.

See Also

PeopleSoft Enterprise CRM 9 Automation and Configuration Tools PeopleBook

PeopleSoft Enterprise CRM Business Object Management

The *PeopleSoft Enterprise CRM 9 Business Object Management PeopleBook* discusses how to create and manage customer and worker business objects in PeopleSoft CRM.

The PeopleSoft Enterprise CRM 9 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. PeopleSoft Enterprise CRM 9 Business Object Management PeopleBook.

See Also

PeopleSoft Enterprise CRM 9 Business Object Management PeopleBook

PeopleSoft Enterprise CRM Product and Item Management

The *PeopleSoft Enterprise CRM 9 Product and Item Management PeopleBook* discusses how to set up products in PeopleSoft Enterprise CRM, including installed products, product packages, and products that are service offerings such as service agreements and warranties.

See Also

PeopleSoft Enterprise CRM 9 Product and Item Management PeopleBook

PeopleTools PeopleBooks

Cross-references to PeopleTools documentation refer to the PeopleTools 8.48 PeopleBooks.

PART 1

PeopleSoft Online Marketing User Guide

Chapter 1
Getting Started with PeopleSoft Online Marketing

Chapter 2
Setting Up PeopleSoft Online Marketing

Chapter 3
Designing Online Dialogs

Chapter 4
Designing Web Templates

Chapter 5
Designing Email Documents

Chapter 6
Designing Web Documents

Chapter 7
Designing the Flow for an Online Dialog

Chapter 8
Deploying and Managing Online Dialogs

Chapter 9
Using PeopleSoft Online Marketing Event Wire

CHAPTER 1

Getting Started with PeopleSoft Online Marketing

This chapter provides an overview of PeopleSoft Online Marketing and discusses:

• PeopleSoft Online Marketing overview.

• PeopleSoft Online Marketing implementation.

PeopleSoft Online Marketing Overview

PeopleSoft Online Marketing provides the flexibility to reach customers through a variety of outbound channels and then manage responses across any channel. Marketing departments are beginning to go beyond traditional one-way marketing—they need the ability to create a relevant, ongoing, automated dialog with customers.

There are three key parts to any dialog: reach, response, and interact.

• Reach enables you to reach out to customers through email, web links, and banner ads, as well as traditional channels such as direct mail. These can involve uninitiated interactions or automated event driven interactions (such as a change in marital status, or the purchase of a particular product). Regardless of the channel, customers can then respond.

• Response: When customers respond online, PeopleSoft Online Marketing lets you create targeted web landing pages or splash pages that provide additional information or contain forms or surveys. When customers submit a form, you can design any sequence of follow-up or confirmation pages. Each customer can follow a different path based on individual profile information. For example, based on whether a respondent is qualified, you can change the next steps. Similarly, if customers respond via phone, branch scripts let you personalize the interaction for each customer.

• Interact: Once customers respond, you can automate follow-up with simple confirmations, targeted offers, and more sophisticated sequences of interactions.

With PeopleSoft Online Marketing, the entire online marketing dialog can be handled using electronic channels. You can create a dialog by designing email messages to be sent to your target audience and web pages where interested recipients can respond. You can also create advertisements that include web links generated by Online Marketing, directing people to your dialog web pages. The respondents to your dialog go to the web page specified in the email or advertisement and respond to the surveys and offers. The data that the respondents provide on the web pages can be added immediately to your database, and a series of follow-up interactions such as follow-up email messages can be sent automatically so a relevant, ongoing, automated dialog is created. Once a dialog is launched, you can obtain the results of the dialog and any associated marketing campaigns using the graphical analysis tools in CRM Analytics (Marketing Insight sample template).

PeopleSoft Online Marketing Business Processes

Using Online Marketing to create and run marketing dialogs requires that you perform a number of tasks. This section serves as a guide to creating your dialog and provides a brief overview of the specific tasks involved. They include:

- Access and Setup
- Preparing Online Marketing for Dialogs (the tasks in this step are performed through the PeopleSoft CRM Marketing application)
- Designing the Dialog
- Deploying the Dialog
- Analyzing Dialog Results (performed through PeopleSoft CRM Analytics)

The following process flow illustrates the PeopleSoft Online Marketing business processes:
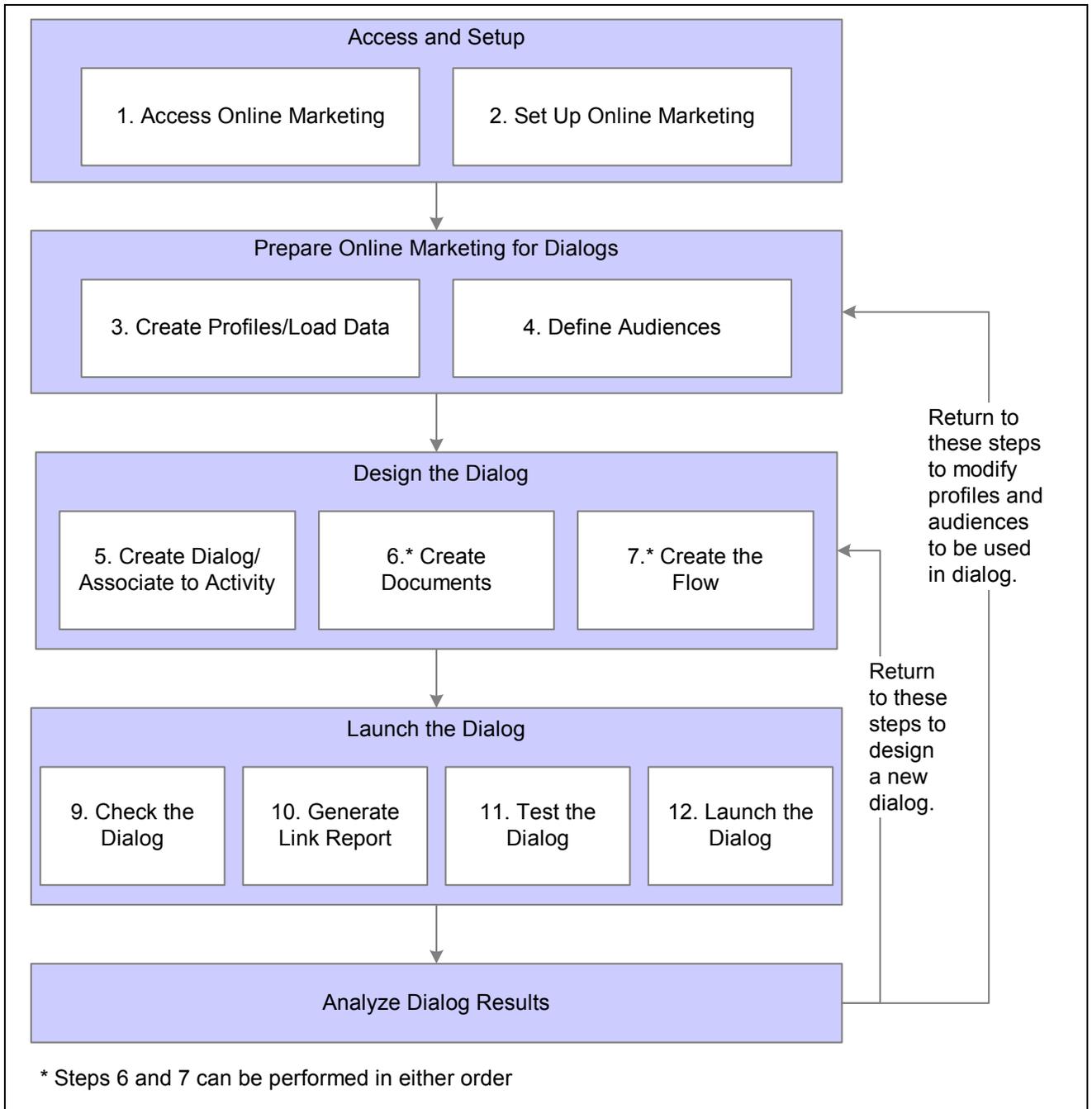
Online Marketing Dialog Flow

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

PeopleSoft Online Marketing Integrations

PeopleSoft Online Marketing integrates with PeopleSoft Marketing.

We discuss integration considerations in the implementation chapters in this PeopleBook.

Supplemental information about third-party application integrations is located on the PeopleSoft Customer Connection website.

PeopleSoft Marketing

You can create PeopleSoft Online Marketing dialogs using PeopleSoft Marketing, and you can share audience and profile information between Marketing and Online Marketing. Also, if both Marketing and Online Marketing are purchased, you can create Marketing programs that track costs and establish teams and tasks. Costs from traditional campaigns and dialogs can be rolled up into a single Marketing Program.

See *PeopleSoft Enterprise CRM 9 Marketing Applications PeopleBook*.

PeopleSoft Online Marketing Implementation

PeopleSoft Setup Manager enables you to generate a list of setup tasks for your organization based on the features 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.

Other Sources of Information

In the planning phase of your implementation, take advantage of all PeopleSoft sources of information, including the installation guides, data models, business process maps, and troubleshooting guidelines. A complete list of these resources appears in the preface in the *PeopleSoft Enterprise CRM 9 Application Fundamentals PeopleBook*, *PeopleSoft Enterprise CRM 9 Business Object Management PeopleBook* and *PeopleSoft Enterprise CRM 9 Product and Item Management PeopleBook* with information on where to find the most up-to-date version of each.

See Also

PeopleSoft Enterprise Setup Manager for Customer Relationship Management 9 PeopleBook

CHAPTER 2

Setting Up PeopleSoft Online Marketing

For dialog designers to be able to use Online Marketing, an administrator must first perform some setup tasks.

The administrator is responsible for setting up Online Marketing to work in your organization's environment, and providing each user with the appropriate access to Online Marketing features.

This chapter describes how to set up Online Marketing, and includes:

• Setting up document types.

• Setting global options.

• Defining the Dialog Execution Server configuration settings.

• Setting up web templates.

• Setting up the mailboxes.

• Enabling dialog roles.

• Setting up extensions.

Setting Up PeopleSoft Online Marketing

This section shows how to set up Online Marketing options.

Pages Used in Setting Up Online Marketing

Page Name	Object Name	Navigation	Usage
Online Marketing Definition	BUS_UNIT_TBL_RY	Set Up CRM, Business Unit Related, Online Marketing Definition	Define Online Marketing business units that will be used by dialogs.
Document Types	RYE_DOC_TYPES	Set Up CRM, Product Related, Online Marketing, Document Types	Set up document types.
Global Options	RY_OPTIONS	Set Up CRM, Product Related, Online Marketing, Global Options	Use to set up options that span all of Online Marketing.
Matching Rules	RY_MATCHING_RULES	Set Up CRM, Product Related, Online Marketing, Global Options, Matching Rules	Use to set up matching rules for adding new individual and company information to the database.

Page Name	Object Name	Navigation	Usage
Matching Attributes	RY_MATCHING_TREE	Set Up CRM, Product Related, Online Marketing, Global Options, Matching Rules, click the Matching Attributes link	Use to define matching attributes for adding new data to the database.
Required Attributes	RY_MATCHING_TREE	Set Up CRM, Product Related, Online Marketing, Global Options, Matching Rules, click the Required Attributes link	Use to define attributes that must be entered in order to add new data to the database.
Character Set Setup	RY_CHARSET_SETUP	Set Up CRM, Product Related, Online Marketing, Global Options, Character Set Setup	Use to specify which character sets will be used in Online Marketing.
Dialog Login	RY_DLG_LOGIN_PG	Set Up CRM, Product Related, Online Marketing, Global Options, Dialog Login Page	Use to modify and preview the HTML content for a dialog login page.
Email Frequency Policy	RY_EM_FREQ_POLICY	Set Up CRM, Product Related, Online Marketing, Global Options, Email Frequency Policy	Use to define the global email frequency policy.
Dialog Execution Server Settings	RY_DES_SETTING	Set Up CRM, Product Related, Online Marketing, Settings	Use to define configuration parameters for the Dialog Execution Server.
Template Setup	RY_TEMPLATE	Set Up CRM, Product Related, Online Marketing, Template Setup	Use to define web template information.
Mailbox Setup	RY_DOC_MAILBOX	Set Up CRM, Product Related, Online Marketing, Mailbox Setup	Use to set up email boxes (bounce, from, and reply-to) for use with Online Marketing.
Marketing/Dialog Role Enablement	RA_MKT_ROLE	Set Up CRM, Product Related, Online Marketing, Marketing/Dlg Role Enablement	Use to define roles that can perform various tasks in Online Marketing.
Extension Summary	RY_EXTENSION_SUMM	Set Up CRM, Product Related, Online Marketing, Extension Summary	Use to specify parameter information about Extensions, and to register new Extensions.

Defining Online Marketing Business Units

To define Online Marketing business units, use the Online Marketing Definition (BUS_UNIT_TBL_RY) component.

Access the Online Marketing Definition page.

Online Marketing Definition page

Business Unit	The business unit defined for Online Marketing.
Description	A brief description of the business unit.
Short Description	A shortened form of the business unit description.
Audience Warning Threshold	Specify a value which, if the audience size is greater than this value, the Dialog Check will display a warning.
Approval Required	Select this check box if approval is required before the online dialog can go Live. The roles that can provide approval are defined in the Global Options setup.

See Also

Chapter 2, "Setting Up PeopleSoft Online Marketing," Setting Global Options, page 10

Chapter 8, "Deploying and Managing Online Dialogs," Checking Online Dialogs, page 136

Setting Up Document Types

The Document Types page is used to enter the description of document types supported by Online Marketing. These values are delivered as system values—new values cannot be added. You can use this page to translate the descriptions into other languages if the installation supports multiple languages.

To set up document types, use the Document Types (RYE_DOC_TYPES) component.

Document Types page

Setting Global Options

This section describes how to set global options for Online Marketing. It includes:

• Global Options.

• Matching rules.

• Character sets.

Defining Global Options

To set global options, use the Global Options (RY_DIALOG_OPTIONS) and Schedule JobSet Definitions (SCHDLDEFN) components.

Access the Global Options page.

Global Options page

Profiles Tablespace Name	Specifies the default tablespace used to create custom profile data storage tables.
Documents Tablespace Name	Specifies the default tablespace used to create document data storage tables.
Audience Warning Threshold	Specifies the warning threshold size for dynamic test audiences. If you select an audience with a count greater than the warning threshold, a warning displays when testing online dialogs.

Audience Error Threshold	Specifies the error threshold size for dynamic test audiences. The count is generated at the time the audience is selected, and if it exceeds the error threshold an error message is generated when testing online dialogs.
Minimum Delay Amt. In Minutes (Minimum Delay Amount In Minutes)	Specifies the minimum delay amount for activities and triggers to kick off when testing online dialogs.
Minimum Frequency In Minutes	Specifies the minimum frequency for executing repeating triggers when testing online dialogs.
Dialog Deployment Role	The role a user must be a member of in order to deploy online dialogs.
Dialog Approval Role	The role a user must be a member of in order to approve online dialogs.
Page Not Found URL	The web address of the page that will be displayed when the indicated Landing, Intermediate, or Final page is not available.
Use Data Validation	Specifies whether data validation Javascript is embedded into the web pages generated by Online Marketing. The default is true.
Include Tracking Block	Specifies whether the email tracking block message will appear in the email. The default is true (the message will appear).
Tracking Block Location	Specifies the position in the email message for the email tracking block message. It may be top or bottom. If it is "top" the message appears at the beginning of the email message. The default is "top".
Upon Hard Bounce, Set Do Not Email Flag	Specifies whether to set the Do Not Email flag for a recipient if email sent to that recipient is returned with a hard bounce.

Upon Hard Bounce, Set Do Not Email Flag (continued):

If you select this option, you must also activate the batch job in the Process Scheduler.

To activate the batch job:

1. Navigate to PeopleTools, Process Scheduler, Schedule JobSet Definitions
2. Search for the Schedule Name RY_BNC_UPDT.
3. Change the Begin Date field to *Today's Date*.
4. Choose *Low* from the Priority drop-down list.
5. Enter *Date Change* in the Recurrence Name field.
6. Change its status from Inactive to Active.
7. Click Save.

See *Enterprise PeopleTools 8.48 PeopleBook: PeopleSoft Process Scheduler*

Document Designer Layout	Specifies which Document Designer mode to use for the current system.

• View each element's details on a separate page. (Recommended): In this mode, the Document Designer splits the element summary and detail information into separate pages, which will speed up the page process. This mode is recommended for use with documents including 20 or more elements.

- View all elements and details on a single page. In this mode, the Document Designer combines the element summary and detail information on one page, making it more convenient to access all the information in one place. This mode is recommended for use with documents including fewer than 20 elements.

Defining Matching Rules

When a respondent accesses a dialog from a Web Links reach action, Online Marketing does not immediately know the identity of the respondent, whereas when a person accesses a dialog by using the URL included in a broadcast email, Online Marketing can immediately identify the respondent.

Online Marketing needs to know the identity of the respondent in order to properly maintain the information in the system. The Matching Rules feature determines whether the respondent is an individual already in the system, or whether a new individual is to be created.

The Matching Rules page allows you to view and edit the conditions used by Online Marketing to identify respondents. These conditions specify the matching fields that are used to determine whether a respondent that came via a Web Link reach action is already in the system.

You can specify multiple matching rules, and each rule can contain multiple fields. Online Marketing determines matches as follows:

- When you specify one or more rules, the information submitted by the respondent must match any one of the rules for Online Marketing to consider the respondent "matched".

- When you specify multiple fields in a matching rule, the information submitted by the respondent must match all of the fields in the rule in order for Online Marketing to consider the respondent "matched".

To match a field, Online Marketing compares the value provided by the respondent on a web page to the values for that field in the system. For example, if the matching rule lists the email address, first name, and last name from the Individuals profile, then the respondent must submit an email address, first name, and last name that match the entries for an individual in the system. If they do, then Online Marketing considers the respondent to be matched, and can use other information provided by the respondent or already known in the system.

Note. A field is only matched if there is an exact match; for example, if Organization Name was a matching rule and a respondent entered "Oracle" as their company name, but the name in the Organizations.Companies.Organization Name profile is "Oracle Inc.," there would be no match. Likewise, there would be no match if the respondent entered "Oracle Corp." or "Oracle inc."

When a respondent does not match any individuals in the system, Online Marketing can insert the respondent as a new individual in the system, as long as the respondent has provided values for all the fields specified in one of the matching rules along with any Additional required attributes specified for that rule. The additional fields are any fields you want to require a respondent to provide before being added to the system.

These rules help you maintain the integrity of your system.

Warning! To insert individuals into the system, the last name should be a required field on the dialog web form where respondents' information is requested. If this field is not filled in by the respondent, the new individual will not be inserted into the system. Other fields required for matching rules (such as email address) should be required as well. Likewise, organization name is required in order to insert any new organizations into the system.

Note. Individuals.People.Email and Individuals.People.Email Alternative are automatically inserted into the system in all lowercase.

Access the Matching Rules page.

Matching Rules page

Priority	The order in which matching rules are applied. The first rule to match stops the matching process.
Matching Type	Specify whether the matching type is the Individuals profile or the Organizations profile.
Matching Attributes	The profile attributes in this column determine whether the inserted responses match an individual or organization in the system. You can enter multiple rows of fields. Each row is a rule, listing the fields that each response will be checked against. If you specify multiple rules, each rule is individually compared against the entered data to determine a match. Rules are evaluated from top to bottom. You can also enter multiple profile attributes in each rule.
Required Attributes	This column is only used when a response does not match any of the rules specified for the matching fields. The profile attributes in this column provide additional fields that are required in order to insert a new individual or organization to the system.
	You can enter multiple rows of fields. If you specify multiple rows, each entire row is compared against the entered data to determine whether a value has been provided for each field specified. If so, then a new individual or organization can be created. Rows are evaluated according to priority. You can also enter multiple profile attributes in each row.
Is Expanded Rule	This column indicates whether this matching rule is an expanded rule. Expanded rules are enabled only if the Use Expanded Matching Rules check box is selected. If so, then the value for a respondent's Email Address will instead be compared to the system's values for Email Alternative, Email Alt 2, or Email Alt 3 if one of those fields is in the expanded rule. Users cannot create new expanded rules, and these rules should only be enabled if merges are enabled.

| Use Expanded Matching Rules | This option enables the expanded matching rules, and should only be selected if merges are enabled |

Defining Character Set Information

The Character Set setup page is used to map the available MIME types for each language. In the Character Set list of email elements in the dialog flow, the appropriate list of MIME types are displayed based on the language of the email document. The MIME type is used to determine the encoding for the email document attached to the element. The setup page pre-populates the MIME types for 16 languages by default. You can add new or modify existing types as appropriate.

Access the Character Set Setup page.

Global Options	Matching Rules	**Character Set Setup**	Dialog Login Page	▶

Character Set Definition   Customize | Find | View All | First ◀ 1-10 of 51 ▶ Last

General	System Data Option				
*Language	Default	*MIME Name	*JVM Name	*Description	
Can French	☐	ISO-8859-1	ISO8859_1	ISO 8859-1 (Latin1)	🗑
Can French	☐	UTF-8	UTF-8	Unicode UTF-8	🗑
Can French	☑	Windows1252	Cp1252	Windows 1252 (Latin1)	🗑
Danish	☐	ISO-8859-1	ISO8859_1	ISO 8859-1 (Latin1)	🗑
Danish	☐	UTF-8	UTF-8	Unicode UTF-8	🗑
Danish	☑	Windows-1252	Cp1252	Windows 1252 (Latin1)	🗑
Dutch	☐	ISO-8859-1	ISO8859_1	ISO 8859-1 (Latin1)	🗑
Dutch	☐	UTF-8	UTF-8	Unicode UTF-8	🗑
Dutch	☑	Windows-1252	Cp1252	Windows 1252 (Latin1)	🗑
English	☐	ISO-8859-1	ISO8859_1	ISO 8859-1 (Latin1)	🗑

[Add]

Character Set Setup page

Language	Specify the language.
Default	When multiple character sets are available for a language, selecting this check box for one of the specifies that it will be the default character set used for that language.
MIME Name	The character set to use for the language in MIME documents.
JVM Name	Character set encoding name - this is fixed for each MIME type.
Description	Displays the description of the character set.

Defining Dialog Login Information

The Dialog Login page is an HTML page that defines the appearance and content for the login page of your online dialog.

Access the Dialog Login page.
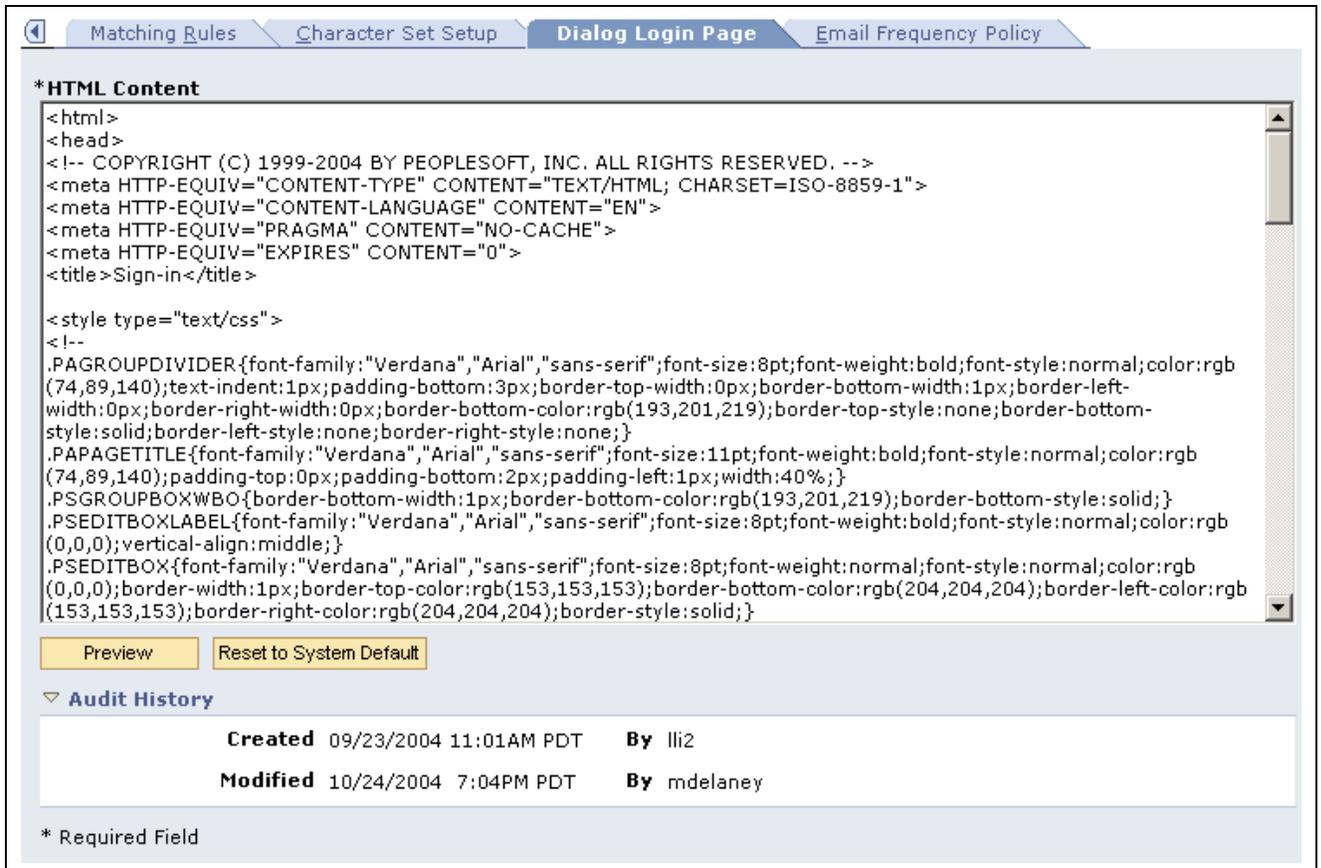
Dialog Login page

HTML Content	The HTML that defines the login page. A default login page is provided with the Online Marketing installation. You should be careful when making changes to this page, as changes might not be supported.
Preview	To preview the results of your changes, click the Save button and then click the Preview button—note that none of the buttons or links on the preview page will function.
Reset to System Default	Click this button to remove your changes and return to the default content.

Default Login Page

A default login page is supplied with the Online Marketing installation.

Default Login Page

Authentication Tag Format

The Dialog Login HTML document contains tags in the Online Marketing Merge Content format. The format is "*<pstag:name>,*" where *name* is the necessary value. Although these links use the Merge Content format, the Login Page tags will not work on dialog pages and dialog tags will not work on the Login Page. The following table shows the supported Login Page tags:

Tag Name	Description	Example Value (italics indicate the variable portion)
<pstag:forgotPassword>	Forgot password URL	http://*host.company.com*/pcs/*ps*/CUSTOMER /CRM/c/RB_SELF_SERVICE.RX_ EMAIL_PSWD.GBL?Page=RX_EMAIL_ PSWD&PRODUCT=OC_OLM&languageCd= *ENG*
<pstag:createAccount>	Create an account URL	http://*www.company.com*/pcs/*ps* /CUSTOMER/CRM/c/RB_SELF_ SERVICE.RX_REGISTER.GBL?Page= RX_REGISTER&PRODUCT=OC_ OLM&languageCd=*FRN*&role=*8*&boid= *2954958475848393949458*
<pstag:changePassword>	Change password URL	http://*www.school.edu*/pcs/*ps*/CUSTOMER/CRM/c /RB_SELF_SERVICE.RX_PROFILE.GBL?Page= RX_PSWD_CHNG&PRODUCT=OC_ OLM&languageCd=*GER*
<pstag:showError>	Error message for login failure (this is blank when no error is present)	Enter User ID. (18068, 60) Enter Password. (18068, 61) Sorry, you are not an authorized user. Please verify your case-sensitive User ID and Password. (16068, 62) Verify the password you entered. User ID and Password are case-sensitive. (16068, 63) You are not authorized to log in as a different user. Please verify your case-sensitive User ID and Password. (?????, ??)

You must create a web link anchor and embed the tag in place. The following example shows a tag:

```
<a href="<pstag:createAccount" target="pia window">Create an Account</A>
```

The error tag should include any additional formatting you wish as the tag will expand only the error text without any formatting. The following example shows a tag with formatting:

```
<font color="#ff0000"><pstag:showError></font>
```

Post-Authentication Processing

After the user has been authenticated, Online Marketing performs processing to verify that the user has access to the dialog, and if so, how to handle him or her within the context of the dialog.

If the URL to the dialog contains the contact's information, Online Marketing checks to see if the authorized user is the same as the user that maps to the individual in the URL. If the values are different, Online Marketing displays an error page to inform the user that he or she does not have permission to access the dialog. If the values are the same, then the user and role matching those in the dialog URL are loaded. Note that the role could override the default dialog marketing role.

If there is no user information in the dialog's URL, Online Marketing tries to find a row in the Basics table that matches the authenticated user and the dialog's marketing role. If this is not found, Online Marketing creates a new role for that user that matches the dialog's marketing role.

The following error messages can be displayed:

Error Message	Condition
Unauthorized User ID/Password. Please try again.	Unauthorized User ID and/or Password.
You do not have sufficient permission to access this page.	The user does not have permission to access the dialog.
An error occurred. Please contact Customer Support.	The login given does not match the person targeted by Online Marketing.
Page not found	The required login parameters are not set. or An unspecified Online Marketing error occurred.

Defining Email Frequency Policy Information

Access the Email Frequency Policy page.

Email Frequency Policy page

Global Policy Status	Select Enabled to make the Email Frequency Policy active for sending emails. Select Disabled to disable it. At least one active rule is required to enable the policy.
Default Counter Setting	Select Increment if you want the email frequency counters to increment when an email is sent, and Do Not Increment if you do not want the counters to be incremented.
Default Queue Shelf Life	Specify the number of days the email will remain active in the queue (that is, the number of days until the queue end date). The email will be expired from the queue after that date.
Default Queue Rule	Select an option that will govern the queue's behavior by default:
	• Select *Per Policy* if you want the queue to adhere to the frequency policy you have defined.
	• Select *Override Policy* if you want the email sent now regardless of the defined frequency policy. This option is used for test dialogs.
	• Select *Per Policy, Do Not Queue* if you want the queue to follow the defined frequency policy but you do not want the emails added to the queue. If they cannot be sent immediately they will be discarded.
Number of Days	For each rule, specify a number of days in which the specified number of emails will be allowed. The number must be between 1 and 365 and must be unique between the policy rules (you cannot have more than one rule specifying 7 days, for example).
Maximum No. of Emails Allowed	For each rule, specify the maximum number of emails to allow to be sent in the specified number of days.
Status	Select Active to activate the specified rule, or Inactive to deactivate it.

> **Note.** Be aware than when you deactivate a rule, emails in the frequency
> queue will be sent immediately and that rule's count will be reset to 0. Emails
> can be dequeued as a result of deactivating a rule—this will occur the next
> time the batch process runs.

See <u>Chapter 10, "Mail Service Operation," page 165</u>.

Defining Dialog Execution Server Configuration Settings

To specify Dialog Execution Server configuration settings, use the Dialog Execution Server Settings
(RY_DES_SETTING) component.

The Dialog Execution Server configuration settings control various aspects of Online Marketing. The values
for these parameters are used by the Online Marketing servers and affect all users.

Access the Dialog Execution Server Settings page.

Dialog Execution Server Settings	Find | View All | First 1-25 of 31 Last		
Name	***Value**		
broadcastRequestDESTimeout	30	+	−
bulkMailerDropDedup	true	+	−
cgiProgramPath	/DCS/	+	−
companyBasicsProfileName	Companies	+	−
contactBasicsCompanySysIdElementName	Company ID	+	−
contactBasicsProfileName	People	+	−
dedupIndexSpace	[DEFAULT]	+	−
dedupTableSpace	[DEFAULT]	+	−
defaultDateFormat	YYYY-MM-DD	+	−
defaultTimeFormat	HH:MM AM/PM	+	−
defaultURLBase	http://WEBServerDNS	+	−
doNotEMailDefault	false	+	−
doNotEMailProfileElementName	Do Not Email	+	−
emailAddressProfileElementName	Email	+	−
extensionTimeout	45	+	−
isDESMultiInstance	false	+	−
jmsProvider	BEA-WLS	+	−

Dialog Execution Server Settings page (1 of 2)

Dialog Execution Server Settings page (2 of 2)

Name	The name of the parameter.
Value	The value for the parameter setting.
Password Encryption Utility	Enter a password you want to encrypt, confirm it, and click the Encrypt button. The encrypted password appears in the Encrypted Password field.

See Also

Chapter 11, "Using the Control Center," page 181

PeopleSoft Enterprise CRM 9 Supplemental Installation Guide

Setting Up Web Templates

To set up web templates, use the Template Setup (RY_DOC_TEMPL_SETUP) component.

Access the Template Setup page.

Template Setup page

SetID	The SetID in which the template resides.
Template ID	The unique identifier of the web template.
Name	The name of the web template.
URL	The web address where the template is located.
Preview	Click this button to preview the web template in your browser.

See Also

Setting Up Mailboxes

To set up mailboxes, use the Mailbox Setup (RY_DOC_SETUP) component.

Whenever you create an email document, the user must specify mailboxes (email addresses) for the Reply To, From, and Bounced fields. Any mailboxes to be used in these fields must first be defined on your mail server and then through the Set Up Mailboxes feature. When an email cannot reach its destination, for whatever reason, the email bounces back to the specified Bounce mailbox.

Note. Although the mailboxes used for the Reply To, From, and Bounced fields can be normal email addresses, PeopleSoft strongly recommends that you set up email addresses dedicated for these purposes. Due to the number of emails that will be sent out, and the potential for large numbers of replies and bounces, it is best to use addresses created specifically for these purposes.

Access the Mailbox Setup page.

Mailbox Setup page

Name	The name of the mailbox.
Email address	The email address of the mailbox.
Forwarding Address	Forwards any emails received by this mailbox to the specified email address. You may want to do this to keep a list of the email addresses that bounce (in addition to the bounce logging performed automatically by Online Marketing).
Type	States whether the email address is a Normal or a Bounce mailbox. Normal mailboxes are used as return addresses and Bounce mailboxes are used as the repository for all bounced emails.
Is Active	A check box that specifies whether the mailbox is active. Only active mailboxes can be used in dialogs.
SetID	The SetID with which the mailbox is associated.

Note. Some ISPs perform an authorization to determine if the email addresses in the header of an incoming email message contain valid external domain names. If invalid domain names are found, these ISPs will reject the email. When specifying email address information for your email messages, make sure these addresses contain valid external domain names.

See Also

Mailboxes and SetIDs

Mailboxes, like other Online Marketing objects, belong to the SetID in which they were created. A mailbox created in one SetID will only be visible and usable in that SetID. If you want to use a mailbox with the same name in multiple SetIDs, you must add it explicitly to each SetID. Any modifications made to a mailbox are applied only to the mailbox of that name in the current SetID.

Mailboxes and Email Aliases

You can set up a Normal mailbox to show an alias as well as an email address in the From: or Reply to: fields of your emails (for example, you might want the field to show ActivePoints Promotions as well as promotions@active_sports.com). To do this, create a Normal mailbox and specify the Email address value in the following format: "alias name" <emailaddress@company.com> (for example, "ActivePoints Promotions" <promotions@active_sports.com>). Then choose these values for your From and Reply to fields.

You cannot use email aliases in Bounce mailboxes.

Merge Content in Mailboxes

To personalize email document From, Reply to, and Subject lines, you can include merge content in these fields.

When using this feature you should consider the following guidelines:

• You can include only one merge content in the From field.

• Selective and thoughtful use of merge content is always recommended, as use of personalization must be weighed against your requirements for speed in executing your broadcast email jobs and rendering of web pages. When many merge content tags are included, performance will be impacted.

See Also

Enabling Dialog Roles

To enable dialog roles, use the Marketing/Dialog Role Enablement (RA_MKT_ROLE) component.

Access the Marketing/Dialog Role Enablement page.
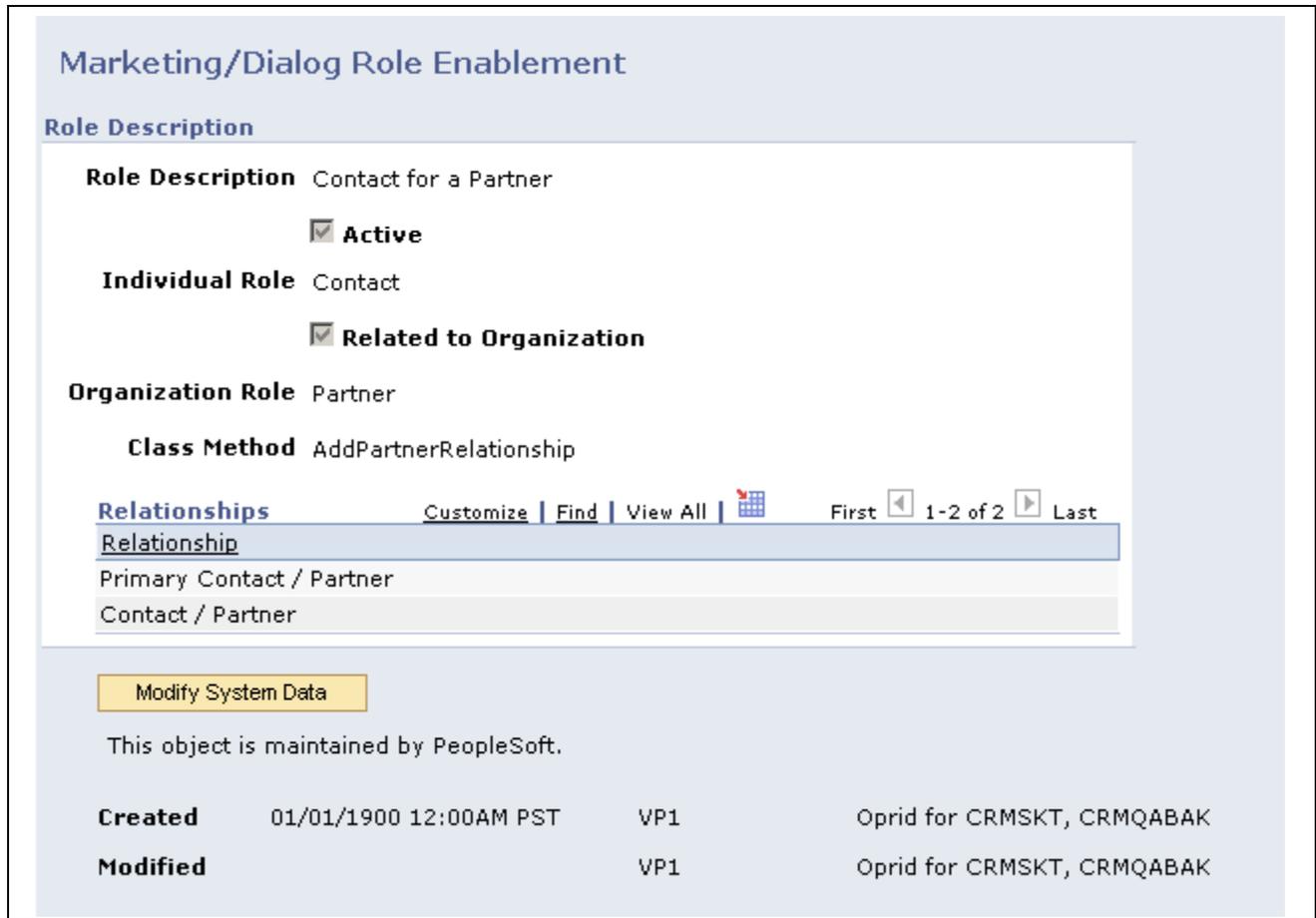
Marketing/Dialog Role Enablement page

Role Description	The name and description for the marketing role. This is shown in the Audiences and Dialog components.
Active	Select this check box to specify that the marketing role is active (available for use in audiences and dialogs), or clear it to specify that it is inactive. Any role in use by an audience or dialog cannot be set to Inactive.
Individual Role or **Organization Role**	The role of the individual or organization that will be assigned or selected. Use the prompt to select from the list of roles.
Related to Organization	(Individuals only) Select this check box to specify that the individual is related to an organization. If so, the relationship types between the two must be specified as well.
Class Method	(Organizations only) Specify the method of the Individual class that will create the relationship between the Individual and the Organization roles entered.
Relationships	Specify the relationships between the role types.
Modify System Data	This feature is available for marketing/dialog roles that are delivered as system data. Click on this button to make changes to the role data on this page. Once changes are saved, the page is updated with user and last modified information.

Defining Extensions

To define extensions, use the Extension Summary (RY_EXTENSION_SUMM) component.

Access the Extension Summary page.
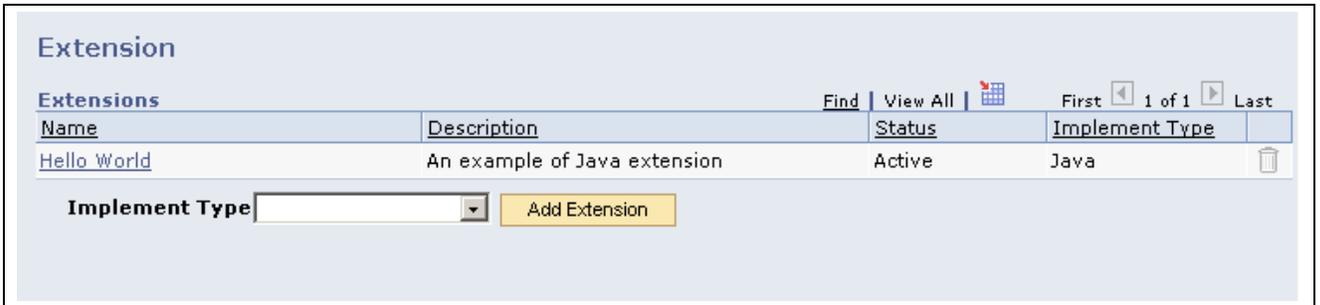
Extension Summary page

Name	The name of the extension.
Description	A brief description of the extension's purpose.
Status	Indicates whether the extension is currently active.
Implement Type	The language in which the extension was implemented: Java or PeopleCode.
Add Extension	Click to go to the Extension Registration page, where you can define a new Extension.

See Also

CHAPTER 3

Designing Online Dialogs

In PeopleSoft Online Marketing, an online dialog defines a specific marketing program that you want to execute. This chapter describes the various tasks you can perform on an online dialog, and includes the following topics:

- Understanding Dialogs
- Creating a Dialog
- Saving Dialogs
- Checking Dialogs
- Cloning Dialogs
- Setting Dialog Options
- Viewing the Link Report

Understanding Dialogs

An Online Marketing dialog consists of one or more actions or promotions, such as an email offer. An online dialog can consist of a single event or a series of events, such as sending broadcast emails, displaying a web page, sending follow-up emails, and so on.

Online Marketing can handle just about any type of online dialog. Different types of online dialogs serve various purposes. Some of the categories of online dialogs that Online Marketing can handle are shown in the following table.

Customer Acquisition	Customer Development and Retention	Channel and Partner Development
Sweepstakes and contests	Cross-selling and up-selling	Lead distribution
Seminars and events	Upgrade programs	Lead follow-up
Trade show lead management	Loyalty and relationship programs	"Did you buy" audits
Ad banners	Maintenance and subscription renewals	Sales force education and training

The following three examples demonstrate some common types of online dialogs:

Dialog Type	Description
Newsletter	A newsletter dialog consists of sending a broadcast email containing either a newsletter or listing the article titles along with web links to the newsletter. The newsletter can be a series of web pages that respondents can view, or it can be interactive by providing respondents the opportunity to make choices or enter information that affects the type of newsletter they see. Newsletters can be sent daily, weekly, monthly, etc., and can be targeted to specific audiences based on information they provide.
Seminar or Special Event	A seminar or special event dialog consists of sending a broadcast email that promotes a seminar or special event. Respondents can register online, and periodic reminders can be sent with specific information based on what the respondents have signed up for, or what information you have about them in the Online Marketing database. You can also create a profile attribute to track the number of registrants.
Promotions	A promotion dialog consists of using direct mail and banner ads to advertise an offer and provide a web address for recipients to respond to. Respondents can register online to receive an offer, and based on the information they provide, you can send follow-up emails about other products or services, each with their own web page.

Designing a Dialog—Overview

Designing an online dialog in Online Marketing involves the following tasks:

- Create the dialog framework, which allows you to define the initial attributes of the dialog (its name, description, purpose, and who will have access to it).
- Define the dialog flow, which graphically displays the elements defining the actions that Online Marketing will perform automatically once the dialog is deployed.
- Define and select audiences you want to target in your dialog.
- Create the email and web documents to be used in your dialog.

If you have purchased PeopleSoft Marketing in addition to PeopleSoft Online Marketing, you can also define the following elements for your dialogs:

- Program detail
- Tasks
- Costs

Understanding Audiences

An audience is a group of people you want to reach with your online dialog. The audience can be a list of names that already exist in your system (an internal audience), or names from an external source, such as a rented mailing list or respondents to a banner ad. You select the audiences you want to target from a list of audiences that have already been defined in the system.

Including several audiences in your dialog allows Online Marketing to track each group separately, and provide statistics for the individual audiences. Online Marketing's ability to track audiences independently allows you to send different offers to audiences and compare their effectiveness. You can also compare the effectiveness of different external sources, such as different banner ads, or different mailing lists.

You can use the following audience-creation methods within Dialogs:

• Saved search.

• Import audience.

• External audience.

If you have also licensed PeopleSoft Marketing, you will have a greater variety of audience-creation options available to you.

When using multiple internal audiences, it is possible that the same person is listed in more than one audience. To avoid confusing recipients with multiple emails, Online Marketing automatically detects any duplicates among audiences, and only sends out one email to a person, regardless of the number of audiences to which that person belongs.

Online Marketing sends broadcast emails to everyone in the first audience listed on the element. For each subsequent audience, whenever Online Marketing encounters an individual that has already been sent the email, that individual is skipped. This behavior is optional and can be turned off on a dialog-by-dialog basis.

See Also

PeopleSoft Enterprise CRM 9 Marketing Applications PeopleBook

Understanding Dialog Statuses

Online Marketing defines seven statuses for a dialog: In Design, In Test, Live, Broadcast Hold, Paused, Complete, and Archived.

A dialog's status determines the tasks that can be performed on the dialog. This includes email broadcasting and web page access from the outside world. Online Marketing users must have appropriate permissions to change the status of a dialog.

When a dialog is initially created, its status is In Design. It remains in this status throughout the entire design process. When you are ready to test that the dialog works as intended, you can change its status to In Test. Then, when you are ready to launch the dialog, change its status to Live.

Dialog statuses are discussed later in the deployment chapter.

Note. A dialog's status is independent of the status of the program to which the dialog is associated. Changing the program status does not affect the dialog status.

See Also

Creating a New Dialog

This section describes the process for creating a new online dialog.

Pages Used for Creating a New Dialog

Page Name	Object Name	Navigation	Usage
Dialogs	RY_DIALOG_SRCH	Marketing, Dialog Designer.	Use to search for existing dialogs or to add a new one.
Dialog Designer - Dialog	RY_DIALOGS	Click the Add Dialog button on the Dialogs page.	Use to specify general information about a dialog.
Dialog Designer - Flow	RYE_FLOW	Click the Flow tab on the Dialog Designer.	Design the dialog flow of the dialog and define the various dialog elements.
Dialog Designer - Audiences	RYE_AUDIENCE	Click the Audiences tab on the Dialog Designer.	Use to select existing audiences for the dialog or to define new audiences.
Dialog Designer - Documents	RYE_DOCUMENTS	Click the Documents tab on the Dialog Designer.	Use to associate existing documents with the dialog or to define new documents.
Dialog Designer - Elements	RYE_ELEMENTS	Click the Elements tab on the Dialog Designer.	Use to manage the objects in the Dialog Designer interface.
Dialog Designer: Clone	RYE_DIALOG_CLONE	Click the Clone Dialog button on an existing dialog.	Use to clone an existing online dialog.
Dialog Designer - Dialog Options	RYE_DIALOG_OPTIONS	Click the Options button on the Dialog Designer toolbar.	Use to specify options concerning matching rules, filtering, and graphical UI use for your dialog.
Dialog Designer - Link Report	RYE_LINK_REPORT	Click the Link Report button on the Dialog Designer toolbar.	Use to obtain the URLs that correspond to elements in a live or test dialog.

Adding a New Dialog

Access the Dialog Designer - Dialog page.

Note. When creating dialogs you should not attempt to work on the same dialog using multiple open browsers, as this can cause data inconsistency.

Dialog Designer- Dialog page

Business Unit	Specify the business unit under which the dialog will reside.
	Note. The business unit of the dialog dictates which audiences and documents can be used with the dialog.
Dialog Name	Specify a name for the dialog. Names can contain a maximum of 75 characters and must be unique.
Description	Specify a brief description of the dialog. You can include up to 254 characters.
Objective	The dialog's purpose. This field is only available when PeopleSoft Marketing has also been licensed; the available objectives correspond to Marketing objectives. The available values are dependent on the Business Unit that has been entered for the dialog.
New Individuals' Role	Denotes the marketing role that a new user (individual or organization) is assigned when created if no information exists to place the user in a specific role. The values are dependent on roles defined during the setup of marketing roles; default delivered values are *Consumer*, *Contact for a Company*, *Contact for a Partner*, and *Worker*.
	Use *Consumer* if the dialog is business-to-consumer (aimed at individuals who have no associated organization).
	Use *Contact for a Company* if the dialog is business-to-business (usually aimed at individuals who are contacts for an organization). If Contact is specified, be sure that the associated organization has been identified and defined before creating the dialog. If the contact is for a company, a Company field must exist on a document somewhere in the dialog. The system looks for a match for the specified company in the database, using the predefined matching rules. If more than one match is found, the system associates the new contact with the first match. If no match is found, both the contact and the company are created.

Use *Contact for a Partner* if the dialog is designed to gain partner relationships.

Use *Worker* if the dialog is aimed at employees of your organization. Be aware that, despite the field's label, if you choose *Worker*, you will only be able to update existing users, not create new ones. This is because new workers should not be inserted via the Online Marketing application, but rather via more appropriate sources such as PeopleSoft HCM.

If you need to change the role after the dialog has launched, you can place the dialog in Paused or Broadcast Hold state, change the role, then change the state back to Live. This change will not affect any respondents who have already submitted pages, but subsequent respondents will be assigned the new role.

Note. A dialog cannot target both consumers and contacts, because all individuals within a dialog need to be inserted with the same role. If, for example, you want to target both consumers and contacts with the same promotion, you can do so by cloning the dialog and executing one dialog to the consumer audience and the second to the contact audience

New organizations are automatically assigned to the Company role. Refer to the documentation on how new individuals and organizations are handled, following this section.

Start Date

The date at which the dialog will begin running.

Note. This date is only for informational purposes and does not affect when the dialog will be running. The actual timeframe is based on the triggers in the dialog.

End Date

The date on which the dialog will stop running.

Note. This date is only for informational purposes and does not affect when the dialog will be running. The actual timeframe is based on the triggers in the dialog. This date does not automatically shut down a dialog; the dialog must be moved to the status of Complete or Archived manually.

Owner

The user who owns the dialog. This field defaults to the currently logged in user, but you can change it by clicking the prompt to display a list of users.

Approval Status

The dialog's current approval status. The statuses are Requested, Approved, or Rejected; depending on what permissions you have, you might not see all of these statuses. Using the Approval Status is optional and can be turned on and off on the Dialog Business Unit (Set Up CRM, Business Unit Related, Dialog Definition).

Login Required

If this option is selected, the user must log in using Self Service before they can access the dialog's Landing Page. This is used in conjunction with the CRM/Student Administration integration.

Dialog Status

Displays the dialog's lifecycle, showing the different stages of development and which stage(s) the dialog can progress to. If a Live version and an Edit version exist, both versions' statuses are shown.

Note. A new dialog always belongs to the currently active business unit. If you want the dialog to belong to multiple business units, you must create it in each one. Dialogs belonging to different business units are updated independently.

How New Individuals and Organizations are Handled

The way in which a new individual or organization coming into the system is handled depends on several factors.

The New Individuals' Role field applies to both individuals and organizations and is used for both matching and creating entities that are unknown to the system when they enter a web flow. If the person or organization is known (for example, if the person clicked on a link in an email), then this field does not apply to that person or organization because matching is not needed. If one but not both are known (for example, if individual is known but organization is not), then matching applies to the unknown entity.

If the organization is unknown (for example, if the user clicked on a generic web link), and if any organization information is entered, then an exact match is checked using the configured organization matching rules along with the organization role specified in the New Individuals' Role drop-down list. If no organization role is specified (for example, if the Consumer marketing role was chosen but there are organization fields on the dialog page), then the Company role is used by default. Note that the specified organization role is used in the match search, so even if there is another organization of that exact name but with a different role, then no match will be found and a new organization is created with the organization role specified in the New Individuals' Role selection (or the default organization role).

If the individual is unknown, the system will go through the same match/create process, but with the individual role configured in the marketing role (there is no default role for individuals, since an individual role is required when setting up a marketing role). If the organization is known when the individual is created *and* the specified marketing role has an organization role, then the individual is associated with that organization. Even if no organization fields exist in the dialog, the individual can still be created, but with no link to a dialog. If the marketing role has no organization, then no link is created even if the organization is known.

You should be aware of the fact that individuals are associated with organizations, and that association is part of the Individuals.People profile, so any questions identifying the organization should be set up in the dialog before the individual is created and before any fields in the People profile are updated. For example, consider a dialog web flow that contains the following:

1. External Event Trigger.
2. Document 1 containing questions that identify the individual.
3. Document 2 containing questions that identify the organization.
4. Document containing custom profile questions only.

In this case, the created individual will never be linked to the organization (because the individual is identified and created at a point in the flow prior to the identification and creation of the organization), unless other Individuals.People profile fields are added later in the dialog.

See <u>Chapter 7, "Designing the Flow for an Online Dialog," page 123</u>.

See <u>Chapter 6, "Designing Web Documents," page 83</u>.

Dialog Statuses

The Dialog Status area of the Dialogs page shows a graphic representation of where the dialog is in its lifecycle, along with which statuses it can progress to from the current status. Since it is possible to edit a version of a dialog while another version is Live, the statuses of both the Live and Edit versions are shown. The following table shows the statuses into which a dialog can move from the current state:

Current State	Can move into
In Design	• Test • Live • Archived
Test	• Live • In Design
Live	• Paused • Broadcast Hold • Completed
Paused	• Live • Broadcast Hold • Completed An Edit version can also be created from this status.
Broadcast Hold	• Live • Completed
Completed	Archived

Live vs. Edit

Online Marketing provides the ability to make and save changes to a dialog without affecting the version that is currently running. To accomplish this, Online Marketing allows two separate copies of the dialog: the Live version and the Edit version.

The Live and Edit versions are displayed separately in the Dialog Status controller. You can track the progress and statuses of each one separately, and making changes to the Edit version does not cause any change in the Live version.

Defining the Flow of the Dialog

Online Marketing allows you to design the flow of your dialog using a graphical interface where you can drag, drop, and define the individual components of the dialog and their relationships to each other.

Understanding Dialog Flow

Dialog flow consists of two categories of actions:

- Actions that are used in the dialog to reach your audience. These actions consist of sending broadcast emails to people in your database and placing web links in specific locations to draw people into your dialog (such as placing a web banner ad on a popular web site).

  The respondents to the various actions can all be tracked by Online Marketing to provide statistics about the effectiveness of that action.

- Actions that represent web pages that recipients can respond to and the follow-up actions that will occur once they respond (such as additional web pages to display or follow-up emails to send to the respondent or others).

  These actions occur as a result of a respondent's action. When a respondent accesses a dialog's web page, Online Marketing reacts to the respondent's input by performing the actions specified in the dialog flow for these actions.

The following table shows which dialog elements can connect to which other dialog elements.

	BE	SE	CA	DTT	EET	LP	IP	FP	SP	WL	UP	DP
BE	X											
SE		X	X				X	X			X	X
CA	X	X	X				X	X			X	X
DTT	X		X									
EET		X				X			X	X		
LP		X	X				X	X			X	X
IP		X	X				X	X			X	X
FP		X	X								X	X
SP												
WL						X			X			
UP		X	X				X	X			X	X
DP		X	X				X	X	X		X	X
DL						X			X			

BE	Broadcast Email
SE	Single Email
CA	Custom Action
DTT	Date/Time Trigger
EET	External Event Trigger
LP	Landing Page
IP	Intermediate Page

FP   Final Page

SP   Standalone Page

WL   Web Link Promo

UP   Update Profile

DP   Decision Point

DL   Document Link (Not an element, but allows connections for elements.)

Using the Graphical Interface

With the graphical dialog design interface you can add, delete, and edit dialog elements, as well as move them around on the canvas to help you visualize the dialog's flow. The following table shows how to perform the various actions needed to define the dialog flow.

Action	How to Perform
Select an element	Single-click the element you want to highlight.
Drag and place an element	Select the element, hold down the left mouse button, and move the element to the desired location. Release the mouse button to place the element. If an element has connections, they will move after the element has been placed.
Add an element	Click the desired button in the menu bar. **Note.** Initially you will only be able to select the Date/Time Trigger and External Event Trigger elements. For most elements, you will need to select an element in the canvas, which then makes other appropriate buttons available for selection in the menu bar. Other elements are initially unavailable in the menu bar. Connections will automatically be made when an element is selected and you click on an element to add it to the dialog. For example, if you select an External Trigger and then click and create a Landing Page, when the Landing Page is added to the canvas the connection with the External Trigger will automatically be made. Some elements have secondary links (at the bottom of the element) that can be selected and allow for connections. For example, for elements that can use documents, any internal document web links will appear in the dialog flow as part of the element. If you click on the web link button for an element and then add an element, the connection will automatically be made for the secondary link, instead of for the primary connection. Temporary links are indicated by dotted lines.
Editing an element	Double-click the element in the flow. Its information appears below the canvas, and a pencil button appears inside the element. Click the Apply button after you have made your edits to have your changes take effect.
Deleting an element	Double-click the element, then click the Delete button at the bottom of the element information. **Note.** The Delete button appears only after the element has been created.

Action	How to Perform
Panning (scrolling) the canvas	Click one of the scroll buttons on the bottom right side of the canvas. You can also hold down the Alt key and click the left mouse button on the canvas to allow freeform scrolling.
Zooming the canvas	Click the Zoom In, Zoom Out, or Original View button on the bottom right side of the canvas, or hold down the Ctrl key and click the left mouse button to zoom in. You can also hold down the Ctrl and Shift keys and click the left mouse button to zoom out. Additionally, you can right-click inside the canvas to access the Zoom menu.

Graphical Interface Buttons and Controls

The following table shows the buttons available in the Graphical Interface.

Date-Time Trigger

External Event Trigger

Landing Page

Intermediate Page

Final Page

Standalone Page

Web Link Promotion

Broadcast Email

Single Email

Update Profile

Decision Point

Custom Action

Canvas scroll buttons—use to scroll the viewing area of the canvas down, up, right, and left.

Canvas view buttons—use to zoom in, zoom out, and return to original view

Note. After zooming, your dialog flow might end up outside the canvas's viewing area. If this happens, use the scroll buttons to re-center it.

Using the Non-Graphical Interface

You can set up Dialog Designer to design dialog flows using a selection interface instead of the default graphical flow designer. In this case, the canvas and other graphical elements are replaced by a drop-down list where you can specify elements for the flow. Select an element and click the Add button, then fill in the appropriate information.

Note. Automatic connections will not be made in the non-graphical interface—you must specify any connections for each element manually

Non-Graphical Flow Designer

Click the View Element Summary link to view the Element summary on the Elements tab.

See Chapter 3, "Designing Online Dialogs," Setting Dialog Options, page 57.

Date/Time Trigger

Date-Time triggers are used to designate that a dialog should kick off at a specific date and time.

Date-Time triggers can only connect to other elements, and act as the beginning of a flow path. The next action must specify an audience to determine the recipients of the dialog.

Date/Time Trigger

Name	You must give the trigger a unique name when it is created.
Start Date	The date on which the trigger will fire.
Start Time	The time at which the trigger will fire.
Repeating Trigger	Select this check box if the trigger will fire multiple times at set intervals. Leave it cleared if you want the trigger to fire only once.

> **Note.** If you set a Repeating Trigger to execute at a time prior to when the dialog is set to Live, the Scheduler will mark all prior iterations as Skipped and will not execute any of them. Be sure to schedule the execution of the Repeating Trigger for a time after the dialog has been set to Live.
>
> Any values in the Frequency or Repeat fields are ignored by the dialog while it is running if the trigger is not marked as a Repeating Trigger.

Frequency	If you selected the Repeating Trigger check box, select a frequency from the available options.
Repeat	If you selected the Repeating Trigger check box, select an option for the trigger to repeat: Indefinitely if you want it to continue firing at the selected frequency until you explicitly stop it, or Until a specific date if you want it to stop firing at specific date and time. If you choose Until a specific date, specify the date and time.

See Chapter 7, "Designing the Flow for an Online Dialog," page 123.

External Event Trigger

External Event triggers are used to allow an external system to trigger a dialog. The External Event Trigger represents:

• A URL that can access a Landing or Standalone Page if connected directly to one of those page types.

• A URL that can trigger the sending of email to an individual if connected to Single Email.

• Multiple URLs if connected to a Web Link Promotion.

External Event triggers can only connect to other elements, and act as the beginning of a flow path.

External Event Trigger

Name   You must specify a unique name for the trigger when you create it.

Landing Page

A Landing Page represents a beginning page in a series of web pages with which the user will interact.

You can only connect a Landing Page from a Document Web Link or an element that represents a URL connection.

Note. Documents that are associated to the Landing Page element must have a Submit button in order to be validated by the Dialog Check.

Landing Page

Name   You must specify a unique name for the element when it is created.

Document   Select the document to be associated with the Landing Page. The list displays all valid documents for the dialog.

Note. In order for documents to appear in this list, they must be web documents and must first be added on the Documents tab.

Once a document is associated, any web links in that document will become available in the Connection Grids.

On Submit Options   Update Profile for matching respondents specifies that any updated information provided by a respondent already in the database will be added to the respondent's profile provided that the matching rules are met (an exact match to the attributes specified in the matching rules is required).

Update Profile for matching organizations specifies that any information provided by respondents about their organization will be added to the user profiles for organizations provided that the matching rules are met (an exact match to the attributes specified in the matching rules is required). Attributes in the Organizations system profile can be added, but not updated.

Add new respondents to profile specifies that any respondents not already in the profile database will be added if the people matching rules are met. This option is not valid if the Worker role is selected for New Individuals' Role on the Dialog Information page.

Add new organizations to profile specifies that any respondents whose organization information is not already in the database will be added to the organization profiles if the organization matching rules are met. This option is not valid if the Worker role is selected for New Individuals' Role on the Dialog Information page.

Note. When updating individual and organization profiles, be sure that information has been provided for the required attributes for that respondent type.

Web Link Connections   Use to control where web links embed in the document's point. When a document is associated to the element, this section will automatically reflect any of the web links that have been created in the associated document. In this section any web links of type Internal, External, or Advisor will appear. Internal links can be used to control sending the user to another part of the flow, so an additional list showing all Landing and Standalone Pages currently in the dialog will display for these link types.

Note. Only Advisor dialogs that do not use an Active Analytics Framework context can be used within a document.

Add Temporary Web Link is used to create a web link that acts as a placeholder until a document is associated. Temporary web links allow you to create a complete flow for planning purposes, without having to create the real documents until you are ready to proceed to actually creating the dialog and all of its parts.

	Note. When a document is associated to an element, any temporary web links that are named identically to document web links contained in the associated document will be replaced for convenience. This functionality reduces the amount of additional work you must do since the connections are automatically maintained. All temporary web links must be deleted or replaced with real document web links before the dialog can be completely valid.
Cross Dialog Links	If the dialog has any cross-dialog links embedded within its documents, this section is used to control where they point. When a document is associated with the element, this section will automatically reflect any of the cross-dialog web links that have been created in the associated document. Cross dialog links require a dialog and subsequent Landing or Standalone Page to which to send users when they click on the link. Both are chosen in this grid. Add Temporary Cross Dialog Link is used to create a cross-dialog link that acts as a placeholder until a document is associated.
	Note. When a document is associated with an element, any temporary cross-dialog links that are named identically to document web links of type Cross-Dialog contained in the associated document will be replaced for convenience. This functionality reduces the amount of additional work you must do since the connections are automatically maintained. All temporary cross-dialog links must be deleted or replaced with real document web links before the dialog can be completely valid.

Intermediate Page

An Intermediate Page is used to connect multiple pages together. It is used in conjunction with the Landing Page, and can be followed by another Intermediate Page or a Final Page.

Note. Documents that are associated with the Intermediate Page element must have a Submit button in order to be validated by the Dialog Check.

Intermediate Page

Final Page

A Final Page is used to end a path with either a lone Landing Page or a Landing Page followed by one or more Intermediate Pages. The Final Page has no On Submit button specified in its associated document, and only Web Links (from the document with which it is associated) can originate from it.

Final Page

Standalone Page

A Standalone Page is a single, self-contained web page with no other pages connected to it. Standalone Pages can only be reached from web links, or elements that represent web links such as External Event Triggers or Web Link Promotions. They have no On Submit button specified in its associated document, and can only contain web links (from the documents with which they are associated).

Standalone Page

Web Link Promotion

A Web Link Promotion (commonly called a "Web Link Promo") allows users to enter the dialog from a banner ad or web link.

By specifying an audience or multiple audiences, you can use a Web Link promotion to track how users are accessing the Landing Page or Standalone Page that is connected to this element. In the Link Report, a URL is generated for every audience that is associated to a Web Link Promotion, and depending on which one a user accesses, metrics can keep track of the number of people who clicked. This functionality is useful for determining how much traffic is being generated by banner ads that are located on different websites, but that point to the same place in a dialog.

Web Link Promos can only point to a Landing Page or Standalone Page, and only an External Trigger can point to the Web Link Promo.

Web Link Promo

Name	Provide a unique name for the Web Link Promo.
Audience	Assign the Web Link respondents to a audience. Whenever respondents access a web page, Online Marketing tracks them by their audience to ensure accurate statistics in CRM Analytics and the Dialog Performance Report.
	You can specify one or more audiences. Online Marketing will generate a separate URL in the Link Report for each audience you specify.
	Note. In order to appear in the Audience list, audiences must be added on the Audience page.
Add Existing Audience	Click this button to add another row to the Audiences list so you can select another audience.

Broadcast Email

A Broadcast Email is used to send out bulk emails based on an audience or multiple audiences.

Broadcast Email can only be reached from a Date/Time Trigger.

Broadcast Email page

Character Set	Select the character set to use for the email from the available options.
	Note. If Character Set filtering is on for a dialog, this field will show only character sets that have been specified based on the language of the document that has been associated.
Email Address to Use	Specify the email address to which you want to send the email: Email or Email Alternative.
Track Open Rate	Select this check box to allow broadcast emails to be tracked for open rate (whether they were opened and how many times). Open rate tracking only works with HTML emails.
Dedup Options	By default, broadcast emails are deduped using the Unique System ID profile field, so each person receives only one copy of an email regardless of how many audiences he or she belongs to. You can also choose to dedup broadcast emails on the Customer ID (External ID) or Email address profile fields.
Audience	Select an existing audience to which to send the email.

> **Note.** In order to appear in the Audience list, audiences must be added on the Audience page.

Add Existing Audience   Click this button to specify another existing audience for the email's recipient list.

Timing Options   Schedule the execution of this action. You can have it execute immediately after the action that precedes it, or you can specify a delay of seconds, minutes, hours, days, weeks, or months from the previous action.

> **Note.** Once a Broadcast Email has been queued it is considered complete and the dialog flow will continue to the next element in the path. If there is a delay in the timing section, then a schedule event is created to queue the email at that later date and time. The flow will continue once the schedule event is created.

Queue Management
- Counter Action: Specify what you want the frequency counter to do for this email job. You can choose *Increment* to increment the counter for the given recipient each time an email is sent to that recipient, or *Do not increment* if you do not want the frequency counter incremented for the emails in this mail job.

- Queue Rule: Select the rule to govern how the email queue is handled.

  You can choose *Override Policy* to ignore the existing email frequency policy (set on the Global Options page). You might want to use this option when you want an email to go out regardless of the frequency policy rules (for example, a legal disclaimer email).

  Choose *Per Policy* to adhere to the existing email frequency policy.

  Choose *Per Policy, Do Not Queue* to adhere to the existing policy but not add the emails to the queue (this is useful for testing).

- Queue Shelf Life: Specify the duration in days that the email should be active after which the system will no longer send it, regardless of the email frequency policy.

- Queue End Date: Specify a date after which the system should no longer send the email. (For example, if you are sending email to solicit attendees for a conference, you would not want recipients to receive your emails after the conference's date has passed.)

> **Note.** In instances where an email has both a shelf life and a queue end date specified, the system will adhere to the earliest date to govern behaviors associated with the frequency management policy. For example, if the current date is 11/15/05, the queue end date is 11/18/05, and the shelf life is 7 days, an email that has already been active for 6 days will be removed from the queue on 11/16/05 (7 days after its activation date) even though its end date is not until 11/18.

See Chapter 10, "Mail Service Operation," page 165.

See Chapter 2, "Setting Up PeopleSoft Online Marketing," Defining Email Frequency Policy Information, page 17.

See *PeopleSoft Enterprise CRM 9 Marketing Applications PeopleBook*, "Using Interactive Reports in PeopleSoft Marketing Applications".

Single Email

Single Email represents sending a single email to an individual, not an audience.

Single Email

Character Set	Specify the character set to use for the email.
	Note. If Character Set filtering is active for a dialog, this field will show only character sets that have been specified based on the language of the document that has been associated.
Ignore "Do Not Email"	Select this check box if you want to ignore the respondent's request not to be contacted by email (for example, you might select this option if you need to send the respondent important information about their account).
Track Open Rate	Select this check box to allow single emails to be tracked for open rate (whether they were opened and how many times). Open rate tracking only works with HTML emails.

Send To Options	These options allow you to specify the individual you want to reach with this email. You can enter a specific email address or addresses, or have the email sent to the respondent.
	The respondent's email address can be obtained from profiles or from text entry elements of documents that were shown in this section of the process. Clicking the Merge button allows you to choose which profile field or document field from which to obtain the email address for the respondent. Only document fields from documents associated to the dialog will appear.
	Note. To specify multiple specific email addresses, the addresses must be separated by a comma and the string must contain no spaces (for example, address@address1,address@address2)
	You must be aware of the order of how documents will be accessed in your dialog. All document fields will be made available for choosing even if they come after the current element in the dialog flow. This functionality allows looping in the dialog.
Timing Options	Schedule the execution of this action. You can have it execute immediately after the action that precedes it, or you can specify a delay of seconds, minutes, hours, days, weeks, or months from the previous action.
	Note. Once a Single Email has been queued with the Email Server, it is considered complete and the dialog flow will continue to the next element in the path. If there is a delay in the timing section, the delay happens not on the queuing of the element, but on the scheduling of when a broadcast email job should be started after it has been queued.
Queue Management	These options are identical to those on the Broadcast Email page.
	See Chapter 7, "Designing the Flow for an Online Dialog," Broadcast Email, page 128.

See *PeopleSoft Enterprise CRM 9 Marketing Applications PeopleBook*, "Using Interactive Reports in PeopleSoft Marketing Applications".

Update Profile

Update Profile allows for the update of an individual's profile information. It can use information that was either collected in documents or it can set profile fields to specific predetermined values.

Update Profile

Profile Rules	Specify the profile fields to be updated.
	Field: Select the profile field you want to update.
	Operator: Select either is set to, or, for numeric attributes, you can also select Increment or Decrement.
	Value: Specify the field that contains the value to place in the profile. You can select a profile field or a field in the web document. . You can also enter a specific value in the Value column. (If you select the web document, it lists only the fields that are of the same type as the field selected in the Field field.) If the field is of a Date or Time type, you can use the Current Date and Current Time values to, for example, capture when a contact responded. The current date and current time are those on the database server.
	Note. Some operators (for example, Equal to Current Date, Equal to Current Time, Increment, and Decrement) do not allow values; in these cases the Value field is disabled.

Decision Point

The Decision Point action allows Online Marketing to check for a specific condition and perform an action based on the result.

Decision Point

If	*Field:* Select a field. You can choose from any field (except many rows per content fields) in the Online Marketing profiles, and entry and choice fields in this dialog's documents.
	Operator: Online Marketing presents different Operators depending on the type of field selected.
	Value: Specify a value. When a choice question is selected in the Field column, the valid choices are listed. If the field has a Date or a Time format, you have the option to specify a particular date or time value (Current Date and Current Time are chosen in the Operator field). For example, if a contact responds after the set date/time value, you might have the dialog perform a different action. The date and time used are those on the computer running the database server.
	You can specify multiple fields, and they can be ANDed or ORed as needed. Use the AND and OR buttons to add additional conditions to the condition list. Use the Delete button to delete a condition.
	Note. Some operators (for example, Is Empty, Is Not Empty, and Equal To/Prior To/After Current Date and Time) do not allow values; in these cases the Value field is disabled.
Then	Specify the connection to be made if the condition specified is true.
Else	Specify the connection to be made if the condition specified is false.

Custom Element

Custom Elements are actions that you set up to perform activities not delivered with Online Marketing.

The places where Custom Elements can be inserted in the flow are dependent on the specific Custom Element type.

Custom Element

Extension Type	Select a custom extension from the available options of custom actions that are available for use. By default, Online Marketing ships with a "HelloWorld" custom action that is used for testing purposes.
Custom Element Parameters	Specify values for the custom element's parameters. Parameters vary by custom element, and will be preloaded after an extension is chosen. You can change the parameter value for this single instance of the extension. You can also add parameters that have not been specified when the extension was created; these parameters will be stored with this single instance of the extension and will not affect the original extension definition.
	You can merge in values from the dialog documents or profile fields by using the Merge button.
	Note. This field appears only when you have selected a custom extension from the Extension type.
Add Parameter	Click this button to add a new parameter to the Custom Element.
	Note. This button appears only when you have selected a custom extension from the Extension type.

See Also

Chapter 3, "Designing Online Dialogs," Setting Dialog Options, page 57

Selecting Audiences for a Dialog

Audiences are the contacts you want to reach in your dialog. Each dialog that contains Broadcast Email and/or Web Link Promotion actions must have at least one audience defined.

Access the Dialog Designer - Audiences page.

Dialog Designer - Audiences page

Audience Name	The name of the audience, which will be visible from the dialog.
Audience ID	The unique identifier for the audience.
Internal/External	*Internal* audiences consist of recipients in the Online Marketing database who are contacted directly via broadcast email messages from Online Marketing.
	External audiences consist of recipients not in the database who are contacted through a source outside the Online Marketing software (such as a banner ad).
Count	The current count of how many members are in the audience.
Audience Status	The current status of the audience. Possible values are: In Design, Designed, Scheduled, Processing, Generated, Approved, Committed, and Archived.
Times Referenced	The number of times the audience is referenced in the current dialog. Only audiences that are not referenced by any elements can be unattached from the dialog.
Add Existing Audience	Click this button to select another existing audience to add to the dialog.
Create New Audience	Select an audience creation method from the available options.
	Note. If you have purchased PeopleSoft Marketing, more options will be available to you. Additionally, only components where the current user's role allows them to access will be listed.
Create	Click this button to create a new audience using the creation method you chose.

See *PeopleSoft Enterprise CRM 9 Marketing Applications PeopleBook*.

Creating Audiences in Dialogs

If you have licensed the PeopleSoft Dialogs product but not the PeopleSoft Marketing product, you can still create audiences to use with your dialogs. You can use the following audience creation methods within Dialogs:

• Saved Search

• Import Audience

• External Audience

To create an audience using a saved search on a Configurable Search page that has been set up to create audiences:

1. Navigate to an enabled Configurable Search page via Customers CRM, Search or from the Audiences tab in the Dialog Designer (such as Person Search or Company Search in the Create New Audience drop-down list).

2. Define the desired search criteria.

3. Click the Save Search Criteria link.

   The Save Search As page is displayed.

4. Select the Save As Audience check box.

5. Enter a name for the audience. The default audience name is based on an existing Saved Search Audience link. If no such link exists, the name is defaulted based on the Saved Search name. Audience names must be unique across all users.

6. Choose an audience type: Fixed or Dynamic. A Fixed audience consists of a list of target individuals. A Dynamic audience is generated by a query at runtime.

7. Click the Save button to save the audience.

See Also

PeopleSoft Enterprise CRM 9 Marketing Applications PeopleBook

Defining Documents for the Dialog

Access the Documents page.
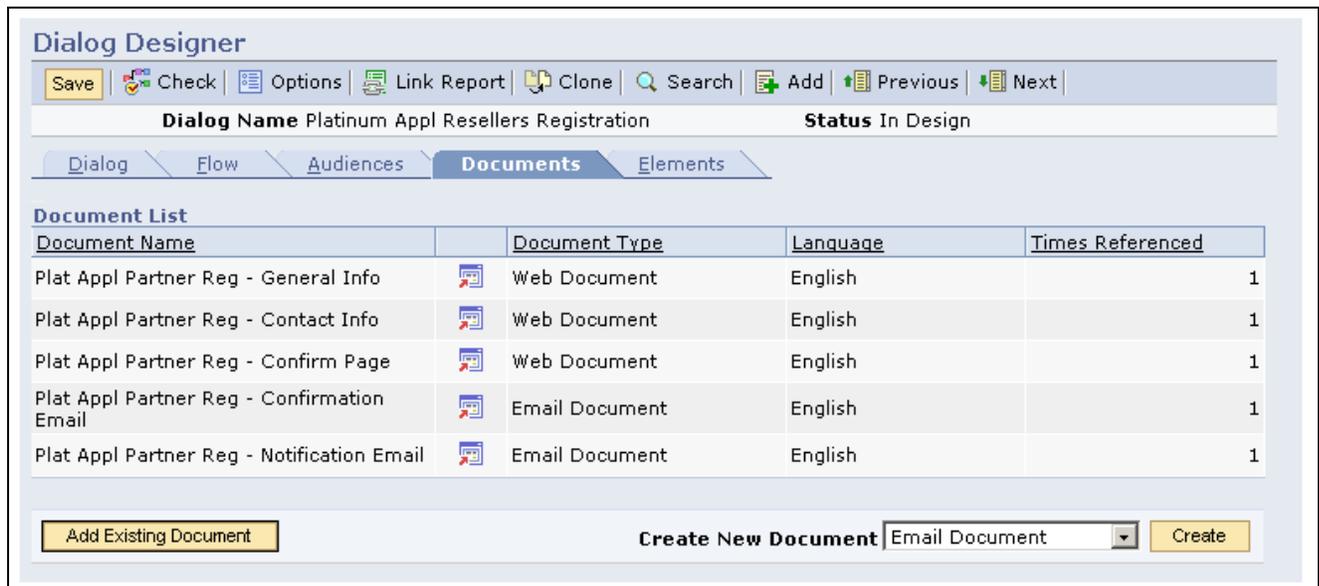
Dialog Designer - Documents page

| **Document List** | Displays the documents that are currently part of this dialog. |
| **Document Name** | Name of the document that has been associated to this dialog |

Document Type	Documents that can be associated to a dialog are either web documents or email documents. The type dictates whether the document will appear in the various elements' document lists.
Language	The language of the document. The language can play a role in which character sets are valid to be chosen for a dialog element.
Times Referenced	The number of times the document is referenced in the current dialog. Only documents that are not referenced in any elements can be unattached from the dialog.

> **Note.** Documents that have gone Live or that have been imported or exported can no longer be removed from the dialog.

Add Existing Document	Click to choose an existing email or web document to add to your dialog.
Create New Document	Select Email Document or Web Document and click to display the Document Designer.

See Also

Viewing Dialog Elements

You can view a list of all the elements currently in the flow of your dialog.

Access the Dialog Designer - Elements page.

Dialog Designer - Elements page

Type	An icon indicating the element type.
Dialog Element	The name of the element

| **Complete?** | If the element is complete (does not require anything further to function correctly), a green check mark displays. If incomplete (for example, if it needs more information), a red square displays. You can determine what is not complete about an element by running the dialog check. |
| **Connections** | Describes the manner in which the element is connected to other elements in the flow. Primary connections and web links (real and temporary) appear in this field. |

Defining Program Details

The Program Detail tab appears only if you have also licensed CRM Marketing.

See *PeopleSoft Enterprise CRM 9 Marketing Applications PeopleBook*.

Defining Tasks

The Tasks tab appears only if you have also licensed CRM Marketing.

See *PeopleSoft Enterprise CRM 9 Marketing Applications PeopleBook*.

Defining Costs

The Costs tab appears only if you have also licensed CRM Marketing.

See *PeopleSoft Enterprise CRM 9 Marketing Applications PeopleBook*.

Saving Online Dialogs

Whenever you make any changes to an online dialog, you must save the dialog to ensure that your changes are not discarded. Whenever you attempt to go to another Online Marketing feature (such as Web Templates) without first saving changes you have made to the dialog, Online Marketing prompts you to save the changes. You can save a dialog from any page in the dialog.

To save an online dialog, click the Save button in the toolbar.

Cloning Online Dialogs

Cloning an online dialog allows you to reuse the elements and flow of the dialog in a new dialog without having to recreate them.

Access the Dialog Designer - Clone page.

Dialog Designer

Clone

Dialog Name Platinum Comm Resellers Registration	**Status** In Design

Enter New Dialog Information

Dialog ID	***Business Unit** COM01
***Dialog Name** Platinum Comm Resellers Registratio	**Description**
Objective Code Acquisition	
New Individuals' Role Consumer	
Start Date 03/12/2004	**Owner Name**
† **End Date** 03/12/2009	**Approval Status**

☐ **Login Required**

† (Note: Dialog does not automatically shutdown on end date.)

Documents to be Cloned

Document ID	Document Name	Document Type	Language Code
20039	Platnium Reseller Reg - Email Confirmatic	Email Document	English
20075	Platinum Reseller Reg Contact Info 1	Web Document	English
20110	Platinum Reseller Reg Gen Info 1	Web Document	English
20135	Platinum Reg Confirmation 1	Web Document	English
20270	Platinum Reseller Reg Notification Email 1	Email Document	English

Clone Dialog

Dialog Designer - Clone page

When you clone a document, you will need to enter new and unique values for the following fields:

• Dialog name

• All document names.

Note. When cloning a dialog, unique names are automatically generated for the dialog and all associated documents. (For example, a document named IntroEmail becomes IntroEmail 1, but if the original document's name was IntroEmail 2, the clone would be named IntroEmail 3.)

To clone documents associated with the dialog, give each document a new name. If you do not provide a new name for a document, the system appends the next available number to the end of the document name to make it unique.

The dialog can be cloned across business units if the business units share setIDs for both audiences and documents. If a dialog has no audiences or documents associated to it, it can be cloned across all business units.

Setting Dialog Options

You can set options for your dialog to govern how matching rules are applied, whether character sets are filtered, and whether to use the Graphical Designer to set up your dialog's flow.

Access the Dialog Designer - Options page.

Dialog Designer - Options page

| **Matching Options** | Select the Use Individual Rules check box to require that individuals inserted into the system must meet the criteria specified before they can be matched with an individual already in the system. By default, individuals must match Email Address and Last Name. |

Select the Use Organization Rules check box to require that organizations inserted into the system must meet the criteria specified before they can be matched with an organization already in the system. By default, organizations must match Organization Name.

Note. If an individual linked with a company that already exists in the system is inserted and the Use Individual Rules check box is selected, the company information will not be reinserted even if the Use Organization Rules check box is not selected.

General Options   Select the Filter Character Sets check box to allow the Dialog Designer to only show character sets that match the language of the currently selected document associated to an element. If this check box is cleared, all character sets in the system will show regardless of the language of the document. This option should only be turned off if the dialog designer has a good understanding of languages and character sets.

Graphical UI Options   Select Use Graphical Designer if you want to design your campaign flow graphically, displaying and manipulating the elements and their connections on a canvas.

Specify the full height and width of the canvas in pixels. The default for each is 5000.

Specify the viewing area height and width (that is, the part of the canvas actually visible on the screen at any given time) in pixels. The default height is 360, and the default width is 745.

Install SVG Viewer   To use the Graphical Designer, you must first install the SVG Viewer. Click this button and follow the instructions to install the SVG Viewer.

See <u>Chapter 2, "Setting Up PeopleSoft Online Marketing," page 7</u>.

See *PeopleSoft Enterprise CRM 9 Supplemental Installation Guide*

CHAPTER 4

Designing Web Templates

Web templates allow you to use an external HTML document as a basis for designing the web pages for your dialog. After an HTML document has been set up as a template, it is available to be used with all Online Marketing dialogs in the same SetID.

Web templates can reside outside Online Marketing and are referenced by their URLs on the web server.

This chapter describes the process for creating and using web templates with your Online Marketing documents. It includes the following sections:

• Creating Web Template Documents

• Setting Up Web Templates

• Using Web Templates

Creating Web Template Documents

You can use any HTML document as an Online Marketing web template.

The following XML tags embedded within <SCRIPT> tags make it available to use with Online Marketing.

Note. When using HTML documents containing <FORM> tags, the <FORM> tags cannot span the Online Marketing content. If you use <FORM> tags, make sure to close them (with </FORM>) before the start of the Online Marketing tags.

Add this tag to the <BODY> section of the document:

```
<script language="XML"
 xmlns:psfttag='http://www.peoplesoft.com'>
 <psfttag:body/>
 </script>
```

Note. If your web template includes tables, be sure to place the XML tag within the tags of the empty cell where the Online Marketing form is to be included.

Adding the following tag to the <HEAD> section of the document is required if you specify a title or a redirect URL for the web page. If you do not specify a title or redirect URL the tag is optional but recommended:

```
<script language="XML"
xmlns:psfttag='http://www.peoplesoft.com'>
<psfttag:head/>
</script>
```

The tags define where the document content is to be inserted when the web document is rendered. Online Marketing renders the <TITLE>, <META>, and other header tags in the position specified by the psfttag:head tag and the rest of the document content in the position specified by the psfttag:body tag.

Note. Do not include any other scripting information in the <SCRIPT> tags, because the entire tag and its contents will be replaced by data from an Online Marketing document.

You can embed the following merge content objects in web templates by typing the merge content syntax (beginning with "pstag:*vcType*") into the appropriate location in the template:

• Profile Field

• Web Link

• Current Date

• Current Time

• Recipient ID

• Tracking Number

Note. Web links embedded within web templates will not be recognized by the Dialog Designer or the Document Designer, but they will be handled properly when your dialog is running.

Web templates should be limited to a maximum size of 1 MB and should be saved in UTF-8 encoding format.

See Appendix A, "Merge Content Specification," page 289.

Setting Up Web Templates

Before you can use an HTML document as a web template, you must perform a few setup tasks.

Pages Used in Setting Up Web Templates

Page Name	Object Name	Navigation	Usage
Template Setup	RY_TEMPLATE	Set Up CRM, Product Related, Online Marketing, Template Setup	Use to make an HTML document available for use as an Online Marketing web template.

Setting Up a Web Template

Access the Template Setup page.

Template Setup page

SetID	The SetID under which the template will reside. If you want the template to exist under multiple SetIDs, you will need to perform Template Setup for each desired SetID.
Template ID	A unique, read-only identifier for the template.
Name	Enter a unique descriptive name for the web template.
URL	Enter the web URL where the template document is stored.
Preview	Click to view the actual appearance of the template document in your browser.

Online Marketing verifies that the URL you supplied is valid and that the XML tags in the template are correct. If the verification is successful, the new template appears in the list of templates. If it is not, an error message is displayed describing the problem. You should go back and recheck your document to make sure you have included the tags properly, or ask your web server administrator to confirm that you are using the correct URL.

Before making your web template available, preview and test it thoroughly in both Microsoft Internet Explorer and Netscape browsers to ensure that all links and any special functionality (such as mouseovers) work properly and that the file looks the same on your browser and in Online Marketing.

Using Web Templates

After a web template has been defined, you can use it in any of your Online Marketing web documents.

Note. A web template is associated with a particular SetID. If you want to use the web template with multiple SetIDs, you must create it in each one. Web templates belonging to different SetIDs are updated independently.

Permissions for Web Templates

To use web templates, you must have the View web page templates permission, and to use template documents in dialogs you must have the Edit online dialogs permission. To edit web templates, you must have the Edit web page templates permission.

See *PeopleSoft Enterprise CRM 9 Application Fundamentals PeopleBook*, "Setting Up Security and User Preferences".

Understanding Previewing and Live Rendering of Web Template Documents

You should be aware of the following behavior associated with Online Marketing documents using templates.

If you modify a template but do not change its location (that is, the URL remains the same), the Document Preview function will display the modified template. This is because the document preview does not rely on what is cached on the server.

In a Live dialog, however, documents using web templates are cached. If a template HTML file is changed outside Online Marketing, the new version will not be used until the Online Marketing Dialog Server cache is cleared. You can clear the server cache by saving the template from the client, or by manually clearing the cache using the Online Marketing Control Center.

If you want a modified template to be active immediately, you must clear the server cache as soon as the template is modified. However, if you do not want the modified template to be active immediately, you should be aware that if the server cache is cleared for any reason (even by another Online Marketing user), this will activate the modified template.

To avoid inadvertently activating a template you do not want to use yet, give the template a new name that is not being used by any other dialog documents and test your document using that template. When you are sure the template works properly with the document, save the template under the original name, associate the document with it, and clear the server cache to make it active.

See Also

Chapter 11, "Using the Control Center," page 181

Using Web Templates with Documents

To use a web template with an Online Marketing document:

1. Before associating an HTML document with a web template, ensure that all references in the web template file (including GIFs, links, JavaScript and Java applets) are absolute references. They should be in the form *http://www.domain.com/myimage.gif* rather than the form *../images/myimage.gif*. Also, make sure that all links and GIFs can be rendered by the Online Marketing web server.

2. In the Document Designer, create a new document, filling in the appropriate information. In the Template Name field, choose a template from the list of available templates.

3. Click Preview to verify that your HTML document is displaying properly in the web template.

If the template is not found at rendering time or if it does not contain the appropriate Online Marketing tags, the server treats the document as if no template exists and includes appropriate HTML tags around the head and body sections (just as it does with any other Online Marketing web document).

See Also

Chapter 6, "Designing Web Documents," page 83

Changing a Document to use a Web Template

To change an existing dialog document to use a web template:

1. In the Document Designer, open an existing document.

2. On the Document page, select a web template from the list in the Template Name field.

3. Save the document.

The selected template is associated with the document.

See Also

Changing a Web Template

If you change the web template, the documents associated with it will automatically apply the changes. However, documents that are imported with previously exported contents with formatting will not be affected by subsequent template changes. Any changes you make after adding a web template to your document will affect the associated documents.

CHAPTER 5

Designing Email Documents

This chapter provides information about creating and modifying the email documents used in dialogs, and includes the following topics:

• Understanding Email Documents

• Defining Email Documents

• Creating Email Content

Understanding Email Documents

You use email documents to communicate with the target audience during the dialog. Email documents can be initial offers that you broadcast to a target audience, or follow-up emails that you send after people respond to an offer. Online Marketing supports ASCII text, HTML formatting, multi-part MIME emails (which display either text or HTML depending on the user's email reader settings), and AOL emails.

You can personalize email documents for each recipient by adding the recipient's name and other information from the database. (This is similar to performing a mail merge in a word processing application.)

You can use email documents in Online Marketing in the following ways:

• Broadcasting emails to a large group of recipients to make an offer.

• Broadcasting email newsletters to subscribers.

• Following up on individual respondents.

• Sending reminders of important milestones for the dialog, such as a scheduled broadcast, submissions from a certain number of respondents, or the end of the dialog.

• Notifying the sales department of leads.

All of these emails can be personalized to contain any appropriate information from the database.

Understanding Personalization

Online Marketing allows you to personalize your email documents by including data from your profiles, such as a recipient's name, address, or other information in the database. You can also personalize documents with information entered in a web document. You personalize documents using the merge content, dynamic content, and custom content extensions features.

Merge content is dynamic, which means that the data to be merged is determined just prior to sending an email. In addition to contact information in the database, merge content can include information entered from a web document in the current dialog. Merge content can also include the URL to a dialog web page, and other special data generated by Online Marketing, such as the recipient ID, tracking number, and current date and time.

Dynamic Content is a type of merge content that allows you to merge content into email messages based on rules you create. These rules can be based on profile attributes or other Online Marketing data.

You can also personalize your email messages by including custom content extensions in the email body. Personalization is supported in both the email body and the subject line.

Defining Email Documents

This section describes how to define the general information about email documents.

Pages Used to Define Email Documents

Page Name	Object Name	Navigation	Usage
Email Document	RY_EDOC	Marketing, Document Designer, Email Document	Define general information about email documents

Defining Email Documents

An email document is essentially an email message that is used during a dialog. You can broadcast email documents to large groups, send follow-up messages to individual respondents, or notify dialog administrators or other internal employees of specific event.

Note. To broadcast emails to a group of contacts, Online Marketing requires that the email addresses for all contacts be stored in the Email or Email Alternative fields in the Individuals system profile.

Access the Email Document page.

Email Document page

Name	Enter a descriptive name for the email document. The name must be unique in the system.
Email Type	Shows the email's type: HTML, Text, or HTML and Text (MIME).
Language Code	Select a language for the document from the available options.
SetID	Choose the SetID with which the document will be associated.
Dialog Status	If the email is attached to a dialog, this field displays the dialog's status.
Attach to Dialog	Select a dialog to which to attach the document. You can attach a document to any dialog in the same SetID.

> After a document has been attached to a dialog, you can now merge other document fields into the current document. You can also preview the document or import into it.
>
> Attaching a document to a dialog allows the document to inherit rules from the dialog. For dialogs with a status of Live, the dialog must be set to Design before a document can be changed. The following list shows the rules:
>
> **Note.** You can only attach a document to a single dialog. If you want to use the document with more than one dialog, you must clone the document. You cannot detach a document from a dialog if the document has ever been Live, if it is used in a dialog flow, or if it has been imported or exported.

Long Description	Enter a description of the email document.

Creating Email Content

You create email documents in a manner similar to creating them in your regular email software. After creating your email document and entering text and attaching it to a dialog, you can preview how the email message will actually look by previewing the formatted email. Merge content is not filled in while the dialog is in the In Design mode.

This section describes the process for creating the content contained in an email document. It describes how to:

- Address an email document.
- Customize the subject line.
- Personalize an email document.
- Copy merge content.
- Create the email document body.
- Add a web link to an email document.
- Add dynamic content to an email document.
- Import HTML text into an email document.

Pages Used in Creating Email Content

Page Name	Object Name	Navigation	Usage
Document Designer - Email Document Designer	RY_EDOC_DESIGNER	Marketing, Document Designer, Designer	Define content for email documents.
Merge Content	RY_VC_MAIN	Click the Merge button next to email text or subject fields.	Add merge content to the email text or subject field.
Dynamic Content	RY_VC_ADAPT_DC1	Click the Dynamic Content link in email document merge content.	Use to specify details about dynamic content.

Addressing an Email Document

Email messages must have From, Reply-To, and Bounce email addresses associated with them. Within the body of the email, you can insert any text, HTML, or merge content fields.

In a typical email application, your personal email address is usually specified as the originator's address, and is used as the mailbox for replies and bounced emails. In Online Marketing, you have to specify these addresses (or mailboxes) for the email document.

The Document Designer allows you to specify mailboxes for the Reply To, From, and Bounced fields. For a mailbox to appear in each field's pull-down list, it must first be defined in Mailbox Setup and be of the same SetID as the email document.

Warning! Be careful not to use a person's email address for any of these mailboxes, due to the potential number of emails that can return to these addresses. Also, bounced Online Marketing emails contain a tracking number that allows Online Marketing to track their relevant information in the database and then discard them. Any non-Online Marketing emails (such as personal emails) delivered to an address that has been designated as a bounce mailbox are discarded.

Access the Document Designer - Email Document Designer page.

Document Designer - Email Document Designer page, Address section

From	Choose an address from the available options for the email's sender.
Reply To	Choose an email address from the available options to indicate where you want replies to this email to be sent.
Bounced	Choose an email address from the available options to indicate where you want any bounced emails to be sent. Remember not to use a person's email address for the Bounce address, because it could potentially receive large numbers of emails.

See Also

Customizing the Email Subject Line

Online Marketing allows you to include merge content in the email Subject line for personalization. To personalize an email subject line:

1. Access the Document Designer - Email Document Designer page.

2. In the email Subject field, type any text you want to include as part of the subject.

    If the subject will contain nothing but merge content syntax, you don't need to type any text.

3. At the point where you want to include merge content, type a pair of curly braces ({}) in the Subject line.

    For example, if you want to personalize the email with the respondent's name, you might enter "A Special Offer for {}".

    Note that you can include more than one set of curly braces if you want to include multiple merged items.

4. Click the Merge button to display the Merge Content page.

    Notice that each set of curly braces you included in your Subject line now contains a merge content button. By default the first button is highlighted, indicating that it is active. You can make any button active by clicking on it.

5. To select the content to merge, browse the folders in the Browse section and select the content you want to use.

    Depending on which content you choose, more fields are displayed on the right side of the page. Enter the appropriate information for your merge content.

Profile Fields	Click the Apply button next to the field you want to merge. If you want to include a default value, enter it in the Optional Default Value field.
	For example, if you want to personalize an email to a respondent's first name, you can select Individuals, People, First Name for the merge content. However, in some cases you might not know the recipient's first name, so you might choose to include some appropriate generic text (such as "Pet Lover" or "Baseball Fan") as the default for when the first name is not available).
	If the profile field is of type Date (for example, birth date) then you can choose the date format in which to display the date.
Document Fields	Click the Apply button next to the field you want to merge. If you want to include a default value, enter it in the Optional Default Value. This type is available if other documents that contain data entry fields exist in the same dialog.
	If the field is of type Date (for example, birth date) then you can choose the date format in which to display the date.
Current Date	Select a date format from the available options and click Apply.
Current Time	Select a time format from the available options and click Apply.
Recipient ID	The ID that is assigned to each person in the database. You cannot make changes to this value.

Tracking Number	A code used to identify the respondent, the action, and the target audience. You cannot make changes to this value.

The merge content tag appears in the appropriate location, replacing the button.
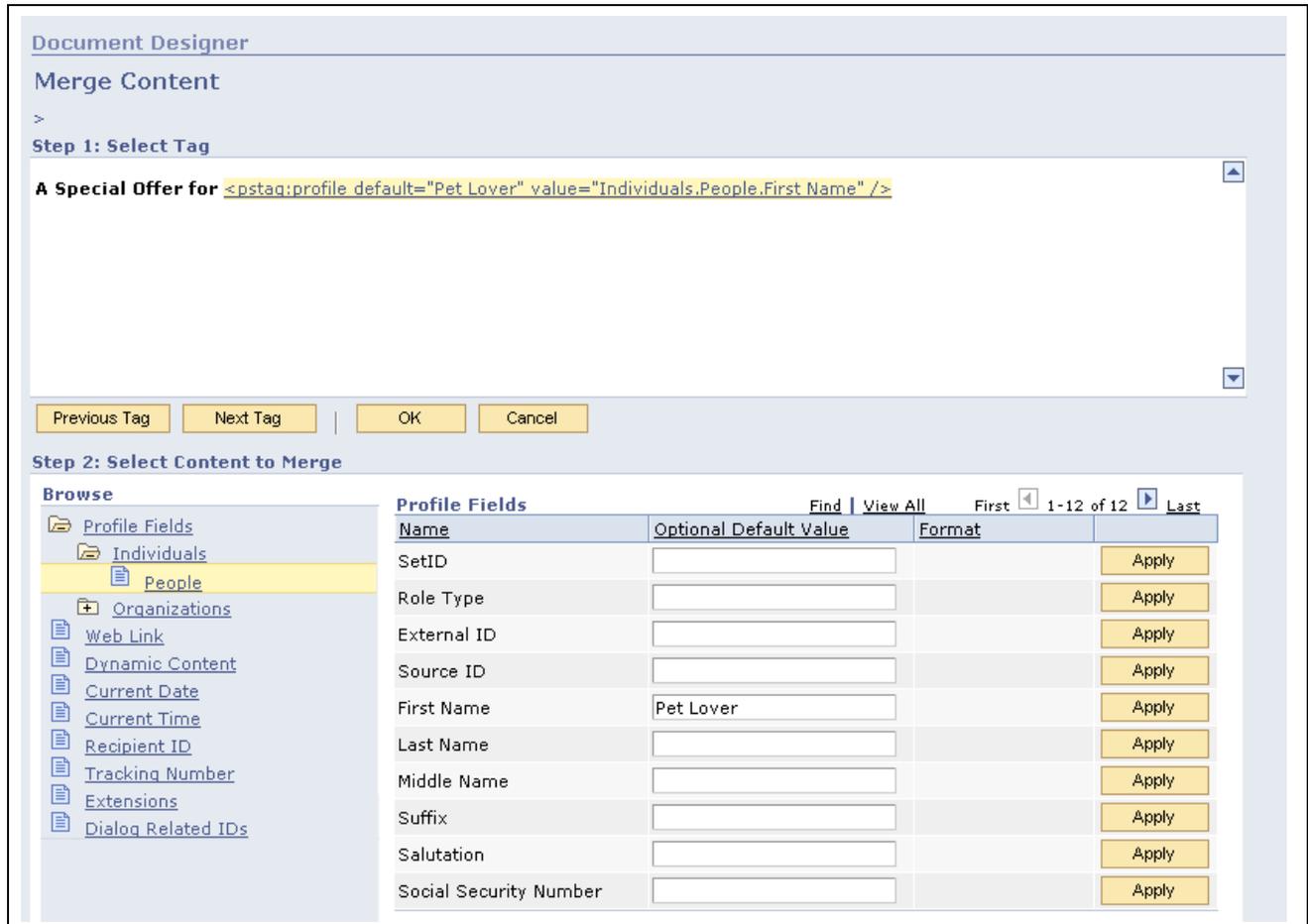
Merge Content page

Guidelines for Including Merged Content in Email Subject Lines

When using this feature you should consider the following guidelines:

• Selective and thoughtful use of merge content is always recommended, as use of personalization must be weighed against your requirements for speed in executing your broadcast email jobs and rendering of web pages. When many merge content tags are included, performance will be impacted.

• The total character length for the email subject line is 254 characters; this includes all characters that make up the Online Marketing merge content syntax. If applying merged content exceeds the maximum characters, an error message will be displayed and you will need to either change the currently applied content or cancel out of the merge process.

See Also

Chapter 18, "Using Extensions," page 265

Appendix A, "Merge Content Specification," page 289

Copying Merge Content

Merge Content can be copied and pasted to places that are enabled for merge content use. If the place where the merge content is pasted is enabled for use, but is an invalid location for the merge content type that was pasted, then an error will be displayed. (For example, Dynamic Content cannot be used in the subject line.) Any merge content that contains a reference to other dialog data will not pass dialog validation until it references data in the correct dialog. Therefore, an internal web link in Dialog A that links to another document within Dialog A can be pasted into a document inside Dialog B, but the link will have to be reset to point to a document inside Dialog B. Similarly, a document field in Dialog A that points to Document 1 that is pasted into a document in Dialog B must be either removed or changed to point to a valid document inside Dialog B.

Document fields can be used in other places in a dialog (for example, Decision Point and Update Profile actions). These places must also always point to valid documents within the dialog. Dialog Validation will catch these if they are not valid uses.

Note. When you clone merge content by using cut and paste, you should keep the ID as is so that the system knows exactly which merge content to clone.

See Also

Chapter 5, "Designing Email Documents," Adding a Web Link to an Email Document, page 74

Chapter 5, "Designing Email Documents," Adding Dynamic Content to an Email Document, page 77

Creating the Email Document Body

You create the body of your email document in the same way that you would do so in your email application: by entering and formatting the information (text, HTML, or both) that you want to include in your message. This section describes how to:

• Enter text information.

• Enter HTML information.

• Enter multi-part MIME (both text and HTML) information.

Entering Text Information

To enter plain text information in the body of an email document:

1. In the Email Document Designer, click the Text tab in the email body area.

2. Enter plain text into the text box, or click the Import Text button to import text from an external source.

    Note. You can enter merge content into the email body by typing a pair of curly braces {} and clicking the Merge button.

    ---

3. Click the Save button.
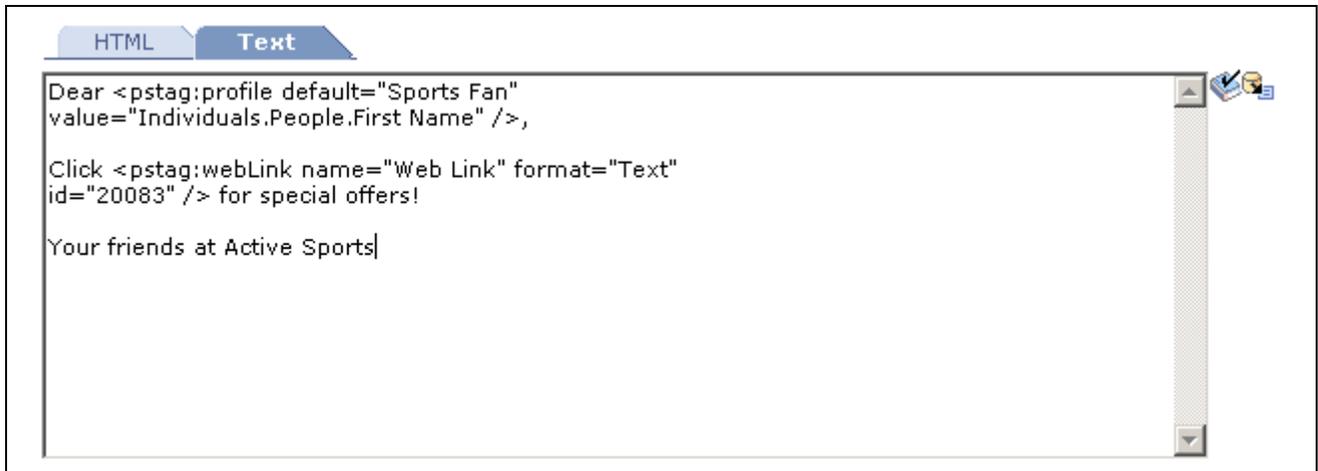
Email Document Designer - Text tab

See <u>Chapter 5, "Designing Email Documents," Importing HTML and Text into an Email Document, page 80</u>.

Entering HTML Information

To enter HTML information in the body of an email document:

1. In the Email Document Designer, click the HTML tab in the email body area.

2. Enter HTML text into the text box, or click the Import HTML button to import HTML text from an external source.

   Note. You can enter merge content into the email body by typing a pair of curly braces {} and clicking the Merge button.

3. Click the Save button.

See <u>Chapter 5, "Designing Email Documents," Importing HTML and Text into an Email Document, page 80</u>.

Entering Multi-Part MIME Information

A multi-part MIME document contains both text and HTML information. To create a multi-part MIME document, simply enter text in both the HTML and Text sections of the email body and save the document.

See Also

Chapter 5, "Designing Email Documents," Adding a Web Link to an Email Document, page 74

Chapter 5, "Designing Email Documents," Adding Dynamic Content to an Email Document, page 77

Chapter 5, "Designing Email Documents," Importing HTML and Text into an Email Document, page 80

Adding a Web Link to an Email Document

Online Marketing enables you to include web links in email documents just as you would in any normal email message, with the added benefits of allowing you to:

• track which recipients have clicked on the links.

• analyze impression and click-through rates for these web links.

To include a web link in an email document:

1. In the body portion of the email document, include curly braces ({}) where you want the web link to appear.

2. Click the Merge button.

   The Merge Content page appears.

3. In Step 1: Select Tag, select (or navigate using the Next and Previous buttons) the tag that you want to represent the web link.

4. In Step 2: Select Content to Merge, click Web Link.

   The Web Link builder appears.

5. Enter information about the web link in the Web Link builder.

Name	Enter a name for the link. The name must be unique.
Format	Specify whether the link is text (for text emails only) or HTML (for HTML emails or web pages).
Label	If the Format is HTML, you must specify a label. The label will be displayed instead of the actual URL. For example, in "To learn more, go to our home page," you could specify "home page" as the underlined clickable label, while the URL you are linking to (for example, http://www.active_sports.com) is the actual URL.
Image	You can specify an optional image if you wish. For example, you might have an image representing your web page that you want to be the clickable link to the page. Note that a label is still required when an image is used, because the label becomes the [ALT] text that displays until the image loads completely, or if the image does not properly render.
	You must enter the full path to the image, for example:
	http://www.active_sports.com/images/home_link.jpg
Type	An *Internal* link is created in and served by Online Marketing dialogs. An *External* link is not created in or served by Online Marketing dialogs. A *Cross-Dialog* link refers to any active Online Marketing dialog other than the current dialog. An *Advisor* link is a link to an Advisor dialog.
	Note that URLs to Online Marketing web documents are generated automatically by Online Marketing when the dialog is deployed. Online Marketing URLs identify the web page's location and provide additional information, such as the target audience that the respondent belongs to, the dialog, and the identity of the respondent. Because the URLs are not generated until the dialog is deployed, you will see a placeholder to remind you what will be inserted there.
URL	(*External link type only*): Enter the URL of the link. The URL must be in the form *http://<web_address>* (for example, http://www.peoplesoft.com).
	Note. For the internal and cross dialog link types, the association of a web page to a link is done in the Dialog Designer.

Append Values	(*Optional, External link type only*) Enter text to append to the end of the URL. For example, you can pass in offer codes or other values that can be embedded in the merge content. So if the web link is inside an email, the person clicking on the email can send a code or some other personal info through that URL, and then they may get more personalized content in return. More merge content can be added to this field by adding {} to the text and clicking the Merge button. This will allow you to merge directly into the Append Values field.
Replace URL Prefix	If you want to customize the first part of the URL, replacing the standard server name with an alternate name, enter the alternate name in this field. This is useful, for example, if three different divisions send out dialogs from the same server, but want the URLs to reflect the individual divisions.
	Note. The new prefix you specify must be set up as a valid DNS entry on your Online Marketing web server. Consult your Online Marketing system administrator.
Track click-through by recipient	If you want Online Marketing to track each recipient who clicks on the web link, select the Track clickthrough by recipient check box. Online Marketing assigns a special code, called the tracking number, that it uses to track the respondents who use this link. Note that if you do not select this check box, you will no longer be able to track submits. Further, records in documents and profile tables will not be tracked to their original submitters.
Track web link offers	If you want Online Marketing to track web link offers (email sent or web page shown), select the Track Web Link offers check box.
	Note. Choosing to track both clickthroughs by recipient and web link offers will slow your outbound email send rate and web page rendering, because additional data must be logged.
Link Category	Select a category that best describes the link from the available options. This will enable you to group web links by type in CRM Analytics, so you can compare the success of different categories of links.

6. Click Apply.

The web link is inserted into the document at the place you specified. The email document shows the web link inserted in the text area. Note that if you have chosen a document in a dialog other than the current dialog, the link will contain a dialog ID number. This number allows Online Marketing to track respondents across different dialogs.

Note. If you want to delete a web link item from a document, put the cursor after it and press the Backspace key until the entire merge content tag is gone.

See *PeopleSoft Enterprise Real-Time Advisor CRM 9 PeopleBook*.

See Chapter 3, "Designing Online Dialogs," page 27.

Cross-Dialog Links

When you create a web link that references an active Online Marketing dialog other than the current dialog (called a cross-dialog link), be aware that the following actions will break the link to that page and result in a "page not found" error:

- The targeted dialog is not live after the link is created.

- The dialog containing the targeted response page is made inactive (changed to In Design, Paused, or Completed state).

Note. The actual association of cross-dialog links is performed in the Dialog Designer.

See <u>Chapter 3, "Designing Online Dialogs," page 27</u>.

Adding Dynamic Content to an Email Document

Dynamic content gives you the ability to dynamically insert content for recipients based on their preferences and profiles. By specifying rules for when different content sections should appear, you can give the most relevant offers to each of your customers. Dynamic content can also reduce both the number of audiences and the number of documents needed to test numerous messages. Thus, with dynamic content you can test more personalized, relevant offers to your audience in less time.

To insert dynamic content into an email document:

1. In the Email Document Designer, insert curly braces ({}) at the point in the body of your email document where you want the dynamic content to appear.

2. Click the Merge button.

   The Merge Content page appears.

3. Click Dynamic Content in the Select Content to Merge section.

4. Enter a name and description for the dynamic content.

   The Name uniquely identifies the dynamic content object within the dialog. When you create a dynamic content object from an existing profile or document element, that element's name is pre-filled in this field.

   The Description is optional and can contain up to 254 characters.

   Note. You cannot use quotation marks or periods in dynamic content.

5. Enter the Sections information.

6. Enter the Layout information.

7. Enter the Advanced information.

Dynamic Content Sections Information

The Sections part of the Dynamic Content builder is where you define your dynamic content object's content sections, conditions, and content. You can add sections one by one using the Add Section button, or you can create a group of sections based on a profile or document choice field using the Load button.

Note. Loading a large group of sections will slow down the load action. Therefore, the Profile and Document field picker is restricted to only show choices with a choice value of less than 60.

Note. The order in which the content sections appear in this list is their ranking for the purposes of determining which content sections will be displayed when the number to be displayed is limited, as set in the Number of Sections to Display text box. You can use the Move Up or Move Down buttons to move the content sections around in the list.

Dynamic Content Sections section

Section Name	Provide a section name that is unique within the Dynamic Content.
Selection Criteria	The left side of the expression can be any profile or document element with the exception of a many rows per contact profile. The appropriate set of operators will be displayed for the element type. The right side of the expression can contain valid values (chosen from a list or typed in as text) corresponding to the element on the left side.
	You can use the AND and OR keywords to create more complex conditions.
Content	The Content text area lets you enter text associated with the content section. You can enter text or raw HTML content. If, for example, this content is part of an HTML email, you can also specify an image for the content (for example, <IMG SRC=image_location>). You can include other merge content objects in the text by embedding them using the Merge button.
	You also have the option of pointing to external content that might reside in a content management system, at a URL, or in an external file system. Refer to the Extensions documentation, particularly the section on sample servlets where an example is given how to do this. After the extension is developed and registered, the extension syntax can be entered in this tab.
Backup Text	The backup text is optional—you can enter text to be displayed if problems are encountered evaluating conditions for the content section.

See <u>Chapter 18, "Using Extensions," page 265</u>.

Dynamic Content Layout Information

The Layout section lets you specify the content headers, footers, and content section separators. Each text area accepts either text or HTML (typically, the HTML is used to specify a path to a GIF or JPG location).

The buttons to the left of the text areas show the location of the separators when the document is rendered.

Dynamic Content Layout section

Content Header	The contents of this text area are displayed immediately preceding the rendered dynamic content.
Content Footer	The contents of this text area are displayed immediately following the rendered dynamic content.
Per Section Header	The contents of this text area are displayed before each content section.
	Note. Care should be taken when specifying this header in conjunction with the Section Footer.
Per Section Footer	The contents of this text area are displayed after each content section.
	Note. Care should be taken when specifying this header in conjunction with the Section Header.
Section Separator	The contents of this text area are displayed to separate sections of content.

The most common use for the various separators is to provide a visual division when displaying blocks of content. Content Headers are most effective to call out a topic in a page, while the Section separators are useful for providing separation between similar types of content. In a typical situation you would likely not use both a Section Header and Section Footer in the same document.

Note. Because no validation is performed to verify that the text you enter is valid for the type of document in which the dynamic content object is embedded, you should take care to specify a separator format that can be rendered correctly for the document type.

Dynamic Content Advanced Options Information

The Advanced Options section contains features designed for more advanced implementations of dynamic content sections. These features are administrative and regulate the runtime behavior of retrieving and displaying dynamic content. Typical users should not need to modify these settings unless they want to override runtime defaults or provide special processing.
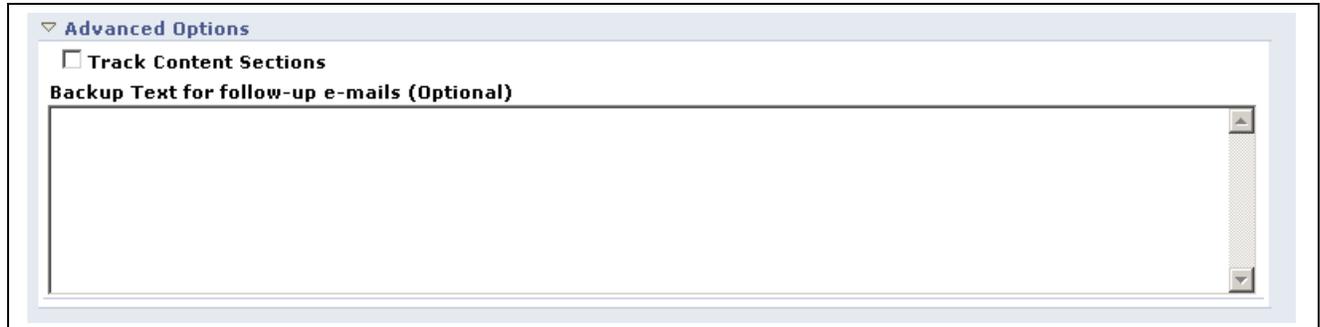
Dynamic Content Advanced Options section

Track Content Sections	When selected, this setting turns on tracking for content sections sent in email messages. Each time a particular content section is sent in the email, the count is incremented (for example, if a particular content section is included 3 times in a single email, this counts as 3).
Backup Text for follow-up e-mails	This text area is for specifying optional text to be displayed in follow-up emails in situations where the dynamic content object encounters an error when obtaining content, or if the timeout is exceeded. Only text or raw HTML is permitted in this field—you cannot embed another dynamic content object or extension in it. The field is limited to a maximum of 2000 characters.
	This field can only be used for follow-up emails—for broadcast email jobs, it is better to halt the job when a timeout occurs, identify the problem (for example, bring the network back up if it has gone down) and then pick up where you left off and send the remainder of the job with the correct content. If a timeout is reached or an error occurs in a broadcast email job, the job will go into a state of Failed. The problem should be investigated and the job restarted.

Importing HTML and Text into an Email Document

You can import text files and HTML-formatted files into your email documents. You can also import both a text version and an HTML version (referred to as "multi-part MIME") into your email to accommodate recipients who have email applications that can handle HTML as well as those who do not.

Importing text or HTML into an email document replaces any information already in the email document. However, after you have imported the text or HTML file, you can modify the imported information and insert merge content into your new email to personalize information in the document.

Note. If you import a document from a file, the character set for the file must be UTF-8.

To import a file into an email:

1. Create the email document.

2. Click the HTML tab or the Text tab, depending on the type of text you want to import.

3. Click the Import HTML or Import Text button.

4. Select the file you want to import and click OK.

Note. Any text in the email file is replaced by the imported text.

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5. You can preview the email or open the email to view the imported text.

   If you preview an HTML email document, the email will be opened in your default browser.

6. If you are importing a multi-part MIME document, repeat steps 2-4 for the remaining content type (text or HTML).

Note. You cannot import binary files into email messages.

See Also

CHAPTER 6

Designing Web Documents

This chapter describes the process for designing and creating Online Marketing web documents. It contains the following sections:

- Understanding Web Documents
- Creating and Working with Web Documents
- Formatting a Web Document
- Importing and Exporting Web Document

Understanding Web Documents

Web documents are individual web pages that can form a standalone web site, or be added to your corporate web site for the duration of the dialog.

Unlike an email document, where you enter your email text directly in the document, a web document is designed by first adding various document elements (such as paragraphs or questions) and then editing them as needed. The order of the items in the list determines their order in the web document. (For example, if you want a submit button to appear at the bottom of the web page, then the last item in the list must be a button.)

Using the Online Marketing document elements, you can design a basic web document that has all the fields you want respondents to fill in. However, you may want to include your company logo, or create a web page with a particular look or style. With Online Marketing you can merge the items in your basic web document with an HTML file created outside of Online Marketing, providing you the ability to create any type of web document you want. If you want even more control over the look and feel of your web document, you can use web templates that provide you with a framework you can fill in with your specific information.

See Also

Chapter 4, "Designing Web Templates," page 61

Understanding Document Elements

A web document's content consists of elements. There are two types of elements:

- Document fields
- Profile fields

Each element must have a unique name in the document, and an element cannot contain another element. Online Marketing uses the following types of elements:

Name	Description
Paragraph	Text that is displayed in the web document. Used as: headings or paragraphs of descriptive text in a document.
Choice Question	A multiple-choice question where the respondent chooses from the choices listed. Online Marketing has four types of choice questions: Choose one, Choose one (w/rating), Choose many, and Yes/No.
Entry Question	A question where the respondent enters text or numeric information. Online Marketing has seven types of entry questions for Text Entry, Number Entry, Decimal Entry, Date Entry, Time Entry, Text Block Entry and File Entry.
Button	A button that the respondent can use to submit and/or clear the information entered on the web document.
Horizontal Line	A ruling line used to separate different parts of the document.
Blank Line	A blank line (like those that appear between paragraphs) between two elements.
Custom HTML	Custom HTML code. Text entered in a Custom HTML field is treated just like any other HTML code by the browser; no processing is done by Online Marketing.

Each document element has specific properties, such as color and layout, that you can edit. Document elements can be cloned, and they can be reordered in the document by changing the order number in which they are displayed.

Understanding Surveys

Online Marketing includes survey features built into web documents, allowing for integration with other PeopleSoft CRM products such as Support. Using the survey features, you can build customer satisfaction surveys and other documents allowing you to solicit feedback from your respondents, assigning weights to questions and responses for obtaining survey scores.

The Survey functionality is integrated with the Case functionality, allowing an Online Marketing survey to be triggered from the Case component and to have the survey results stored in association with the Case. Further, results from survey dialogs are recorded and are available for reporting purposes for the life of the dialog.

Understanding the Scoring Framework

The Scoring Framework is a term used to describe the process of assigning weights to survey questions and answers so that scores can be calculated for an individual question or for an overall survey. In order to have access to the Scoring Framework, a document must be designated as a Survey Document (this choice is made in the Document Designer). Weights can be specified for the question and for each of the answer choices for the following element types:

• Multiple Choice.

• Single Choice.

• Single Choice with Rating.

• Yes/No.

Weight values can be from –99 to 99.

Note that once you indicate that a document is a Survey Document (and thereby allow the use of weights for questions and answers) and take the document Live, you cannot later remove the document's status as a Survey Document. This is to prevent corruption of the scoring data that has already been calculated.

Score Calculation

The calculated score for an individual question is derived from *answer weight * question weight*. For multiple-choice questions, the calculated score is the *sum* of (*answer weight * question weight*). When a user submits a page, the question scores are calculated and the overall survey score (or running total score) is updated. Because a user's path of execution might lead from one dialog flow to another, or can be affected by premature exit from the dialog or visiting a page more than once, the overall survey score is adjusted accordingly. The following general rules apply when calculating survey scores:

• The overall survey score is the total score of all the *unique* pages submitted in the path of execution, regardless of whether the pages come from a single flow or more than one flow in the same dialog. This implies that if a page is revisited and *resubmitted*, the latter submission's score will be counted toward the overall survey score.

• A Landing Page determines the start of the overall survey score calculation for the flow of execution. If the path of execution takes a user to another Landing Page within the *same* dialog (through an *internal* cross-dialog link), the current overall survey score is recorded for the current execution flow and the score calculation will start over for the new flow, starting with the submission of the Landing Page. If the path takes a user to a Landing Page in another dialog (through an *external* cross-dialog link), then the current survey score is recorded in much the same way and the score calculation will start for the new dialog.

• Question scores and overall survey scores reflect the most current ("Live") state of the document and the dialog. During the life of the dialog, changes such as adding or deleting questions can be made to the document. New documents can even be added and switched (from one action to another) within the dialog flow. These changes have impact on the scores.

• In a circular or cyclic flow situation, where a Decision Point takes a user to a previously visited Intermediate Page, the data (and scores) accumulated between the first visit to the Intermediate Page up until the Decision Point will then be removed and become available. This affects the score calculation.

Note. Rating Values in Choose One with Rating elements do not affect the score calculation.

Completed Surveys

When a user reaches the Final Page of a survey dialog flow, the system will indicate that the survey has been completed. Note that if the user traverses to a page in another dialog (through a cross-dialog link) or closes the browser before reaching the Final Page, then the survey is considered incomplete.

There is no built-in mechanism to prevent users from completing a survey more than once. However, for the purposes of reporting survey results for the Case component, only the latest completed survey results (per Case) are displayed. Incomplete surveys do not have any impact on surveys that have already been completed.

Lifetime of Survey Scores

Survey scores begin to accumulate once the web pages are made accessible by setting the dialog to Live (or Test), and will stop accumulating when the dialog is set to Complete status. The score data will be available even when the dialog is set to Complete. In general, scores will accumulate as long as the dialog web pages are accessible.

At the individual/question level, scores are recorded as the web page is submitted, along with other document data.

Overall Survey Score Restriction When Updating Cases

The Case component can use a survey dialog when the Update Case extension is used at the end of the dialog flow. Update Case, a system-delivered extension, is designed to update the case's survey score with the current dialog's overall survey score. Because the Case transaction can have a maximum score of 999, you should design any case-related survey dialog flows to ensure that the overall survey score cannot exceed 999.

See <u>Chapter 18, "Using Extensions," page 265</u>.

See Also

PeopleSoft Enterprise CRM 9 Call Center Applications PeopleBook, "Processing Cases," Sending Case Surveys

Creating and Working with Web Documents

This section describes how to create and work with web documents.

Pages Used in Creating Web Documents

Page Name	Object Name	Navigation	Usage
Document Designer	RY_DOC_SRCH	Marketing, Document Designer	Use to specify the type of document you want to create for your online dialog.
Document Designer - Document	RY_DOC	Marketing, Document Designer, click the Add Web Document button	Use to create a new web document for your online dialog.
Document Designer - Designer	RY_DOC_DESIGNER	Marketing, Document Designer, click the Designer tab.	Use to design a web document for your online dialog.
Web Document Profile Insert	RY_VC_MAIN	Marketing, Document Designer, click the Designer tab and select Profile Attribute.	Insert a profile field into a web document.
Element Format Properties	RY_DOC_ELEM_FMT	Click the Element Properties link	Click to change the formatting for an individual element.
Import/Export	RY_DOC_IE	Click the Import/Export button in a web document that has been attached to a dialog	Use to export web documents and to import HTML files into web documents.

Creating a Web Document

Before you can add elements to a web document, you must specify its general information.

Access the Document Designer - Document page.

Document Designer - Document page

Name	Enter a unique name for the document.
	Note. The double quote (") and period (.) characters are not allowed in the document name.
Language Code	Select a language for the document from the available options. If you change a document's language, the system will try to translate any profile fields in the document.
Attach to Dialog	Select a dialog to which to attach the document. You can attach a document to any dialog in the same SetID.
	After a document has been attached to a dialog, you can:
	• merge other document fields into the current document.
	• preview the document.

- import the document.

- export the document.

Attaching a document to a dialog allows the document to inherit rules from the dialog. The following list shows the rules:

- Renaming a document is only allowed before the dialog goes live. After the dialog is live, you cannot change the name.

- For dialogs with a status of Live, the dialog must be set to Design before a document can be changed.

- For dialogs with a status of Live, you cannot change document choice labels or delete choices.

Note. You can only attach a document to a single dialog. If you want to use the document with more than one dialog, you must clone the document. You cannot detach a document from a dialog if the document has ever been Live, if it is used in a dialog flow, or if it has been imported or exported.

Type	This read-only field shows the document's type: Web Doc or Email Doc.
Dialog Status	This read-only field displays the current status of the dialog. The options are Design and Live.
SetID	Choose the SetID with which the document will be associated.
Description	Enter a brief description of the document.
Survey Document	Select this check box if the document will contain survey questions that will be weighted for scoring purposes.
Title	Enter a title for the document. This is not the same as the document's name; the title will appear in the web browser's title bar.
Redirect URL	If you want to redirect the user to another page from this one (sometimes called a "forced" redirect), specify the URL of that page. (You can redirect a user to a dialog standalone or landing page or to an external URL, but not to an intermediate page.) Redirecting means that when users view the original page, the system automatically sends them to another specified page after a predefined period. A common reason to use a redirect page is to jump a person from the final page in a dialog back to an e-commerce or corporate site. It is also used to jump them from a blank dialog page to an external URL as a means of tracking the clickthrough—however, this latter method is no longer used in versions 4.0 and later where external link tracking is provided.

Note. A document that includes a redirect URL and delay does not need to contain other elements. Adding elements to such a document is allowed, but they will not be used when the document is rendered.

Redirect Delay	Enter a value which defines how long in seconds to wait before displaying the new page. The default value is 0.

Note. Specifying 0 for the delay means that the user might not see the page on which the redirect was set. Whether the redirect page is visible depends on many factors, including the speed of the webserver(s) involved.

Template Name	If the document will use a web template, enter its name in this field. You can choose only templates that were created with the same SetID as the document.
Question Format	Select the formatting for your document's questions by specifying font and justification information. The formatting you specify in these fields applies only to questions, not to answers.
Answer Format	Select the formatting for your document's answers by specifying font and justification information. You can also specify where the answer will appear relative to the question: below it, to the left, or to the right. The formatting you specify in these fields applies only to answers, not to questions.
	Once they are set, question and answer format settings apply to all new document elements created thereafter. Any formats that were previously set at the element level retain their previous formatting and aren't changed by the document-level formatting.

Adding an Item

Although web documents can contain a variety of items, all items are added in the same manner.

To add an item to a web document:

1. Access the Document Designer - Designer page.
2. Click the button corresponding to the item you want to add to the document.

The following table shows the elements and their buttons.

¶	Paragraph
< >	Custom HTML
≡	Horizontal line
→▤	Blank line
▤	Profile
☑	Choose One
1 2 3	Choose One with Rating
☑☑	Choose Many
y n	Yes/No

[abc]	Text Entry
[≡ᵢ]	Text Block Entry
[123]	Number Entry
[.01]	Decimal Entry
[31]	Date Entry
🕐	Time Entry
[📄]	Upload File
[▭]	Button

The item is added to the Document Designer. If other items already exist in the document, the new item appears below the selected element in element list.

Document Designer Modes

The Document Designer is available in two modes, depending on the number of elements you plan to include in your document. If you only want to include a few elements, you can choose to display a summary of the elements along with their details on the same page, which makes viewing of your entire document design more convenient. However, if your document will contain more than 20 elements, it is usually more convenient (and better for performance purposes) to separate the summary of elements from the details about each element. You can change the Document Designer mode on the Global Options page.

Note. In both modes, a document can contain a maximum of 400 elements, including profile elements (profile questions). If you attempt to add more than 400, an error message will display.

Viewing Element Details on a Separate Page

This mode is recommended, and is selected by default on the Global Options page.
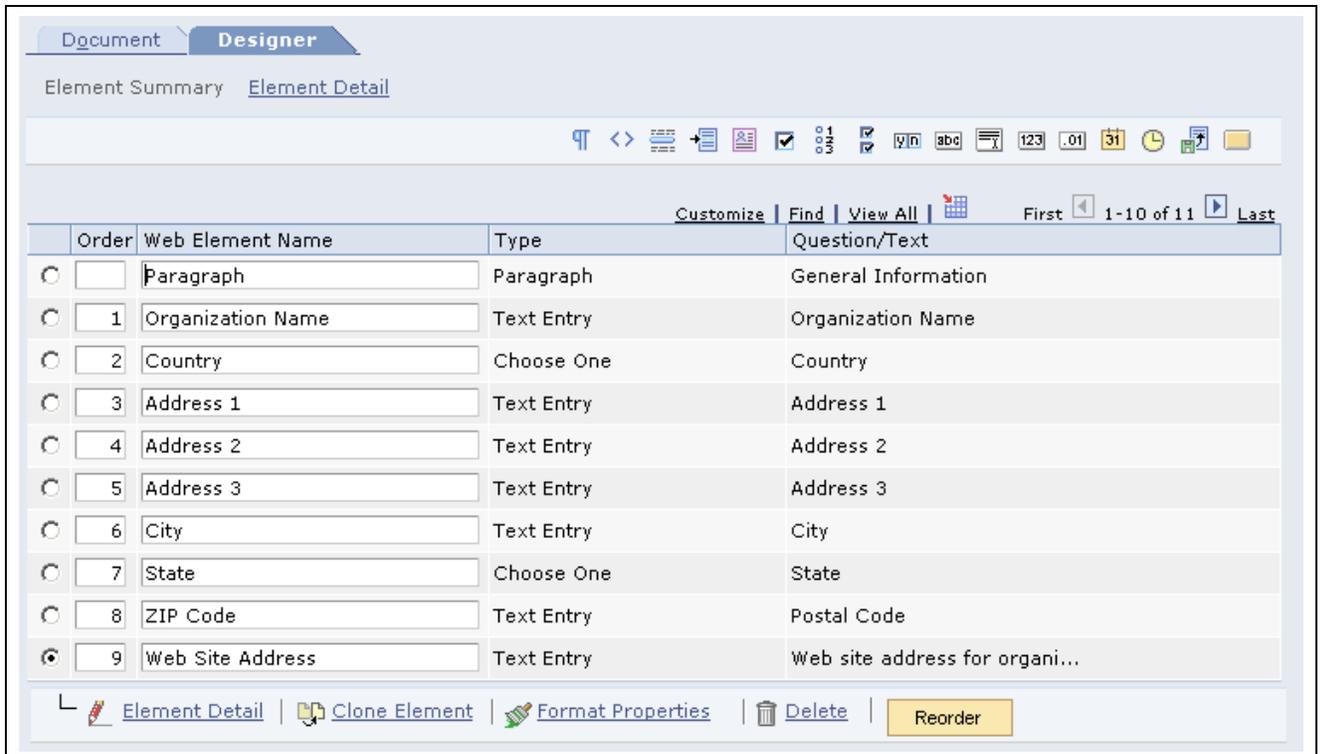
Viewing element details on a separate page

In this mode, the Document Designer tab includes two links: Element Summary and Element Detail. The Element Summary page displays a brief list of all the elements on the page. You can select an item and click the Edit button or Element Detail link to display and edit the detail for that item.

To add a new element to the document in this mode, you select the existing element that you want the new one to follow, and then click the appropriate element button. The new element is added to the list directly following the existing one.

In this mode, you order the items in the list using the numbers in the Order column in conjunction with the Reorder button. Each element in the list has a number corresponding to its current order in the document. To move elements, you enter numbers corresponding to each element's desired order in the Order column, then click the Reorder button to make the change. You should consider the following rules and guidelines when reordering elements:

• The reordering operation does not take place until you click one of the following buttons: Reorder, Save, Clone, Delete, or New Element. Only clicking Save will actually change the order in the database, so you must save for your changes to take effect.

• You can only enter 3 digits in the Order field, and the maximum order number is *400*.

• Invalid values (such as negative numbers, decimals, or characters) display an error message when you attempt to reorder, and any Order fields that are empty or contain zeroes are ignored.

• If you move an element down by giving it the same number as an existing element, the new element will be placed directly below the original element following reorder. The following tables provide an example. The first table shows the initial values:

Order	Element
1	Coffee

Order	Element
2	Tea
3	Cola

The next table shows the order change prior to clicking the Reorder button:

Order	Element
3	Coffee
2	Tea
3	Cola

Finally, the last table shows the resulting order after the reorder operation is complete. Note that the element that was formerly at position 1 has moved to position 3—after the element that was originally in position 3 (and currently in position 2).

Order	Element
1	Tea
2	Cola
3	Coffee

- If you move an element up in the same way, the new element is moved directly *above* the original element. The following tables provide an example. The first table shows the initial values:

Order	Element
1	Coffee
2	Tea
3	Cola

The next table shows the order change prior to clicking the Reorder button:

Order	Element
1	Coffee
2	Tea
1	Cola

Finally, the last table shows the resulting order after the reorder operation is complete. Note that the element that was formerly at position 3 has moved to position 1—before the element that was originally in position 1 (and currently in position 2).

Order	Element
1	Cola
2	Coffee
3	Tea

- If you want to move a group of elements together, you should specify the same target value for each element in the group. After the reorder operation completes, they will end up in the new location, ordered in the same way as before. The following tables provide an example. The first table shows the initial values:

Order	Element
1	Paragraph
2	Number Entry
3	Text Entry
4	Decimal Entry
5	Blank Line
6	Button

The next table shows the order change prior to clicking the Reorder button:

Order	Element
6	Paragraph
6	Number Entry
3	Text Entry
4	Decimal Entry
2	Blank Line
2	Button

Finally, the last table shows the resulting order after the reorder operation is complete. Note that the grouped elements have been moved (in the same relative order) to their new locations.

Order	Element
1	Blank Line
2	Button
3	Text Entry
4	Decimal Entry

Order	Element
5	Paragraph
6	Number Entry

• If an element is given an Order number that exceeds the maximum number of elements within the document, that element will be placed at the bottom of the list. (For example, in a list that currently contains 10 elements, if a new element is added and given the order number 99, it will be placed at position 11 in the list.)

Viewing All Elements and Details on One Page

In this mode, all document elements and their details are shown on a single page. You work with items on the page by using the Collapse All and Expand All buttons, which allow you to display all the details or to collapse the items so only the summary of each is shown. Each element also includes an individual expand/collapse arrow so you can view details on specific elements while leaving the rest collapsed.

To arrange document elements in this mode, you select them and modify the order number to move them into position. New elements are added after the selected element in the element list.

The Reorder feature in this mode works as described previously in the section on viewing elements and details on a separate page.

Note. If you have used previous versions of Online Marketing, only this mode was available in those versions.

Cloning an Item

Occasionally you may find it easier to clone an item and edit its text, rather than start from scratch. When you clone an item, all of the text and formatting is copied to the new item. Because each item must have a unique name within the document, Online Marketing makes the name unique automatically by appending a number to it. You can change this name.

To clone an item, select its Select radio button and click the Clone button. A new copy of the item appears below the selected element.

Renaming an Item

All items in a document must have unique names within the document. Since you may often have many items in a document, it will be helpful to use descriptive names for each item.

To rename an item, simply change the name in the item's Web Element Name field and save the document.

Note. The double quote (") and period (.) characters are not allowed in a document name.

Deleting an Item

You can delete any item in a web document prior to activating your dialog or if the dialog is put back into Design status.

To delete an item from a web document, select its Select radio button and click the Deletebutton.

Editing Items in a Document

There are six types of items that you can use in a web page: paragraph, questions (entry questions and choice questions), buttons, rule and line break elements, and HTML paragraphs. You can also add items from the profile elements. This section describes how to work with these items, and how to:

• Build paragraphs

• Build entry questions

• Build choice questions

• Build buttons

• Add a horizontal line

• Add a blank line

• Add custom HTML

• Add predefined profile attributes

• Use prefilled fields

• Format items

Note. All of the document items in this section are shown in the simple mode, where all elements and details are viewed on a single page. The functionality for each item in both modes is identical.

Building Paragraphs

A paragraph allows you to add text to a web page. Paragraphs can be used as headings or as paragraphs of descriptive text.

The paragraph field in the builder allows you to enter as much text as you need. You can separate text into separate paragraphs simply by leaving a blank line between the text.
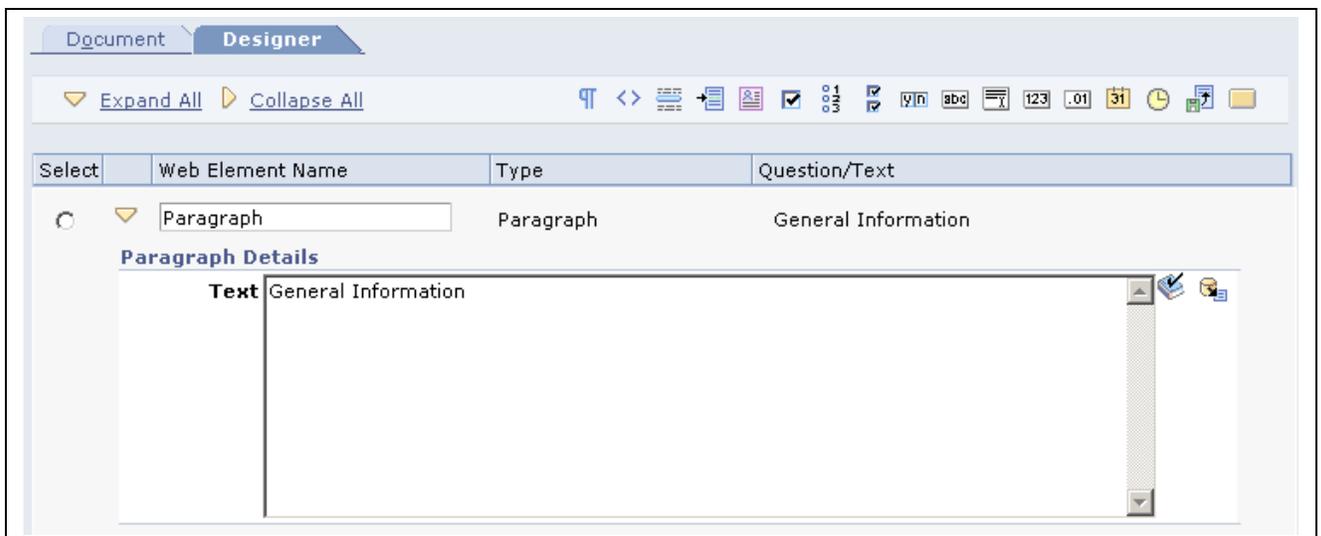
Document Designer - Paragraph

To add text to a paragraph:

    1. Add a paragraph item to the document.

2. Change the paragraph's name from the default to something more descriptive.

3. Type the paragraph text in the Text box. You can also insert merge content into the paragraph by inserting empty brackets ({}) and clicking the Merge button.

4. Click the Save button to save the paragraph.

See Chapter 6, "Designing Web Documents," Adding Merged Content, page 113.

Building Entry Questions

An entry question allows you to place a question on a web page, and provides a field for the respondent to enter an answer.

This section describes the steps involved in editing an entry question. It describes the following entry question types:

• Text Entry

• Number Entry

• Decimal Entry

• Date Entry

• Time Entry

• Text Block Entry

• File Entry

You can define any entry question/answer as a hidden field by clicking the Hide Field check box. This means you can designate a default value associated with the web document being filled out (and/or the person filling it out) without that default value actually appearing on the web form for the respondent to see. For example, you could specify a default value of current date and time, so you can track in the Online Marketing database the date and time the web form was filled out. Because this field is not viewable by the respondent, it should not be designated a required field. Further, because the purpose of the field is to include a hidden, default value, it should always have a default value specified.

When designing questions, you should be aware that certain fields are needed by the system in order to properly update individual and organization profile attributes. To ensure proper updates, you should make these attributes required when designing your web pages.

• When inserting a new individual into the system, the Last Name and one contact method is required. For Online Marketing, the contact method used is the Email Address. Both of these fields should be set to required (and located on the same document page) so that individuals can be properly added.

• When inserting individuals with the role type Contact (as opposed to Consumer), the individual's Company Name should be provided as well. If this is not included, the individual cannot be included in audiences. The organization information must be added to the database before the contact information (on a previous page or on the same page).

See Chapter 3, "Designing Online Dialogs," Creating a New Dialog, page 30.

Text Entry Questions

A Text Entry Box allows you to include a question with an entry field where the respondent can provide a text answer.

Document Designer - Text Entry box

Profile	The name of the profile from which the question is drawn.
Question	Enter the text of the question. To include merged content add empty brackets ({}) and click the Merge button.
Required	Select this check box if the respondent must answer this question before being allowed to submit the form.
Hide Field	Select this check box if you do not want the question to appear on the page.
Validate email address format	When inserting a text entry field associated with the Individuals.People.Email or Individuals.People.Email Alternate profile into a document, you can choose to validate the email addresses that users enter into this field. By default, the Validate Email Address Format check box on the Text Entry form is selected, meaning that email addresses are validated before being entered into your database.

Note. You can apply validation to any text field (for example, if you have a custom profile with an email field, you can apply it there as well). However, you should only apply it to fields that contain email addresses.

To be considered valid, email addresses must be in the form username@domain, where:

• Username is a string of characters or numbers with no spaces in between. The first character must be either an alphabetic character or a digit. In the case of quoted strings (for example "John_Smith"), everything within the quotation marks is considered valid.

• Domain is in the form subdomain1.subdomain2...etc. (for example, demo.org or fizzbin.curly.co.uk.)

The following characters cannot be included in username or subdomain: ( ) <> @ (except as a separator between the username and the subdomain) , ; : \ " [ ]

If you do not want to validate entered email addresses, clear the Validate Email Address Format check box.

> **Note.** If the Validate Email Address Format check box is selected and Required is not selected, null values are allowed in the field. You must select Required to disallow null values.

Default   Specify any default text you want to have appear in the entry field. (You can also insert merge content by adding empty brackets ({}) and clicking the Merge button.)

Width   Specify the width of the entry field. This value limits the number of characters on one line. The default is 32.

Height   Specify the number of lines of text in the entry field. The default is 1.

> **Note.** The Height value specifies only how much text is displayed, not how much can be entered.

Max   Enter the maximum number of characters that can be entered to answer the question.

Text Block Entry

The Text Block Entry document element allows you to include text fields in your dialog that are longer than permitted in a standard text field. For example, a dialog designer might use a Text Block document element for a dialog question where an essay-type answer is required.

There is no maximum number of Text Block Entry fields that can be included in a document. You can embed them in web and email documents using the Merge Content functionality, and you can use them in the Decision Point in the dialog flow and in the Dynamic Content conditions; in these latter cases, the only valid operator is *is empty/is not empty*
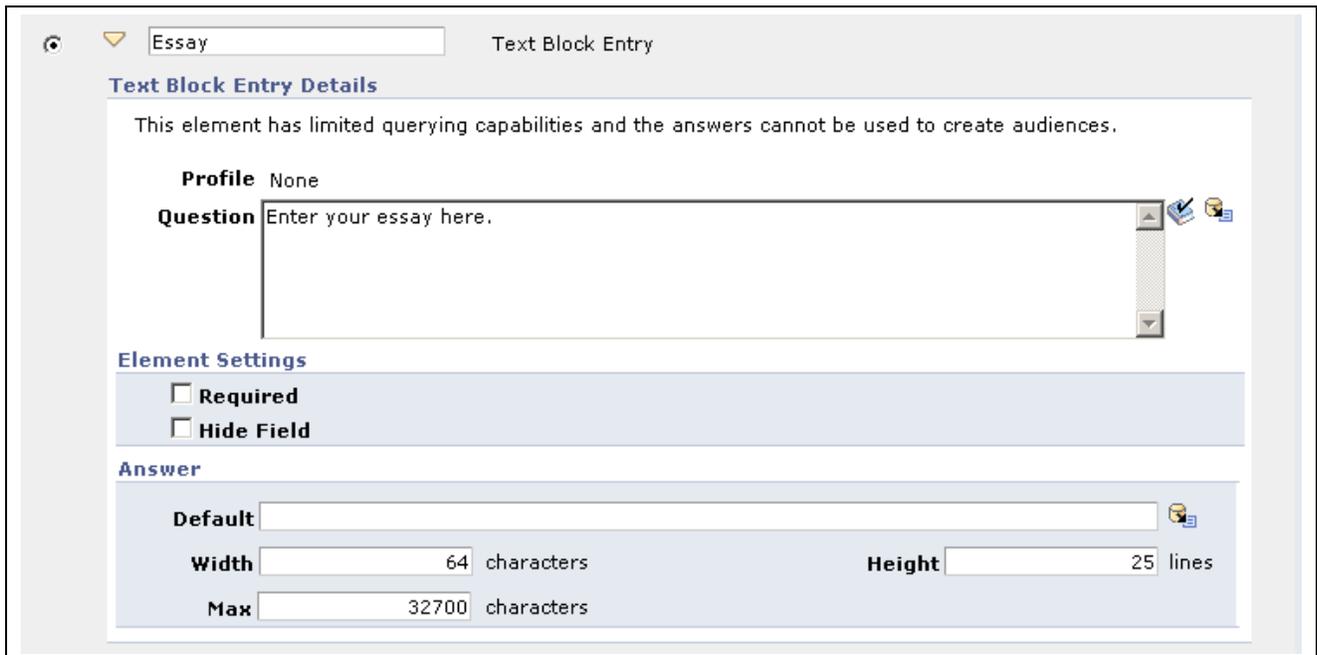
Document Designer - Text Block Entry box

Default   Enter a default answer.

Width   The default width is 64 characters.

Height   The default height is 25 characters.

Max   Text Block Entry fields can include a maximum of 32,700 characters.

The following table shows where you can and cannot use Merge Content to include Text Block document elements:

Name	Use Merge Content?
Web document paragraph	Yes
Web document custom HTML	Yes
Web document question	No
Web document default	No
Web document button	No
Email document subject	No
Email document content	Yes
Dynamic content section content	Yes
Web link URL append	No
Dynamic content condition builder	Yes
Dynamic content section creator	No
Document Extension parameter	Yes
Dialog Designer condition builder	Yes
Dialog Designer extension parameter	Yes
Redirect URL	No
Choose email address	Yes

Number Entry Questions

A Number Entry Box allows you to include a question with an entry field where the respondent can enter a whole number with a maximum of 9 digits. This maximum is not configurable, though you can use the Answer Width field to limit the number of digits that the respondent can enter.

Document Designer - Number Entry box

Decimal Entry Questions

A Decimal Entry Box allows you to include a question with an entry field where the respondent can enter a number with a decimal point (maximum of 19 digits, including 4 decimal places). This maximum is not configurable, though you can use the Answer Width field to limit the number of digits that the respondent can enter.

This item uses the same dialog box as the Number Entry box, shown previously.
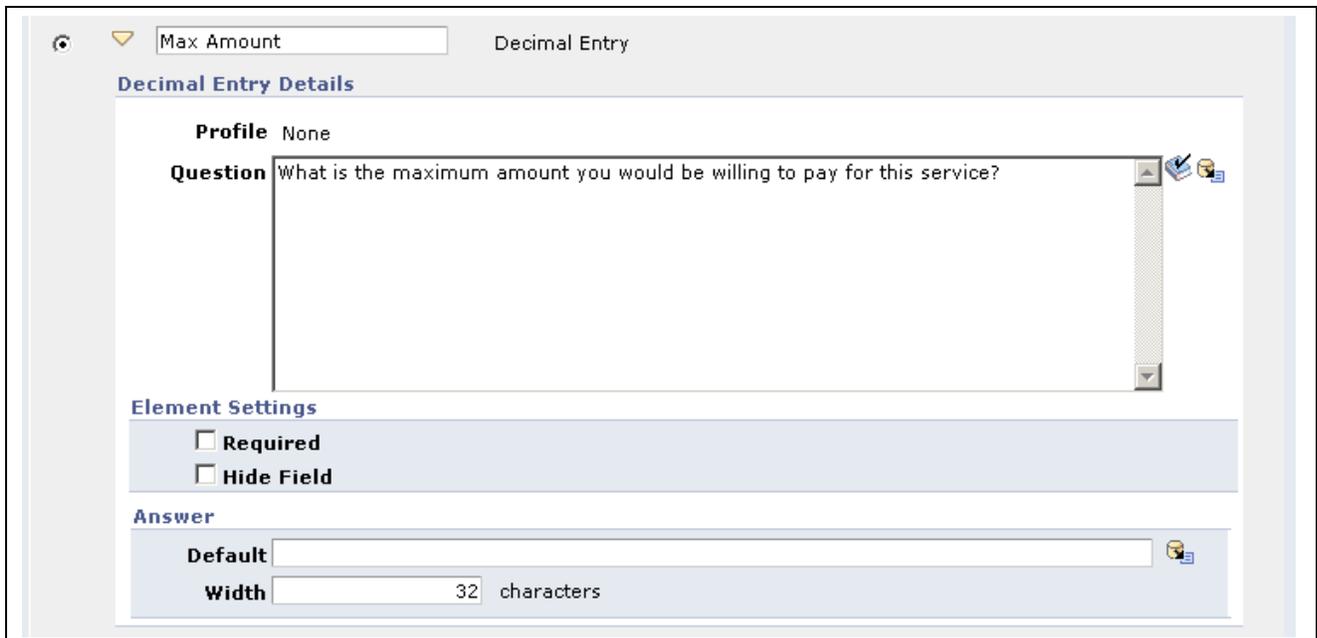
Document Designer - Decimal Entry box

Date Entry Questions

A Date Entry Box allows you to include a question with an entry field where the respondent can enter a date.
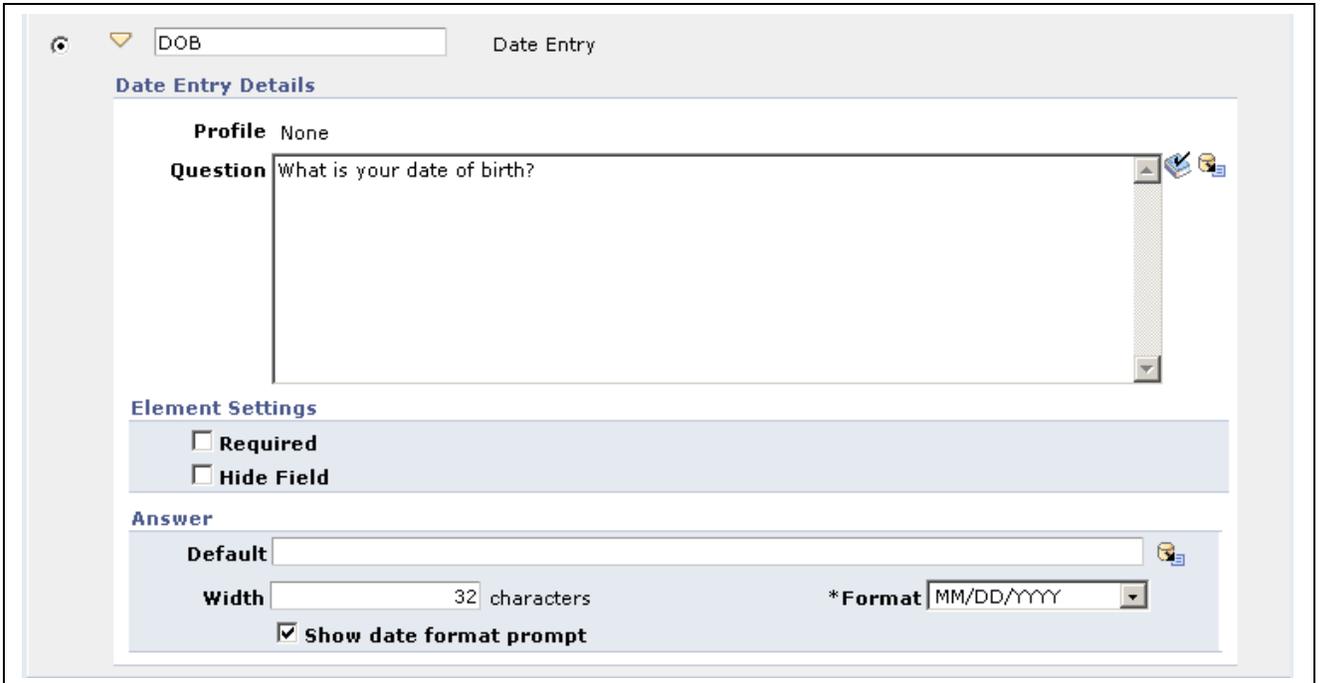
Document Designer - Date Entry box

Show Date Format Prompt	Select this check box to display the input date format in the document.
Format	Select an input date format from the available options.

Time Entry Questions

A Time Entry Box allows you to include a question with an entry field where the respondent can enter a time.

Document Designer - Time Entry box

Format	Specify whether the time entered is based on a 12-hour or 24-hour clock.

Adding a File

The File Entry element allows you to upload external files and commit them to the system.

File Entry element

The File Entry document element includes the following features and requirements:

• An unlimited number of File Entry document element fields can be applied to a web document. If different files are uploaded to the same field, the last file uploaded overwrites the previous file. If the same file is uploaded to two or more fields, each file is saved separately.

• You can set the maximum file size. Maximum file size is a system-wide setting; it cannot be set for individual fields.

Note. You should consult your web server documentation when setting maximum file size, to ensure that the settings are compatible between the web server and Online Marketing. If the web server settings are significantly higher than those in Online Marketing, performance can be affected.

• The default width of a File Entry element answer is 32 characters; you can configure this value.

• The height of a File Entry element answer is one line; this value is not configurable.

• The default maximum of a File Entry element is 254 characters; this value is not configurable.

• Documents containing File Entry elements can be previewed like any other document element type.

• Once a file has been uploaded, you cannot delete it.

• The file name can be embedded in web and email documents using the Merge Content functionality.

• Files can be referenced in the Decision Point element of a dialog flow and in Dynamic Content conditions—the only valid operator is *Empty/Not Empty*.

When a File Entry field is included on a dialog page, users can type in a file path and name or use a Browse button to select a file. After a file name has been supplied, the name is displayed in the File field if the value has been added as Merge Content. The user must click the Submit button (or its equivalent) to initiate the file upload process.

The following table shows where you can and cannot use Merge Content to include File Entry document elements:

Name	Use Merge Content?
Web document paragraph	Yes
Web document custom HTML	Yes
Web document question	Yes
Web document default	Yes
Web document button	Yes
Email document subject	Yes
Email document content	Yes
Dynamic content section content	Yes
Web link URL append	No
Dynamic content condition builder	Yes
Dynamic content section creator	No
Document Extension parameter	Yes
Dialog Designer condition builder	Yes
Dialog Designer extension parameter	Yes
Redirect URL	No
Choose email address	No

Building Choice Questions

A choice question allows the respondents to select from a list of choices. Choice questions also allow Online Marketing to provide statistics about the respondents' answers.

This section describes the steps involved in editing a choice question. It describes the following choice question types:

• Choose One

• Choose One with Rating

• Choose Many

• Yes/No

For the Choose One and Choose One with Rating question types, the answer list is where you specify the choices that will be made available to the respondent.

Note. For all choice question types, if the item is a Profile Attribute, then you cannot change the name of the choice(s).

Choose One Questions

Choose One questions allow the respondent to select only one of the choices listed.

Use the Answer field to specify the choice answers from which the respondent can choose.

Document Designer - Choose One

Profile	If the item is a profile attribute, the name of the profile to which the question refers appears here. If the item is not a profile attribute, None is displayed.
Question	Enter the text of the question. You can include merge content for the question by adding empty brackets ({}) and clicking the Merge button.
Style	Select a style in which you want the question and its answer choices to display: Radio Button or Drop Down List.
Show Prompt Text	Select this check box if you want to specify a prompt to use instead of a default value. The prompt is available as the default choice for the question. This field is only active if Drop Down List is selected in the Style field.
Prompt Text	If you chose Drop Down List for the style and selected the Show Prompt Text check box, enter the prompt text to be displayed.
Layout	Specify how the list is laid out on the web page This field is only active if Radio Button is selected in the Style field.
Weight	This field only appears if you selected the Survey Document check box on the Document page. Specify a numeric value between –99 and 99.
Required	Select this check box if the respondent must answer this question before being allowed to submit the form.

Answer Choices	For each answer choice, enter a unique choice name. If the choice is the default, select the Default check box. You can use the Move Up and Move Down buttons to select a row and change its location in the list.
	The Weight field only appears if you selected the Survey Document check box on the Document page. Specify a numeric value between –99 and 99.
Add Choice	Click this button to add another answer choice row.
Move Up	Move the currently selected choice up.
Move Down	Move the currently selected choice down.

See <u>Chapter 6, "Designing Web Documents," Adding Merged Content, page 113</u>.

Choose One with Rating Questions

Choose One with Rating questions allow the respondent to select only one of the choices listed, and assign a numeric value to the choice. When editing the item, you specify a numeric value to be associated with the choices. These values will be saved instead of the choice value, and used in the generated results.

Use the Answer field to specify the choice answers from which the respondent can choose. In the rating column where you specify a numeric value to associate with the choices. The Default column allows you to select the default answer if none is chosen (unless you have specified a prompt for a drop-down list).

Document Designer - Choose One with Rating

Rating	Specify a unique numeric value to associate with each choice.

Choose Many Questions

The Choose Many item allows you to include a multiple choice question where the respondent can select any number of the choices listed.

The fields function as they do in Choose One / Choose One with Rating. The one exception is for the Answer field where, for this item, you can specify any number of choices you want "selected" by default on the web page.

Document Designer - Choose Many

Default   For Choose Many questions, you can choose more than one choice to be selected by default.

Yes/No Questions

The Yes/No item allows you to include a question where the respondent can select either Yes or No.

The Answer field is where you specify the default value for the item.

Document Designer - Yes/No Question

Format	Choose a format for the question: Radio Buttons or Checkbox.
Horizontal Display	Select this check box if you want the question to display in a horizontal format.
Weight	Specify a numeric weight value for the question, from –99 to 99. This option appears only if the Survey Document check box was selected on the Document page.
Default Choice	Select Yes or No as the question's default answer choice.

> **Note.** Yes/No questions must always have a default value selected (either Yes or No). If you do not want to specify a default value, use a Choose One field with two choices—Yes and No—and do not make the field required.

> The Weight option appears only if only if the Survey Document check box was selected on the Document page. You can specify a numeric value between –99 and 99.

Horizontal Display Layout Type

The Horizontal Display layout type is available for all of the choice question types, and is used in conjunction with the survey functionality (although it is also available in non-survey dialogs).

> **Note.** The other layout types (Best Fit, Columns, and One Answer Per Line) are relatively self-explanatory, but Horizontal Display is explained separately because it includes many more options.

Horizontal Display layout type

Choosing the Horizontal Display layout type adds some or all of the following new properties fields to each choice question:

Horizontal Display Layout	Determines whether to display the choice labels above the radio buttons or check boxes. This is a typical layout for a survey question.
Display Numeric Scale	Determines whether to display a numeric scale heading for the question. When this check box is selected, an additional column is displayed to the right of the Choice label column, enabling the user to specify numeric values for the scale.
Scale	This column contains numbers up to four digits. This heading is optional.
Hide Label	Used to hide the appropriate choice label when the document is rendered. You cannot leave the choice labels blank—this value simply determines whether they are displayed in the rendered web document.
Hide All/Show All	Use this choice to hide or show all choice labels at once.

See .

Adding a Button

A Button item allows you to place submit and clear buttons on the web page. The submit button will submit the page to the web server, and the clear button will clear the data entered in the fields on the page. The clear button also returns all fields to their default values.
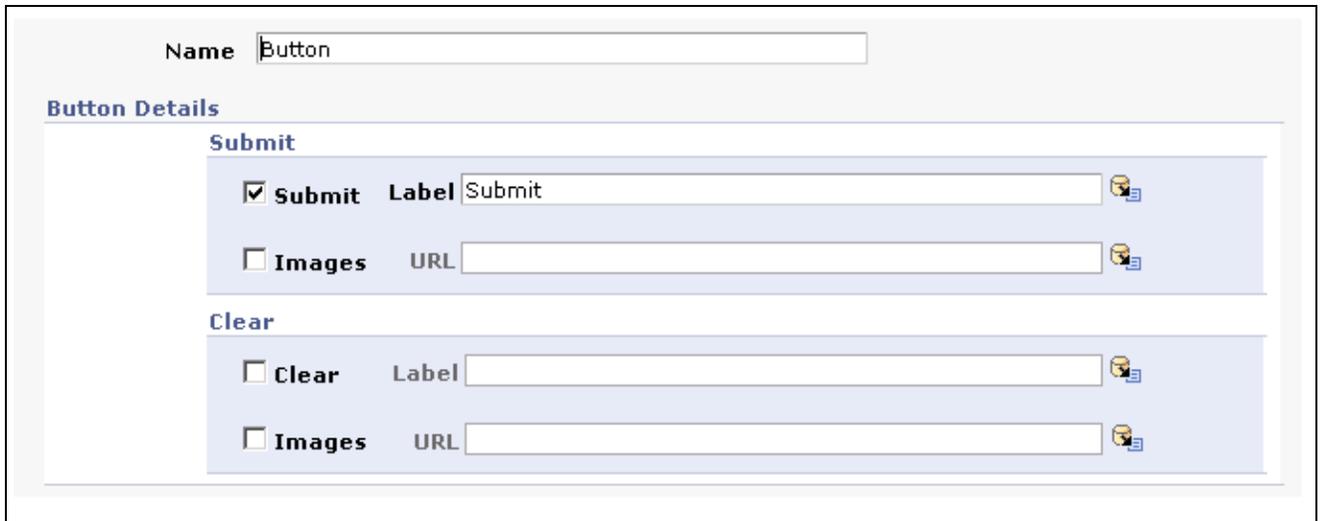
Document Designer - Button

Name	By default, a button is named Button*n*, where *n* is the next unused number in the sequence for the document. You can enter a new unique name for the button.
Submit	Select the check box to include a Submit button on the page.
Clear	Select the check box to include a Clear button on the page.
Label	For both Submit and Clear buttons, you can enter a label to appear on the button. The defaults are Submit and Clear, respectively. Click the Merge button to use merged content (such as the current date or time) as the button's label.
Images	For both Submit and Clear buttons, you can replace the default button with an image. Enter the location of the image in the field.
	To enter an image using merge content, enter curly braces ({}) and click the Merge button.

See Also

Chapter 6, "Designing Web Documents," Adding Merged Content, page 113

Adding a Horizontal Line

The horizontal line (<HR> or horizontal rule in HTML) tag inserts a horizontal line into your web document. You can specify the width and appearance of the line.

To insert a horizontal line into your web document, select the Horizontal Line button in the Document Designer.

Document Designer - Horizontal Line

Name	By default, a button is named Horizontal Line*n*, where *n* is the next unused number in the sequence for the document. You can enter a new unique name for the line.
Height	Enter the line's height in pixels. The default is 2.
Width	Enter a value for the line's width, either as a number of pixels or as a percentage of the page's total width, depending on the option you choose in the Horizontal Width field.
Unit	Select from the available options whether the value in the Width field is a number of pixels or a percentage of the page's total width.
Shade	Select 3D Effect for a shaded line, or 2D Effect for a flat, non-shaded line.

Adding a Blank Line

The blank line element allows you to insert a blank line between two elements, giving you more control over the appearance of the text in the finished web page. For example, you could insert a blank line between two question elements to make them easier to read.

To insert a blank line into your web document, click the Blank Line button.

Document Designer - Blank Line

Adding Custom HTML

The Custom HTML Box allows you to enter text formatted with HTML tags into your web document. This feature permits users who are familiar with creating their own custom HTML to have greater control over the layout and appearance of the document. Online Marketing displays the text in a Custom HTML Box as it would any other HTML text.
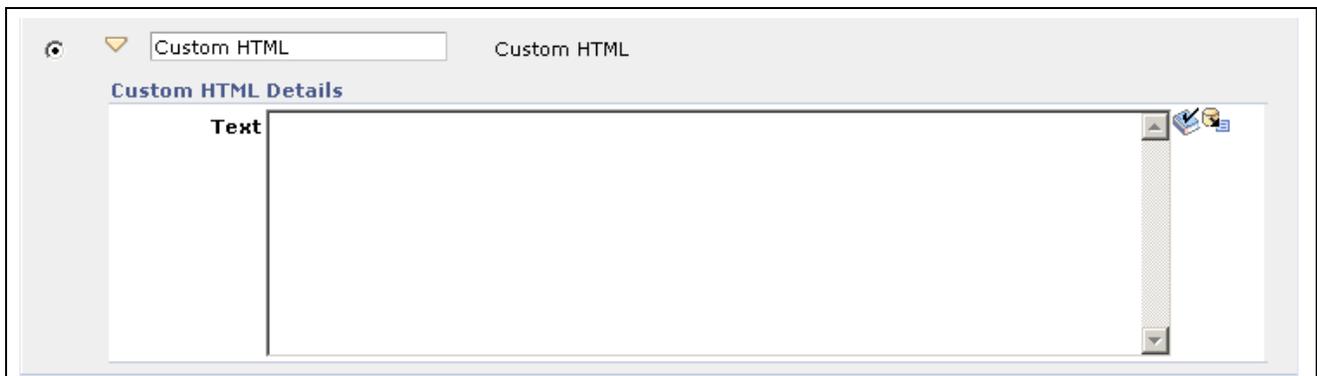
Document Designer - Custom HTML

Type or paste HTML text in the text box. The text will appear in the finished web document formatted as specified in the HTML. You can change the name of the text box element or leave it as the default. To enter merge content, click the Merge button and select a field.

Note. <FORM>, <HTML>, and <BODY> tags are not allowed in Custom HTML text.

See Also

Chapter 4, "Designing Web Templates," page 61

Chapter 6, "Designing Web Documents," Importing Web Documents, page 119

Adding a Profile Field

Document fields can be created based on profile fields that are marked as profile questions and have a status of Active in the profile definition. These document fields inherit all the attributes of the profile field.

All fields in the system with the exception of Many Rows per Contact or "map to existing" fields can be used in documents. When profile attributes are created, all aspects of the attribute are defined (type, size, name, etc.), making it simple to incorporate these attributes as items in web documents. However, after adding a profile attribute to your document, you can still modify some of its attributes, such as the question and layout of the field, but you cannot change the choices (for a choice question). If you want to change the choices, you must do it in the profile itself.

By using a profile attribute in a document, you can automatically display the value that exists in the system for the respondent by selecting the Pre-fill with value from profile check box from the item builder. But more importantly, any changes made by the respondent to a profile attribute are automatically updated in the system. You can change the question for this specific document without affecting the original question and you can hide the field, but you cannot add, delete, or rename any of the choices or ratings. If the profile definition changes, it must be removed and re-added to the document before the new profile field changes will take effect.

Note. For profile fields with Choice data types (Choose One, Choose One with Rating, and Choose Many) you can click the element's Refresh button to propagate changes made to an Active profile choice list (addition and inactivation of choices) to the document.

If the document is copied and translated to a new language, the profile fields will translate to the new language if values exist in that language. If no values exist, the base language is used.

You can insert more than one profile field at the same time. The Document Designer will create new document elements for each inserted profile field, keeping them in the same order as they were in the Profile Field list from which you chose them. You can reorder them as with any other document element.
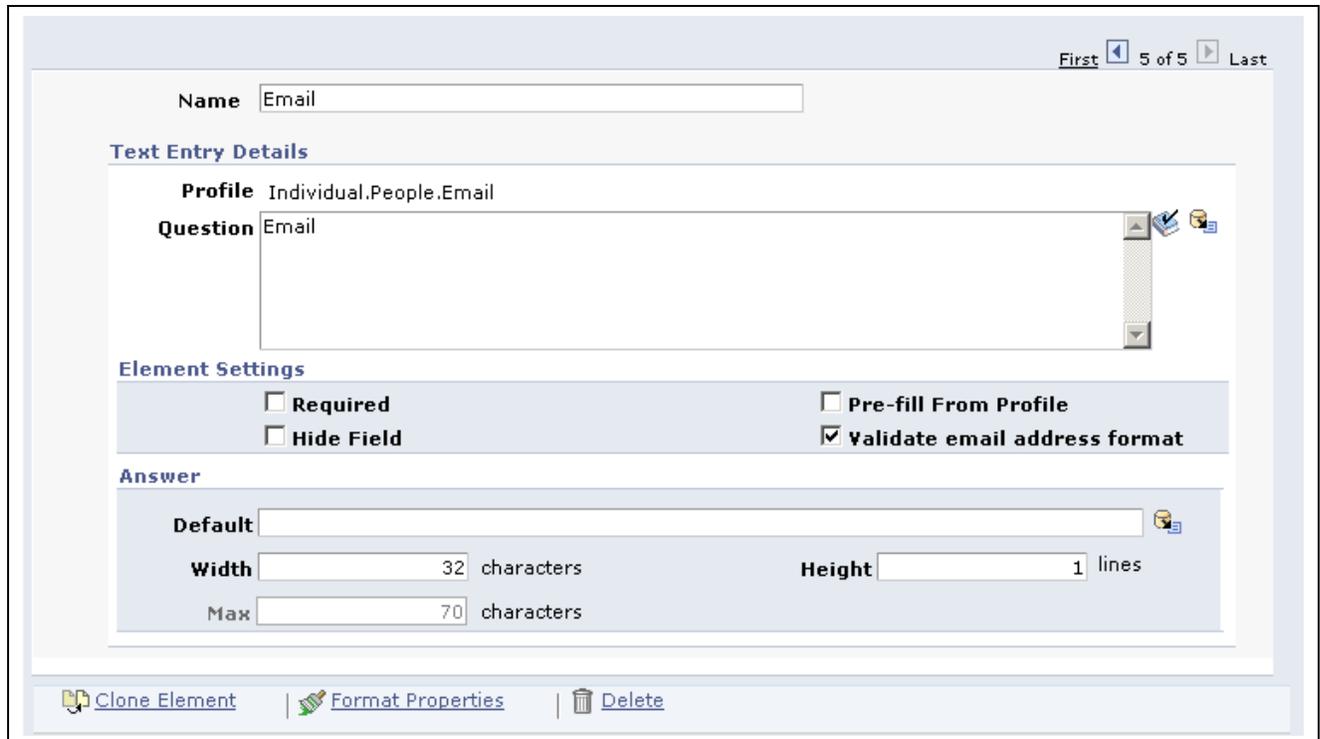
Document Designer – Profile Field

To add an item from profiles:

1. In the Document Designer, click the Profile Attribute button.

   The Web Document Profile Insert page appears.

2. Navigate to the profile you want to insert and select it.

   A list of profile fields for that profile appear.

3. Select the Select check box for each desired attribute.

   The Document Designer - Profile Field page appears, filled in with the information for the selected profile.

4. Click the Apply Selected button.

   The last profile field you selected from the list appears in the Detail page. You can page through all the selected fields using the arrow buttons and the First and Last links on the top right side of the page.

5. You change any of the following fields in the profile attribute:

   • Name

   • Question

   • Style

   • Layout

   • Required

   • Pre-fill with value from profile

Web Element Name   The name of the profile field you chose. You can change the name.

Profile   This read-only field shows the full name of the profile field.

Question	Enter the question you want to ask for the profile field. The default value is the name of the field.
Required	Select this check box if the respondent must answer this question before being allowed to submit the form.
Hidden	Select this check box if you do not want the question to appear on the form.
Pre-fill From Profile	Select this check box if you want the field to be pre-filled with default information from the profile.
Validate email address format	Select this check box if you want the email address entered by the respondent to be validated before the form can be submitted.

Warning! When creating a web document that will insert individuals, make sure that the Last Name field is on the web document—otherwise, the individual cannot be created as a valid person. You should also make sure other fields required for matching rules (such as Email) are included. Likewise, make sure Organization Name is a required field for inserting organizations.

See Also

PeopleSoft Enterprise CRM 9 Marketing Applications PeopleBook

Chapter 6, "Designing Web Documents," Building Entry Questions, page 96

Adding Merged Content

You can merge content into many document fields, allowing the addition of tags that will be evaluated when the document is rendered. For example, you might use a Current Time merge content tag to display the current time on the web page, or a profile attribute to personalize a web page for a known user. You can merge content into the following document fields:

- Paragraphs
- Custom HTML
- Entry element (Text, Time, Date, Number, Decimal) question or default answer
- Choice element (Choose One, Choose One with Rating, Choose Many, Yes/No) question
- Button label

To add a merge content tag to one of the allowed document fields:

1. Insert the field into the web document.

2. At the location where you want the merge content to appear, enter a pair of curly braces ({}) in the text box.

3. After you have entered all the tags for merge content you want to include, click the Merge button.

   The Merge Content page appears. All the curly brace placeholders are replaced by merge content tags.

4. In Step 1: Select Tag, click the tag you want to define to select it.

5. In Step 2: Select Content to Merge, select a merge content type.

6. Enter the appropriate information about the merge content type and click Apply.

7. If you have entered more tags, click the next one or click the Next Tag button, then repeat steps 5 and 6 for each merge content tag.

Adding a Current Date

To add a current date merge content object:

1. Click Current Date in the Select Content to Merge browser list.

2. Select a date format from the available options.

3. Click Apply to insert the tag syntax.
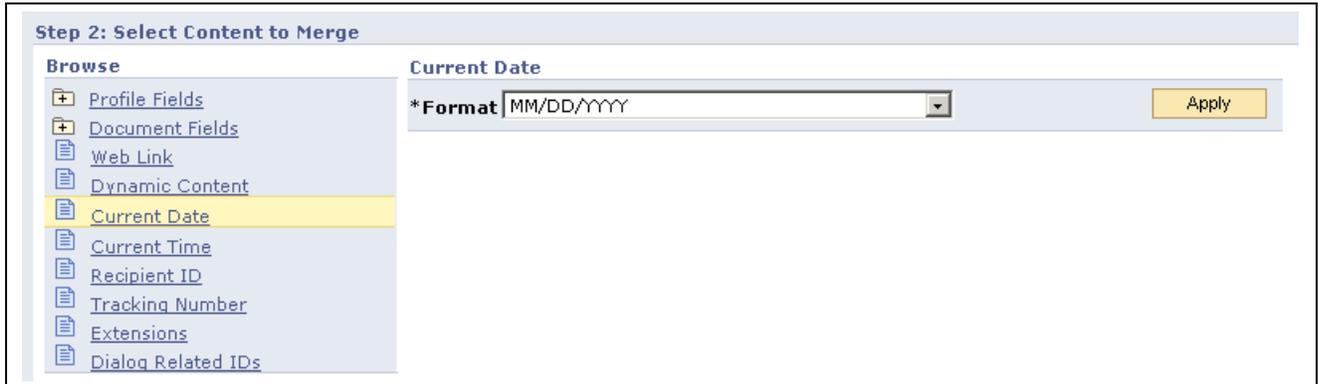
Merge content - Current Date

Adding a Current Time

To add a current time merge content object:

1. Click Current Time in the Select Content to Merge browser list.

2. Select a time format from the available options.

3. Click Apply to insert the tag syntax.
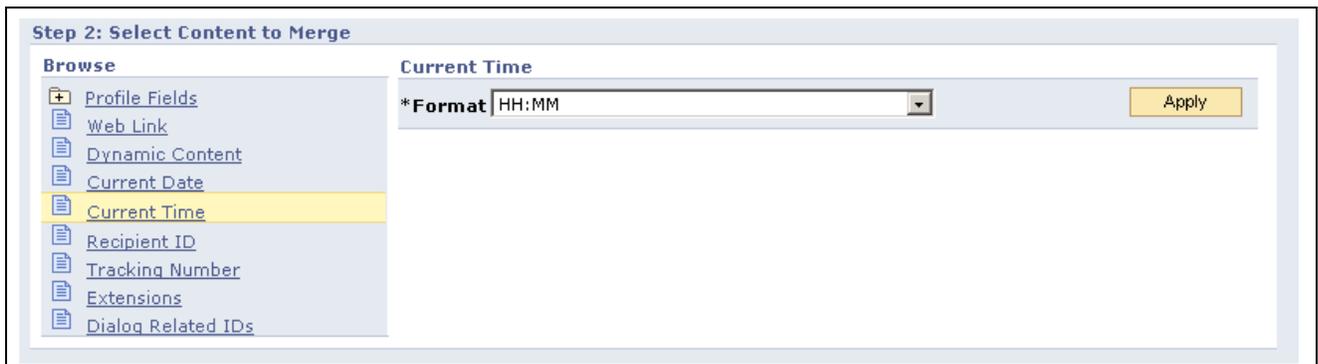
Merge content - Current Time

Adding a Recipient ID

To add a Recipient ID merge content object, click Recipient ID in the Select Content to Merge browser list. Recipient ID does not require any additional information, so the tag syntax is automatically inserted.

Adding a Tracking Number

To add a Tracking Number merge content object, click Tracking Number in the Select Content to Merge browser list. Tracking Number does not require any additional information, so the tag syntax is automatically inserted.

Adding a Profile Field

To add a profile field merge content object:

1. Click Profile Fields in the Select Content to Merge browser list.

2. Click the folder containing the profile from which you want to include a field.

3. Click the profile name.

4. In the list of profile fields, select a format (if appropriate) for the field you want to include. You can also choose to include an appropriate default value in case the value for the profile field is not available. For example, as a default for the First Name profile field, you might include "Valued Customer" or "Baseball Fan."

5. Click Apply.

Merge content - Profile Fields

Note. The following characters may not be used as any part of a profile definition including field values, profile name, or audience name: ampersand (&), apostrophe or single quote ('), double quote ("), greater than (>), less than (<), or period (.).

Adding a Web Link

To add a web link merge content object:

1. Click Web Link in the Select Content to Merge browser list.

2. Fill in the fields defining the web link.

   Refer to the documentation on designing email documents for descriptions of these fields.

   Note. The double quote (") and period (.) characters cannot be used as part of the Web Link name.

3. Click Apply.

Merge content - Web Link

See Chapter 5, "Designing Email Documents," Adding a Web Link to an Email Document, page 74.

Adding Dynamic Content

To add a dynamic content merge content object:

1. Click Dynamic Content in the Select Content to Merge browser list.

2. Fill in the fields defining the dynamic content object.

   Refer to the documentation on designing email documents for descriptions of these fields.

   Note. The double quote (") and the period (.) characters cannot be used as part of the dynamic content name.

   ---

3. Click Apply.

See Chapter 5, "Designing Email Documents," Adding Dynamic Content to an Email Document, page 77.

Adding an Extension

To add an Extension merge content object:

1. Click Extension in the Select Content to Merge browser list.

2. Click the magnifying glass button and select an extension from the list.

3. Fill in any information required by the extension.

   If the extension has parameters, they will be displayed. You can add or delete parameters as well as change values for the parameters. You can also merge content into values. Only Java extensions defined as usable in documents are allowed in this field. The default value is what is displayed if the extension returns no content.

4. Click Apply.
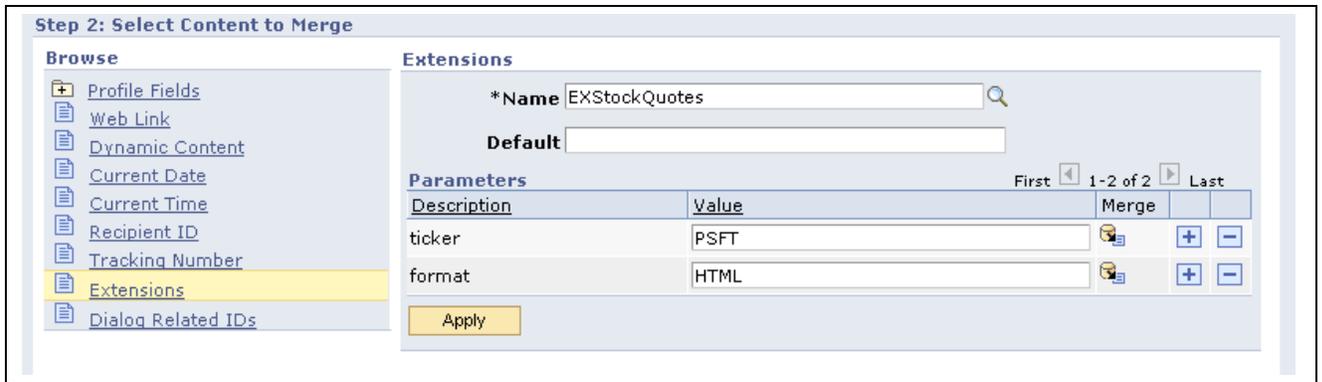
Merge content - Extensions

Formatting Items

Online Marketing allows you to control some formatting characteristics of items in a web document, such as the color and size of the text, and its position on the page.

Once you have added items to your document, you can modify their formatting individually through the Element Format Properties page. On this page, you can set parameters that determine how the question and answer are positioned on the page.

Access the Element Format Properties page.
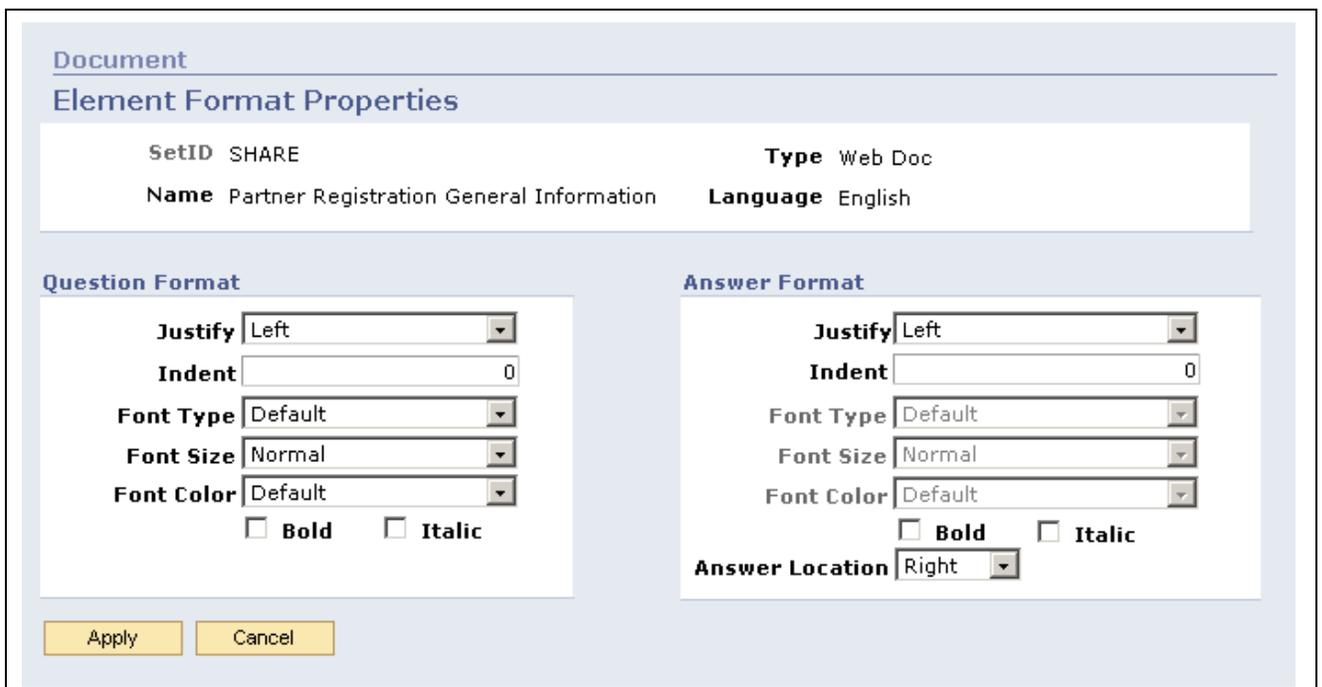
Document Designer - Element Format Properties page

Justify	Indicates whether the question or answer is left, center, or right justified.
Indent	Indicates how far, in points, that the question or answer is indented.
Font Type	Select Default to use the browser's default font, or select another font from the available options.

Font Size	Specifies the relative size of the text being displayed (Smallest, Smaller, Normal, Larger, and Largest). Each setting increases or decreases the size as defined by the browser.
Font Color	Select the font's color from the available options.
Bold	Select the check box to set the font in boldface.
Italic	Select the check box to set the font in italics.
Answer Location	For answers, specifies the position of the answer relative to the question (below, right, or left of question).

After formatting the items for your page, you should preview the document to ensure you are pleased with the results.

Supported Fonts

Online Marketing supports the following fonts for document elements. Note that the font setting overrides the default set in the viewer's browser. If the browser does not support the specified font, the default setting is used.

- Arial
- Arial Black
- Arial Narrow
- Bookman Old Style
- Comic Sans MS
- Courier New
- Garamond
- Haettenschweiler
- Impact
- Lucida Console
- Lucida Sans Unicode
- Map Symbol
- Modern
- Roman
- Script
- Tahoma
- Times New Roman
- Verdana

Previewing a Web Document

Online Marketing allows you to preview web documents. Previewing a web document allows you to see how it will appear in a browser.

Note. You should preview your document on several browsers because each browser behaves a little differently. By default, when you preview a document, it will appear in the web browser that is currently registered as your default browser. Also, any merge content in your documents is not filled in until the dialog is deployed—you will see the merge content surrounded by curly braces ({}).

It is advisable to preview your document regularly while you are designing your page.

To preview a web document, click the Preview button on the Document Designer page. This button is visible once you have attached the document to a dialog.

Note. When previewing web pages, you should configure your browser to turn off web page caching; otherwise, the preview might show the previous (cached) version of the document instead of the new version. You can also click Reload to view the new version.

Importing and Exporting Web Documents

This section describes how to:

• Import web documents.

• Export web documents.

Note. When importing and exporting documents, some fields such as the Language Code, Attach to Dialog, and Template will be disabled on the first page.

Importing Web Documents

You can import an existing HTML document from a file to use as your web document. Once you have imported the HTML file, the only change the Document Designer will allow you to make to the web document is to rename it or change its description. If you need to make changes to the HTML, you must export the document, make the changes outside of the Document Designer, and then re-import the file.

Importing an external HTML file to use as your web document is useful if you have already created one or more web pages that you would like to use in your dialog, or if you simply prefer to use a certain web page design tool. However, these pages can serve only to display information because you cannot add document elements to an imported web document.

If the imported document was originally created in the Document Designer, all inserted document fields, profile fields, and merged content must still be in the document. Upon import, the Document Designer checks the document to verify that all inserted fields and content still exist.

If there is new merge content in the imported document, the Document Designer checks to see if they contain the required information for the corresponding merge content type. If the required information is present, then the merge tags are accepted; otherwise, an error is displayed.

When an imported document is copied and translated, no translation is performed on the imported contents; you will need to perform any language updates manually.

You can discard the imported document if you preview it and it does not have the desired appearance.

Note. Importing a file will override any previously imported file. Therefore, discarding the second imported file will not revert to the first import file, but rather to the last saved document prior to any imports.

To import an HTML file to use as a web document:

1. In a web document that has been attached to an Online Marketing dialog, click the Import/Export button.

   Note. The Import/Export button does not appear in documents that are not attached to dialogs.

2. Select Import an HTML file to represent this document.
3. Browse to where the HTML document is located and select it.
4. Click the Import button to import the document.

Import/Export page

After you have imported a document, you can choose to discard the imported document and revert to the original. To do this, choose the Discard previously imported/exported version and use the original document option. This option is only available after a document has been imported or exported.

Note. Any changes made to merge content syntax outside of Online Marketing are applied once the document is imported back into the system. These changes are permanent, and will not be removed if the imported contents are later discarded.

Exporting Web Documents

You can export the current web document to a file, allowing you to make cosmetic changes using a third-party tool. After making the changes, you can import the document back into the system, retaining any inserted document fields and profile fields intact in addition to adding the cosmetic HTML. When a document is exported, no changes can be made to the document from within Online Marketing. If changes are desired, then use the Import/Export button to discard the exported contents first.

There are two main export options:

Export the original document	Exports all fields and formatting to an HTML file. This option should be used as the first step in merging the web document with an HTML file, if you want the HTML generated for the web document to include the layout format.

Export the original document without formatting	Exports all fields (but no formatting) to an HTML file. This option should be used as the first step if you want the HTML generated for the web document to not include any formatting. All text and items will remain intact, but the layout of the document will be discarded.
Export the original document without web template	Documents associated with web templates can display duplicate content if they are exported with their web templates and then re-imported. Select this option to export the document without the web template and thus avoid content duplication. This option only appears for documents associated with web templates.

Note. When you select this option and export the document, you will see the same message that displays when you export a document with its web template. However, this does not imply that the web template was exported in this case.

Import/Export page

To export a document:

1. In a web document that has been attached to an Online Marketing dialog, click the Import/Export button.

   Note. The Import/Export button does not appear in documents that are not attached to dialogs.

2. Select the appropriate option, depending on whether you want to export the document with or without formatting.

3. Click the Continue button.

4. The document is exported, and its new status is displayed.

After you have exported a document, you can choose to discard the exported document and revert to the original. To do this, choose the Discard previously imported/exported version and use the original document option. This option is only available after a document has been imported or exported.

If the document has a web template associated with it, the template will be exported only if you select the Export the original document option (to preserve the formatting).

When exporting a web document with data entry fields, validation libraries in JavaScript are included in the exported document. Some libraries may output language-specific validation messages, based on the language of the document.

If a copy of an imported web document with language-specific JavaScript messages is made, and the language association of the document is changed, you have two options to change the language-specific JavaScript. First, you can export the previously imported document and make changes outside of the system, then re-import. Secondly, you can embed a JavaScript merge content tag <pstag:javascript /> into the initial exported document as a placeholder for language-specific libraries. The tag will be replaced with language-specific libraries when the document is rendered.

Note. If you export a document and edit it using Notepad, be sure to save the document in ANSI format rather than UTF-8. If you save in UTF-8 format, Notepad adds a small string of characters to the top of the document that will be rendered as a '?' character on your web page.

CHAPTER 7

Designing the Flow for an Online Dialog

When an online dialog goes live, PeopleSoft Online Marketing Dialog Execution Server (DES) executes a sequence of actions, such as sending broadcast emails to your target audience and displaying various web pages to respondents. This sequence of actions is called the flow.

This chapter describes how to use flows in Online Marketing, and includes the following topics:

- Understanding Flows
- Understanding Flow Actions
- Creating a Flow

Understanding Flows

A flow defines the sequence of actions that Online Marketing will perform after the dialog is deployed. The flow consists of a series of steps (actions) defining how you will reach the dialog's target audience and how you will handle respondents and subsequent follow-up interactions.

Certain actions in the flow are scheduled to occur at a specific time. Other actions are triggered by a response from an individual in the target audience, such as displaying a particular web page.

Flows are created in the Flow tab of the Dialog Designer and can be as simple or as complex as needed.

The following sections describe the actions in a flow.

See Also

Chapter 3, "Designing Online Dialogs," page 27

About the Dialog Flow

The dialog flow contains two broad categories of actions: those used to reach your target audience, and those that occur as a result of audience members' responses to the actions reaching them.

The actions are executed in order based on when they were scheduled. At a minimum, a dialog must have at least one trigger —either a Date/Time trigger or an External Event trigger. Date/Time triggers can have broadcast email or custom action extensions following; External Event triggers can have a Landing Page, Web Link Promo, Standalone Web Page, or Single Email.

- Each section of the flow starts with a Date/Time Trigger or External Event Trigger. Date/Time Triggers specify key dates for the dialog, around which all the actions in that group will be scheduled. Repeating Date/Time Triggers, an option in the Date/Time Trigger, specify details about actions that are performed on a repeated basis. External Event Triggers specify a way that an external system can reach the dialog (either by a Landing Page, a Web Link Promo, or a Standalone Web Page, or via the Case integration).

A flow can use as many Date/Time Triggers as needed, and must have at least one action attached to each trigger (scheduled based on the date of the trigger). When the specified date and time is reached, Online Marketing fires the trigger and executes the actions that are attached it.

• For actions requiring a response from the recipient, each section of the flow starts with an External Event trigger and is followed by a Landing Page or Web Link promo. All the steps in each section will be executed in sequence based on the respondent's input. A Landing Page or Web Link Promo action is accessed directly by a respondent entering the page's URL in the web browser, or by a link from an email document or another web page.

Whereas actions reaching out to customers use Date/Time triggers with actions that are executed when the specified date is reached, actions requiring a response from the recipient do not automatically execute any action unless they are in response to an action by a respondent. For this reason, these actions under different Landing Pages will not execute simply because all of the actions in the preceding section have been completed. They must be accessed explicitly.

Typical Dialog Flow

The following steps describe a typical dialog flow:

1. The dialog begins by contacting a target audience with an offer. On the date and time specified in a scheduled action in a Date/Time Trigger, the target audience is reached through a broadcast email.

2. People from the target audience respond by using their browser to open the specified Landing Page, which is the entry point to the dialog. On this page, the respondents will typically have to make some choices or provide information to the dialog.

3. The flow continues by:

   • Displaying additional web pages to the respondent (Intermediate Page or Final Page)

   • Sending a follow-up email to the respondent (Single Email)

   • Sending an email to an individual, such as to a sales representative, to notify of a hot lead (Single Email)

   • Updating the database with new information from the respondent (through profile attributes in the web documents or an Update Profile action)

4. At some point during the dialog, you may want to send another broadcast email to the same audience (such as a deadline reminder), or to a different audience.

5. Once the dialog is over, it can be stopped (stopping broadcast and follow-up emails and making the web pages of the dialog unavailable to the outside world.)

At any time during the dialog, you can monitor the responses using ACE reports or Dialog Performance Reports.

See *PeopleSoft Enterprise CRM 9 Application Fundamentals PeopleBook*.

Note. If you are designing a complex dialog flow in which parts of it can re-execute, and if the flow contains multiple paths that converge into a common input action (such as an Intermediate Page), you should make sure that all paths leading from that common input action result in a web Submit action before they reach the input action the next time through the flow. Doing this will prevent your dialog flow from experiencing an error such as an infinite loop.

Understanding Flow Actions

This section describes the actions you can use in flows. They include sending emails to either an entire audience or a specific individual, displaying web documents to a respondent, updating the database with information provided by the respondents, and defining the flow of the dialog.

The flow actions are listed in the Flow designer, and include the following:

• Date/Time Trigger (including Repeating Date/Time Trigger)

• External Event Trigger

• Broadcast Email

• Web Link Promo

• Custom Action

• Single Email

• Standalone Web Page

• Landing Page

• Intermediate Page

• Final Page

• Decision Point

• Update Profile

Date/Time Trigger

The Date/Time Trigger is one way to start a section in the flow. Within a Date/Time Trigger, you add the actions that you want scheduled based on the date specified in the trigger. The actions attached to the trigger can be scheduled to occur on that date or a specified period (hours, days, weeks, months) following that date. The date associated with a Date/Time Trigger can be entered explicitly in the Date/Time Trigger builder.

All Broadcast Email actions must be attached to a Date/Time Trigger to execute. Date/Time Triggers can schedule the execution of any number of actions. Custom actions can be attached to Date/Time Triggers.

See Chapter 3, "Designing Online Dialogs," Defining the Flow of the Dialog, page 34.

Repeating Date/Time Trigger

You can define repeating versions of Date/Time Triggers . Repeating Date/Time Triggers start a section in the flow. Following a Repeating Date/Time Trigger, you add the actions that you want executed on a repeating basis (hourly, daily, weekly, or monthly) based on the starting date specified in the trigger. You can schedule the repeating actions to begin on that date or on a given number of hours, days, weeks, or months following that date.

You can enter the date and time associated with the beginning of a Repeating Date/Time Triggers explicitly in the Date/Time Trigger builder.

Scheduling Repeating Date/Time Triggers (Broadcast Email Only)

Repeated actions occur as scheduled in the Repeating Date/Time Trigger, and mail jobs are sent out at the times and intervals specified when the trigger and action are defined. However, there are two special cases, illustrated in the following table, that you must consider when scheduling repeated actions.

Jobs that Continue Past Next Scheduled Interval

The smallest repeat unit for Repeating Date/Time Triggers and their actions is one hour. If you are sending broadcast email messages to a large number of people, the time required to process them all (remove duplicate contacts so each person only receives the email once) might be longer than one hour. If this occurs, the Dialog Server ignores any job that should begin during the time it is processing the first job (this is called overlapping), then resumes at the next hourly interval after the first job is completed.

For example, suppose you have three instances of a broadcast email job scheduled under a single Repeating Date/Time Trigger: Instances A, B, and C. Instance A is scheduled to start at 2:00 p.m., and instances are set to repeat hourly. Normally this would mean that Instance B would begin at 3:00, and Instance C at 4:00. However, Instance A is being sent to a large number of contacts, and does not finish processing until 3:20. In this case, the broadcast email will overlap Instance B, forcing Instance B to be skipped. Instance C will begin as scheduled at 4:00 (see illustration). You should take this behavior into account when planning and setting up your broadcast email jobs to avoid overlapping.

Pausing a Dialog During Repeating Date/Time Triggers

Online Marketing schedules repeated actions based on their triggers, not on the actions themselves. If you pause a dialog and then restart it, any actions that were scheduled to occur within the time the dialog was paused do not occur, with the exception of any actions that have already been queued prior to the pause.

For example, assume you have scheduled a Repeating Date/Time Trigger to start at noon today, with a series of actions set up to send broadcast email once every hour for the next six hours, starting at 1:00 p.m. The default interval for the Scheduler is one minute. The following examples describe what might occur depending on when the dialog is paused:

• If you pause the dialog at 11:45 a.m. and restart it at 11:50, the scheduled actions proceed as planned. This is because the pause and restart of the actions both occurred prior to the Scheduler's queuing of the Repeating Date/Time Trigger.

• If you pause the dialog at 11:57 a.m. and resume it at 12:10 p.m., the scheduled actions will not proceed as planned. This is because the scheduler checks every minute to determine whether there are any actions that must be queued in the subsequent one-minute period, then queues those actions. Since the dialog was in a paused status at 11:59, the trigger has not been queued; therefore none of the actions associated with that trigger will occur.

• If you pause the dialog at 1:30 and resume it at 1:45, all the actions proceed as planned. All the actions under the trigger have already been scheduled, and each action is not queued until approximately one minutes before it is scheduled to occur.

• If you pause the dialog at 1:45 and resume it at 2:10, the 2:00 instance of the action does not occur (in the Scheduler it will show a status of Skipped), but all the subsequent actions do.

Warning! Be aware that Repeating Date/Time Triggers do not behave in the same way as Date/Time Triggers. Date/Time Triggers that have already executed will never re-execute even if you change the scheduled time to a later time on the same day; you must add a new Date/Time Trigger to the flow. Repeating Date/Time Triggers, when stopped and restarted, will continue executing any actions that have already been scheduled with start times that have not yet passed. Also, Date/Time Triggers that are scheduled for dates past the date the dialog is set to Live will be executed immediately. In comparison, a Repeating Date/Time Trigger skips dates that have already occurred when the dialog is set to Live.

Further, when a dialog containing Repeating Date/Time Triggers is put into the Broadcast Hold or Paused state and then restarted, all prior iterations of the trigger will be sent to the Scheduler with a state of Skipped.

See .

External Event Trigger

An External Event Trigger is another way to start a process. It can link to the following items:

- a Landing Page.
- a Web Link Promo.
- a Standalone Web Page.
- a Single Email.

External Event Triggers and Landing Page

When the trigger connects to a Landing Page, the Dialog Link Report generates a URL associated with this trigger. Using this URL, external systems can invoke the trigger, which then activates the Landing Page action to serve the web page for the individual.

External Event Triggers and Web Link Promo

When the trigger connects to a Web Link Promo, the Dialog Link Report generates a URL for every audience that is specified in the web link promo action. A Web Link Promo allows users to enter the dialog from a banner ad or web link and metrics can keep track of the number of people accessing a particular link. This is useful for determining how much traffic is generated by banner ads located on different websites pointing to the same place in the dialog. Web Link Promos are typically followed by Landing Pages.

External Event Triggers and Single Email

External Event Triggers can connect to a Single Email (such as a survey email). Note that when integrating with a Case for sending surveys, it is required that the survey single email and the survey web pages reside in the same dialog. If they do not, then the case will not be able to access the survey report and score.

If a single email is specified to send to the respondent's email address, then the Individual ID must be passed in the URL for the external event trigger.

When the External Event Trigger is directly attached to a Single Email, the View URL hyperlink is not displayed, since there is no web page to view.

Note. Dialog authentication (specified by the Login Required check box in the Dialog Designer page) will not work in conjunction with a flow starting with an External Event Trigger directly connected to a Single Email activity. Dialog Check will check for this and report an error if this situation exists.

See Also

Java and PeopleCode API documentation delivered as part of your CRM Online Marketing installation

Chapter 6, "Designing Web Documents," Understanding Surveys, page 84

PeopleSoft Enterprise CRM 9 Call Center Applications PeopleBook, "Processing Cases," Sending Case Surveys

Appendix E, "Online Application for Admission," User Authentication, page 323

Chapter 8, "Deploying and Managing Online Dialogs," Checking Online Dialogs, page 136

Broadcast Email

The Broadcast Email action specifies an email message to be sent to one or more target audiences.

Broadcasting an email to an audience is a typical method of starting an Online Marketing dialog. You can broadcast an offer to your target audience that includes the URL(s) generated by Online Marketing, directing recipients to respond to a specific Standalone Web Page or a Landing Page.

When you add this action to your flow, you will need to specify the email document to send, the target audience to reach, and the timing of the action relative to the previous action in the flow. You also need to specify whether the action's queue management behavior will override the global options for frequency management (how many emails a given person should receive in a given time period).

Note the following:

- If you are using the email document to publicize an URL, the document you broadcast must contain the generated URL for the appropriate Landing Page or Standalone Web Page.

- To broadcast emails, Online Marketing requires that the email addresses for all recipients be stored in the Email or Email Alternative fields in the Individuals.People profile. You must specify one of these fields in the Broadcast Email task.

- The email document you broadcast will not be sent to contacts with Do not email selected in the profile used to maintain their subscriptions. This can be either the Individuals system profile or your own custom permission profile attribute if this is specified as an exclude condition of the audience.

Broadcasting to Multiple Target Audiences

When sending a broadcast email, you can specify multiple target audiences, and the email will be broadcast to all contacts listed in each of the target audiences specified. However, since it is possible to have some of the same contacts included in more than one target audience, Online Marketing automatically ensures that duplicate emails will not be sent to the same contact for that specific email action.

Online Marketing sends the broadcast email to all unique individuals in the selected audiences. If the contact audience is in more than one audience, that contact is only listed once so the contact is not sent a duplicate broadcast email. For example, if a contact appears for the first time in the third target audience and again in subsequent audiences, then that contact will be dropped from the audience list from the fourth target audience on.

Therefore, the respondents will be identified as being part of the first target audience in which they are listed.

See <u>Chapter 10, "Mail Service Operation," page 165</u>.

See <u>Chapter 2, "Setting Up PeopleSoft Online Marketing," Setting Global Options, page 10</u>.

Web Link Promo

The Web Link Promo action allows you to generate a URL that the dialog will use to direct respondents to a Landing Page or Standalone Web Page of the dialog. Typically you generate Web Link actions for events such as placing a web banner ad, placing a print ad, sending direct mail, sending broadcast email through another source, etc.

Usually, a Web Link action is used to reach people who are not in your profile database. However, it is also possible to send a generated Web Link to an audience of contacts in your database (for example, to test the effectiveness of a direct mail offer against a broadcast email offer to the same audience).

By including a Web Link action in your flow, Online Marketing will generate a special URL (through the Link Report) to be used as the Web Link so Online Marketing can track the respondents as an audience. This special URL specifies the entry point to the dialog (a Landing Page or a Standalone Web Page) and also incorporates a code (called the tracking number) that is used to track the respondents. This code allows Online Marketing to know the audience that the respondent belongs to.

You must provide the generated URL to the people directing the development of the banner ad, direct mail, and so on so respondents can access the appropriate web page.

When defining target audiences for your dialog, you should create a different target audience for each Web Link you want to track separately. For example, you may want to track the effectiveness of two different banner ads. By identifying each with its own audience, you will be able to easily distinguish between the two. In this case, you would include both audiences in your Web Link. Online Marketing would then generate two separate URLs; one for each target audience.

When you add this action to your flow, you will need to specify a unique name and a description, the target audience for the respondents, and the Standalone Web Page or Landing Page entry point to the dialog.

Custom Action Extensions

Custom action extensions enable you to extend actions in the dialog flow. Custom actions are custom Java servlets and PeopleCode functions that can execute business logic, update or retrieve profile information, and even retrieve or post information to external systems.

Examples of custom actions include:

• A servlet to push a sales lead to a Sales Force Automation application,

• Custom rules for lead scoring or distribution

• Updating Case with the latest survey score for a particular individual. Online Marketing provides a built-in custom action called Update Case Score to be used in a survey dialog flow for updating the Case component with survey scores.

Note. Unlike custom content extensions included in documents, custom actions in the dialog flow ignore any data returned. Their purpose is to simply perform an action, and not to act upon data that might be returned. You should be aware of this fact when you select custom actions from the list of available choices.

See <u>Chapter 18, "Using Extensions," page 265</u>.

Standalone Web Page

The Standalone Web Page action specifies a web page as an entry point to the dialog, without any follow-up action to be performed. A Standalone Web Page action uses a web document without a Submit button. This type of page is useful to simply display information to a respondent. To include an entry point to the dialog where the respondent is to enter some information, you must use a Landing Page.

Although there is no submit button on a Standalone Web Page, you can include a web link in the web document to take respondents to another part of the dialog, or to another dialog. You do this using Web Link command in the Documents Designer.

See .

Landing Page

The Landing Page action specifies a web document to be displayed as an entry point to the dialog. This action starts a section in the flow. Once a dialog is entered, the flow executes the actions in the section, in order.

To use the Landing Page, a respondent enters data in the web page and then clicks the Submit button on the page. Based on the respondent's input, you can have the flow make a decision on the next action to take.

When you add this action to your flow, an icon labeled On Submit is added below the Landing Page icon, indicating that the steps below it will occur as a result of a submit from a respondent.

Intermediate Page

The Intermediate Page specifies a web document where a respondent enters information and then submits the information. This action works similarly to the Landing Page except that it is not an entry point into the dialog.

The Intermediate Page specifies that the respondent is to enter data in the web page and then click the Submit button on the page. Based on the respondent's input, you can have the flow make a decision on the next action to take. When you add this action to your flow, an icon labeled On Submit is added below the Intermediate Page icon, indicating that the steps below it will occur as a result of a submit from a respondent.

Final Page

The Final Page action specifies a web document to be displayed to a respondent during the dialog. This action works like a Standalone Web Page as it does not accept input from the user, except that this page always follows an On Submit in the dialog flow.

Although there is no submit button on a Final Page, you can include a web link in the web document to take respondents to another part of the dialog, or another dialog. You do this by inserting a Web Link into the document in the Documents Designer.

There is one tab in the Final Page builder. The General tab is where you select the web document to be displayed. You should also provide an appropriate unique name for the action and a description.

Using Final Pages in Flows

Normal execution of actions are as follows:

• Actions in each section of a flow are executed in sequence based on the respondent's input.

• Actions are executed as soon as they are reached in the flow.

The exception to the normal dialog flow is the Final Page action. When the flow reaches a Final Page action, rather than simply displaying the specified web document, Online Marketing marks the web document to be shown, and then continues processing subsequent actions until it reaches the end of the flow. If another Final Page exists, only the document associated with the last Final Page action Online Marketing encounters in the flow without additional input from the respondent is then shown.

Single Email

The Single Email action specifies an email message to be sent to a specific individual. A single email can be sent as a reply to a respondent, or to notify a specific individual that a certain event has occurred (such as a respondent's request for a representative to call).

You can specify recipient options, timing options (when to send the email) and queue management options for single emails.

Decision Point

The Decision Point action allows Online Marketing to check for a specific condition and perform an action based on the result. A typical use of this action is to check whether the respondent has filled in a particular value in a field of the web document. For example, you can specify that if a certain selection is made from a multiple choice list on a web page, a certain web page is to be shown.

A Decision Point action can only be placed in a flow following a web page with a submit button (Landing Page or Intermediate Page). You can place just about any type of action after this action (except a Landing Page or Standalone Web Page). Actions under the Yes branch are performed when the condition is met, and actions under the No branch are performed when the condition is not met.

Update Profile

The Update Profile action allows you to update the value of any profile attribute with data from an element in a web document, data from another profile attribute, or data that you explicitly specify.

Online Marketing keeps track of all data entered in web documents in order to display the data in CRM Analytics or Dialog Performance Reports. However, no profile attributes are modified unless they are explicitly used in a web document, or you use the Update Profile action.

The Update Profile action serves four basic uses:

• Conditional Update. It allows you to conditionally update a value in the database. When you use a profile attribute as a question in a web document, that attribute is automatically updated whenever respondent enters a value for the attribute. However, you may want a profile attribute to be updated only if certain other criteria are met.

  One way of doing this is to use a Decision Point to check for the condition, and if it is met, use the Update Profile action to update the profile attribute.

• Explicit Update. It allows you to update a profile attribute when the attribute is not marked as a profile question. Attributes that are not profile questions cannot be used as questions in a web document, and therefore cannot be automatically updated.

• Interpreted Update. It allows you to update a value with interpreted data. Sometimes you may want to update an attribute in a profile based on information you have learned from the respondent, such as indicating the respondent as a "hot lead" based on other selections made in the web document.

• Increment/Decrement an attribute. It allows you to increase by one or decrease by one a numeric profile attribute.

Note. The Basic Organization profile attributes cannot be modified using Update Profile.

CHAPTER 8

Deploying and Managing Online Dialogs

This chapter describes the tasks involved in deploying (or launching) online dialogs and managing them once they are running. Once a dialog is live, there are a variety of management tasks you can perform on the dialog.

This chapter contains the following sections:

- Understanding Dialog Statuses
- Deploying Dialogs
- Managing Live Dialogs
- Moving Dialogs

Understanding Dialog Statuses

A dialog's status determines who can access the dialog and what can be done to it, such as making changes or testing the dialog.

Dialogs have two versions: the Live version and the Design version. The Design version is the one you work on; you can make changes to it without affecting anything visible to your customers. The Live version is the one that your customers see: once your Design version is set up the way you want it, you move it to Live so it is available to be seen by customers. Your Design version remains, and you can still make changes to it without changing the Live version.

Online Marketing uses the following dialog statuses:

Dialog State	Description
In Design	When you initially create a dialog, its state is In Design. In this state, you can create and modify all the components of the dialog: documents, flow, etc. You can also generate the URLs to be used for any Web Link Promo or External Event Trigger actions in your dialog. While in this state, the dialog's web pages cannot be accessed by the outside world. From the In Design state, you can change the dialog's state to Test and Live. You can also change directly to Archived if the dialog has never been Live.
Test	The Test state allows you to try out your flow to make sure it works as intended. While a dialog is in this state, you cannot make changes to the dialog or any of its documents. From the Test state, you can change the dialog's state to In Design or Live.

Dialog State	Description
Live	Placing a dialog in Live state deploys the dialog. This starts the dialog's flow, and makes the web pages of your dialog available to the outside world. If you want to change a dialog while it is in Live state, you must first place the dialog in In Design state. From the Live state, you can change the dialog's state to Broadcast Hold, Paused, and Complete.
Broadcast Hold	Placing a dialog in the Broadcast Hold state pauses all outbound actions and leaves the dialog's web pages accessible to the outside world. If you want to change a dialog while it is in Broadcast Hold, place the dialog in the In Design state and you can make changes to outbound and inbound actions of the In Design version. Changes you make will take effect once you move the In Design version to Live . From the Broadcast Hold state, you can change the dialog's state to Paused, Live, and Complete.
Paused	Placing a dialog in Paused state pauses all actions, so that you can make significant changes to the dialog and stage the dialog before redeploying it. In this state, none of the dialog's web pages can be accessed by the outside world. To make changes to the dialog, place it in the In Design state first. From the Paused state, you can change the dialog's state to Broadcast Hold, Live, and Complete.
Complete	Placing a dialog in Complete state stops the dialog. The dialog is no longer Live and cannot be redeployed. All of the data gathered by the dialog is still available to CRM Analytics. If there is currently a Design version of the dialog at this point, all the changes will be reverted such that there is only one Complete version.
Archived	Placing a dialog in Archived status makes no functional change; it simply provides a status that you can use to search for dialogs that are no longer used.

Viewing Dialog Status

The Dialog Status section of the Dialog Designer page displays a graphical representation of the statuses of your dialog's Live and Design versions.

Dialog Status

Note. If the dialog has never been Live, the Dialog Status section will not distinguish between the Live and Design versions; only one row without a row header will appear in the Dialog Status grid.

Live Version	This row displays current status information about the Live version of the dialog.
Design Version	This row displays current status information about the Design version of the dialog. You can make changes to the Design version without affecting the Live version. All edits to the dialog are done in this version.
	Indicates that the dialog has passed through this status.
	This button moves through the grid cells to visually indicate the dialog's current status. The link next to the button indicates the action you can perform at that point in the dialog. For example, if the dialog is in Live status, click the View link to view it. When viewing the Live dialog, click the link to view the Design version.
	In the Live version, buttons appear for statuses in which you can place the dialog from the current status. For example, click the Pause button to place the dialog in Paused status. In the Design version, only the Test and Live buttons will appear. Note that if the Live version is currently in Paused or Broadcast Hold state, moving the Design version to Live will remove the Live version from these states and set it to Live.
	This button moves through the grid cells in the In Design version, visually indicating the dialog's current status.
Revert to Live	If you have made changes to the dialog in the Design version, click this button to return it to the same state as the Live version.

Dialog Statuses and Audiences

When changing a dialog's status to Live, Broadcast Hold, or Paused, the audiences associated with the dialog must be in either the Approved or Committed status.

When changing the dialog's status to Test, if all associated audiences are of type External, the audiences must be in status Approved or Committed. If an Internal audience exists, the audience you chose from the Audience list for the testing must be Approved or Committed.

Once a dialog has been activated, you will only have access to audiences in the Approved or Committed statuses.

See Also

PeopleSoft Enterprise CRM 9 Marketing Applications PeopleBook

Chapter 3, "Designing Online Dialogs," Selecting Audiences for a Dialog, page 52

Deploying Dialogs

Before you activate your dialog, there are three tasks that you should complete:

• Check your dialog to ensure that there are no problems.

• Test the dialog design to ensure that it performs as intended.

• Generate the URLs of any web link promos in your dialog. This allows you to provide the URL to the person implementing the web link promo prior to deploying the dialog.

After you have performed these tasks, you can activate the dialog, which simply involves changing the state of your dialog to Live.

See Chapter 8, "Deploying and Managing Online Dialogs," Checking Online Dialogs, page 136.

See Chapter 8, "Deploying and Managing Online Dialogs," Going Live with an Online Dialog, page 141.

Checking Online Dialogs

Before activating your dialog, you must first check your dialog's integrity to ensure that there are no problems. Online Marketing includes the Dialog Check that checks for a variety of mistakes in a dialog. This tool helps you correct some basic problems that can prevent your dialog from running properly. The tool checks four areas of the dialog: target audiences, documents, and flow.

Dialog Designer

Check

Dialog Name Platinum Appl Resellers Registration	**Status** In Design

Validation identifies errors or potential problems with the dialog in its current state. You must fix errors in order to test and deploy the dialog.

Dialog Consistency Check   **Errors & Warnings**

[Run All Checks]   none

○ Target Audience
○ Documents
  ○ Document Basics
  ○ Merge Content
  ○ Profile Choices
○ Dialog Flow
  ○ Action Basics
  ○ Referenced Documents
  ○ Referenced Target Audiences
  ○ Action Dependencies
  ○ Email Fields
  ○ Referenced Profile Fields
  ○ Referenced Custom Actions
  ○ Queue Management

Legend

○ Not Checked   ⚠ Warning
✔ Pass check   ■ Error
                  ⓘ Notice

Return to Dialog Designer

Dialog Check page

The results of the tests are indicated by four colors: green, yellow, blue, and red. Green indicates pass, Yellow indicates a warning, Blue indicates a notice, and Red indicates an error that will prevent your dialog from being activated.

When the tool indicates any warnings, notices or errors, it also creates a report that describes the problems found. Before activating your dialog, you must correct all errors indicated, and should ensure that the warnings are acceptable to you. Warnings indicate a potential problem, but do not prevent the dialog from running. Notices indicate that an email document's individual frequency management actions have been modified.

The dialog check performs the following tests:

Target Audience   Checks whether all target audiences included in the dialog are actually used in the flow.

Document Basics   Checks whether all documents have been used in the flow, that items within the documents have been properly defined, that web documents with entry fields also contain a submit button, and that templates exist and have appropriate tags.

Merge Content   Checks whether all required data specified for the object is present.

Profile Choices   Performs a comparison between a choice document element and the profile choice element that it was based upon. If a corresponding profile choice does not exist in the document choices, it is flagged as absent. If an inactive choice exists in the profile but not in the document's version, it is flagged as active.

Action Basics	Checks whether the flow is properly structured.
Referenced Documents	Checks whether document references in a flow actually contain documents, and that each On Submit task contains a web document with a Submit button.
Referenced Target Audiences	Checks whether a target audience is specified in the flow wherever it is needed (for broadcast email and web link promos).
Action Dependencies	Checks whether there are any task dependencies in a flow, and, if so, checks whether the dependencies are met.
Email Fields	Checks whether the format of any email addresses is correct.
Referenced Profile Fields	Checks whether the appropriate condition fields are filled out.
Referenced Custom Actions	Checks for required custom action keywords and also verifies that parameter/value pairs, if present, conform to proper format.
Queue Management	Checks email queue management settings against the global default settings and displays a notice if they are different.

To check a dialog:

1. From the Dialog tab of the dialog you want to check, click the Check button.

   The Dialog Check page is displayed.

2. Click either Run All Checks or you can run an individual test by clicking the test's link.

   The selected tests run, and the results are indicated by a colored icon:

   • Green indicates that the test was passed.

   • Yellow indicates a warning.

   • Red indicates an error that will prevent your dialog from being activated.

   • Blue indicates a notice that the email's queue management settings are different from the global settings.

   If any warnings, notices or errors are indicated, they are displayed on the right side of the Dialog Check window, along with an explanation for each.

3. If desired, export this information to an Excel file by clicking the Export button.

4. Fix any problems indicated in the report. You must fix red errors. You are not required to fix yellow warnings to continue, but you should ensure that they are acceptable to you.

5. Run the tests again, and repeat the process if other problems appear.

Validation (with no errors, although warnings are permissible) is required before a dialog can be deployed.

Generating URLs for Web Link Promos and External Event Triggers

If your dialog uses any Web Link Promo or External Event Trigger actions, you need to generate the URLs for these actions so that you can provide the URLs to the person implementing the web link promos on web sites or elsewhere.

This feature generates the special URLs that contain the location of the web page (Standalone Page or Landing Page) and identifies the target audience that all respondents using this URL will belong to. Online Marketing generates a different URL for each audience or trigger and web page combination. For example if a dialog uses one web link promo with two audiences, then Online Marketing generates two different URLs.

Since a dialog uses different audiences while being tested, the URLs generated from the Testing state will not access the web pages of a live dialog. The URLs to be used with a live dialog can be generated either before or after testing the dialog, from one of the following states: In Design, Broadcast Hold, Paused, or Live.

If you generate the URLs before testing the dialog, depending on the changes you make to the dialog after testing, you may need to regenerate the URLs. For example, you must regenerate the URLs if you change a target audience or Landing Page in the dialog.

Note. Placing a web link promo or external event trigger on a web site requires human interaction, such as a person placing a banner ad on a web site.

To generate the URLs for Web Link Promos and External Event Triggers, click the Link Report button in the Dialog Designer toolbar.

The Link Report for the dialog is displayed.

Dialog Designer - Link Report

Link To	The action to which the URL points.
Link From	The action in which the link is initiated.
Audience	The audience to which the link is directed.
URL	The URL link generated for the document. Each of the URLs specified must be provided to the person handling the placement of that web link promo or External Event Trigger.
View URL	This hyperlink is available for External Event Triggers connected to Standalone Pages or Landing Pages, but not when connected to a Single Email action.

You can export the Link Report to an Excel file by clicking the Download button.

Note. You cannot use the link generated in a testing report as a link in your live dialog.

Testing your Online Dialog

You should test your dialog to ensure that it was properly designed and works as expected. Since dialogs often run over a period of several months, Online Marketing allows you to create a condensed version of your dialog so that you can test all of its components. By condensing the time period and reducing the size of your target audience, you may be able to test an entire dialog in a matter of hours.

Dialog Designer - Test

To test an online dialog:

1. In the Dialog Status Controller, click the Test button.

   The Test Dialog page appears.

2. Select a test audience. (The Select Test Audience group box is only available if the dialog has one or more Date/Time Triggers.)

   You can select from a list of internal audiences that have a status of Committed or Approved. A test audience can be fixed or dynamic, and must match the SetID associated with the dialog. Fixed audiences with counts greater than the error threshold are automatically excluded from the search list. In the case of dynamic audiences, the count is generated at the time the audience is selected, and if it exceeds the error threshold an error message is generated. If you select an audience with a count greater than the warning threshold, a warning displays and you can choose to continue or cancel and select another audience.

   When testing, you only specify one testing audience, regardless of the number of audiences in your actual dialog. All broadcast emails are sent to the same testing audience

   Note. Since people in your company may not normally be part of your profile database, you may need to have your Online Marketing Administrator help add these people to the database. Individuals entered via testing dialogs are not removed—you can include testing contacts the audience for your online dialog.

3. Choose a subject line prefix to be inserted in front of the subject for each broadcast email, so that your testing audience is not confused when they receive the broadcast email (for example, you could insert the words "Dialog Test:" in front of the subject). This step is optional, and only appears if the dialog contains emails.

4. Choose options for the timing of the test. If the dialog contains Date/Time Triggers, both the Immediate and Compressed timing options are available. If the dialog has only External Event Triggers and no single emails with delays, the Compressed timing option is not available.

   If you choose Immediate, all activities and triggers kick off in five minutes, and delays are adjusted to five minutes. (You can modify the default minimum delay in the Global Options settings.)

   If you choose Compressed, you must provide a compression percentage. The default is 25%. The Compressed option causes the dialog to execute within the chosen percentage of the original timeframe. (For example, if the duration of the dialog is 4 days and you choose 25%, the dialog's timeframes are compressed so it will finish executing in one day.)

   After you select Compressed and click OK, a page is displayed to show you the approximate duration of the test.

5. Click OK to proceed with the test or click Cancel to go back and adjust the compression percentage.

Once the testing dialog is created, Online Marketing deploys the dialog immediately to the testing audience. Even in dialogs where you have set a date to send your first broadcast email, Online Marketing will reset that date to the current date and time, and send the first broadcast email to your testing audience immediately. This is true even when the first date in the dialog has already passed.

If the dialog uses a Web Link Promo action, you can still test your dialog from the Testing state. You must generate a URL for the Web Link Promo from the Testing state by creating a Link Report. Using this URL you can test the dialog.

If your dialog contains repeating triggers, you can set the minimum frequency in which the repeat iterations are executed. The default minimum frequency used for testing is 60 minutes; it can be modified in Global Options.

Note. Because a dialog uses different audiences while being tested, the URLs generated from the Testing state will not access the web pages of a live dialog.

Going Live with an Online Dialog

You deploy an online dialog by changing the dialog's state to Live. Before you do this, you must run the Online Dialog Check to ensure that the dialog does not have any errors. Once your dialog passes all the tests, you should place the dialog in the Test state to test that the dialog works as expected.

When you deploy a dialog, Online Marketing performs the following tasks:

- Automatically checks the dialog for errors. If it finds any, the Dialog Check page is displayed with the errors. You will need to correct the problem before being able to deploy the dialog. The Dialog Check page only displays messages for errors; it does not automatically indicate warnings. Online Marketing only indicates warnings when you explicitly run the Online Dialog Check.

- Creates the document data storage tables. These tables contain all the responses to the dialog web pages, and statistics associated with the dialog. This information is accessible through CRM Analytics, and exists in the database until the dialog is deleted.

- Informs the Online Marketing Dialog Server to clear the server cache so that all new tables are available to the web server.

Once your dialog is Live, anyone can access its web pages. If your dialog uses both a broadcast email and a Web Link Promo action (such as a banner ad), anyone seeing the URL can access the dialog, even if it is weeks before the broadcast email is sent out. Depending on your dialog this may or may not be a problem.

If you have associated your dialog to an activity in a Marketing campaign, you will also want to change that activity's status to executing.

To deploy a dialog, click the Live button in the Deployment Status controller. If there are errors in the dialog, you are prompted to run Dialog Check and fix the errors before you are able to activate the dialog.

Managing Live Dialogs

There are a variety of ways that you can manage your live online dialogs, including:

- Handling email bounces

- Making changes to a live dialog

- Stopping a dialog

- Deleting a dialog

How Online Marketing Handles Email Bounces

Whenever you create an email document, you must specify a mailbox for the Bounced field. Any mailboxes used in this field must first be defined through Mailbox Setup.

Note. Although the mailboxes used for Bounced mail can be personal email addresses, it is strongly recommended that you set up email addresses dedicated for this purpose. Due to the number of emails that will be sent out, the fact that emails are deleted from the mailbox, and the potential for large numbers of bounces, it is best to use addresses created specifically for these purposes.

Any emails sent by Online Marketing that bounce are returned to the Bounced mailbox. Online Marketing monitors this mailbox, logs every email that is returned to it, and then deletes the bounced emails.

Online Marketing determines whether an email received in the bounced mailbox is a bounce by checking the From address and the subject for specific keywords. These keywords are specified in the parameters bounceMailFromFilter and bounceMailSubjectFilter. You can also specify an email address where all non-bounce emails received in the Bounced mailbox are forwarded. This is specified in the parameter bounceForward.

You can view statistics about the number of bounced emails through CRM Analytics and the Dialog Performance Forecast ACE report. If you want to see the email addresses that bounced, you can set up the mailbox to forward all emails it receives to another email address, prior to deleting them from the mailbox. (You do this through Mailbox Setup.) However, you might not want to do this if the target audience for the dialog is very large. For example, with an audience of 100,000 contacts, a 2% bounce rate would send 2,000 emails to the specified email address.

See Also

PeopleSoft Enterprise CRM 9 Supplemental Installation Guide

Making Changes to a Live Online Dialog

Once a dialog is Live, you may decide that you need to make certain changes to the dialog. This section describes the types of changes you can make to the In Design version of a Live dialog, and how those changes can affect the dialog and your data.

Warning! Be very careful if you decide to make changes once a dialog has gone Live. It is possible to severely damage your dialog and the data collected.

This section provides information on:

• When changes take effect

• Restrictions on changes

• How changes affect dialogs

• Placing a dialog in Broadcast Hold

• Pausing a dialog

• Reactivating a dialog

When Changes Take Effect

To make changes while a dialog is Live, you set the dialog to In Design and make changes without affecting your Live version. The changes take effect when you change your In Design dialog to Live. You can pause a dialog to test it, but it is not required.

Modifications you make to a dialog only affect actions that are triggered or scheduled after the change takes effect (when the In Design version is changed to Live).

For example, you might have a reminder email that is scheduled to be sent one month after a respondent submits a seminar registration. Changing the reminder date to one week only affects respondents to the dialog after the change takes effect. Respondents who submitted their registration before the change takes effect will still get the reminder one month from the day they submitted it.

Restrictions on Changes

Once your dialog has gone Live, you can make the following changes:

• General changes, such as dialog name and description.

• Changes to target audiences.

• Document changes.

• Changes to the dialog flow (outbound and inbound actions).

How Changes Affect Dialogs

Online Marketing allows you to make changes to the In Design version of an active dialog . However some changes can have unintended consequences, such as causing dialog results to be misleading, damaging data already gathered, or confusing respondents already interacting with the dialog. The following table describes a variety of changes to an already active dialog that can cause problems.

Warning! This is not a comprehensive list of all possible damaging changes. It is intended to help you understand how changes can affect your dialog.

Dialog component	Change
Emails	Deleting a Broadcast Email action or a Follow-up Email action.
	Deleting an email action before the email is sent prevents it from being sent, even if it is already scheduled. This also applies to Broadcast Email actions deleted while Online Marketing is sending the emails to the target audience.
	Deleting a Broadcast Email action also prevents you from seeing those results in CRM Analytics.
	Editing an email document (while in any state).
	You can edit a document used in an email action at any time. The change will be reflected the next time the email action is executed. If you make changes to an email document used in a Broadcast Email action that has already started being sent out, the changes will not be included unless the Mailcaster is restarted (the Online Marketing Mailcaster handles sending all Online Marketing emails to the SMTP server). This is the only way to force a Broadcast Email action to restart. However, any emails already sent out will not be resent.

Dialog component	Change
Choice Questions	Changes to Choice questions are allowed .
	Adding questions to a document: When a new question is added to a document, a "blank" value is stored in that document's data table for each respondent who already submitted data for that document. The "null" indicates that no answer was supplied for the question.
	This is how unanswered questions are marked, so the CRM Analytics data might be misleading because Online Marketing does not automatically indicate the date when the respondent submitted the page. (Of course, you can do this yourself by using a hidden date field.) It may seem that many people chose not to answer a question, when actually the question was added late.
	Changing the number of choices presented for a multiple choice question: Changing the number of choices in a question can cause the results to be misleading because the same choices will not have been available to all respondents.
	Changing the text of a choice question in a document, but leaving the choices unchanged: Although this does not damage the dialog, you must be very careful when changing the question, because only the new question is listed in CRM Analytics. If you change the question, the results can be misleading.
	For example, suppose the following: the original question is "What is your favorite color" and you change it to "What is your least favorite color". If prior to the change, 20,000 respondents selected red as their favorite color, and after the change 10,000 respondents selected red as their least favorite color, then the results will show 30,000 people selected red as their least favorite color, which is entirely misleading.
	Removing questions from a document: Online Marketing never deletes columns from a document data table. If a question is removed from the document definition, any new respondents will have a "null" value placed in the column associated with the deleted question. However, since the question has been removed, there is no way to view or analyze the data originally stored in that column. Further, since the column still exists, you are unable to use that question's name again.
	Warning! The exception to this is if the removed field is required. If it is required, the insert will fail and could result in lost data for that insert.

Dialog component	Change
Date/Time Triggers	These changes to Date/Time triggers are allowed. • Adding, deleting, or modifying outbound actions for an existing Date/Time trigger that has been scheduled but not yet executed. When a Date/Time trigger's execution date and time arrive, the actions associated with that trigger will execute. If an action is scheduled for a delayed execution, Online Marketing places it in an execution queue until that date. Once an action is scheduled for execution, changing the scheduled date and time does not change when it executes. (Online Marketing does not change the timing on actions that have already been scheduled.) • Adding outbound actions to a Date/Time trigger that has already been executed. Doing this has no effect on the dialog. A Date/Time trigger is executed only once. Any actions added after that date are never executed. • Changing the date of a Date/Time trigger that has already been executed. Doing this has no effect on the dialog. A Date/Time trigger is executed only once. • Creating a new Date/Time trigger (with new broadcast email). If you schedule a new Date/Time trigger for a date or time before the dialog is reactivated, the milestone is triggered immediately after the dialog is reactivated. • Changing the date of a Date/Time trigger that has not yet executed. Doing this will cause the Date/Time trigger execution to change to the new date.
Landing Pages	• Creating a new Landing Page (with new subordinate inbound actions, such as Intermediate Pages) is allowed. Respondents cannot access a new Landing Page unless you provide the new URL via a Broadcast Email, a Web Link Promo, or a new link from a modified web document already in the flow. • Deleting an existing Landing Page. Deleting a Landing Page deletes any subordinate actions, and breaks any links to or from these actions. It also prevents you from seeing those results in CRM Analytics. If the dialog has already sent broadcast emails or placed Web Link Promos that contain links to a deleted Landing Page, recipients may still attempt to access the web page. Any respondents that attempt to access a deleted web page receive an error message. • Redirecting a Web Link Promo to a different Landing Page. You can redirect a Web Link Promo, but any respondents who received the original link and attempt to use it, will receive an error message if the original Landing Page has been deleted.

Dialog component	Change

Repeating Triggers	These changes are allowed :
	
	• Creating a new Repeating Trigger (with new broadcast email).
	
	  If you schedule a new Repeating Trigger for a date or time before the dialog is reactivated, the trigger is triggered when the next repeat is scheduled.
	
	• Adding, deleting, or modifying outbound actions for an existing Repeating Trigger.
	
	  When a Repeating Trigger's execution date and time arrive, the actions associated with that trigger will execute.

Web Documents	Selecting a different document to be used in a web page . When you change the document that is associated with a web page action, any links to the original web page generated by the Link Report will remain intact. However, merge content and cross dialog links from other Online Marketing web documents will need to be reset.
Decision Point	Modifying an existing Decision Point can have a serious effect on the overall behavior of the flow. You should not do this unless absolutely necessary.

Placing a Dialog in Broadcast Hold

When a dialog is placed in Broadcast Hold, all outbound actions in the dialog are suspended, except for broadcast email tasks that are already ready to be mailed.

• If the broadcast email task has already begun de-duping (removing duplicates from its target audiences), the calculations are not interrupted. Once Online Marketing completes this task, the broadcast email will be suspended.

• If the Broadcast Hold occurs after de-duping has completed (when the broadcast email task is either queued, waiting to be mailed, or while Online Marketing is sending the broadcast emails) the task completes before the dialog is placed in hold state. The only way to stop the emails from being sent is to have your Administrator restart the Mailcaster (the Online Marketing Mailcaster handles sending all Online Marketing emails to the SMTP server).

Actions that have been scheduled but not yet executed are prevented from executing while the dialog is paused.

While in Broadcast Hold, the inbound actions continue to be available to all respondents to the dialog.

To broadcast hold a dialog, click the Hold button in the Deployment Status controller.

Pausing a Dialog

When a dialog is placed in Paused state, all actions in the dialog are suspended except for broadcast email tasks that are already ready to be mailed.

• If the broadcast email task has already begun de-duping (removing duplicates from its target audiences), the calculations are not interrupted. Once Online Marketing completes this task, it will be suspended.

• If the Pause occurs after de-duping has completed (when the broadcast email task is either queued, waiting to be mailed, or while Online Marketing is sending the broadcast emails) the task completes before the dialog is placed in Paused state. The only way to stop the emails from being sent is to have your Administrator restart the Mailcaster (the Online Marketing Mailcaster handles sending all Online Marketing emails to the SMTP server).

Actions that have been scheduled but not yet executed are prevented from executing while the dialog is paused.

Any respondent who attempts to access a web page or attempts to submit a web page receives a "temporarily out of order" error message as specified in the PageNotFoundMessage and PageNotFoundURL parameters. Online Marketing has no way of tracking any respondents that were interacting with the dialog at the time it was paused.

To pause a dialog, click the Pause button in the Deployment Status controller.

Re-Activating a Dialog

When a paused dialog is reactivated, the execution of actions proceed according to the normal schedule, with one exception. Any action that was scheduled to execute while the dialog was paused starts executing immediately after the dialog is reactivated.

To reactivate a dialog, click the Live button in the Deployment Status controller to resume all scheduled jobs and resume serving web pages, or click the Broadcast Hold button to resume serving web pages without resuming bulk email jobs.

Stopping a Dialog (Complete)

Certain dialogs lend themselves to specific end dates. For example, with a sweepstakes dialog, after a certain date you may not want respondents to continue entering the sweepstakes.

Stopping a dialog ends the execution of the dialog and respondents can no longer access any of its web pages. However all of the data are still accessible through CRM Analytics.

Note. Although dialogs can have start and end dates, these dates are only used for informational purposes and do not automatically start or stop the dialog.

Warning! Once a dialog is stopped, it cannot be reactivated. If you want to be able to reactivate a dialog, you should pause a dialog instead of stopping it.

To stop a dialog, click the Complete button in the Deployment Status controller. All scheduled jobs are deleted from the schedulers and web pages are no longer served.

When you change a dialog's status to Complete, a check is performed to ensure that no dialog or nested dialog edits have been done since the last time the dialog was live. (In other words, a check is performed to determine whether the Live copy and the Edit copy are the same.) If there is a difference, a message displays informing you that the Live and Edit dialogs are different, and that if you choose to continue, the Edit version will be overwritten by the Live version. You are given the option to copy the Edit version as a new dialog if you do not want to lose your changes.

Archiving a Dialog

From the Complete status, you can change a dialog's status to Archived by clicking the Archive button in the Deployment Status controller. Though no change occurs as a result of this status move, you can use the Archived state to filter or search for dialogs that are no longer in use. You cannot delete a dialog from the system.

Warning! Do not place a dialog in Archived status unless you are sure you do not want to use it again.

Moving Dialogs

When running Online Marketing with integrated applications that need to access other CRM data, it is important to be able to develop dialogs in one location and then move them to a production environment once they have been completed and tested. To do this, you use a utility called the Dialog Mover.

Refer to the chapter that discusses importing and exporting online dialogs for more information.

See .

CHAPTER 9

Using PeopleSoft Online Marketing Event Wire

PeopleSoft Online Marketing Event Wire enables real-time integration of a dialog with e-commerce or other external systems.

This chapter provides overviews of Event Wire, how Event Wire works, and sample Event Wire implementation and discusses how to:

• Create dialogs that use Event Wire.

• Deploy dialogs.

Understanding Event Wire

Online Marketing Event Wire enables Online Marketing to receive data from external systems in real time to measure the effectiveness of dialogs, to trigger a dialog, or to update document or profile fields in the PeopleSoft CRM database.

To submit data to a dialog, the external system must be programmed to send the appropriate data to Event Wire, which in turn submits the data to the specified dialog. Data submitted through Event Wire is treated the same as information entered on and submitted from a web page.

To use Event Wire, a dialog designer and a technical implementer must collaborate to set up the dialog and the external system. The dialog designer designs the Online Marketing dialog and provides information about the dialog to the technical implementer, who programs the external system to make the appropriate calls to Event Wire.

Event Wire provides the following capabilities to Online Marketing:

• Completes the link with external systems, allowing you to automatically receive data obtained or generated by the external system.

  - Tracks purchases that result from click-throughs from a dialog.

  - Completes real-time transfer of profile data into the CRM database. (This includes creating new customer records and updating existing customers.)

  For example, an external system could inform Online Marketing that a specific item was purchased as a result of a dialog, and the results can be shown in CRM Analytics. Saved profile information can be used in other dialogs.

• Triggers dialogs in real time, allowing you to design dialogs that perform specific actions as a result of the input from an external system.

  - Sends follow-up email offers to customers as a result of their external system activity.

  - Presents surveys or other dialogs to customers as a result of their external system activity.

For example, when a customer makes a purchase from a site, this action could trigger Online Marketing to send an email to the customer offering a discount on a subsequent purchase.

Dialogs used by Event Wire are designed just as any other Online Marketing dialog. Because the external system must be able to submit data to the dialog, certain information about the dialog (such as the entry point URL, the names of the fields on the landing page, and default field values, if any) must be provided to the external system.

To pass data to Event Wire, the external system must specify a URL that points to an External Event Trigger or a Web Link Promo. In turn, these must point to a Landing Page or Standalone Page for a specific dialog. A Landing page enables Event Wire to trigger specific actions in a dialog, to submit new document or profile data to be stored in the CRM database, or both. A Standalone page records that a visit to the site occurred, which is a way of measuring the effectiveness of a dialog.

The Landing page is never seen by the customer, nor is any JavaScript on the page executed. However, subsequent pages in the dialog can be displayed, allowing the customer to enter additional information. The Standalone page can appear to the customer. Whether a dialog page appears to the customer is determined by how the technical implementer calls Event Wire.

Understanding How Event Wire Works

This section discusses the three typical scenarios for external systems that use Event Wire:

1. Customers originate at the external system (External System → Event Wire → Online Marketing).
2. Customers originate at a dialog (Dialog → External System → Event Wire → Online Marketing).
3. Customers originate at both sources.

Customers Originate at the External System (Scenario 1)

In this scenario, customers always originate at the external system. For example, a customer accesses an e-commerce site, makes a purchase, and the purchase information and customer information is passed to Event Wire and Online Marketing to track the purchase and make a subsequent offer to the customer.

This flowchart illustrates the scenario 1 process:
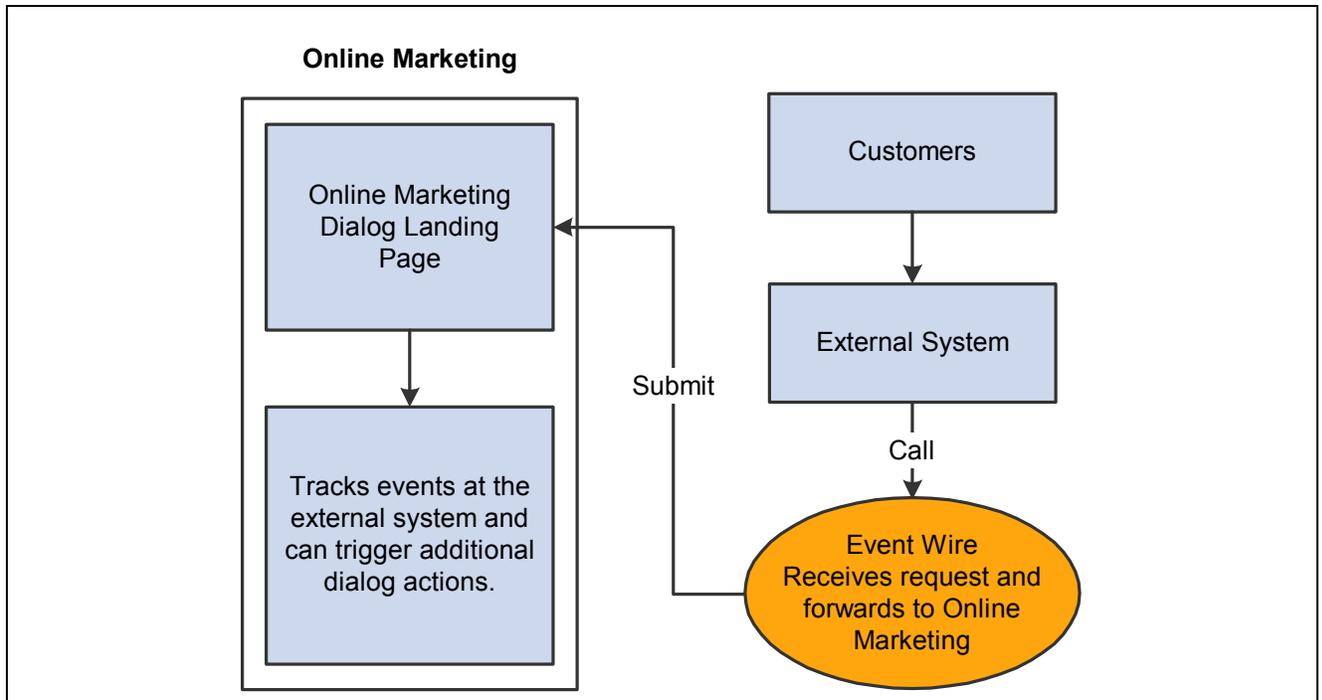
Event Wire - Scenario 1

To pass data to Online Marketing, the external system makes a call to Event Wire, specifies the External Event Trigger or Web Link Promo URL (also called the Landing page URL), and includes any customer data desired. The Landing page must include fields to accept the data you want to pass from the external system to Online Marketing. (The URL for this Landing page must be provided to the external system in advance so that the calls to Event Wire can specify this URL.)

Event Wire fills in the fields on the Landing page with the information provided, and submits the page. Online Marketing receives the information and stores it in the database.

Because the external system is going through Event Wire, it can provide any amount of information about the respondent to Online Marketing.

Up to this point, no input from the customer is needed, and the Landing page does not appear to the customer. However, this Landing page can trigger other dialog actions, such as sending follow-up emails or displaying subsequent pages to the customer, where they can interact directly with the dialog.

Customers Originate at an Online Marketing Dialog (Scenario 2)

In this scenario, customers to the external system always originate at an Online Marketing dialog. This flowchart illustrates the scenario 2 process:
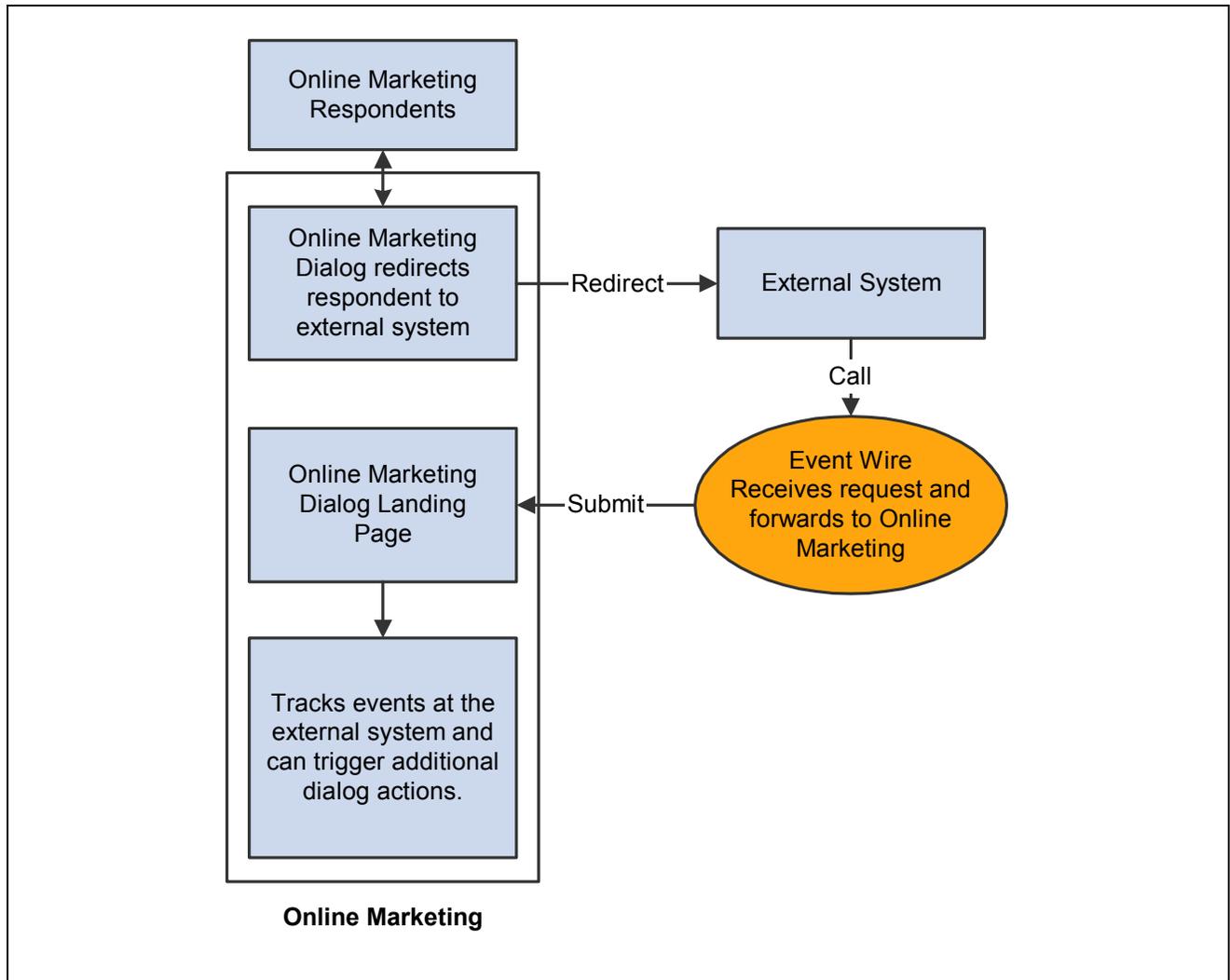
Event Wire - Scenario 2

A dialog sends a broadcast email to a target audience or places a banner ad. Respondents arrive at a Standalone page that automatically redirects them to an external site. That purchase information is then passed on to Event Wire (via a call). Event Wire then submits the data to Online Marketing so that information about the purchase can be tracked and subsequent offers can be made. (The Standalone page that redirects and the Landing page used by Event Wire can be in different dialogs.)

The differences between this scenario and scenario 1 are:

• You must create a Broadcast Email with an offer to attract respondents to the external system or place a banner ad.

• You must create a Standalone page to redirect the respondents to the external system.

• Respondents to the Broadcast Email are automatically redirected to the external system.

• The dialog can pass information such as the specific Landing page to use in the call to Event Wire and information in the CRM profiles about the respondent to the external system via the redirect command.

Customers Originate at Both Sources (Scenario 3)

Scenario 3 combines scenarios 1 and 2. Customers can originate at a dialog or at the external system. T

Note. This scenario uses two Landing Pages to demonstrate that all customers to an external system do not have to be routed to the same entry points in a dialog.

In this scenario, a dialog sends a Broadcast Email to a target audience and a banner ad is placed at a web site. Respondents that arrive through Online Marketing can be redirected to the external site, specifying the URL for Landing page 1. Customers can also enter the external system directly, and the external system can be set up to send all of their direct customers to a different Landing page (Landing page 2).

This flowchart shows the various sources where customers can originate, and it shows that an external system can use multiple Landing Pages:
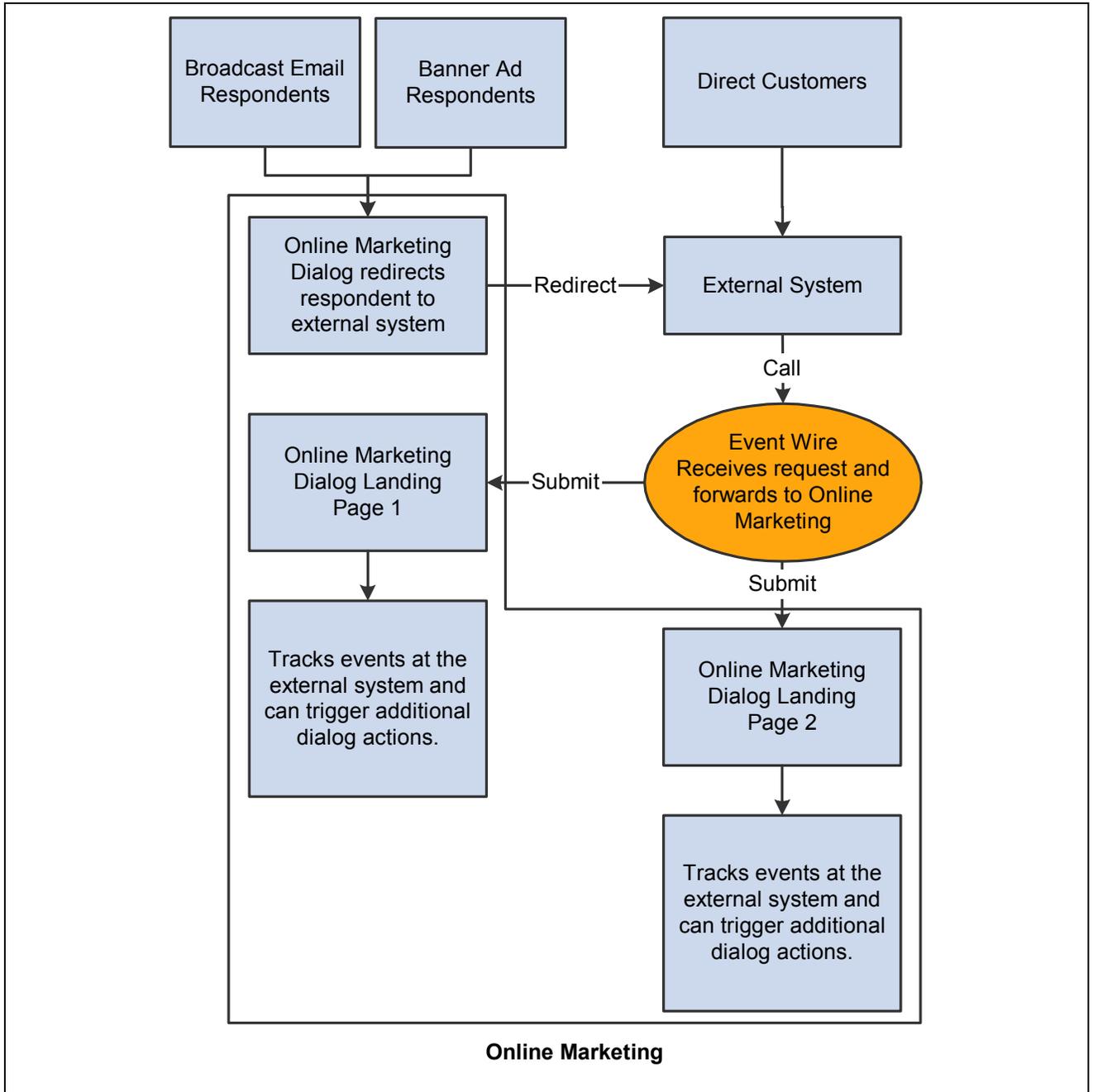
Event Wire - Scenario 3

155

Understanding a Sample Event Wire Implementation

This section discusses:

• Components of the dialog

• Web documents

• External system programming

• Dialog testing and deployment

In this scenario, a merchant wants to send a 5 USD discount coupon offer to a specific target audience and to record information about any purchases made at the e-commerce site. When a purchase occurs, the customer's profile is updated with the date and amount of the purchase, and the customer receives a follow-up email containing the order ID and a 10 USD coupon to be applied to their next purchase.

Components of the Dialog

To achieve this Event Wire implementation, you could create a dialog with the following components:

• An internal audience that includes everyone who has previously purchased products (perhaps with the name *People Who Purchased*).

• A Date/Time trigger and a broadcast email for the 5 USD discount offer.

• A Standalone page that redirects the respondent to the external system.

  The redirect also indicates the Landing page URL to be used by Event Wire.

• An External Event Trigger and a Landing page where the external system submits data to the dialog.

  This page contains profile attributes for the Email Address, Order ID, Date of Purchase, and Amount of Purchase.

• A follow-up email to offer a 10 USD discount coupon.

Creating this dialog is the same as creating any other dialog except that the web pages are used in the dialog (redirecting the respondent to an external system and accepting data from the external system).

Web Documents

In our scenario, you need to create two web documents: a Standalone page that redirects the respondent to the external system and a Landing page that receives data from the external system.

The redirect document includes the redirect command specifying the URL of the external system and the Landing page URL to be used by the external system when making its call to Event Wire. In this example, there is no additional profile information being passed to the external system. The Landing page URL must be saved by the external system so that it can be passed to Event Wire when the customer makes a purchase.

The Landing page where the external system submits data to the dialog is not seen by the customer. If you want the customer to enter additional information directly in the dialog (such as to fill out a survey), you can create a subsequent page to be displayed to the customer.

See Chapter 6, "Designing Web Documents," Creating and Working with Web Documents, page 86.

See Chapter 9, "Using PeopleSoft Online Marketing Event Wire," Enabling the External System to Obtain the Landing Page URL, page 159.

External System Programming

Before this dialog can be deployed, the technical implementer must program the external system to handle the data that is passed to it (in this example, the Landing page URL) and to pass to Event Wire the Landing page URL, Order ID, Date of Purchase, and Amount of Purchase.

The call that is placed from the external system to Event Wire determines whether any dialog pages will appear to the customer.

See Also

Part 3, "PeopleSoft Online Marketing Integration," page 237

Dialog Testing and Deployment

After designing this dialog, you need to test it to ensure that it performs as intended. You (or the technical implementer) should then check that the external system is placing the calls to Event Wire correctly.

After ensuring that the external system is working properly with Event Wire, you are ready to go live with the dialog.

See Also

Chapter 9, "Using PeopleSoft Online Marketing Event Wire," Deploying Dialogs, page 161

Chapter 8, "Deploying and Managing Online Dialogs," page 133

Creating Dialogs that Use Event Wire

This section provides an overview of dialogs that use Event Wire and discusses how to::

• Enable customers to enter the external system.

• Enable the external system to obtain the Landing page URL.

• Set the Landing page URL in the external system.

• Use multiple dialogs with the same external system.

• Enable online marketing to handle passed data.

Understanding Dialogs that Use Event Wire

Dialogs that work with Event Wire are created in the same manner as any other dialog except that in some cases the Event Wire dialog passes information to the external system (via a redirect page), and in all cases the external system submits information to the Event Wire dialog. The dialog's entry point must be an External Event trigger that points to a Landing page or Standalone page, or a Web Link Promo action that points to a Landing or Standalone page.

Before designing a dialog that uses Event Wire, you must evaluate the specific needs of your dialog. In particular, you need to consider:

• How customers will enter the external system (directly or via the dialog).

  If customers enter the external system via a dialog, then the dialog you create must include a redirect page to send respondents to the external system.

- How you will pass the Landing page URL to the external system (passed via Online Marketing redirect page or programmed into the external system).

  If customers enter the external system via a dialog, then you can include the URL in the redirect command to the external system. Your technical implementer can pass the URL using a cookie or set the URL directly in the external system.

- What information about the respondent you want to pass to the external system (tracking number or other profile information).

  If customers enter the external system via a dialog, then you can include profile information about the respondent in the redirect command to the external system. You will only want to do this if you need the profile information in the external system (this information is not required by Event Wire).

- If the same dialog will be used to redirect to the external system and receive data from Event Wire.

  This setting determines how many dialogs you must design, test, and launch.

- How Online Marketing will handle data passed to it from Event Wire (save in profiles or use only in results).

  This setting determines the type of fields you want to include on the Landing page and the subsequent actions you want the dialog to perform.

- If you want to set up default values in the Event Wire Landing page.

  If you want to do this, you must inform your technical implementer.

After you have determined your needs, you can design the dialog (create profile attributes, target audiences, documents, and the flow) and provide the necessary information to the technical implementer, who in turn can program your external system.

Enabling Customers to Enter the External System

If customers enter via a dialog, create a dialog that includes a Standalone page that contains a redirect command to the external system.

Entering the External System via a Dialog

When customers respond to an Online Marketing Broadcast email, banner ad, or web link, they can be redirected to the external system automatically when they access the web page in the dialog that contains the redirect command.

The command that redirects respondents to the external system simply needs to specify the URL of the appropriate page in the external system. No additional information is required in this command.

However, depending on your needs, you can choose to pass information to the external system via this redirect command. For example, you can include the URL of the Landing page to be used by Event Wire, and any other profile information you want to make available to the external system.

See Chapter 8, "Deploying and Managing Online Dialogs," page 133.

Entering the External System Directly

When customers enter the external system directly, they do not go through the dialog and, therefore, no redirect page is needed in the dialog. The URL of the Landing page to be used in the call to Event Wire must be programmed in the external system by the technical implementer.

See Chapter 9, "Using PeopleSoft Online Marketing Event Wire," Customers Originate at the External System (Scenario 1), page 152.

Enabling the External System to Obtain the Landing Page URL

The external system must be able to specify the Landing page URL in the call to Event Wire. This URL can be provided to the external system by passing it in the redirect command (dynamic URL), or by having your technical implementer program it into the external system (static URL).

Which method you use depends on your needs and on how the customers will enter the external system.

You can always program the Landing page URL directly in the external system (static URL), but for you to be able to pass the Landing page URL dynamically, the customers must come through the dialog.

The redirect command contains the Landing page URL and can also include any profile information about each respondent. The static Landing page URL only contains the location of the Landing page and identifies the dialog.

Redirecting Respondents to the External System

Online Marketing can redirect to the external system all respondents to a Broadcast Email or banner ad. To redirect a respondent, you must include a redirect command in the body of the web page. The redirect command must specify the URL of the external system as well as contain the Landing page URL that the external system will use in its call to Event Wire.

Note. Because additional information must be passed along with the external system URL, Event Wire redirect commands cannot be set up via the document creation process. You must enter the redirect command directly in the body of the web document.

To specify the redirect, create either a Paragraph or Custom HTML field in a web document, and insert the following command:

```
<META HTTP-EQUIV="Refresh" CONTENT= "0;URL=http://
URL_of_external_system/path_and_target?
lpurl_param={Merge_field_for_link_to_landing_page}&
param_2={value_for_param_2}&
...
param_n={value_for_param_n}">
```

URL_of_external_ system	The URL of the external system.
path_and_target	The location of the application on the external system.
lpurl_param (landing page URL parameter)	Any parameter name you want to use to specify the Landing page URL.
Merge_field_for_ link_to_landing_ page	The Landing page URL that must be passed on to Event Wire. This value is obtained by inserting a Web Link merge content item in the document. The external system must store this value and include it in the Event Wire call.
param_n (parameter n)	Any parameter name you want to use for any other information you want to pass to the external system. You can specify as many parameters as you need.
value_for_param_n (value for parameter n)	The value for each parameter. Typically, this value is a profile attribute obtained via a merge content item.

For example:

```
<META HTTP-EQUIV="Refresh" CONTENT= "0;URL=http://
mystore.com/cgi-bin/gx.cgi/catalog/EEC?
```

```
lpurl=<pstag:webLink name="landing" format="Text" id="20746" />">
```

When the dialog is running, the lpurl value will be converted to a specific URL by Online Marketing, and the actual redirect command will be similar to:

```
<META HTTP-EQUIV="Refresh" CONTENT= "0;URL=http://
mystore.com/DES/catalog+EEC?
lpurl=<pstag:url name="EWLink" value="Event Wire Dialog 3.landing"
format="HTML"⇒
id="20352"/>">
```

Note. To obtain the Landing page URL, insert a merge content item (click the Merge button, click Web Link, and enter the specific information). Then, when setting up the dialog, select the target landing page in the dialog link area.

Typically, you specify the redirect command in the body of the web document (in a paragraph). However, your technical implementer may want to use another method of transferring information to the external system, such as a cookie. In this case, the implementer will need to provide you with the appropriate code to insert in the web document.

Setting the Landing Page URL in the External System

Whenever customers can enter the external system directly, you must have the Landing page URL programmed in the external system so that it can be used in the call to Event Wire. This programming is typically performed by your technical implementer.

To set the static URL in the external system, you must first obtain the URL for the Landing page by generating the Dialog Link Report.

See Chapter 8, "Deploying and Managing Online Dialogs," Generating URLs for Web Link Promos and External Event Triggers, page 138.

Using Multiple Dialogs with the Same External System

When customers originate as Online Marketing respondents, they are redirected to the external system and information can be passed to the external system in the redirect command. When the external system makes its call to Event Wire, the Landing page URL can specify a page that is in the original dialog or it can be in a different dialog.

When the redirect and the Landing page are in different dialogs, you can obtain the URL for the Landing page by inserting a cross-dialog link on the redirect page.

Enabling Online Marketing to Handle Passed Data

Online Marketing can store information it receives from the external system in the profile database, or it can list the information in the dialog results.

To accept data from the external system, the Landing page must include the appropriate fields to receive all the data. You must decide which document or profile attributes to include on the Landing page, which fields to make required, and which fields are included only for dialog analysis. Event Wire does not support Text Block or File field types, so do not include those fields on landing pages intended to be used by Event Wire. Also, Event Wire does not support survey dialogs.

Field Matching Rules in the Dialog

Dialogs can use Profile Rules to determine whether a customer from the external system is known in the Online Marketing profiles.

If any matching rules are used by the dialog, you must ensure that the external system provides all of the matching fields in addition to the required fields on the Landing page. Without specifying these fields, you cannot update the profile database.

If matching fields are not included in an otherwise valid Event Wire call, the data will be available through CRM Analytics, but no data will be saved in the profile database.

Using a Standalone Web Page

A Landing page allows you to submit information to a dialog. However, if you want the external system to only record a visit to the site, you can use a Standalone page. A Standalone page does not include a submit button, and, therefore, no profile information can be passed to a dialog via a Standalone page. The Standalone page is used to record the number of times that a particular event occurs at the external system. This information can be viewed through CRM Analytics.

A Standalone page can also be used as the redirect page to redirect respondents to the external system without having them view any dialog pages.

Using Required Fields on Landing Pages

When a Landing page uses required fields, Event Wire performs additional processing to ensure that the requirements are met for each call it receives from the external system. Specifying required fields can be helpful during the design and testing phase of your dialog to ensure that the external system is passing the appropriate parameters. However, using required fields in a live dialog results in slower overall performance. Therefore, after testing the implementation to ensure proper operation, you should change the fields, marking as *not required* all but the necessary required fields. This prioritization improves system performance.

Note. Be sure to leave necessary required fields marked as *required*; otherwise, bad data might be inserted into the PeopleSoft CRM database.

Using Default Values

Event Wire can automatically use default values set in the Event Wire Landing Page. However, before these default values can be used, you must inform your technical implementer of the values, especially if any involve merge content.

Deploying Dialogs

After designing the dialog, perform the following tasks:

1. Test the dialog to ensure that it works properly.

2. Collaborate with your technical implementer to perform a manual test with Event Wire (entering specific commands in a web browser to ensure proper operation).

3. Collaborate with your technical implementer to test the dialog using your external system.

4. Go live with the dialog.

After designing an Online Marketing dialog, you need to verify that it performs as intended. You (or the technical implementer) should then check that the external system is placing calls to Event Wire correctly.

You test your dialog by placing it in Testing state. While in Testing, you (or your technical implementer) can make calls to Event Wire to test that the dialog is performing properly. You can place the calls by entering the command directly in a browser. PeopleSoft Online Marketing Integration Guide.

After you verify that the dialog functions as intended, the dialog still should be tested through the external system while the dialog is in Testing. After ensuring that the external system is working properly with Event Wire, you are ready to change the dialog to Live state, generate the appropriate URLs, and ensure that the correct URLs are being used by the external system.

The last step before going live is to verify that all the changes were made correctly and that system performance is as expected.

See <u>Part 3, "PeopleSoft Online Marketing Integration," page 237</u>.

Making Changes to a Live Dialog

After your Online Marketing dialog is integrated with the external system, if you make changes to the fields in the Landing page used by the external system, then the external system call to Event Wire may also need to be modified.

For example, if you change some fields on the Landing page, the technical implementer may need to modify the call from the external system to use the correct fields.

PeopleSoft Online Marketing Administration

Chapter 10
Mail Service Operation

Chapter 11
Using the Control Center

Chapter 12
Using the WatchDog Utility

Chapter 13
Email Response Processor

Chapter 14
Importing and Exporting Dialogs

CHAPTER 10

Mail Service Operation

This chapter describes the configuration and operation of the PeopleSoft Online Marketing Mailcasters and Single Mailers.

This chapter includes the following sections:

• Understanding Mailcasters

• How the Mailcaster Works

• Mailcaster Recovery

• Mailcaster Operation

• Mailcaster Configuration Parameter Reference

• Understanding the Single Mailer

• Single Mail Recovery

• Single Mailer Configuration Parameters

• Understanding Email Frequency Management

• Managing Email Frequency

See Also

PeopleSoft Enterprise CRM 9 Supplemental Installation Guide

Understanding Mailcasters

Four types of Mailcasters can be configured to work with Online Marketing:

• Small Job Only Mailcaster.

• Small Job Priority Mailcaster.

• Large Job Priority Mailcaster.

• Large Job Only Mailcaster.

The three types are defined by the kinds of mail jobs they are set up to handle. Each one is described in more detail in the following sections.

Small Job Only Mailcaster

The Small Job Only Mailcaster, as its name implies, handles only small mail jobs. The actual size of a small mail job is configurable, and is controlled by the configuration parameter smallAudienceThreshold. Only those jobs containing fewer emails than this parameter specifies can be handled by a Small Job Only Mailcaster.

Typically, Small Job Only Mailcasters are used to handle test dialogs and dialogs with very small audiences.

To define a Mailcaster as Small Job Only, set the following configuration parameters:

- smallJobOnly = true
- maxJobSize = <a value equal to or smaller than smallAudienceThreshold>

Small Job Priority Mailcaster

Like the Small Job Only Mailcasters, Small Job Priority Mailcasters handle small jobs; however, Small Job Priority Mailcasters will also handle large jobs if no small jobs are available for processing.

To define a Mailcaster as Small Job Priority, set the following configuration parameters:

- smallJobOnly = false
- maxJobSize = <a value smaller than smallAudienceThreshold>

If any small jobs exist in the queue at the time this Mailcaster becomes available, it will take these jobs first. If only large jobs exist, it will process large jobs only until another small job becomes available.

Large Job Priority Mailcaster

Large Job Priority Mailcasters are configured to handle large mail jobs first, and to process small jobs only if no large jobs are available.

To define a Mailcaster as Large Job Priority, set the following configuration parameters:

- smallJobOnly = false
- maxJobSize = <a value larger than smallAudienceThreshold>

If any large jobs exist in the queue at the time this Mailcaster becomes available, it will take these jobs first. If only small jobs exist, it will process small jobs only until another large job becomes available.

Large Job Only Mailcaster

The Large Job Only Mailcaster handles only large mail jobs. The actual size of a large mail job is configurable, and is controlled by the configuration parameter smallAudienceThreshold. Only those jobs containing more emails than this parameter specifies can be handled by a Large Job Only Mailcaster.

How the Mailcaster Works

This section describes the basic operation of the Mailcasters. It describes the mail queue, the way Mailcasters handle jobs, and job assignment priority. Also included is an example of Mailcaster operation.

The Mail Queue

Mail jobs are placed in the mail queue by the Online Marketing Dialog Server (also called the DES). When a Mailcaster is started, it immediately checks the mail queue for jobs that match its configuration. If it finds such a job, it handles the job (either by processing the entire job or by taking a smaller piece of it to process, depending on how it is configured) and then checks back with the queue for another job. If it does not find a job that matches its configuration (for example, if it is a Small Job Only Mailcaster and the queue contains only large jobs) it will go to sleep for one minute, then wake up and check again. It will continue this process until an appropriate job becomes available.

If multiple Mailcasters have been configured, each one goes through the same process of checking the queue and taking a job that most closely matches its particular configuration. If more than one such job exists at the time a Mailcaster checks the queue, it will by default take the oldest available job (the one that has been on the queue the longest) to process.

Each time a Mailcaster finishes processing a job, it becomes available and immediately checks the queue again for a new job.

Job Types

Mailcasters handle three types of jobs:

• Parent jobs

• Child jobs

• Small jobs

A parent job is a mail job that is divided into smaller jobs, which are then handled by Mailcasters. Parent jobs are by definition large mail jobs (that is, jobs larger than the smallAudienceThreshold parameter).

A child job is a subset of a parent job—each parent job can have two or more child jobs, with the actual number determined by the interaction of the following factors:

• The size of the parent job

• The percentageJobSize parameter

• The maxJobSize parameter

• The minJobSize parameter

Refer to Mailcaster Configuration Parameter Reference on page 17 for a description of the configuration parameters, and to How Job Size is Determined on page 4 for information on job sizes.

A small job is a mail job that contains fewer records than the value of the smallAudienceThreshold parameter. Small jobs are handled as single jobs and are not broken into child jobs.

How Job Size is Determined

Job size refers to the size of a "chunk" of emails a given Mailcaster will accept for processing. In the case of a small job (a job containing fewer emails than specified by the smallAudienceThreshold configuration parameter), a Mailcaster takes the entire job and processes it as a single entity. In the case of larger jobs, these jobs are divided into smaller "child" jobs and processed by different Mailcasters. In this way, a Mailcaster that has finished processing a job can obtain another job from the queue and continue processing rather than being forced to remain idle until all the other jobs have finished.

The configuration parameters that govern job size are smallAudienceThreshold, minJobSize, maxJobSize, and percentageJobSize.

Mailcasters of type Small Job Only will only accept jobs where is_small_job is set to 'y'. This is done during deduping by the DES when the job size is less than the smallAudienceThreshold used by the DES. Note that smallAudienceThreshold can be set for each Mailcaster.

For large jobs, the Mailcaster (of type Large Job Priority or of Small Job Priority if there are no small jobs in the queue) divides the job up into smaller "child" jobs using the following guidelines:

1. First it looks at the overall job size. If the entire job fits within the range specified by minJobSize and maxJobSize, it divides the job into a single child job. For example, if the job size is 2112 emails, minJobSize is set to 2000, and maxJobSize is set to 10000, this job falls in the range of 2000–10000 and is processed as a single child job.

2. If the job does not fit within the range specified in minJobSize and maxJobSize, the Mailcaster will look at the percentageJobSize parameter and attempt to divide the job using its value. For example, if the parent job is 100,000 records and percentageJobSize is 3, the Mailcaster will attempt to use a job size of 3000 (3% of 100,000).

3. Next, it will look again at the minJobSize and maxJobSize parameters. If the child jobs in step 2 do not conform to these parameters, it adjusts them so they do. For example, if maxJobSize was set to 2000, it would not be possible for this Mailcaster to process a job of 3000 records. Instead, a job of 2000 records is created. Likewise, if minJobSize was set to 5000 records, then a 5000-record job would be created and processed. However, minJobSize is ignored if there are not enough emails left to send.

Job Assignment Priority

Mailcasters search the queue for jobs in priority order, based on the job's type and its current state. Refer to Job Types on page 4 for a description of the types of jobs handled by Mailcasters, and to Mail Job States on page 6 for a description of job states.

Small Job Only Mailcasters and Small Job Priority Mailcasters look for jobs in the following order:

1. Small mail jobs in RECOVERING state

2. Small mail jobs in RUNNING state that are not being updated (also called "hanging" jobs)

3. Small mail jobs in QUEUED state

   At this point if the Mailcaster is Small Job Only it can go no further, because these are the only types of mail jobs it can process. If it is a Small Job Priority Mailcaster, it continues its search:

4. Child jobs in RECOVERING state

5. Jobs in P_ASSIGNING state

6. Jobs in P_QUEUED state.

Large Job Priority and Large Job Only Mailcasters look for jobs in the following order:

1. Large jobs in RECOVERING state

2. Large jobs in RUNNING state that are not being updated ("hanging" jobs)

3. Jobs in P_ASSIGNING state

4. Jobs in P_QUEUED state

5. Small jobs in RECOVERING state (*Large Job Priority Mailcasters only*)

6. Small jobs in RUNNING state that are not being updated ("hanging" jobs)(*Large Job Priority Mailcasters only*)

7. Small jobs in QUEUED state. (*Large Job Priority Mailcasters only*)

Mail Job States

This section describes the various states for mail jobs. These states appear in the Control Center.

Parent Mail Job States

The following states apply to parent mail jobs only.

State	Description
QUEUING	The parent job is waiting for processing—that is, it has not yet entered the dedup stage. (Deduping is a process done by the DES when the mail job is first created. A mail job can be sent to multiple audiences, and a contact can likewise be in multiple audiences. Deduping is the process where it is ensured that even if a contact is in multiple audiences of a mail job, that contact receives the mail only once.)
P_QUEUED	The parent job has finished deduping, but has not been worked on by a Mailcaster.
P_ASSIGNING	The parent job is being processed, but not all child jobs have yet been created. It is in the process of assigning child jobs.
P_ASSIGNED	The parent job has finished processing. All child jobs have been assigned but they have not yet finished running.
P_FINISHED	All child jobs are finished—the job has been completed successfully.
P_FAILED	All child jobs have failed.
P_PARTIAL_FINISHED	Some child jobs are finished and some have failed.
STOPPED_R	The job was stopped while it was in RUNNING state, using the Control Center. If the job is restarted, it will be changed to RECOVERING state.
STOPPED_Q	The job was stopped while it was in a P_QUEUED state. If the job is restarted it will revert to the P_QUEUED state.

Small Mail Job States

The following state applies only to small jobs.

State	Description
QUEUED	The job has finished deduping and is waiting to be processed by a Mailcaster.

Child and Small Job States

The following states apply to child and small jobs.

State	Description
RECOVERING	A child or small job is ready for recovering. This status is used when the Administrator performs the manual recovery—the Administrator sets the job status to RECOVERING by stopping and restarting the job using the Control Center, then waits for the Mailcaster to restart the job.
RECOVERED	When a Mailcaster picks up a job in RECOVERING state and creates a new job for it, it is marked RECOVERED.
STOPPED_R	The job was stopped while it was in RUNNING state, using the Control Center. If the job is restarted, it will be changed to RECOVERING state.
STOPPED_Q	The job was stopped while it was in a QUEUED state. If the job is restarted it will revert to the QUEUED state.
STOPPING	The job is in the process of being stopped from the Control Center, but the Mailcaster has not yet finished stopping it. When the job has finished stopping it will be updated to a STOPPED_R state. STOPPING is a transient state.
INTERRUPTED	The Online Marketing Dialog Server has crashed during the dedup process and an orphaned job has been left in the database. When the scheduler next runs, it will update any such jobs to the INTERRUPTED status.
FAILED	The job has failed to complete.
FINISHED	The job has finished successfully.
RUNNING	The job is being processed by the Mailcaster.

Parent, Child, and Small Job States

The following state applies to all types of mail jobs.

State	Description
STOPPED	The small, child, or parent job has been stopped because the dialog was edited and the BulkEmailTask has been deleted. A job will also be marked STOPPED if it has no recipients.

See .

Mailcaster Recovery

When something unexpected (such as a system crash or power failure) occurs while Mailcasters are running, jobs can be left in a "hanging" state. It is necessary to recover these mail jobs and, if necessary, resend them. There are two types of recovery:

- Automatic—the Mailcaster performs the recovery operation

- Manual—the Administrator performs the recovery operation

Note. Recovery applies only to small and child jobs. Note also that Small Job Only Mailcasters will not recover child jobs. This is because in order to recover a child job, the Mailcaster must process the entire job, and its job size could be greater than the Mailcaster's maxJobSize.

Automatic Recovery

In automatic recovery, the Mailcaster recovers a hanging job using the recover log table from the database. Depending on the time the hang occurred, it is possible that the recovering process might send out one or more duplicate emails. This is because, when using the recovery table to reconstruct the job, the Mailcaster can encounter a gap between the sending of the mail and the writing to the recovery log. This can result in the sending of at most one duplicate email per send mail thread.

To specify automatic recovery, set the automaticMailJobRecovery configuration parameter to true.

Manual Recovery

In manual recovery, the Mailcaster does not try to recover the hanging job. Instead, the Administrator must manually restart the job using Control Center. To do this, stop the job and then restart it. This changes the job's status to RECOVERING, which allows a Mailcaster to pick it up and create a new one from it. This might be desirable, for example, if Mailcasters were being run in different time zones. The new job is identical to the old one except that it has a new Job ID number and lists the original Job ID as its parent job.

To specify manual recovery, set the automaticMailJobRecovery configuration parameter to false.

Recovery Expiration

In some cases, you might not want a hanging mail job to be recovered. For example, if the job in question was a broadcast email announcing special sale prices good for this Saturday only, it would not make sense to recover the job if it was hanging beyond the end of the business day on Saturday. Likewise, you would not want to send a reminder to attend a seminar after the seminar is over. To handle these time sensitive situations, you can set a time period in hours after which no attempt will be made to recover the mail jobs.

To specify a recovery expiration, set the jobRecoveryExpireInHours configuration parameter to the number of hours after which you no longer want mail jobs recovered.

Mailcaster Operation

This section contains an example Mailcaster run, illustrating some of the concepts discussed in this chapter.

Mailcasters

In this example, the system uses seven Mailcasters, numbered #1 through #7.
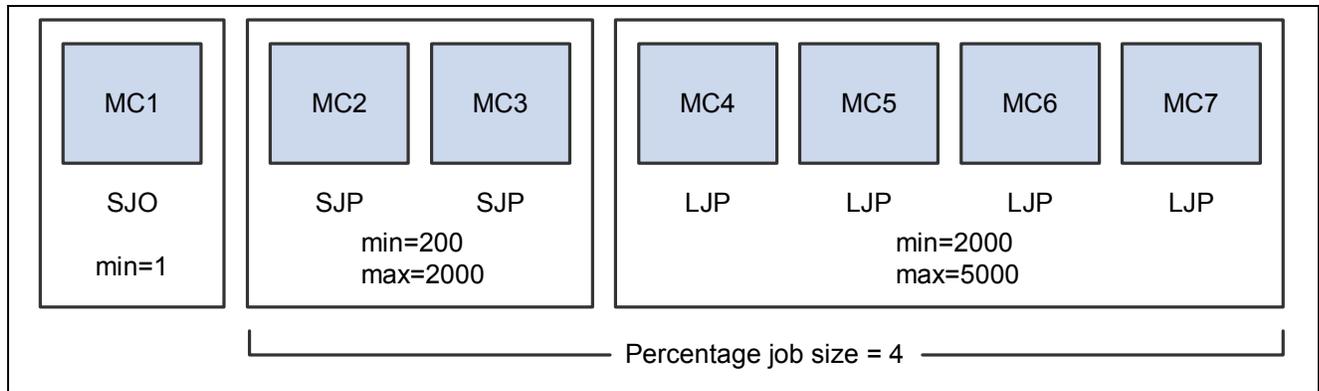
Mailcaster diagram 1

- Mailcaster 1 is Small Job Only, with a minJobSize of 1.
- Mailcasters 2 and 3 are Small Job Priority, with minJobSize=200 and maxJobSize=2000.
- Mailcasters 4 through 7 are Large Job Priority, with minJobSize=2000 and maxJobSize=5000.
- For Mailcasters 2 through 7, percentageJobSize is set to 4.
- smallAudienceThreshold is set to 2000.
- Automatic Recovery is on.

Mail Queue

For the example, the mail queue (in the PS_RY_BULK_JOB table) contains three jobs:

- Job 101 contains 11,000 emails, is_small_job is n, status is P_QUEUED.
- Job 102 contains 135 emails, is_small_job is y, status is QUEUED.
- Job 103 contains 200,000 emails, is_small_job is n, status is P_QUEUED.

The Process

All the Mailcasters have already been started. In this example, Mailcaster 1 (the Small Job Only Mailcaster) wakes up first and checks the queue for a job.

It looks at Job 101 first, but skips it because it is not a small job.

Next, it checks Job 102. At 135 emails, is_small_job is y, so Mailcaster 1 begins processing it and changes its status to RUNNING.
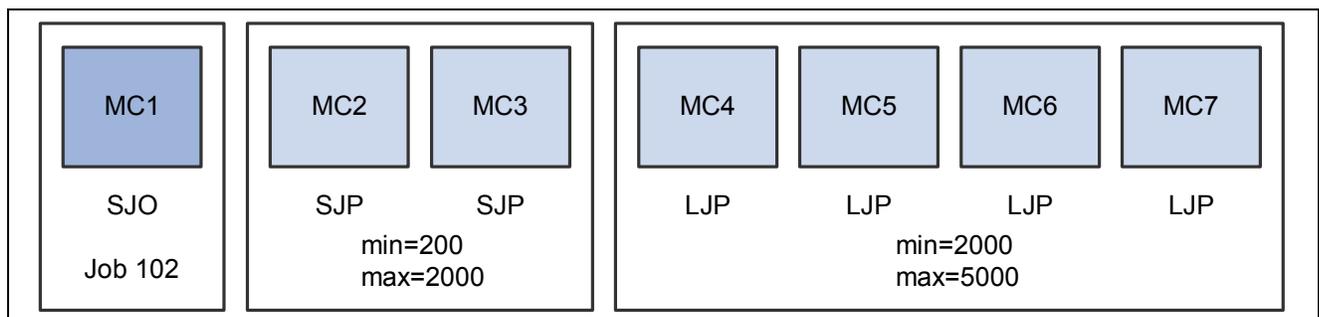
Mailcaster diagram 2

Next, Mailcaster 4 wakes up. It checks the queue and finds Job 101 waiting in P_QUEUED state. Because there are no large jobs in RECOVERING state, hanging, or in P_ASSIGNING state (the first three priorities for Large Job Only Mailcasters), it takes Job 101. It updates Job 101's status from P_QUEUED to P_ASSIGNING and inserts a new job, Job 104, in the PS_RY_BULK_JOB table with status RUNNING.

Because Job 101 is larger than Mailcaster 4's maxJobSize of 5000, it will have to be broken into child jobs. To determine the size of Job 104 (the child job), Mailcaster 4 first checks the percentJobSize parameter, which is 4. Dividing 11,000 emails into chunks of 4% each results in jobs of 440 emails. Because this value is smaller than the Mailcaster's minJobSize of 2000, the Mailcaster instead sets the child job to 2000 emails and begins processing it.

The queue now looks like this:

Job 101 (P_ASSIGNING)

Job 103 (QUEUED)

Job 104 (RUNNING)

Job 101, which formerly had 11,000 emails, now has 9,000 remaining.
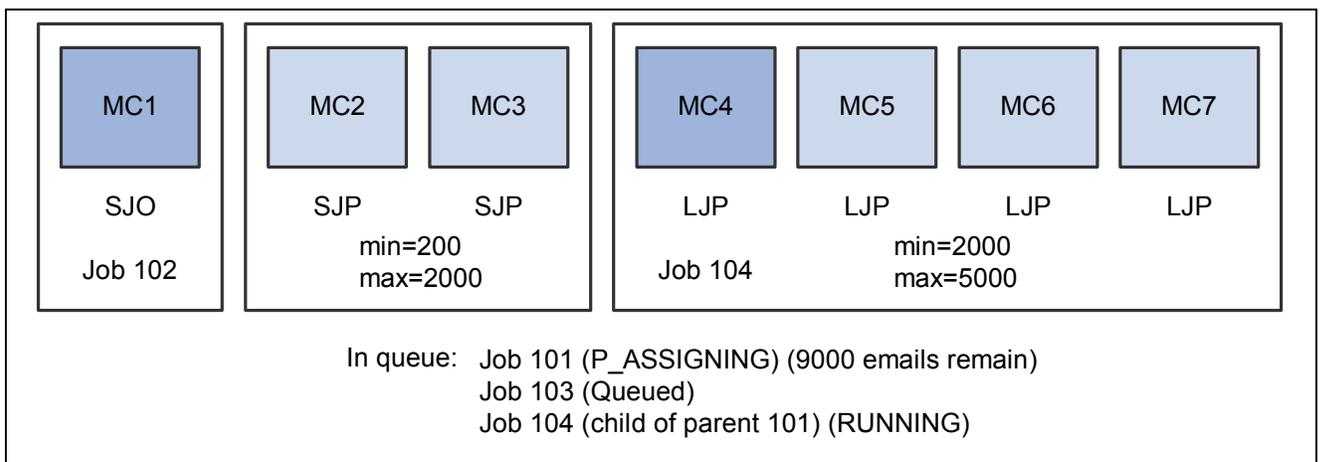
Mailcaster diagram 3

Next, Mailcasters 5, 6, and 7 wake up in order, check the queue, and in each case they find Job 101 still in P_ASSIGNING state.

Mailcaster 5 creates child job 105 with 2000 emails.

Mailcaster 6 creates child job 106 with 2000 emails.

Mailcaster 7 creates child job 107 with 2000 emails.

In each case, the jobs are set to RUNNING and the Mailcasters begin processing them.

At this point, parent job 101 has 3000 emails remaining (9000 - 6000).

Note. In all three cases, Mailcasters 5 through 7 ignored the percentageJobSize parameter because its result was smaller than the Mailcaster's minJobSize.

MC1	MC2	MC3	MC4	MC5	MC6	MC7
SJO	SJP	SJP	LJP	LJP	LJP	LJP
	min=200 max=2000					
Job 102			Job 104	Job 105	Job 106	Job 107

In queue: Job 101 (P_ASSIGNING) (3000 emails remain)
            Job 103 (Queued)
            Job 104 - 107 (RUNNING)
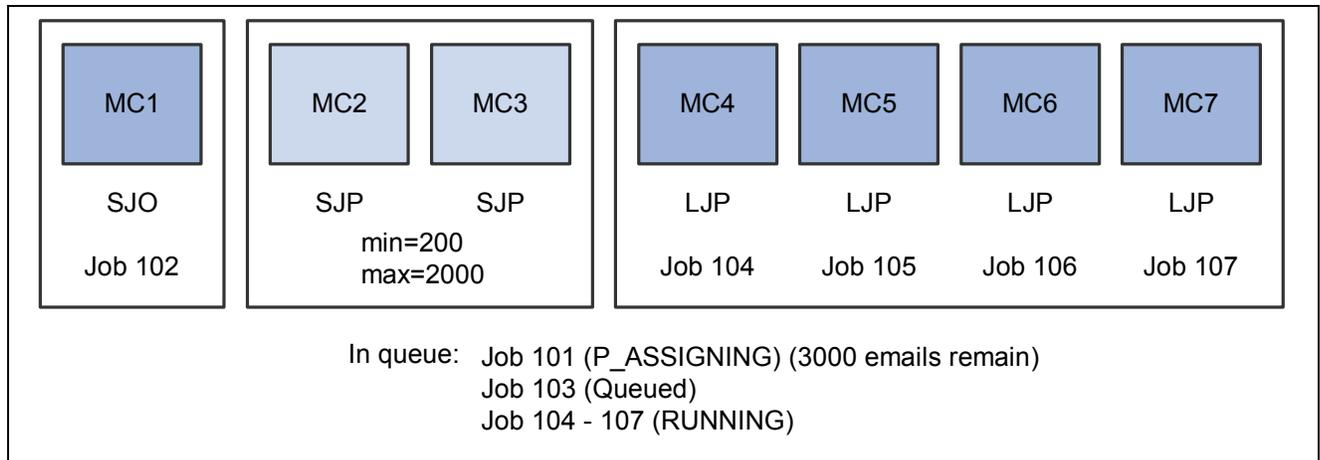
Mailcaster diagram 4

Mailcaster 2 wakes up and checks the queue. Although Mailcaster 2 is a Small Job Priority Mailcaster, there are no small jobs available so it discovers Job 101 still in P_ASSIGNING state. Checking percentageJobSize, it finds that the result is smaller than its minJobSize (4% of 3000 is 120, or less than 200) so it creates Job 108 with 200 emails.

Mailcaster 3 wakes up, checks the queue, and creates Job 109 with 200 emails.

Parent Job 101 now has 2600 emails.

MC1	MC2	MC3	MC4	MC5	MC6	MC7
SJO	SJP	SJP	LJP	LJP	LJP	LJP
Job 102	Job 108	Job 109	Job 104	Job 105	Job 106	Job 107

In queue: Job 101 (P_ASSIGNING) (2600 emails remain)
            Job 103 (Queued)
            Job 104 - 109 (RUNNING)
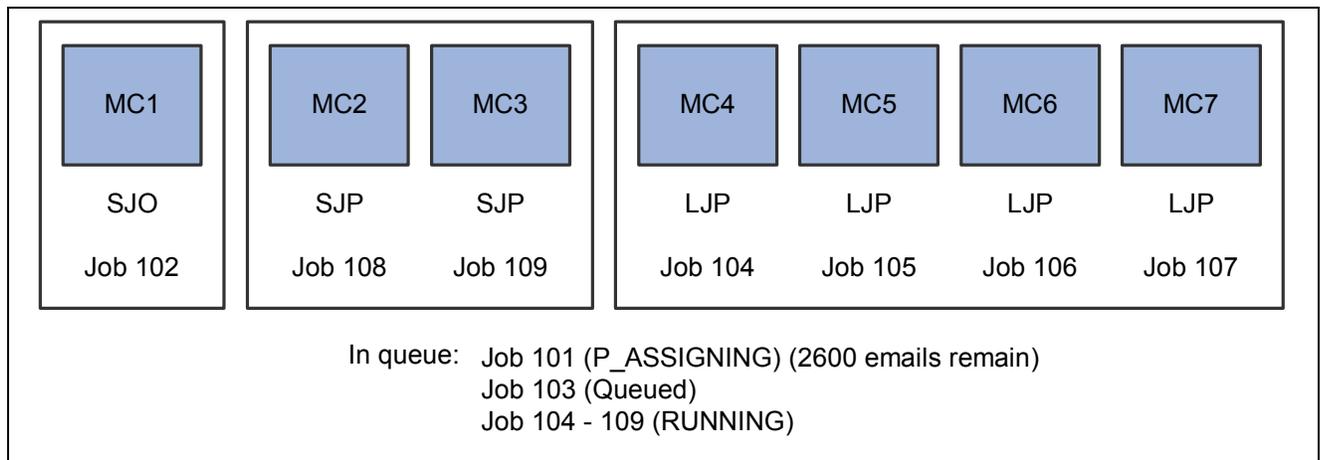
Mailcaster diagram 5

Mailcaster 1 finishes processing its job and marks it FINISHED. It checks the queue, but there are no small jobs available for processing. It goes to sleep, and will wake up again in 1 minute to check again.

Mailcaster 4 finishes processing its job, marks it FINISHED, and checks the queue. It finds Job 101 still in P_ASSIGNING state, so it creates Job 110 with 2000 emails, marks it RUNNING, and begins processing it.

600 emails remain in Job 101.
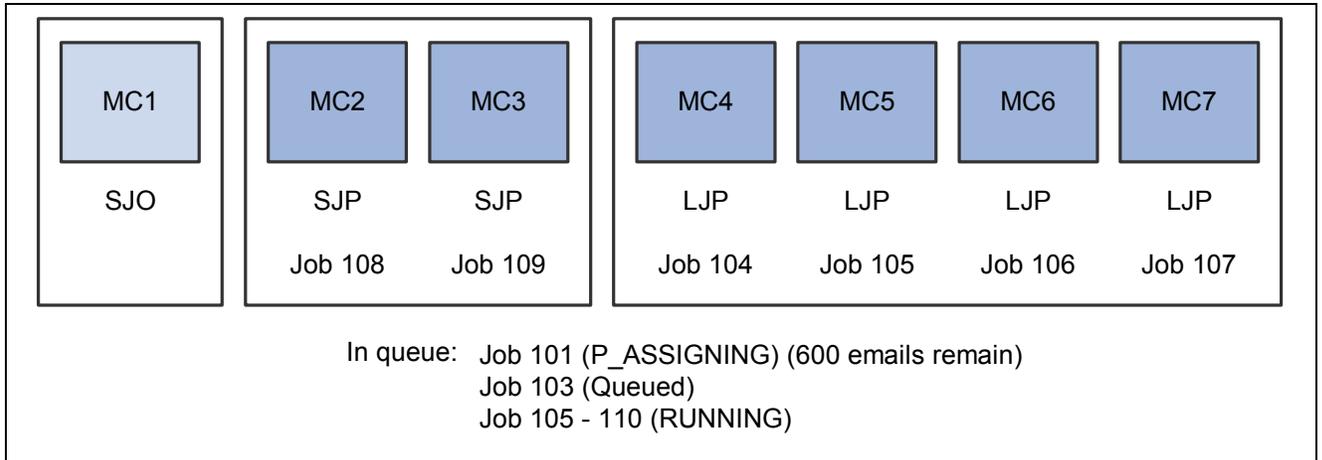
Mailcaster diagram 6

Mailcaster 6 wakes up and creates a new child job to process the remaining 600 emails in Parent Job 101. Job 101 is now in P_ASSIGNED state—all the jobs have been assigned, but have not yet finished processing.

All the Mailcasters processing children of Parent Job 101 finish successfully. Job 101 is marked P_FINISHED.
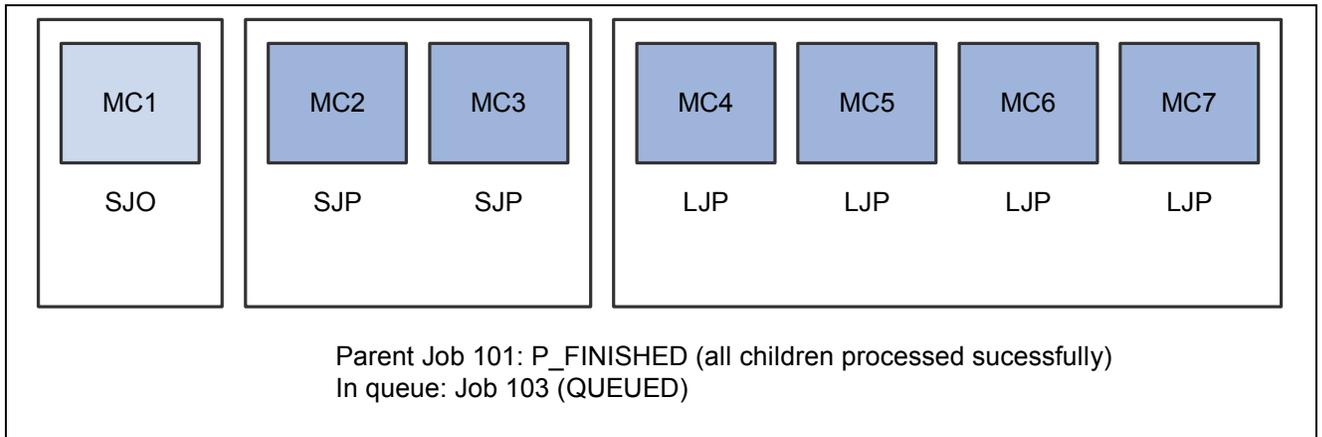
Mailcaster diagram 7

When the Mailcasters next check the queue, they will begin dividing up and processing Job 103. Mailcaster 1 (the Small Job Only Mailcaster) will be idle until another small job is added to the queue.

Mailcaster Configuration Parameter Reference

The following table lists the configuration parameters that control the Online Marketing Mailcasters. Mailcaster configuration parameters are set in the MCR.config file.

smallAudienceThreshold   Defines what the DES considers to be a "small" mailjob. In conjunction with the maxJobSize parameter, defines whether a Mailcaster is Small Job Priority or Large Job Priority.

The default value is 100.

smallJobOnly   If the Mailcaster is a small Mailcaster and this parameter is set to true, the Mailcaster is defined as a Small Job Only Mailcaster and will only process

	small jobs. If it is set to false, the Mailcaster can process both small and large jobs. Default is false.
	smallJobOnly is ignored if the maxJobSize for a Mailcaster is greater than or equal to the smallAudienceThreshold.
minJobSize	The minimum size for a child mailjob. This value must be smaller than maxJobSize.
	The default value is 2000.
maxJobSize	The maximum size for a child mailjob. This value must be larger than minJobSize. In conjunction with the smallAudienceThreshold parameter, defines whether a Mailcaster is Small Job Priority or Large Job Priority.
	The default value is 10000.
percentageJobSize	The percentage of a large job to use as a child job size. This value must be greater than 0; the default is 3.
	Note that if the calculated percentage is smaller than minJobSize or larger than maxJobSize, these values are used instead of percentageJobSize.
	Note also that when percentageJobSize is used to divide up a large job into equally-sized child jobs, any records remaining are included in their own (smaller) child job.
recoveryStringUpdateFrequency	Defines the number of emails that are sent before the Mailcaster updates the database tables with information about the job. Setting this parameter to a low number results in more accurate reports in the Control Center but can slow down performance; setting it high increases performance but Control Center reports will be less up-to-date.
	The default value is 100.
automaticMailJobRecovery	When a Mailcaster detects a hanging running job (that is, a job with status Running that has not been updated in the last two hours), this parameter is used to determine if the Mailcaster will try to recover it.
	If the parameter is set to false, the Mailcaster will not try to recover the job and the Administrator must manually recover it. If it is set to true, the Mailcaster recovers the job automatically. In some cases this can result in the sending of duplicate emails. Default is true.
jobRecoveryExpireInHours	The time period, in hours, after which mail jobs will not be recovered. This parameter is commonly used when dealing with time sensitive audiences or mailings containing time sensitive information.
	The value must be greater than 0, and the default value is 96.

Understanding the Single Mailer

Single mails to be sent are placed on the single mail queue. If the mails are to be sent immediately, they will have a status of Queued. If they have been scheduled to be sent in the future then they will have a status of Scheduled. The single mailers update the email status from Scheduled to Queued when the appropriate time is reached.

When a single mailer starts to send mail, it reserves a batch of emails for it to send. It then sends those emails sequentially. If problems occur during the rendering or sending of the email then the single mail is updated with the appropriate error code and description. This allows the administrator to fix the underlying problem. They can then resubmit the failed mails for delivery using the Control Center.

A single mailer can recover mail reserved by another single mailer but not sent. After a configurable time period mails that have been reserved by a single mailer and not sent will be updated so that they are no longer reserved by that process. They can then be sent by any running single mailer.

The following table displays a list of single mailer states:

State	Description
Scheduled	The mail is scheduled to be sent in the future.
Queued	The mail is queued to be sent.
Sending	The mail is in the process of being sent.
Failed	The single mailer attempted to send the mail but it failed in rendering or in delivery.
Paused	The mail has been paused due to a change in dialog state.
Stopped	The mail has been stopped due to a change in dialog state or dialog editing.

The following table displays a list of single mailer error codes:

Error Code	Description
Bad Email Address	The recipient's email was rejected by the mail server.
Persistence Exception	There was an error with the database when loading the email.
Failed to Load Campaign or Document	There was a problem with the metadata of the document or the dialog.
VCRenderingException	There was a problem in rendering the email.
FailSingleEmail	There was a problem in rendering the email in a custom function.
IOException	There was a problem sending the email.
TagFormatException	There was a problem with the document when rendering the email.
SenderNotAccepted	The sender's address was not accepted by the mail server.

See Also

177

Understanding Email Frequency Management

When sending email as part of an online dialog, a marketer might want to keep track of how many emails have been sent to a given person during a given time period, to avoid annoying recipients with too many emails in too short a time. Email frequency management lets you set thresholds for number of emails allowed to be sent in a specified time period. Counters keep track of how many emails have been sent to each recipient, and when the threshold for a recipient is reached the system queues up the remaining emails and holds them until time has passed and the previously sent emails age out of the counters.

For example, suppose you have specified that recipients should receive no more than 3 emails in 7 days, and that the 7 days begins on May 20. If, on May 20, 5 emails are intended for a recipient, 3 of these will be sent (and that person's counter will be incremented for each email) and the other 2 will be queued and sent on May 28 (after 7 days the first emails will have aged out of the counters). That person can then receive one more email between May 28 and June 4 (the next 7-day period).

Email frequency management also includes a Process Scheduler batch job that runs on a schedule to decrement the counters as sent emails "age out" of the delivery window. You can specify that if an email ages beyond a certain point (for example, if the email announces a seminar and the date of the seminar has passed by the time the recipient can receive more emails), the email is removed from the queue and logged as not delivered.

Managing Email Frequency

Online Marketing manages email frequency using an Email Frequency Policy. This policy includes policy rules, which specify the number of emails that can be sent to a recipient in a specified time period. Each email frequency policy can contain four policy rules. This section describes the functionality of the email frequency policy, the policy rules, and the email frequency queue.

Email Frequency Policy

You define the email frequency policy on the Global Options page.

When it is enabled, the global frequency policy governs all emails that Online Marketing sends, for all online dialogs. It specifies the defaults for whether the counter should be incremented with each email, the maximum number of days that emails should remain in the queue before being removed ("shelf life"), and how the queue should behave.

Once it has been enabled, disabling the global frequency policy results in the loss of all prior logging of email. No historical data is retained. Further, it also results in the immediate sending of all the waiting emails that are currently in the email frequency queue. If you do not want this to occur, you must delete all messages from the queue using the Control Center's Email Frequency Queue page.

You can override the global frequency policy on the Broadcast Email and Single Email pages in the dialog flow—in this case, the system will use the settings you specify for that email only, but the global policy will continue to be in effect for all other emails.

Frequency Policy Rules

Each contact has four aggregated counters to keep track of how many emails the contact has been sent. These counters correspond to four counter rules, which consist of a maximum email count and a time duration. For example, you might specify a one-day count, a seven-day count, a 30-day count, and a 90-day count. You can set each rule independently to Active or Inactive; only the counters corresponding to rules that are in the Active state will be updated.

Rolling counter policy rules are used to "age out" messages that are reflected in counters. Each time an email is sent, the recipient's counter is incremented. Each night, a batch job runs to decrement the rule counters for those messages that are older than the rule calendar window. When these counters have been decremented, any emails that are queued can be sent (provided that they comply with any other rules set for that recipient).

By default, four global calendar counter rules are included: 1 day, 7 days, 30 days, and 90 days. You can change these rules globally, or you can change them by individual email.

Note. The system enforces consistency between the rules so that they do not contradict each other: for example, you cannot specify one rule as 1 email per 7 days and another rule as 10 emails per 30 days. The 7-day rule would prevent the 30-day rule from being enforced.

Counters and Counter Calculation

Database tables keep track of the daily email count for a contact. The maximum number of days allowed in defining a policy rule is 365.

To calculate the count, a Process Scheduler batch job runs at a specified time to reset the daily email count log. It reads from the daily count log and produces the aggregated count, according to the active rules. (For example, if a rule's counter is 7 days, the batch job determines the current day and selects the past 7 days' logs (including the current day) .

Email Frequency Queue

When emails cannot be sent to a recipient because he or she has already received the maximum allowable emails for that time period, the remaining emails are placed on the email frequency queue, where they remain until one of four things happens:

• They "age out" of the policy rule and become eligible for sending, at which point they are sent.

• They reach their expiration date (the date after which they should no longer be sent) and they are removed from the queue.

• The global email frequency policy is deactivated, at which point the system attempts to send all the waiting emails in the queue.

• They are manually deleted from the queue.

You can specify (on the global or individual email level) whether the email should be queued if it cannot be sent—if you choose the Do Not Queue option, emails that cannot be sent because they violate the frequency policy will simply be discarded.

You can also specify whether or not to count an email task with the frequency counter. If you specify Do Not Count, the mail service does not increment the frequency counter for that email. Like Do Not Queue, you can specify Do Not Count at the global or individual level.

If you have specified that emails should be queued and that the frequency counter is active, then each time a contact's frequency counter is decremented, the system scans the email queue to see if there are any pending emails for that recipient. Any emails that can be sent (according to the policy) are sent until the recipient's counter once again reaches the maximum allowed by the policy rules.

Expiration of Queued Emails

Every email that is queued because of the frequency counter has an expiration date. This is the date after which the content expires, so that even if it "ages out" of the count and should be allowed to send, it will be removed from the queue and not sent. You can specify the expiration date as an actual date or as a "shelf life" — a time period from the queuing date (for example, 7 days from the date the email is added to the queue).

Note. If an email from a repeating trigger is to be queued, and an email from an earlier sequence exists, the new email will not be added to the queue; instead, it will immediately expire.

Single Email Notifications

Single emails sent to specific addresses (for example, email notifications) are excluded from the frequency policy: they are sent immediately, are not counted toward the user's total for the purpose of incrementing the frequency counters, and are not queued.

Overriding the Frequency Policy

You can choose to override the frequency policy for an email task, opting to ignore the frequency policy rules and send any emails immediately. These emails are still logged, and the frequency counter is still incremented. When you run Dialog Check, you will get a notice that these emails are overriding the frequency policy.

Managing the Email Frequency Queue

You manage the email frequency queue using the Online Marketing Control Center, using the Email Frequency Queue Report page. From there, you can update the queue, delete all queued emails, and attempt to recover failed emails,

See .

Testing Dialogs with Frequency Policies

When a dialog is placed in the Test state, all of its email tasks are created with Override Frequency Policy and Do Not Count selected. This means that staged emails will always be sent, and they will not affect the Live dialog execution. It also means that you will not need to remove queued emails when testing dialogs.

CHAPTER 11

Using the Control Center

This chapter provides an overview of the Control Center and discusses how to:

• Determine DES status

• Administer Scheduler events

• Administer email job reports

• View the dedup email job report

• Administer single email failure and recovery

• Administer the single email queue

• Administer the frequency email queue

• View Dialog Mover status

• Maintain dialog services

Understanding Control Center

The Control Center allows you to perform a number of administration tasks on the Online Marketing Dialog Execution Server (DES). These tasks are generally used to correct a problem, or to assist PeopleSoft Customer Connection representatives in troubleshooting your system.

Note. DES Clustering is only supported on WebLogic.

Determining DES Status

You use the DES status pages to:

• Monitor the server and perform DES Scheduler service tasks.

• Clear the cache.

• Monitor memory usage.

• Change debug flags.

• View status reports for running single mailers, bulk mailers and frequency mailers.

Pages Used to Determine DES Status

Page Name	Object Name	Navigation	Usage
Server Monitor	RY_DES_SERVICE	Marketing, Dialog Monitoring, Server Monitor	Use to monitor the Dialog Execution Server and to perform DES Scheduler service tasks.
Cache	RY_CACHE	Marketing, Dialog Monitoring, Server Monitor Click the Cache tab.	Use to clear or refresh the DES cache for troubleshooting purposes.
Memory Usage	RY_MEMORY	Marketing, Dialog Monitoring, Server Monitor Click the Memory Usage tab.	Use to monitor the DES memory usage for troubleshooting purposes.
Debug	RY_DEBUGFLAG	Marketing, Dialog Monitoring, Server Monitor Click the Debug tab.	Use to change the DES debug flags. This feature should only be used while troubleshooting your software with a PeopleSoft Customer Connection representative.
Email Service	RY_MAILCASTER_INFO	Marketing, Dialog Monitoring, Server Monitor Click the Email Service tab.	Use to display a running status report for all currently installed single mailers or mailcasters.

Viewing Server Monitor Details

Access the DES Server Monitor page.

Control Center - Server Monitor page

When this page is active, the current status of the Dialog Execution Server cluster instances is displayed.

DES Cluster Instances

Displays the running status of the DES instance.

ID	The identifier for the individual DES instance.
IP Address	The network address of the machine running the instance.
Host Name/Port	The name or port number of the machine running the instance.
Status	The status of the instance: *Running* or *Stopped*
Comment	A brief description of the instance's status. Options are:

- Timed out or killed
- Create Failed
- Create Requested
- Create Successful
- Delete Requested
- Shutdown normally
- Initializing
- Run Request Failed
- Run Requested
- Shutting down
- Stop Request Failed
- Stop Requested
- fully functional

Start Time	The time and date at which the instance was started.
Last Update	The time and date of the last time the instance was updated.
Reload	The DES updates its status by default every 30 seconds; click this button if you want to get the latest DES instance status manually.

Scheduler Timer

Manages the execution of dialog jobs, such as triggers and other internal dialog processes. Click Start Timer to start the Scheduler Timer, or Stop Timer to stop it.

Click Timer Status to view the current Scheduler status.

Note. The administrator of WebLogic or WebSphere application servers can stop and restart applications without bringing the server down. PeopleSoft does not recommend doing this with the Dialog Execution Server. If for any reason DES must be stopped and restarted, the server should be recycled by stopping and restarting it.

Clearing Caches

Access the Cache page.
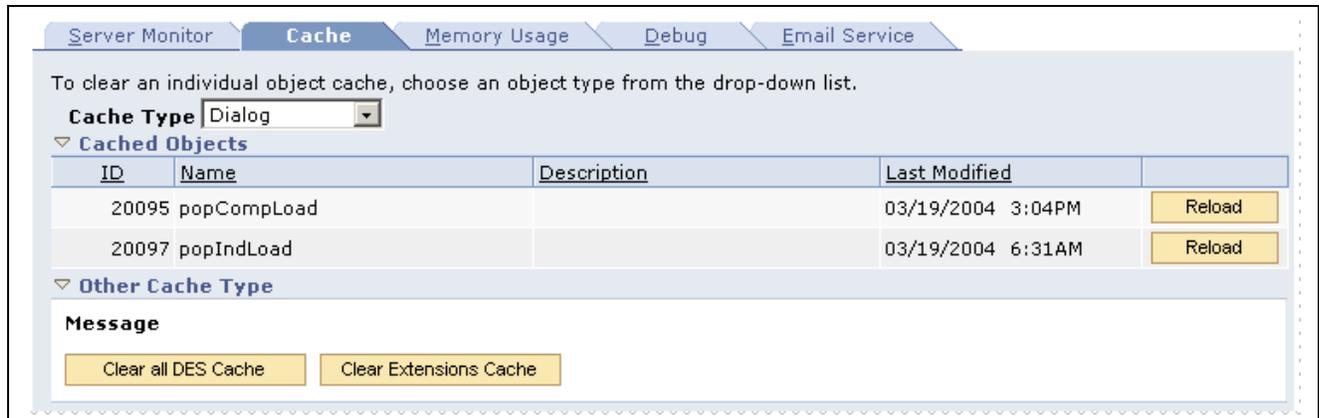
Control Center - Cache page

The Cache page clears cache and memory for troubleshooting purposes. This feature should only be used while troubleshooting your software with a PeopleSoft Customer Connection representative.

Cache Type	Select the type of cache you want to clear: *Audience*, *Dialog*, *Profile*, or *Template*.
Cached Objects	Displays the cached objects from all of the DES instances in the chosen cache type.
Reload	(*Dialog* cache type only) Click this button to cause DES to reload the specified Dialog data from the database into the DES cache.
Clear	(All cache types except *Dialog*) Click this button to cause DES to clear the specified object from the DES cache.
Clear all DES Cache	Click to clear all the Dialog Execution Server caches.
Clear Extensions Cache	Click to clear the DES Extensions cache.

Warning! Using the Clear Cache function can have an effect on system performance due to the fact that it clears all objects that are cached and therefore will take time to restore all these objects. Problems can occur if this command is used during the execution of a Scheduler or Single Mailer request.

Viewing Memory Usage

Access the Memory Usage page.

Control Center - Memory Usage page

The Memory Usage page allows you to monitor memory usage for troubleshooting purposes. You can view memory usage for documents or for all of DES by DES instance.

Memory Category	Choose a memory category:
	DES Document Contact displays document memory usage.
	DES Entire Server displays memory usage for all of DES.
Reload	Click to refresh the information displayed in the window.
DES Instance ID	Click this link to display the DES memory usage data for the selected instance.

Changing DES Debug Flags

Access the Debug page.

Control Center - Debug page

The Change DES Debug Flags feature should only be used while troubleshooting your software with a PeopleSoft Customer Connection representative. Any changes you make here will remain in effect until they are changed again using this feature, or until the server is restarted.

Flags	Enter the debug flags you want to send to the DES.

Send Debug Flag	Click to send the specified debug flags to the DES.
	Note. Debug flags apply to all DES instances.

Viewing Email Service Information

Access the Email Service page.

Email Service page

The Email Service page displays detailed information (via RMI) about Mailcaster, Frequency Mailer and Single Mailer processes.

Service Type	Select *Frequency Emailer*, *Single Emailer*, or *Mailcaster*.
Reload	Click to reload information about the selected service type from the system.

Mailcasters

Email Engine ID	The Instance ID of the Frequency Emailer, Mailcaster, or Single Mailer
Host Name/Port	The name and RMI port number of the email engine.
Status	The current status of the event. The possible values are:

- *Down*
- *No Host Found*
- *Idle*
- *Not Registered*
- *Running*

Render Queue Size	The maximum number of messages on the queue to be rendered
Render Queued Count	The current number of messages on the render queue.
Render Thread Count	The number of render threads.

Send Queue Size	The maximum number of rendered messages to be sent.
Send Queued Count	The current number of rendered messages to be sent.
Total Sent Count	The total number of messages sent by the thread.
Send Thread Count	The current number of send threads.
Dedup Table Name	(Mailcaster only) The name of the deduplication table.
Mail Job ID	(Mailcaster only) The identifier of the mail job.
Job Status	(Mailcaster only) The current status of the mail job.
Is Small Job	(Mailcaster only) Whether the mail job is considered a small job (based on the smallJobOnly configuration parameter).
Message Queued	(Mailcaster only) The total number of messages in the queue (waiting to be sent) as part of this mail job.
Message Sent	(Mailcaster only) The total number of messages already sent as part of this mail job.

Send Threads

Thread ID	The Java thread name
Email Server	The SMTP server this thread uses to send mail.
Status	The status of the send mail thread: *Running* or *Idle*.
Sent Count	The number of messages sent by this thread.

Administering Scheduler Events

The scheduler manages the execution of Online Marketing jobs, such as dialog Date/Time trigger . You can use it to produce a report of schedule events, as well as:

- Restarting a failed, skipped, or paused event.
- Stopping a queued event.
- Drilling down to an individual mail job report.

Pages Used to Administer Scheduler Events

Page Name	Object Name	Navigation	Usage
Scheduler Event Report	RY_SCHEDULER_EVENT	Marketing, Dialog Monitoring, Control Center, Scheduler Event Report	Use to produce a report of scheduled events, stop or restart events, and view individual mail job reports for finished events.

Viewing the Scheduler Event Report

Access the Scheduler Event Report page.

Control Center - Scheduler Event Report page

Event ID	The unique ID of the scheduled event. If the event has broadcast email associated with it and the Mail Job has finished, you can click on its ID to view the Mail Job Report. The event can be a Trigger execution or a delayed broadcast email event.
Trigger Name	The name of the trigger to be executed.
	Note. For repeating triggers, the first repeat event will appear in the table immediately after the dialog is activated. The second and subsequent times, the event is listed in the table *n* minutes before its execution time, where *n* is the wakeup interval of the scheduler.
Dialog Name	The name of the dialog associated with the scheduled event.
Staging Dialog	Identifies whether this dialog is in staging (test).
Event Type	The type of event to be executed by the scheduler. Examples include Execute Trigger and Send E-mails.
Event Start Date/Time	The date and time when the event was scheduled to execute.
Last Modified Date/Time	The date and time when the event's status was last modified.
Repeat Number	The number of times this particular event has repeated.
Instance ID	The numerical ID of the DES instance handling this scheduler event.
Event Status	The current status of the event. The possible values are:
	Duplicated: Events in the "Suspended while running" state are changed to duplicated when a paused dialog is restarted. A copy of the "Suspended while running" event is created to avoid conflicts between the restarted event and a possible orphaned mailjob.

Failed: the event failed. You should investigate the cause of the failure by checking the server log files.

Finished: the event finished normally. If this is a broadcast email event, there will also be an entry in the Mail Job Report.

Overlapped: a repeat event was overlapped by a previous repeat event that had not yet completed.

Queued: the event is in the queue and ready to be invoked at the Event Start Time.

Running: the scheduler is processing the event.

Scheduling: the event is being scheduled.

Skipped: a repeat event was skipped.

Stopped: the event was stopped by the marketer (such as when a dialog is stopped or a milestone is deleted).

Stopped while queued: any event stopped using the Control Center Stop button (as opposed to an event stopped by Online Marketing when an entire dialog is stopped).

Suspended: the event was suspended by an Online Marketing administrator (dialog is paused or in Broadcast Hold).

Suspended while running: this status occurs if an event is running when the dialog is paused.

Restart	Click to restart a failed, skipped, or paused event. A confirmation page will be displayed. If the status of the event has changed, you will be informed of this fact and asked if you want to continue the action.
Stop	Click to stop a queued job. A confirmation page will be displayed. If the status of the event has changed, you will be informed of this fact and asked if you want to continue the action.

Administering Email Job Reports

The Email Job Report shows the status of Mailcaster email jobs, and allows you to restart stopped or failed email jobs.

Page Used to Administer Email Job Reports

Page Name	Object Name	Navigation	Usage
Email Job Report	RY_MAIL_JOBS	Marketing, Dialog Monitoring, Control Center, Email Job Report	View information about individual mail jobs, and to restart stopped or failed jobs.

Viewing the Mail Job Report

Access the Mail Job Report page.

Mail Job Report page

Mail Job ID	The identifier of the mail job listed in the PS_RY_BULK_JOB table (an integer value). If the job is a child job and is finished, you can click the Mail Job ID to view more information about the child job.
Trigger ID	The identifier of the trigger that scheduled this broadcast email job.
Activity ID	The activity ID for this job. Large mailing events are often split into multiple child jobs handled by different bulk mailers. Each child job has the same Activity ID, allowing them to be associated with each other in reports.
Dialog Name	The dialog for which this broadcast email job was executed.
Job Queued Date/Time	The date and time when the mail job was entered in the queue.
Last Modified Date/Time	The date and time when the mail job's status last changed.
Number of Child Jobs	The number of smaller jobs into which the main job was divided.
Parent Job ID	The identifier of the parent email job.
Repeat Number	The number of times a trigger event has occurred. For the first iteration of a repeating trigger event, its Repeat Number is 1. Each subsequent time the event is repeated, its Repeat Number is incremented by one.
Job Status	The status of this job. The possible values for parent mailjobs are:

- *Parent Queued*: The parent job is ready for the Mailcaster to execute.
- *Parent Assigning*: The parent job is in process, but not all child jobs have been created.
- *Parent Assigned*: The parent job has finished processing, but not all child jobs have finished running.
- *Parent Finished*: All child jobs have finished running.
- *Parent Failed*: All child jobs have failed.

- *Parent Partial Finished*: Not all child jobs have finished or not all child jobs have failed.

The following status values apply to child or small mailjobs:

- *Recovering*: The mailjob is ready for recovering. This status is used when administrators perform manual recovery. The administrator can set the job status to Recovering by stopping the job and restarting it using Control Center, then waiting for the Mailcaster to rerun the job. When the Mailcaster picks up the job, it is marked as Recovered.

- *Recovered*: A new mailjob has been created for this mailjob. Refer to the Recovering status for more information.

- *Stopped while running*: The job was stopped using the Control Center. If the job is restarted, it will be changed to the Recovering state.

- *Stopped while queued*: The job was stopped while it was in a Parent Queued state. If the job is restarted, it will be changed back to a Parent Queued state.

Mailjobs can show the following additional statuses:

- *Running*: The Mailcaster is executing this small or child job (sending out the emails).

- *Finished*: The child or small job completed successfully.

- *Stopped*: The small, child, or parent job was stopped (such as when a dialog is stopped or a milestone is deleted).

- *Stopping*: When a Running job is stopped by the Stop button on the Control Center Mail Job page, the Control Center changes the status to Stopping. The mailcaster will change the status to Stopped once it has finished stopping the job. If the job isn't stopped in an appropriate amount of time then the Control Center will change the status to Stopped.

- *Queuing*: The job is in the process of deduping.

- *Queued*: The small job has finished deduping and is waiting to be handled by the Mailcaster.

- *Fail*: The small or child job failed. You should investigate the cause of the failure by checking the Mailcaster log files.

- *Interrupted*: A crash occurred while a dedup operation was taking place. This status is set after the scheduler restarts.

Trigger Name	The trigger that scheduled this broadcast email job. This is the name given to the trigger in Online Marketing.
Activity Name	The name of the action as configured in Online Marketing.
Message Queued	The number of email messages that have been processed by the Mailcaster. Until the job finishes running, this number will be different from the number listed in Message Sent, because the messages are sent one at a time to the SMTP server.
Message Sent	The number of email messages that have been sent to the mail server. While the job is running this number will be different (lower) from the number listed in Messages Queued. Once a job has finished the two will often match;

however it is not an error if they do not. If any email addresses were rejected by the mailserver then the sent count will be less than the queued count.

Instance ID   The numerical ID of the bulk mailer instance handling this job

Viewing the Dedup Report

The Dedup Email Job Report shows jobs that have been deduplicated and sent to a Mailcaster for mailing. *Deduplication* refers to the process by which duplicate email addresses are removed from a broadcast mailing list, ensuring that an addressee doesn't receive the same email more than once. This is particularly important if you are sending a broadcast email to more than one audience (since the same addressee may appear in more than one audience). The deduplication process also removes from the list addresses with Do Not Email specified.

Note. When a large mail job is sent from Online Marketing, it is typically sent by multiple mailcasters. The Online Marketing Dialog Execution Server creates a parent mail job with a status of *P_Queued*. When mailcasters begin to send the mail they change the status of the parent job to *P_Assigning* and create child jobs with the status of *Running*. The Dedup Email Job Report only lists entries for parent email jobs such as these, as well as for small mail jobs.

Page Used to View Dedup Email Jobs

Page Name	Object Name	Navigation	Usage
Dedup Report – Mail Job	RY_DEDUP_JOBS	Marketing, Dialog Monitoring, Control Center, Dedup Email Job Report	Displays a list of mail jobs that have been deduplicated and sent to the mailcaster for mailing.
Dedup Report – Audience	RY_DEDUP_JOBS	Click the Audiences tab on the Dedup Report page.	Displays audience information about mail jobs.

Viewing the Dedup Report

Access the Dedup Report – Mail Job page.

Dedup Report page

Mail Job ID	The numerical job ID assigned to this mail job by Online Marketing.
Trigger ID	The trigger ID assigned to this event by Online Marketing.
Trigger Name	The name of the trigger associated with the event.
Activity ID	The identifier of the activity associated with the mail job.
Activity Name	The name of the activity associated with the mail job.
Dialog Name	The name of the dialog from which the mail job was sent.
Job Status	The current status of the mail job.
Job Queued Date/Time	The date and time when the mail job was queued for sending.

Viewing Dedup Report Audience Information

Access the Dedup Report – Audience page.

Dedup Report – Audience page

Audience Name	The name of the audience to which the mail job is being sent. This is the audience name configured in Online Marketing.
Total Audience Count	The number of members in the audience to which the mail job is being sent. This value is equal to the sum of the Total Do Not Email Count, Total Deduped Count, and Total Emails to be Sent fields.
Total Do Not Email Count	The number of audience members who have requested not to be contacted by email.
Total Deduped Count	The number of emails removed from this job by the deduplication (dedup).
Total to be Sent	The total number of emails in the job that will be sent to audience members.

Administering Single Email Failure and Recovery

Single Email Failure and Recovery allows the administrator to search for and identify single emails that failed to send or were rejected. The administrator can then choose to resend the emails or delete them.

Page Used in Single Email Failure and Recovery

Page Name	Object Name	Navigation	Usage
Single Emailer Failure and Recovery	RY_SINGLE_MAIL_ERR	Marketing, Dialog Monitoring, Control Center, Single Email Failure/Recovery	Use to identify and re-send or delete single emails that failed to send or were rejected.

Administering Single Email Failure and Recovery

Access the Single Email Failure and Recovery page.

Single Emailer Failure and Recovery page

Select	Select the emails you want to recover or delete.
Detail	Click to view the Single Email Queue Report for the selected document that failed with the specified error code.
Document Name	The name of the document.
Error Code	The reason why the email failed or was rejected. Error codes include:

- Bad Email Address

- Build Program Failed

- Campaign or Document is Null

- Data Not Accepted

- Email Address is Null

- Failed to Load Campaign or Doc

- Fail Mail Exception

- IO Exception

- Message is Null

- Mail Server Not Running

- Persistence Exception

- Recipient Not Accepted

- Sender Not Accepted

- Tag Format Exception

- VC Rendering Exception

Count	The number of emails with the specified document name that failed with the specified error code.
Check All/Clear All	Select the check box to select all the emails in the results list. Clear the check box to clear all the selected emails.
Recover Selected Emails	Click to recover the emails you have selected. The emails will change to Queue status, so the Single Mailer will try send them again.
Delete Selected Emails	Click to delete from the queue all the emails you have selected.

Administering the Single Email Queue

The Single Email Queue Report provides the capability to watch the status of an individual email in the queue. You can also delete or recover the queued single emails.

Page Used to View the Single Email Queue

Page Name	Object Name	Navigation	Usage
Single Emailer Queue Report	RY_SINGLE_MAIL_QUE	Marketing, Dialog Monitoring, Control Center, Single Emailer Queue Report	Use to monitor the status of single emails in the mail queue, and to delete or recover selected emails.

Administering the Single Email Queue

Access the Single Emailer Queue Report page.

Single Email Queue Report page

Select	Select an email's check box to mark it for deletion.
To be sent Date/Time	The date and time at which the single email is to be sent.
Last Modified Date/Time	The date and time when the single email's status was last changed.
Document Name	The name of the single email in the queue.
Email Addresses	The email address(es) to which the single email is being sent.
Instance ID	The instance ID of the particular email service.
Status	The current status of the email. The possible values are: • Failed • Paused • Queued • Scheduled • Sending • Stopped
Recover	Click this button to recover a failed single email. The button is available only when the email's status is Failed.
Check All/Clear All	Select the check box to select all the emails in the results list, or clear the check box to clear all the selected emails.
Delete Selected Emails	Click to delete emails whose Select check box has been selected.

Administering the Frequency Emailer Queue

This section describes how to administer the Frequency Emailer Queue.

Page Used to Administer the Frequency Emailer Queue

Page Name	Object Name	Navigation	Usage
Frequency Emailer Queue Report	RY_FREQUE_MAIL_QUE	Marketing, Dialog Monitoring, Control Center, Frequency Emailer Queue Report	Use to administer the Frequency Emailer queue.

Maintaining the Frequency Emailer Queue

Access the Frequency Emailer Queue page.

Frequency Emailer Queue Report page (1 of 2)

Frequency Emailer Queue Report page (2 of 2)

Select   Select the check box to select the associated dialog, or clear it to deselect the dialog.

Dialog Name   The name of the dialog.

Document Name   The name of the email document to be sent.

Original Email Service Type   Displays the email service type that originally was to send the mail: Single Mailer or Mailcaster.

Expiration Date   The date after which the email expires from the queue and will be discarded.

Email Address   The email address to which the email is to be sent.

Status   The current status of the email. The possible values are:

- Failed

- Paused

- Queued

- Sending

- Staged

- Stopped

- Waiting

Error Code   The reason why the email failed or was rejected. Error codes include:

- Bad Email Address

- Build Program Failed

- Campaign or Document is Null

- Data Not Accepted

- Email Address is Null

- Failed to Load Campaign or Doc

- Fail Mail Exception

- IO Exception

- Message is Null

- Mail Server Not Running

- Persistence Exception

- Recipient Not Accepted

- Sender Not Accepted

- Tag Format Exception

- VC Rendering Exception

Instance ID   The instance ID of the particular email service that has reserved the email for sending.

Start Date/Time   The date and time when the email was enqueued in the Frequency Email Queue.

Last Modified Date/Time	The date and time when the email's status last changed.
Check All/Clear All	Select the check box to select all the emails in the list; clear it to clear any selected emails.
Recover Failed Emails	Click this button to attempt to recover and requeue any emails with status Failed.
Delete Selected Emails	Click this button to delete all the emails you have selected.
Update Queue	Click this button to update the email queue, which updates the counts of the email counter.
Delete All Queued Emails	Click this button to delete all emails currently in the queue.

Viewing Dialog Mover Status

The Dialog Mover Status Report page allows you to view the status of imported and exported dialogs.

Pages Used to View Dialog Mover Status

Page Name	Object Name	Navigation	Usage
Dialog Mover Status Report	RY_DM_STATUS_RPT	Marketing, Dialog Monitoring, Control Center, Dialog Mover Status Report or Click the Dialog Mover Status Report link on the Dialog Import Status page during a dialog import.	View the status of the Dialog Mover's dialog import and export process.

Viewing Dialog Mover Status

Access the Dialog Mover Status Report page.

Dialog Mover Status Report page

Dialog ID	The original Dialog ID for an exported dialog, or the new Dialog ID for an imported dialog.

Dialog Name   The original dialog name for an exported Dialog, or the new Dialog Name for an imported dialog..

Process Type   The action that is being performed: *Import* or *Export*.

Status   The current status of the import or export. The values are *Finished*, *Running*, *Failed*, *Cancelling*, and *Cancelled*. The *Cancelling* and *Cancelled* states occur when a user chooses to cancel a running dialog import.

Cancel   This button appears only next to dialog imports with the status of *Running*. Clicking it changes the import's status to *Cancelling*, after which it will change to *Cancelled*.

Refresh   Click to get the current status of the dialog import process.

Note. If a dialog import is running, then another dialog of the same name cannot be imported until the first run is finished or cancelled.

Maintaining Dialog Servers

The Maintain Dialog Servers page allows you to install new instances of the Standalone Dialog Servers: Mailcaster, WatchDog, and Email Response Processor.

Pages Used to Maintain Dialog Servers

Page Name	Object Name	Navigation	Usage
Maintain Dialog Servers	RY_INSTANCE	Marketing, Dialog Monitoring, Control Center, Maintain Dialog Servers	Install Standalone Dialog Server instances.

Maintaining Dialog Servers

Access the Maintain Dialog Servers page.

Maintain Dialog Servers page

Server Name	The name of the Process Scheduler running the instance.
Instance Type	The type of this particular instance: Mail Service, E-mail Response Processor, or WatchDog.
Service Type	The service type of this particular instance: For Mail Service, choices are Frequency Emailer, Mailcaster, or Single Emailer; for E-mail Response Processor, choices are Bounce Process or Reply Process. There are no choices for WatchDog.
Instance	The number of the specified instance.
Server Status	The current status of the server. Status values are Running and Stopped.
Request Status	The current status of the request. Values are:

- timed out (DES) or killed by process monitor
- Create Failed
- Create Requested
- Create Successful
- shutdown normally
- Initializing
- Run Request Failed
- Run Requested
- Shutting down
- Stop Request Failed
- Stop Requested
- fully functional

Start, Stop	Click Start to start an instance that is not currently running, or click Stop to stop a running instance.
Instance Start Time	The time at which the instance was started.
Instance Last Update Time	The time at which the instance's status was last changed.
Host Name/Port Number	The host name and port number of the machine running the instance.
IP Address	The IP address of the machine running the instance.
Create a New Instance	Click this button to create a new instance.
Refresh	Click this button to refresh the view.

Note. You must click the Save button after specifying the new Instance required data, or click the Start or Stop button.

CHAPTER 12

Using the WatchDog Utility

This chapter provides an overview of the PeopleSoft Online Marketing WatchDog utility and discusses how to run the WatchDog utility.

See Also

PeopleSoft Enterprise CRM 9 Supplemental Installation Guide

Understanding the WatchDog Utility

This section discusses:

- The WatchDog utility
- How WatchDog Works
- Running WatchDog
- Accessing WatchDog
- WatchDog Tests
- Testing the Online Marketing dialog server

The WatchDog Utility

WatchDog is a utility that monitors the Online Marketing server components and database access to ensure that they are operational. WatchDog can be set to send reports to specific email addresses the state of the components changes (from working to not working or vice versa). You can configure the WatchDog utility to check the following components:

- Database (Microsoft SQL Server, Oracle, or DB2)
- Online Marketing dialog server
- Web server
- Mail server
- Scheduler

How WatchDog Works

WatchDog can be set to run at any interval, and cycles through the tests for each component. (A typical interval is 30 minutes.) Before running the tests, WatchDog can attempt to communicate with each component (ping test). WatchDog generates an error when it cannot establish communication or when the component fails its tests.

WatchDog has two types of tests: a ping test to make sure that the component can be reached and tests that use commands to each component to ensure that they are running properly. WatchDog first pings each component a specified number of times. If a response is not received within the specified time-out period, WatchDog assumes that a problem exists with that component, generates an error report, and sends it to the email addresses specified in the WDG.config file. After the ping tests succeed, WatchDog runs basic tests on the various components.

To ensure that responses can be received within the time-out period, it is strongly recommended that you run WatchDog from within your corporate firewall. This action assures the fastest communication and helps prevent WatchDog from reporting communication problems due to network latency.

When WatchDog detects a problem, it sends an error report to the email addresses specified in the errorMailList parameter in the WDG.config configuration file. One or more of these email addresses can be to a pager to notify an administrator immediately about a problem. WatchDog sends a detailed email report containing a description of the problem and the current WatchDog configuration. For pagers, WatchDog formats an abbreviated message. WatchDog generates specific messages to describe problems detected within the Online Marketing components. When an error is detected outside Online Marketing, the report includes any messages generated by the component (such as the database, mail server, or web server).

In addition to notifying administrators of a problem, WatchDog can also provide you with periodic notification that it is still operational. It can send a special *I am alive* email to email addresses and pagers specified in the configuration file. The reason that you may want to use this feature is that WatchDog only notifies administrators when it detects a problem. If WatchDog has stopped running, you will not be notified of problems with Online Marketing. By setting WatchDog to send a periodic message, you will know when WatchDog is not working because the messages will not be sent.

The *I am alive* email includes the contents of the WDG.config file and the report generated from the most recent run of WatchDog, so you can view the status of each component.

Running WatchDog

You start and stop WatchDog through the Maintain Dialog Servers page in the Online Marketing Control Center.

Accessing WatchDog

WatchDog also has a Quick Look feature that lets you check the status of WatchDog. When the WatchDog server receives a Quick Look request, it provides a short status of what WatchDog is doing at that time. If WatchDog is sleeping when the request is received, it wakes up and sends the last report, if one exists.

You can access WatchDog from a web browser or a DOS window. From a browser, specify the following URL, where *host* is the machine where WatchDog is running, and *qkLookPort* is the value set in the qkLookPort configuration parameter.

```
http://host:qkLookPort
```

From a DOS prompt, specify the following command from the directory where WatchDog is installed:

```
..\..\..\jvm\1.3.1\java -cp
.;.\annu13.jar;.\watchdog.jar;
..\..\..\driver\<driver_file>
WatchDog.WatchDog -qklook
```

WatchDog Tests

WatchDog includes the following tests:

• Database tests.

• Web server tests.

• Application server tests.

• Scheduler tests.

• Mail server tests.

• Mail event tests.

• Cluster tests.

Database Tests

WatchDog opens a connection to the database and runs a defined query. WatchDog does not evaluate the results of the query for correctness, only for successful completion. Only one database can be monitored.

WatchDog performs these database tests:

Database access	Checks whether a connection to the database can be established.
Driver	Checks whether the JDBC driver can be found and loaded.
Query	Checks whether a query can be executed.

Web Server Tests

WatchDog performs these web server tests:

Web Server	Checks if the web server (reverse proxy server) is accepting connections.
MCP	Checks whether the Marketing Campaign Processor (MCP) (the servlet that handles web requests for Online Marketing) is running by sending an *are you there* (rut) message and waiting for a response.
Database connection	Checks whether the Dialog Execution Server (DES) can connect to the database.
Online Marketing Dialog Server	Checks whether a dialog can be run properly by visiting a Landing Page and validating that the correct page is returned. WatchDog also submits the Landing Page to validate that the correct intermediate or Final Page is returned.

Application Server Tests

WatchDog performs this test:

Application Server   Checks whether the Application Server is running and can communicate with PeopleSoft Pure Internet Architecture. It does this by sending a request to the Dialog Execution Server servlet, which makes a Jolt call to PeopleSoft Pure Internet Architecture.

Mail Server Tests

WatchDog performs these Mail Server tests:

TCP layer   Checks whether a connection to at least one mail server can be established.

SMTP protocol layer   Checks whether a simple Simple Mail Transfer Protocol (SMTP) dialog can be established with at least one mail server.

Mail Event Tests

WatchDog performs these mail event tests:

Bulk Mailers   Connects to each Bulk Mailer via Remote Method Invocation (RMI) to get current system status. If WatchDog cannot connect via RMI, then the Bulk Mailer is assumed to be not running and the test fails.

Mail job   Checks the status of all mail jobs by querying the database.

Mail sending rate   Checks the sending rate of the mail jobs in the database.

Server Group Tests

WatchDog performs the following server group tests:

Scheduler   Checks whether the Scheduler is up and running by accessing its status in the database.

WatchDog sleeps between running each of the tests. The resulting report is saved and compared with the previous run for differences. If differences exist, the report is emailed out so the administrator can be informed of changes in the system performance—for example, if a formerly working system has stopped responding or if a system that was not running has started again. Because of this, only pass or failure information is reported, and not statistical information (which would likely change with each run and result in too many reports).

Cluster Tests

If you are running in a clustered environment, WatchDog checks the status of each system as it is stored in the database.

Example WatchDog Report

The WatchDog report delivered by email looks similar to this:

```
WEB SERVER :
Running:  OK.
Executing Servlets:  OK.
DES:  OK.
Database connection:  OK.
Campaign Check:  OK.
Cluster: IS NOT WORKING.
```

Testing the Online Marketing Dialog Server

For WatchDog to test the Online Marketing Dialog Server (DES), you must first create and launch a simple test dialog. The test dialog needs only three components (two web documents and an external audience), but the values used in the two web documents must also be set in several WatchDog parameters.

Before running WatchDog, you should create the test dialog, launch the dialog, and set the appropriate WatchDog parameters to the values used in the dialog.

When you run WatchDog, the DES test attempts to access the web pages and find the values specified in the parameters. The following example describes the simplest dialog you can create and the values you can use to perform the DES test. If you decide to use a value different from the sample, be sure to also use that value in the appropriate WatchDog parameter. This is because WatchDog uses the values in these parameters to perform a query against this test dialog.

Test Dialog

The test dialog you create must contain two web pages and an external audience. Each web page must contain a string that must also be used in the test parameters. The following list describes the contents of the test dialog:

• Two web documents (a Landing Page and a Final Page).

  - The Landing Page must include three profile fields (first name, last name, and email), a paragraph item containing a string (landing_page_string), and a Submit button to display the Final Page.

  - The Final Page must contain a paragraph item containing a string (final_page_string).

• One external audience.

Test Parameters

WatchDog uses four parameters to query the test dialog. For WatchDog to interpret the results of the query correctly, set the DES test parameters in the WDG.config file to match the values used in the web documents. Set these four parameters:

demoCampaignMagicNumber	Set to the magic number in the generated URL for the test dialog. The magic number is the end of the URL, beginning with "p= ..." or "q= ...". The format is demoCampaignMagicNumber=p=<number>
	or
	demoCampaignMagicNumber=q=<number> (be sure to include both equal signs or errors can occur).
expectedResponseAfterGet	Set to a string on the Landing Page (landing_page_string). WatchDog searches for this string to verify that the Landing Page can be reached.
queryToSubmit	Set to the values for all the fields on the Landing Page the *johnDrake* number for that page and *"dialogFlowId"* for that Dialog. A URL is constructed using the value and submitted, which simulates clicking the Submit button on the Landing Page.
	In this query, you can specify any value for the fields.
	Note. You can find the *johnDrake* and *dialogFlowId* number by viewing the HTML source of the Landing Page from the browser. It is located immediately before the </FORM> tag, indicated by johnDrake=nnnnn and dialogFlowId=nnnnn...

expectedResponseAfterPost   Set to a string on the Final Page (final_page_string). WatchDog searches for this string to verify that the Final Page can be reached.

The following examples show the test parameters:

```
demoCampaignMagicNumber=URL generated for your test dialog

expectedResponseAfterGet=landing_page_string

expectedResponseAfterPost=final_page_string

queryToSubmit=First+Name=John (any_first_name)
 &Last+Name=Doe (any_last_name)
 &Email=john@watchtest.com (anyname@anydomain.com)
 &johnDrake=specific_number_found_on_your_web_page
```

Running the WatchDog Utility

You run WatchDog from the command line with the following parameters.

Note. These commands are generated into a file named *CommandLine* in the installation directory.

no parameters	WatchDog performs the series of tests once.
-loops [number]	Specifies the number of times the tests are to be run.
	If number is *0,* WatchDog loops indefinitely.
	If number is *n,* WatchDog loops *n* times.
-debug	Includes debugging messages in the generated log files.
	If this option is not specified on the command line, WatchDog looks for a value in the WDG.config file. If no value exists in the configuration file, the default value is used. The default is *NO.*
	To see debug information on the screen, you have to set service=NO and debug=YES.
-help	Lists the command-line options for WatchDog.
-ping	Turns on PING feature. Before launching the tests, the specified machines are pinged. At least one machine must respond for the tests to be run.
	If no machines respond to the ping, an error report is sent and WatchDog continues to ping the machines. After a specified number of tries (pingMax), WatchDog sends an email and continues to ping the machines that did not answer at the end of the sleep interval.
	When all the machines have answered, another email report is sent, indicating the change in status.

If this option is not specified on the command line, WatchDog looks for a value in the WDG.config file. If no value exists in the configuration file, the default value is used. The default is *YES.*

-qklook   When this parameter is specified, the WatchDog client attempts to obtain the current status of WatchDog by connecting through the specified qklook port.

Note. If you want to view the qklook test results in a command line window instead of reading output from log files, you can run WatchDog with the following command:

```
<WatchDogInstallDirectory>java com.peoplesoft.crm.omk.Watc
-cp<path to watchdog classfiles>
```

-service   Specifies to run WatchDog as a service.

If this option is not specified on the command line, WatchDog looks for a value in the WDG.config file. If no value exists in the WDG.config file, the default value is used. The default is *YES.*

-sleep [time]   Specifies the time in minutes between tests. If time is *0* or not specified, this value is taken from the Interval parameter in the WDG.config file. The default is *30* minutes.

CHAPTER 13

Email Response Processor

The Email Response Processor is a utility designed to handle both bounced email messages and returned email messages from users asked to reply by email or those who want to unsubscribe from mailing lists. You can use it to automatically handle the contents of any POP3 mailbox.

This chapter contains the following sections:

- Understanding the Email Response Processor
- Email Response Processor Configuration Files
- Script Reference
- Email Response Processor Performance Issues

Understanding the Email Response Processor

The Email Response Processor consists of a combination of mail process threads. Each thread processes a set of mailboxes as instructed by a mail script. Two types of threads are included, categorized by the types of mailboxes they process:

- Reply Process
- Bounce Process

The following rules apply in general to the Email Response Processor:

- Each type of mailbox has its own instance of a mail process thread and its own configuration file.
- Each mail process thread runs on separate threads generated by the Email Response Processor.
- Each mail process thread has a separate configuration file. The scripts that handle the behavior of each mail process thread are included in the thread's individual configuration file.
- The number of mail process threads generated is determined by the number of configuration files passed to the Email Response Processor.
- The mail process thread handles mailboxes in a round-robin fashion. The threads operate concurrently. Because their operation depends on a number of factors (such as the number of emails in the mailbox, the type of operation performed on each email, and so forth), the order of their operation cannot be predetermined.

The advantage to this design is that mailboxes can be categorized and assigned to different mail process threads, thus improving performance. Each set of mailboxes is treated differently using separate configuration and mail script files. No hardcoded limit exists to the number of mail process threads that can be created—the limit is dependent only on the number of configuration files passed to the Email Response Processor.

How the Email Response Processor Works

The Email Response Processor's two components, the Reply Process and the Bounce Process, work similarly, each controlled by its own script. The Reply Process or Bounce Process begins by contacting the POP3 server. It opens the first mailbox in its list, reads the messages one at a time, and executes its script once for each message. When the specified number of emails have been processed in the first mailbox (as determined by the maxMailToGetPerPOPSession parameter), that mailbox closes and the Email Response Processor moves on to the next mailbox.

After it has completed processing on all the specified mailboxes, the Email Response Processor stops immediately and waits a specified amount of time before beginning again. If it reaches the limit set in the maxMessagesPerHour configuration parameter, it will stop immediately and wait until the end of the current hour before continuing to the next mailbox. By doing this, the Email Response Processor ensures that it will not use all the available resources and will not overlook a mailbox because another is too active (and thus consuming too many resources).

Note. The Email Response Processor never deletes an email message unless the script specifically instructs it to do so. By default, the Reply Process's configuration file deletes messages that contain body text such as "Auto Reply," "automated response," and similar, and the Bounce Process's configuration file deletes all bounced messages after they have been processed. Refer to the appropriate configuration file (ReplyProcess.script or BounceProcess.script) for a complete list of such text.

Understanding Email Bounces

When an email message "bounces," it means that the mail server has rejected the message. There are many reasons for this, including:

• The message is too large.

• The recipient's inbox is full.

• Something in the message's content triggered a spam filter.

• The recipient's address isn't valid.

In any case, for whatever reason the email message is rejected, the Email Response Processor must log these bounces so that the administrator can determine whether emails were delivered, and if not, why.

There are three types of bounces: hard, soft, and unknown.

• A *hard bounce* is a message that is permanently undeliverable due to an invalid recipient address or because the recipient's mail server is blocking your server.

   Another name for hard bouncing is "Permanent Failure."

• A *soft bounce* occurs if the mail server recognizes the address but cannot deliver the message. This might be because the recipient's inbox is full, the server is down, the connection is broken, or the user has abandoned the mailbox. Emails can also soft-bounce if the sender's mail server doesn't understand why the receiving mail server refused the message. Soft bounces can be temporary problems—for example, the connection breaks during the relay, too many messages swamp the server, or something similar. Most mail servers will retry soft-bouncing messages, but the messages aren't guaranteed to be delivered.

   Another name for soft bouncing is "Persistent Transient Failure."

• An *unknown bounce* is a message for which the Email Response Processor cannot determine a reason for the bounce.

Running Email Response Processor

You start and stop Email Response Processor through the Maintain Dialog Servers page in the Online Marketing Control Center.

See Chapter 11, "Using the Control Center," Maintaining Dialog Servers, page 200.

Email Response Processor Configuration Files

The Email Response Processor uses a configuration file named ERP.config to specify the database connectivity information. This file is installed during Email Response Processor installation. Refer to your installation documentation for further information about this file.

The Email Response Processor's functionality is configured in two files: ReplyProcess.script and BounceProcess.script. The configuration files are similar and are divided into two parts:

• A parameter section, defining global parameters

• A rules section, describing the way incoming emails should be handled

Additionally, an optional error handling section defines the actions to execute if an error occurs during normal operation.

Parameter Section

The parameter section of the configuration files allows for the global configuration of the Email Response Processor (SMTP mail servers and mailboxes). Each parameter is defined in this manner:

```
name = value [, value...] ;
```

The following table shows the parameters:

Parameter	Description
logFile	Specifies the log file name. The default value is Reply_Processor.log for the Reply Process and Bounce_Process.log for the Bounce Process. The log is written in a Log subdirectory under each Email Response Processor instance directory. **Note.** The log file can grow to be very large. If you want a smaller log file, set the debugMode parameter to off, which will cause the Email Response Processor to log much less information.
maxMailToGetPerPOPSession	Used to configure how many emails to process for each open/close POP3 session. The Email Response Processor will open a mailbox, process emails up to maxMailToGetPerPOPSession, then close the mailbox and move on to the next one. By default this parameter is commented out in the script file and the default value of 10,000 is used.
popServer	The name of the POP3 server hosting the mailboxes.

213

Parameter	Description
popUsers	A comma-separated list of mailbox definitions in the form (username, password). The password must be encrypted. The mailboxes should all have the same password—because the encryption is done at installation, this allows you to cut and paste the encrypted password if you add any new mailboxes after installation is complete. You can use the Password Encryption Utility to encrypt passwords; refer to the chapter on setting up Online Marketing for more information.
smtpServerNames	A comma-separated list of SMTP servers used to send email (such as auto-replies and forwards). The first reachable server in the list will be used. If the first fails, the second will be used.
wakeupInterval	The delay in minutes during which the Email Response Processor waits before waking up to begin processing the next batch of email messages. The default is 3.
maxMessagesPerHour	Limits the number of messages processed per hour to avoid tying up the CPU. The default is 0, meaning unlimited.
debugMode	If set to on (or true or yes) additional information (for example, database update and contact-not-found information) is written to the log file. The default is true. To turn this parameter off, set it to off (or false or no). **Note.** If you set this parameter to on, your log files can grow very large and occupy a large amount of disk space.
sourceAddress	Contains the email address you want to display in the From field of a forwarded or replied email message (for example, abc@demo.com). If this parameter is not present or if the value is an empty string (""), the source address is extracted from the processed email.
getContactFromSender	If this parameter is set to true (or on or yes), the system gets the contact from the Sender field of the email if the Contact ID is not available from the magic number.
localHost	The complete local host name with domain (for example, host.domain.com).
bigMailThreshold	The size of an email message in bytes. Mail messages of sizes larger than this value will be deleted without processing. A logfile is generated.

Example

The following example shows the parameters section of a configuration file with some of the values set.

```
popServer = mailserver@demo.com ;
popUsers = (ps, 12345) ;
smtpServers = mailserver@demo.com ;
logFile = Reply_Processor.log ;
```

See Also

PeopleSoft Enterprise CRM 9 Supplemental Installation Guide

Chapter 2, "Setting Up PeopleSoft Online Marketing," Setting Up PeopleSoft Online Marketing, page 7

Rules Section

The rules section of the configuration file contains a simple script that describes what the Email Response Processor should do with the emails it receives. The script, executed for each message in each of the mailboxes, is a list of actions to be performed in sequence.

You can control which parts of the script are executed for each email using the following structure:

if <condition> then <action> [else <action>] end

The action can be either a single action (such as delete or forward) or a list of action enclosed in curly braces. To provide greater control, you can nest these blocks.

The condition that triggers an action is most commonly the presence of a particular character string in a particular part of the message. For example, if the email contains the string "unsubscribe" then the script might direct the Email Response Processor to forward the email to an address set up to handle unsubscribe requests. You can combine conditions using the AND and OR keywords or negate them with the not keyword.

Note. Only the Reply Process checks conditions on received emails. The Bounce Process assumes that the popUsers parameter contains only mailboxes designated as bounce mailboxes and that these mailboxes contain only bounced email messages. For more information about setting up bounce mailboxes, refer to Using PeopleSoft Online Marketing.

Example

The following example shows the rules section of a Reply Process configuration file. In this example, if the string "Original Message" appears in the message body, the email is forwarded to the email address bounced@demo.com. If the string "unsubscribe" appears in the message body, the email is forwarded to unsubscribe@demo.com. Afterward, the email is deleted from the mailbox (including any emails not containing the specified strings in the body).

```
...
if inBody ("Original Message") then
 forward (bounced@demo.com) ;
else {
  if inBody ("unsubscribe") then {
   forward (unsubscribe@demo.com) ;
 }
}
delete;
...
```

Note. Be aware that if you use multiple mailboxes for processing replies, all the mail is not necessarily processed at the same time. For example, if you have four mailboxes set up to process unsubscribe requests and reply with confirmation notices, some notices might be delivered sooner than others depending on which mailbox received the request.

Error Handling Section

When an error occurs in the main script, the execution is interrupted, the error is logged, and then the section is executed.

The error handling section of the configuration file is introduced by the onError keyword:

```
onError <action>
```

for example:
```
onError delete
```

Example

The following section shows the error handling section of a configuration file. In this case, messages generating errors are deleted.

Note. Comments are preceded by "//".

```
...
onError   / /ensure that the message is deleted
 delete;
```

Script Reference

The following section provides a reference to the scripting language used in the Email Response Processor configuration file.

Note. The complete sample ReplyProcess.script and BounceProcess.script scripts, which you can modify to suit your needs, are located in <*PeopleTools_install_dir*>/JavaApps/CRM/OMK/ERP*x*, where *x* is the identifier of each Email Response Processor instance created.

Conditions

This section describes the conditions you can specify in the ReplyProcess.script configuration file. In each case, the proper syntax for the condition is included, along with an example of its use.

Note. Only the Reply Process checks conditions on received emails. The Bounce Process assumes that the popUsers parameter contains only mailboxes designated as bounce mailboxes and that these mailboxes contain only bounced email messages.

inSender

The inSender condition looks for the specified string within the From field of the email.

The inSender syntax is as follows:

```
inSender ([boolean ignoreCase] "String")
```

For example:
```
inSender ("jsmith@demo.com")
```

inRecipient

The inRecipient condition looks for the specified string within the To field of the email.

The inRecipient syntax is as follows:

```
inRecipient ([boolean ignoreCase] "String")
```

For example:
```
inRecipient ("jdoe@peoplesoft.com")
```

inSubject

The inSubject condition looks for the specified string within the Subject field of the email.

The inSubject syntax is as follows:

```
inSubject ([boolean ignoreCase] "String")
```

For example:
```
inSubject ("Returned Mail")
```

inBody

The inBody condition looks for the specified string within the body of the email.

The inBody syntax is as follows:

```
inBody ([boolean ignoreCase] "String")
```

For example:
```
inBody ("unsubscribe")
```

inHeader

The inHeader condition looks for the specified string within the header of the email.

The inHeader syntax is as follows:

```
inHeader ([boolean ignoreCase] "String")
```

For example:
```
inHeader ("Reply-Processor")
```

inAll

The inAll condition looks for the specified string within the body or the header of the email.

The inAll syntax is as follows:

```
inAll ([boolean ignoreCase] "String")
```

For example:
```
inAll ("unsubscribe")
```

contactNotFound

The contactNotFound condition is true if the sender of the message cannot be identified.

The Email Response Processor tries to determine contact information from the magic number if it is present. If no magic number is found and the parameter getContactFromSender is set to on, the email address is used instead. If both methods fail, the contact is considered to be unidentified.

Note. The Email Response Processor uses only the main addresses, not the alternative email address, to determine contact information.

The contactNotFound syntax is as follows:

```
if
 contactNotFound
  then
   {
   <action>;
   }
```

For example:

```
if
 inRecipient("abuse")
then
  if
   contactNotFound
  then
   {
   forward("hosting_rp_error@demo.com");
   delete;
   }
```

boolean IgnoreCase

In each condition described previously, the boolean IgnoreCase element is optional. If set to false, the matching is case-sensitive; otherwise, case is ignored. The default value is true.

For example:

```
inSender (false, "mjones@demo.com")
```

would find "mjones@demo.com" but not "MJones@Demo.com".

Checking for Multiple Conditions

You can use all of the string checking conditions to check for the occurrence of any or all of several strings in the same command. To do this, insert all or any before the condition and provide a comma-separated list of strings for which to search. For example:

```
all inBody (true, "String 1", "String 2")
```

checks if "String1" and "String2" are in the body of the message, using a case-insensitive match. Substituting any results in a check for either of the two conditions.

Note. This type of checking is more efficient in both speed and memory usage than combining multiple individual conditions with the AND or OR keywords.

Actions

This section describes the syntax for actions performed upon the email message if the specified conditions are met.

delete

Deletes the message from the mailbox. Note that although the message is removed from the POP server, the remainder of the script is still executed for the message.

If the message is not deleted, it will remain on the server. This means that the next time the Email Response Processor is run, it will perform the specified actions on the message again.

Note. Be sure to test your Email Response Processor configuration carefully to ensure that only those messages you intend to delete are removed.

forward (address)

Forwards the message to the address specified.

To enable the Email Response Processor to forward mail to another domain, you might have to include that domain in the relay control of the SMTP mail server. (For example, if your domain is xyz.com and you are forwarding mail to forward@demo.com, you must add demo.com to the relay control of your SMTP mail server(s).)

Note. If the Email Response Processor is forwarding email to a mailbox with business rules associated with it (for example, Kana), be sure to test thoroughly to ensure that mail is properly processed.

reply (string file)

Replies with the contents of the specified file. The original message is quoted after the included text.

ignore

Ignores the message. The action is still logged, unlike those messages that do not fit any of the rules.

Note. All preceding actions in the script are executed, but all following actions are ignored.

Database Actions

This section describes the syntax for actions performed upon the database if the specified conditions are met.

update (field, value)

Updates the specified profile field with the specified value. The fieldname must be in table.column format, and the value is the proper value for the field. The syntax differs depending on whether a basic profile field or a custom profile field is updated.

Basic Profile Field Update:

The format for field is BASIC.XXXX, where XXXX is a valid basic profile field name (exactly as it appears in the PeopleSoft Online Marketing Client, including spacing and case). The value should be a valid value for the field type. No SQL format is allowed.

Example:

```
update ("BASIC.Do Not Email", "Y");
```

If the Basic profile field type is Multiple Choice, the format is:
```
update("fieldname", "<semicolon separated code list>");
```

For example,
```
update("BASIC.MultiChoice1", "code1;code3;code6");
```

If the field type is Date, the date format is 'YYYY-MM-DD'; for example:
```
update("BASIC.Birth Date", "1968-02-03" );
```

If the field type is Time, the format is "HH:mm" in 24 hour format. For example:
```
update("BASIC.Time 1", "14:25" );
```

The system checks to see if the basic profile field name is supported. If it is not supported, the systems reports an error at initialization.

Custom Profile Field Update:

For a custom profile field, the following format is used:
```
update (field, value)
```

The field name must be in table.column format, where table is a valid custom profile table. The value must be in proper SQL format.

For example:

SQL Server:
```
update (APP_YOUR_CUSTOM_TABLE.YOUR_COLUMN, "value")
update (APP_YOUR_CUSTOM_TABLE.ROW_LASTMANT_DTTM, "getdate()" );
```

Oracle:
```
update (APP_YOUR_CUSTOM_TABLE.YOUR_COLUMN, "value")
update (APP_YOUR_CUSTOM_TABLE.ROW_LASTMANT_DTTM, "sysdate" );
```

DB2:
```
update (APP_YOUR_CUSTOM_TABLE.YOUR_COLUMN, "value");
update (APP_YOUR_CUSTOM_TABLE.ROW_LASTMANT_DTTM, "current_timestamp");
```

It is recommended that you also update the ROW_LASTMANT_DTTM column along with the column and value you wish to change, as this will enable other applications or database extracts to capture changes made by the Email Response Processor.

logSoftBounce

Logs in the database that the current email bounce is a soft bounce.

logHardBounce

Logs in the database that the current email bounce is a hard bounce.

You can configure the system to set the DO_NOT_EMAIL flag for recipients of hard bounces. This configuration parameter is set on the Global Options page.

See Chapter 2, "Setting Up PeopleSoft Online Marketing," Setting Global Options, page 10.

logUnknownBounce

Logs in the database that the current email bounce is an unknown bounce (that is, the system cannot determine if the bounce is hard or soft).

logBounce

Logs in the database that an email message has been bounced against a specified contact. The contact is identified from the magic number (or from the Sender field if the magic number is not present and the getContactFromSender parameter is set to true). If the contact cannot be obtained, the corresponding information is logged in the logfile.

Note. This is a legacy action from pre-8.95 versions of Online Marketing. It will log the bounce as an unknown bounce type.

Error Handling

You can define an error-handling block for an operation or group of operations by enclosing the operation between the keywords try and onError. For several operations, enclose the operations between curly braces.

For example, the following statement attempts to update the Do Not Email field of the BASIC profile. If the operation fails, the message is forwarded to another email address.

```
try
 update ("BASIC.Do Not Email", "'Y'");
onError
 forward (error@demo.com);
```

Email Response Processor Performance Issues

In order to maintain a high level of performance, the same mailbox should not be passed to more than one mail process thread. Special care should be taken in the following cases:

- The same POP3 user should not be included in more than one configuration file. This is because after a thread has logged in to a POP3 mailbox, the next thread cannot log in to the same POP3 mailbox until the first thread has logged out. This can affect the system's performance.

- The same configuration file should not be passed to the Email Response Processor more than once. This could result in more than one thread using the same log file, or in more than one thread attempting to process the same POP3 mailbox.

An error message will display and the Email Response Processor will stop running if you attempt to pass the same configuration filename more than once or if you have the same mailbox name in more than one file.

Updating the DO_NOT_EMAIL flag for hard bounces can affect performance.

Email Response Processor Script Language Keywords

The following keywords are used by the Email Response Processor:

- all
- and
- any

- contactNotFound
- delete
- else
- end
- forward
- if
- ignore
- inAll
- inBody
- inHeader
- inRecipient
- inSender
- inSubject
- logBounce
- logHardBounce
- logSoftBounce
- logUnknownBounce
- not
- onError
- or
- reply
- then
- try
- update

CHAPTER 14

Importing and Exporting Dialogs

This chapter describes how to use the Online Marketing Dialog Mover, and includes the following sections:

• Understanding Dialog Mover.

• Exporting Dialogs.

• Importing Dialogs.

Understanding Dialog Mover

When running Online Marketing as a standalone application, developing and deploying an Online Marketing dialog in a single location is a viable option, but customers running integrated applications that need to access other CRM data need to be able to develop the dialog in one location and then move it to their production environment once it has been completed and tested.

The Dialog Mover allows you to develop a dialog and then export it to an XML file, which you can then import to another location. It consists of two utilities:

• Dialog Export, which copies the dialog and saves it to a file that can be transferred between the two systems.

• Dialog Import, which reads the file and translates it back into the form of an Online Marketing dialog.

What Dialog Mover Moves

Dialog Mover moves the following dialog components:

• Web documents.

• Email documents.

• Dialog flow.

What Dialog Move Does Not Move

Dialog Mover does not move shared objects, such as:

• Business units.

• SetIDs.

• Profiles.

• Audiences.

• Templates.

• Mailboxes.

• Custom extensions.

These items will need to be moved manually from the original system to the target before the dialog is exported. If these items are not in place prior to the export, Dialog Mover displays an error message and the dialog will not be moved.

Furthermore, Dialog Mover does not update dialogs in any way.

How Dialog Mover Works

Because the source and target databases in some cases are not accessible at the same time due to firewalls, security issues, or other reasons, Dialog Mover is split into two steps for moving dialogs and other related objects. The first step, Dialog Export, translates the dialog's components into an XML document that is portable from one machine to another. The second step, Dialog Import, translates the XML document back to a dialog format (provided that its attendant shared components have already been manually moved to the new machine first).

Dialog Mover does not require that dialog components (such as web and email documents) retain the same ID numbers across systems. Since there is no way to know whether the IDs are in use by other objects on the target system, Dialog Mover ensures that the links are synced up correctly across each system by matching on object name rather than ID number. Shared objects are referenced primarily by name, but can also be referenced by other properties such as type or status.

Imported dialogs are created in the new system in an In Design state. They must be activated before they can be ready for production. Users can use an In Test state to verify the imported dialog before moving it to a Live state.

Only users with Dialog Administrator permission can use the Dialog Mover to import and export documents. Only one dialog can be exported at a time.

Note. Dialog Mover will only support moving dialogs between databases that have the same A. You cannot use Dialog Mover to move a dialog from a source database with one base language to a target database with a different base language.

Dialog Mover Memory Allocation

When moving large dialogs, Dialog Mover can experience errors if sufficient memory is not allocated to it in both the host and the target systems. It is recommended that the maximum heap size be set to at least 500 megabytes if you will be moving large dialogs.

Exporting Dialogs

Dialog export consists of five steps, some of which are optional:

1. Select a dialog to export.

2. Run Dialog Check (*optional*).

3. Run the Dialog Dependency Report (*optional*).

4. Export the select Dialog and Save the export file.

5. View any messages about the export.

Pages Used to Export Dialogs

Page Name	Object Name	Navigation	Usage
Dialog Export Page	RY_EX_DIALOG	Marketing, Dialog Mover, Dialog Export	Select a dialog to export
Dialog Check	RY_DM_DIALOG_CHECK	Click the Check Dialog button on the Dialog Export page.	Check the dialog for errors and warnings before exporting it. This step is optional.
Dialog Dependency Report	RY_EX_DEPENDENCY	Click the Dialog Dependency Report button on the Dialog Export page.	View the profile fields, audiences, mailboxes, custom extensions, templates, and so forth used within the documents.

Selecting a Dialog to Export

Access the Dialog Export page.

Dialog Export page

Only the current In Design version can be accessed; if the dialog has both a Live and In Design version, you may want to select Revert to Live in the In Design version so that the In Design and Live versions are the same.

Business Unit   You must include a business unit for the dialog to be exported.

Status	The Status list displays all dialogs that are not in Archived or Completed state. It is not necessary for the dialog to be in a state that can pass Dialog Check in order to export it—you can export incomplete dialogs that aren't Live or that do not even have the ability to become Live in their current states.
Check Dialog	Click this button to run Dialog Check on the selected dialog. This step is optional.
Dialog Dependency Report	Click this button to run the Dialog Dependency Report on the selected dialog. This step is optional.
Export to File	Click this button to export the dialog to a XML file that can be imported to another system.

Running Dialog Check

Access the Dialog Check page.

This step is optional; it is not necessary to run Dialog Check before exporting a dialog. The Dialog Check page is described in the documentation on creating a dialog.

Click the Return link to return to the Dialog Export page.

Dialog Check

See Chapter 3, "Designing Online Dialogs," page 27.

Running the Dialog Dependency Report

Access the Dialog Dependency Report.

Dialog Dependency Report

The Dialog Dependency Report lists all the profile fields, audiences, mailboxes, custom extensions, templates, and so forth used within the documents. You must make sure that all of these items exist on the target database before you can import this dialog (after the export file is generated), or the import operation will fail.

You can save the Dialog Dependency Report to a file by clicking the Download icon.

Saving the Export File

After you have verified that all necessary shared objects exist on the target system, click the Export to File button on the Dialog Export page. If you haven't selected a dialog, an error message will appear asking you to select one before exporting.

Note. You should disable any pop-up blockers prior to clicking the Export to File button, or the file download window might not appear.

Dialog Mover prompts you to open the file or to choose a location in which to save it. Click Save and save the file to your local machine. The default name for the file is *dialog_<original dialog id>.xml* (for example, a dialog with the Dialog ID of 20001 in the source system will be saved as *dialog_20001.xml*), but you can change this name. The default save location is the browser's default.

Note. The Dialog ID will likely be different in the target system (following the dialog's import).

Warning! If you do not click Save, then the file is not saved to your machine, but Dialog Export will still treat the export as having completed successfully (assuming that it could be generated).

Viewing Dialog Export Status

You can view the status of the dialog export using the Control Center's Dialog Mover Status Report page.

See <u>Chapter 11, "Using the Control Center," Viewing Dialog Mover Status, page 199</u>.

Importing Dialogs

The dialog import process includes five steps:

1. Select the XML file to import.
2. Check for version and name conflicts.
3. Check dialog dependencies.
4. View the dialog post import checklist.
5. Confirm the import and view status.

Understanding Dialog Import

Dialog import creates a new dialog on the target system, using the data from a source XML file generated during the dialog export process. The new dialog is always saved in the In Design state, and it is not necessary that the dialog be in a state that will pass Dialog Check in order to allow the import.

After the dialog has been successfully exported, you must physically transfer the XML file to the target system (or a location that it can access) and then run the import process. Only Dialog Administrators have permission to run the import—users who do not have this permission will not see the Dialog Mover and Dialog Import links.

Warning! Modifying the XML file between the time it is exported and the time it is transferred to the target system is not supported and can cause errors in the import process and unexpected or unwanted behavior by the imported dialog. Further, you should not use Dialog Mover for upgrade purposes.

Pages Used to Import Dialogs

Page Name	Object Name	Navigation	Usage
Dialog Import Wizard Step 1: Select Import File	RY_IM_STEP_1	Marketing, Dialog Mover, Dialog Import	Select an exported dialog XML file to import.
Dialog Import Wizard Step 2: Version and Name Check	RY_IM_STEP_2	Click the Next Step button on the Dialog Import Wizard Step 1: Select Import File page.	Determine whether there are any version or name conflicts between the source and target systems.
Dialog Import Wizard Step 3: Dialog Dependency Report	RY_IM_STEP_3	Click the Next Step button on the Dialog Import Wizard Step 2: Version and Name Check page.	Determine whether appropriate dependencies are in place before importing a dialog.
Dialog Import Wizard Step 4: Dialog Checklist	RY_IM_STEP_4	Click the Next Step button on the Dialog Import Wizard Step 3: Dialog Dependency Report page.	View a list of manual checks you must perform before continuing with the dialog import process.
Dialog Import Wizard Step 5: Confirmation	RY_IM_STEP_5	Click the Next Step button on the Dialog Import Wizard Step 4: Dialog Checklist page.	Verify your selection and confirm the import.
Dialog Import Wizard: Dialog Import Status	RY_IM_FINAL	Click the Import button on the Dialog Import Wizard Step 5: Confirmation page.	View final import status, including objects renamed due to conflicts.

Selecting an XML File to Import

Access the Select Import File page.

Select Import File page

Select File   Click to display a File Upload page where you can select an XML file to import.

Process Overview   Click to display a page showing an overview of all the steps in the dialog import process.

After you have selected an XML file and click Next Step, Dialog Mover validates the file. If the file is corrupt or otherwise invalid, the process stops and an error message is displayed, otherwise continue to next step.

Checking for Version and Name Conflicts

Access the Version and Name Check page.

Version and Name Check page

This page displays the environment version and duplicate names. If the source and target environments are different in the following respects, the differences are displayed:

• CRM release version.

• Database type.

• Database version.

• PeopleTools version.

Note. Importing dialogs when source and target versions are inconsistent is not supported, and can cause Dialog Import to behave unexpectedly. However, you can still continue the process if you wish.

If a dialog or document with the same name exists in the target database, or if the dialog or document had been imported before, the currently-imported dialog and documents are given new names and created as an entirely new dialog for the conflicts. The renaming convention is the same as that for clone dialogs: a space and a numeric suffix are appended to the name. If the name already ends in a space and a number, then the number is incremented. For example:

Old Name	New Name
My Dialog	My Dialog 1
My Dialog1	My Dialog1 1
My Document 99	My Document 100

Only the old names of conflicting dialogs and documents are shown on the Name and Version Check page; the new names will be shown at the end of the dialog import process.

The following names might be changed during the import process:

- Dialog
- Document
- VCObject
- Merge Content – Document Field
- Merge Content – WebLink
- Merge Content – Dynamic Content
- Dynamic Content sections
- Custom Extension
- Temporary Link

Checking Dialog Dependencies

Access the Dialog Import Wizard Step 3: Dialog Dependency Report page.

Dialog Dependency Report page

The following table shows the dependencies that all must be in place before the import can proceed.

Note. All name checks are case-sensitive.

Object Type	"Missing" Error	"Mismatched" Error
Dialog business unit	ID	n/a
Document SetID	ID	n/a
Dialog marketing role	Name	Individual and organization types
Referenced profile fields	Profile group (individual or organization) Profile name Profile field name Status of field is not Activated	Field type (Choose One, Text, etc.)
Referenced audiences	Name Status is not Approved or Committed	Source (Internal/External)
Referenced mailboxes	Name	Type (Bounce/Normal)

Object Type	"Missing" Error	"Mismatched" Error
Referenced templates	Name	n/a
Referenced custom extensions	Name	n/a
Referenced custom variable content types	Name	n/a
Referenced cross dialog link	Name	n/a

If any of the dependencies are missing or mismatched, Dialog Import will display an error message and will not continue. Only if all the required dependencies are in the target system will the import process continue. In addition, a *Relink* warning message will be displayed for missing dialogs referenced by cross-dialog links—in this case, the cross-dialog link will still appear but it will not point to a dialog.

Regardless of whether the dependencies are missing, the Dependency Report will appear showing the overall status and a list of missing and/or matched dependencies. By default, the list is sorted by status. You can save this page to a file for reference by clicking the Download icon in the grid. Note that the Next Step button will not be accessible if there are any missing or mismatched dependencies.

Checking the Dialog

Access the Dialog Import Wizard Step 4: Dialog Checklist page.

Dialog Checklist page

The Dialog Checklist displays information about the steps that you might need to perform following the import. For example, some items you might have to do include:

• *Cross-dialog links*: If the dialog contains a link to another dialog, then the cross-dialog link will search (via Dialog Name and Action Name) for the other dialog to link to. If the other dialog action exists, then

the link will point to it. If the target action does not exist, the link will point to nothing, and this will be noted on the Dialog Checklist.

- *External links in variable content*: If the dialog contains any external links, they will be listed in the Dialog Checklist so you can check the URLs and verify that they are still valid.

- *Audiences*: A list of all the audiences used in the dialog will appear along with a note reminding you to check them and verify whether they need to be regenerated or whether their queries must be changed.

- *Templates*: You might need to modify the URLs of any web templates used in the dialog.

- *Mailboxes*: You might need to modify the values of the mailboxes used with the dialog.

- *Submit button*: If the Submit button is pointing to an image, you might need to verify that the image URL is still correct.

You can save the Dialog Checklist to a file for reference by clicking the Download icon.

Confirming and Import Dialog

Verify the selected Dialog and click *Import* button to start import the Dialog.

Dialog import confirmation page

Viewing Status

When the import process finishes, Dialog Mover displays the Dialog Import Wizard: Dialog Import Status page.

Dialog Import Status page

If any objects (dialogs or documents) were renamed during the import process, the old and new names are displayed on this page. You can save the page for reference by clicking the Download icon.

Click the Dialog Mover Status Report link to display the Dialog Mover Status page in the Control Center. On this page, you can view the import's status as it runs.

PART 3

PeopleSoft Online Marketing Integration

Chapter 15
Understanding the Online Marketing Event Wire Setup

Chapter 16
Event Wire API Reference

Chapter 17
Using the Event Wire Control Center

Chapter 18
Using Extensions

CHAPTER **15**

Understanding the Online Marketing Event Wire Setup

This chapter discusses:

• Event Wire

• Event Wire setup

• Event Wire and your external system

• Retried transactions

• Event Wire security

See Also

Part 1, "PeopleSoft Online Marketing User Guide," page 1

Event Wire

Event Wire is an application programming interface (API) that provides several functions to be used by an external system to submit data to PeopleSoft Online Marketing, query the status of the operations being performed, and schedule housekeeping tasks to maintain data integrity.

Event Wire accepts HTTP or HTTPS calls and passes the requests to the Online Marketing Dialog Server for processing.

When a request is made to Event Wire from an external system, the request must specify the entry point to the Online Marketing dialog (an External Event trigger followed by a Standalone page or Landing page). This URL is called the Landing Page URL in Event Wire. Depending on the needs of your dialog, you can use a Landing Page to submit new profile data to be stored in the Online Marketing profile database and trigger follow-on actions in the dialog, or you can use a Standalone page to simply record that a visit to the external site occurred.

Event Wire Setup

Before any external system can use Event Wire, you must set up the external system in the Event Wire Control Center. You should also verify that Event Wire is properly set up. This section discusses how to:

• Set up your external system.

• Verify your Event Wire setup.

Setting Up Your External System

To pass data to Event Wire, an external system must identify itself by using an external ID in its calls. The external ID is one of the values that is configured when you set up your external system through the Event Wire Control Center via the Event Wire External System Registry (Marketing, Dialog Monitoring, Event Wire, External System Registry).

Event Wire saves a log file containing a record of each call received along with information about the call, including the external ID. Any calls containing an invalid external ID fails.

By using a unique external ID for each external system, you will be able to track the activity of each external system separately.

See Chapter 17, "Using the Event Wire Control Center," page 259.

Verifying Your Event Wire Setup

To verify that you have properly set up Event Wire, you need to create and deploy a simple dialog to ensure that a call to Event Wire will have the desired effect.

To verify your Event Wire setup, complete these steps:

1. Verify that you have a PeopleSoft user ID with appropriate permissions to be able to create and deploy a dialog.

2. Create a simple Online Marketing dialog consisting of an external event trigger, a landing page, and a final page.

   The landing page should have a few fields that are required and a Submit button (for example First Name, Last Name, and email address). The final page can display a confirmation message, such as "It's working."

3. Create a flow for the dialog that includes an external event trigger and the two web pages as response actions.

   Set the flow for the web pages so that once the values for the fields on the landing page are submitted, the final page appears.

4. Generate the URL for the external event trigger to be used in the call to Event Wire.

   This URL is generated through the Link Report command.

5. Deploy the dialog (change the dialog to Live state).

6. From a browser, use the generated URL (from step 4) to place calls to Event Wire.

   a. Issue a getparams call to view the parameters used.

   b. Issue a processtrxn call to submit values to the landing page.

   c. Verify that you see the final page.

When you issue the processtrxn call with returntype=2, the final page should appear in your browser. Its appearance confirms that Event Wire and Online Marketing are operating properly. If the final page does not appear in your browser, check your processtrxn call.

See Also

Chapter 17, "Using the Event Wire Control Center," page 259

Chapter 16, "Event Wire API Reference," page 249

Event Wire and Your External System

This section discusses:

• Passing the Landing Page URL to the external System.

• Calling Event Wire.

• Using required fields on Landing Pages.

• Field matching rules in the dialog.

• Displaying web pages to customers.

• Checking the status of Event Wire.

• Making changes to a Live dialog

Passing the Landing Page URL to the External System

For two of the calls to Event Wire (getparams and processtrxn), the external system must include the URL of the Online Marketing dialog landing page (the external event trigger entry). The external system can receive this URL dynamically, or the URL can be hard-coded into the external system (a static URL).

Setting the Landing Page URL Dynamically

You can pass the Landing Page URL dynamically to the external system by either:

• Inserting the URL in a redirect command.

• Including the URL in a cookie.

After the URL is received by the external system, it must be saved during the customer's session so that it can be included in the processtrxn call to Event Wire. The external system can save the URL in a variety of ways, including hidden fields and cached information during the customer's browser session.

Setting a Landing Page URL Statically

When the customer arrives at the external system directly (without being redirected by an Online Marketing dialog), the Landing Page URL must be preset in the external system so that it can be passed to Event Wire in the processtrxn call. For example, the URL could be placed in a configuration file for the external system to read and set. The URL could also be placed in a GIF image tag on the page or in a cookie.

Calling Event Wire

The main call that the external system will make to Event Wire is the processtrxn call. This call specifies the Landing Page URL to be used, and includes any data to be passed to Online Marketing.

You can make this call to Event Wire in several ways:

• Image tags

• Cookies

• Programmatically

You must decide how you will make the calls to Event Wire. This decision has several factors, such as: what you want displayed to your respondents, whether the Landing Page URL is dynamic or static, how easily you want to be able to track the successful completion of your calls from the external system, and the length of the call to be made (HTTP limitations).

When the Landing Page URL is passed dynamically, the external system must be able to store this information and then include it in the processtrxn call.

See Chapter 16, "Event Wire API Reference," page 249.

Specifying Parameters to Event Wire

Calls to Event Wire must specify two types of parameters: those specific to Event Wire, and those specifying the data to be submitted to the Online Marketing dialog.

The external system can pass parameters to Event Wire via the query string of an HTTP GET or POST call or via a cookie. (The query string is everything that follows the question mark in the HTTP call.) Cookies must only specify the Event Wire parameters.

Depending on how your external system is set up, it is possible to pass parameters to Event Wire using more than one of these methods. To avoid conflicts due to the same parameter being sent via different methods, Event Wire uses the following precedence rule:

1. Parameters specified using the GET method.

2. Parameters specified using the POST method.

3. Parameters specified in cookies.

4. If useDefaultValue = 1, default profile and document values.

This rule means that when the same parameters are specified in more than one method, Event Wire takes the value set in the method with the highest precedence. The parameters specified using GET have the highest, followed by those using POST, then those in cookies, and finally any default profile or document values if useDefaultValue is set to true.

If parameters contain any special characters, they must be URL-encoded before being sent to Event Wire.

Using IMAGE Tags

One way of making a processtrxn call is to embed an IMAGE source tag into an HTML page of the external system. This method is easy to implement: specify the Event Wire call as the image source. When the page is submitted, the call is made automatically.

However, when using an IMAGE tag you should keep in mind the following:

• Any respondent can view the Event Wire call by simply displaying the web page source.

• If Event Wire is not available, the page containing the image may take longer to load.

• You cannot retrieve the Event Wire result codes from an IMAGE tag, making it impossible to be notified whether a call was successful.

Using IMAGE tags to place calls to Event Wire is convenient because it is simple to integrate with web sites; just insert the IMAGE tag on the web page, and include the specific call. The following example shows an IMAGE tag.

```
<IMG SRC="http://estartup.com/Apps/DES/wire?method=processtrxn&
lpurl=http:%3a%2f%2festartup.com%2fApps%2fDES%2fmcp%3fr=iwedf139df
&externid=estore&First$Name=Joe&Last$Name=Smith" HEIGHT=0 WIDTH=0>
```

Some important notes on using IMAGE tags include:

If you are using IMAGE tags to call Event Wire on the subsequent page after a SUBMIT and that subsequent page contains links that a user might access and then click the Back button on the browser to re-access the subsequent page, then every Back access will make another Wire transaction for that user.

If you are not using IMAGE tags to call Event Wire but if an Event Wire call occurs for every SUBMIT, then a user submitting the same page more than once can cause this problem to occur.

You can do one of the following to avoid this problem:

1. If it is acceptable for Event Wire to be called multiple times by the external system but the business requirement is for the dialog to be triggered only once per visit, use a transaction ID (trxnid) to force actions involving a single user to be recorded only once. Event Wire will ignore subsequent transactions with the same trxnid after the first successful transaction.

   To implement this, add the trxnid parameter to the Event Wire call, and program a unique transaction id generator to create a distinct trxnid for each visit. For example, in the HTTP call you might add something similar to:

   ```
   &trxnid=110900123sdf
   ```

   You must also access the Event Wire Control Center to turn on the trxnid parameter requirement for that external system. If you do not change the settings in the Event Wire Control Center, then the trxnid will be ignored.

   Note. trxnid values should be unique among all the Event Wire transactions for a specific external system.

   ---

2. If the application server is experiencing heavy load and you want to reduce the number of Event Wire calls being made to only one per user, you must restructure how Event Wire is called.

   Do one of the following:

   • Do not call Event Wire using IMAGE tags on pages that users might return to or access more than once.

   • Programmatically check in your external system before calling Event Wire that this request has not already been submitted to Event Wire.

See Chapter 16, "Event Wire API Reference," page 249 and Chapter 16, "Event Wire API Reference," processtrxn, page 251.

Using Cookies

Using cookies to pass a parameter to Event Wire produces the same results as specifying the parameter in the query string of an HTTP GET or POST call.

When using cookies to pass parameters, you should keep in mind that when customers have cookies turned off in their browsers, the Event Wire call will fail. You may want to set the external system to check for this condition and use a preset Landing Page URL (lpurl) in the call to Event Wire.

When using cookies, you should only include the processtrxn specific parameters (trxnid, lpurl, externid, returntype, and method). The parameters that specify values for fields on the Landing Page should be included in the query string. (The query string is everything that follows the question mark in the HTTP call.)

To test that you are setting the cookies properly, use the Event Wire short method, which displays all the cookies that Event Wire can read in the current browser. For example: http://machine_name[:port]/DES/wire?method=short.

See Unofficial Cookie FAQ at http://www.cookiecentral.com/faq.

Programming Calls to Event Wire

Event Wire can be called by any application that can make HTTP requests, including:

- Web browsers.

- Applications written in Perl, C/C++, Java, and so on.

- Application server modules.

- HTML documents through IMAGE tags, JavaScript, and so on.

- Database callouts (for example, Oracle's UTL_HTTP package).

Writing a program to call Event Wire has the advantage that it is very flexible. You can create a custom solution for each situation, and you can check status codes and take actions based on the results. However, altering existing programs can require significant resources and may not be an attractive prospect.

Consider the following programming scenarios:

An e-commerce site wants to use Event Wire to submit purchase data to the Online Marketing profiles. Here are two programming options to implement this scenario:

- Modify the external program that handles the confirmation of the purchase to also call Event Wire.

  This solution allows the program to check the status codes and resubmit any calls that were not completed. For example, if a network problem exists, the program can store the requests and retry them later.

- Insert JavaScript in the confirmation page to call Event Wire in a separate small window and display the results in that window.

  In this case, calls to Online Marketing will not be automatically resubmitted by the external system if they fail due to a network problem.

Another scenario is an external registration system that stores data into its own database, and wants to add this data to the Online Marketing profiles. In this case, you can write a Perl script to go through the database at night and call Event Wire with the new data for that day.

Using Required Fields on Landing Pages

When a Landing Page uses required fields, Event Wire performs additional processing to ensure that the requirements are met for each processtrxn call. Specifying required fields can be helpful during the design and testing phase of your dialog to ensure that the external system is passing the appropriate parameters. However, using required fields in a dialog results in slower overall performance. Therefore, after testing the implementation to ensure proper operation, you may want to change the fields so that they are not marked required. This improves system performance but increases the chance of invalid or missing data (for example, if the matching field is not specified).

Along with other types of errors, missing required fields from the processtrxn call is considered an invalid request. Invalid requests are not logged in the Event Wire tables and thus are not retried. However, they may be logged in the DES log file, depending on the error logging level set.

Event Wire performs specialized data validation depending on whether the field is required or not:

- *If the field is required*: An incorrect value passed in means that the entire transaction in error, and none of the document/profile fields are inserted.
- *If the field is not required*: Event Wire ignores the bad data (inserts an empty value) and continues with the other fields in the request.

In either case, an error message appears in the Event Wire log files and the transaction report.

Note. If the matching field is not required and not passed to Event Wire, then Event Wire returns success even though the contact or company profile is not updated. This is because the Event Wire call is still correct, but the matching rule for Online Marketing is not fulfilled.

Field Matching Rules in the Dialog

Online Marketing dialogs can use profile rules to determine whether a customer from the external system is known in the Online Marketing profiles.

If any matching rules are used by the dialog, you must ensure that your Event Wire call provides all of the matching fields in addition to the required fields on the Landing Page. Without specifying these fields, you cannot update the profile database.

If matching fields are not included in an otherwise valid Event Wire call, the data will be available through the CRM Analytics company reports, but no data will be saved in the profile database.

See Also

PeopleSoft Enterprise CRM 9 Marketing Applications PeopleBook

Displaying Web Pages to Customers

When an external system makes a call to Event Wire, it may take a few seconds for Event Wire to respond, depending on the configuration and load on the Online Marketing Dialog Server.

If the external system is to display a web page to the customer based on the response it receives from Event Wire, the external system can be set to display two different web pages to ensure that the user does not experience a long wait time: one page containing a confirmation from the external system that can be displayed immediately, and the other containing the Online Marketing dialog page that will be displayed as soon as Online Marketing responds to the call.

For example, imagine that the external system is an e-commerce storefront, and Event Wire is called after a customer has purchased an item. After the purchase, the storefront can display two browser windows. The first window displays the storefront's confirmation page. The second window can contain the call to Event Wire with the appropriate parameters and display the landing page for the Online Marketing dialog. If the call to Event Wire does not succeed, the alternate URL configured in the Event Wire Control Center appears.

Checking the Status of Event Wire

Under normal conditions, after Event Wire performs a call, it returns an HTML response to the external system, indicating the status of the call. However, because the external system and Event Wire communicate across a network, it is possible that either the call to Event Wire or its response will not arrive.

You should keep this possibility in mind when determining how to implement Event Wire with your external system. Depending on the goals of your dialog, you may want to log and review Event Wire responses received by the external system. Event Wire provides the gettrxnstatus call as well as the Report feature in the Event Wire Control Center that return the status of Event Wire transactions.

Making Changes to a Live Dialog

After your Online Marketing dialog is integrated with your external system, if changes are made to the live dialog, you may need to make changes to the external system call.

For example, if changes are made to the Landing Page, you need to check whether these changes affect the parameters being passed to Event Wire. If so, you should modify the call from the external system. If the parameters are not changed to match the fields on the Landing Page, a previously valid processtrxn call will become invalid and fail.

Retried Transactions

This section discusses:

• Understanding retried transactions.

• Typical reasons why calls fail.

Understanding Retried Transactions

It is possible that after Event Wire receives a processtrxn call from an external system, it cannot contact the specified Online Marketing dialog. One possible reason for this result is that the dialog is in Paused status.

When this result occurs, Event Wire logs the transaction in the Event Wire database and responds to the external system with a return code indicating that the transaction was not completed.

Through the Event Wire Control Center, you can set the Scheduler to periodically check the Event Wire database for incomplete transactions and to automatically retry the transaction. Since retries can occur long after the transaction was originally submitted, Event Wire does not issue any response to the external system as a result of completing a retried transaction.

Event Wire will only retry calls that are valid but fail for another reason. A valid call is one that is properly formatted and has all of the necessary parameters. Invalid calls are not retried.

Typical Reasons Why Calls Fail

A valid call to Event Wire can fail for a variety of reasons, such as:

• Slow response time due to congestion on the network.

• The network is down.

• The Online Marketing dialog is in Paused status.

• The Application Server is busy and cannot launch a new request from Event Wire to the Dialog Server.

Although Event Wire can automatically retry unsuccessful transactions, sometimes the external system will not receive a response to a call due to a network or other problem. To ensure that each call is handled correctly, you may want to set up the external system to track the Event Wire responses to the processtrxn calls, and resend any call that does not receive a response.

Event Wire Security

Each external system that uses Event Wire must identify itself by using an external ID in every processstrxn or gettrxnstatus call. Event Wire checks whether the external ID has been set up in the Event Wire Control Center. If not, the request is rejected.

However, anyone who knows a valid external ID, the landing page URL, and its parameters can issue a call to Event Wire. To minimize the exposure of these values, you can use a secure connection to call Event Wire. To do this, establish an SSL (Secure Sockets Layer) session, whereby all data is encrypted before being sent across the network.

CHAPTER **16**

Event Wire API Reference

To use Event Wire, you must program your external system to make HTTP or HTTPS calls with the appropriate information. Event Wire returns the status of the requested operation to the external system via HTTP calls.

This chapter includes the following sections:

• The Event Wire API

• Status Codes and Messages

• Sample Java Code

The Event Wire API

Event Wire is accessed through an HTTP API that accepts calls in URL encoding. Event Wire also accepts secure HTTP calls (HTTPS).

Event Wire supports the following calls:

getparams	Obtains the list of fields used on an Online Marketing Dialog Landing Page.
processtrxn	Passes to Event Wire the Landing Page URL to be accessed and the values for each field on the Landing Page.
gettrxnstatus	Obtains the status of Event Wire transactions.

getparams

getparams returns the list of document fields used on an Online Marketing dialog Landing Page. This allows you to see the fields on the Landing Page and their exact spelling so that they can be properly specified as parameters in the processtrxn call to Event Wire. getparams is typically used only while developing the calls or while troubleshooting problems that arise from changes to a dialog.

getparams Syntax

To get the parameters for a particular landing page URL, you must make the following HTTP request (this request must be written as one line without any blank spaces):

```
http://<EventWire_domain[:port]>/Apps/DES/wire?
```

```
method=getparams&
lpurl=<landing_page_URL>
```

where:

EventWire_domain	is the domain name of the machine where Event Wire is installed. (This is also the machine where the DES is installed.)
port	is the port on which to connect to Event Wire. The default is port 80.
method	specifies the operation to be performed by Event Wire. For this call, method must be set to getparams. (The default value for method is processtrxn.)
lpurl	is set to the URL for the Online Marketing landing page. It should be URL encoded. For example:

```
http://mystore.com/Apps/DES/mcp?q=iwedf139df
```

For example:
```
http://estartup.com/Apps/DES/wire?method=getparams&lpurl=
http%3a%2f%2festartup.com%2fApps%2fDES%2fmcp%3fq=
iwedf139df
```

getparams Return Values

Event Wire responds to all getparams calls with an HTML page, containing a status code, status message, and the fields used on the specified page.

The status code and status message are listed in the HTTP headers of the returned page, in the following syntax:

```
WireStatusCode: <status_value>
 WireStatusMsg: <status_message>
```

The fields used on the specified landing page are listed in the HTTP body of the HTML page. The fields are listed in the following table, including their type, whether they are required, and any preset values. Event Wire does not support Text Block or File elements, so if the landing page includes elements of that type, an error message will appear. Also, Event Wire does not work with survey dialogs, so if the dialog contains any documents with "Survey Document" checked, then an error message will appear.

Name	The name of the field. Notice that the column lists field names containing a "$". This is the symbol used by Online Marketing to represent spaces. When specifying parameters in the processtrxn call, you must use the "$" in the field name instead of spaces.
Type	The field's type (for example, Text Entry, Single Choice, and so on). If the page contains Text Block or File elements, then the getparams call will return an error page.
Required	Whether the field is required.
Valid Values	The acceptable values defined for the field.
Use Profile Default	Indicates whether the default profile value will be populated by Event Wire if the useDefaultValue parameter is 1. Values are Yes or No depending on whether the profile default will be used. If the field is not a profile field, this column contains "N/A".

Document Default Value   Indicates whether the default value (if any) for the document field will be populated by Event Wire if the useDefaultValue parameter is 1. If the field is not a document-specific value or has no defaults, this column is empty.

If the getparams request is not successful, the WireStatusCode will not be 0, and Event Wire will return WireStatusCode and WireStatusMsg in the body of the HTML page.

See Chapter 16, "Event Wire API Reference," Status Codes and Messages, page 256.

processtrxn

processtrxn is the function used to pass the Landing Page URL to Event Wire, and to specify values for the fields on the Landing Page. After each processtrxn call, Event Wire accesses the Landing Page specified in the call and passes any values specified for the fields on that page.

This call also specifies whether any Online Marketing dialog pages can be displayed to the customer (through the returntype parameter).

As with the getparams call above, Event Wire does not support Text Block or File fields and so the processtrxn API will fail if the landing page contains any of those types of fields.

processtrxn Syntax

To make a processtrxn call, you must use the following HTTP request (this request must be written as one line without any blank spaces):

```
http://<EventWire_domain[:port]>/Apps/DES/wire?
  [method=processtrxn&]
  lpurl=<landing_page_URL>&
  externid=<external_sys_id>&
  [trxnid=<transaction_id>&]
  [returntype=<type_of_response>&]
  [dblog=<value_of_dblog>&]
  [useDefaultValue=1&]
  [ <field_1>=<field_value>&
    <field_2>=<field_value>&
    ...
    <field_n>=<field_value> ]
  [ &<choice_field>=<choice_1>;...;<choice_n>]
```

where:

EventWire_domain   is the domain name of the machine where Event Wire is installed. (This is also the machine where the Dialog Server is installed.)

port   is the port on which to connect to Event Wire. The default is port 80.

method   specifies the operation to be performed by Event Wire. The default value for method is processtrxn. For this call, method is optional, since it is the default operation.

lpurl   is set to the URL for the landing page. It should be URL-encoded if it will be called programmatically. For example:

```
http://mystore.com/Apps/DES/mcp?q=iwedf139df
```

The landing page contains a submit button, Event Wire will attempt to simulate the submit information on that Landing Page, and the Online Marketing Dialog Server will log the transaction as a submit. If the Landing Page does not contain a Submit button (a Standalone page), the Dialog Server will log the transaction as a visit and not a submit. You can view the logged information through CRM Analytics.

externid

identifies the external system making the call. The externid is set up via the Event Wire Control Center. The only characters allowed in the externid are alphanumeric characters, underscores, and dashes.

trxnid

identifies the specific request for a particular external system. The only characters allowed in the trxnid are alphanumeric characters, underscores, and dashes. The maximum allowable length is 40 characters.

For each externid, the trxnid can be configured as either required or optional. This is set through the Event Wire Control Center. The trxnid is displayed on the transaction reports generated through the Event Wire Control Center.

If the transaction ID is set to Not Required in the External System Setup of the Control Center, then this field is entirely ignored for the external system, and it is not saved in the trxnid column of the log. However, if this setting is later changed, any subsequent trxnids will be logged.

dblog

(Optional) This parameter specifies whether successful transactions should be logged and the way in which they are logged. Valid failed transactions are always stored in the Event Wire database, regardless of the dblog value. After a transaction is updated from failed to successful during retry, it will still exist in the Event Wire database.

0: The default. Successful transactions will be completely logged in the Event Wire database. This value is backward compatible with previous versions of Event Wire.

1: Successful transactions will be logged in the Event Wire database, but without the URL. This option saves space in the Online Marketing database.

2: Successful transactions will not be logged in the Event Wire database. The exception to this is when trxnid is required; in this case, this value is treated the same as if dblog were set to 1.

returntype

(Optional) This is a number indicating the type of content to be returned in the body of the response HTML page.

0: The default. A clear 1x1 pixel GIF image is always returned in the body, regardless of whether the call succeeds or fails.

1: Indicates that an empty HTML page is always returned in the body, regardless of whether the call succeeds or fails.

2: Used to allow the external system to display an Online Marketing dialog page to the customer. This returntype indicates that if the processtrxn call succeeds, the body of the response page is either the content of the Standalone Page, or the content of the next web page in the flow (when the call is to a Landing Page). If the processtrxn call fails, the body of the response page is the HTML page specified in the Event Wire Control Center (External System Setup).

<table>
<tr><td></td><td>3: Indicates that the WireStatusCode and WireStatusMsg values are to be returned as text inside the body. This can be useful in debugging.</td></tr>
<tr><td>useDefaultValue</td><td>(Optional) is used to preload the default values for Online Marketing Dialog documents or profile fields.</td></tr>
<tr><td>field_n</td><td>(Optional) This is the name of a field on the landing page. This field must be written in the Online Marketing format (spaces are replaced with "$"). For example, for the profile field First Name, it would be written as First$Name.

You can use the getparams call to obtain the fields on a landing page in this format. However, the required fields must be provided. All other fields are optional.</td></tr>
<tr><td>field_value</td><td>(Optional) This is the value to be assigned to the field. The value must be in URL-encoded format. If the field is a date field, it must match the format specified in the dialog Landing Page.</td></tr>
<tr><td>choice_field</td><td>(Optional) This is the name of a multiple choice field on the landing page. This field must be written in the Online Marketing format (spaces are replaced with "$"). For example, for the profile field Favorite Color, it would be written as Favorite$Color.

You can use the getparams call to obtain the fields on a landing page in this format. However, the required fields must be provided. All other fields are optional.</td></tr>
<tr><td>choice_n</td><td>(Optional) When the field is a multiple choice field, you must specify each value separated by a semicolon. For example, if there are multiple types of books that can be specified for a field named Booktype, to specify Mystery and Comedy, then you would include the following: Booktype=Mystery;Comedy</td></tr>
</table>

For example:

```
http://estartup.com/Apps/DES/wire?method=processtrxn&
lpurl=http://estartup.com/Apps/DES/mcp?p=iwedf139df&externid=ecom5
&trxnid=123&returntype=2&dblog=1&First$Name=Sacha&Last$Name=Smith&
Email=sasha@esail.com&purchase=500
```

See <u>Chapter 16, "Event Wire API Reference," getparams, page 249</u>.

See <u>Chapter 17, "Using the Event Wire Control Center," page 259</u>.

processtrxn Return Values

Event Wire responds to all processtrxn requests with an HTML page, containing a status code and status message in the HTTP headers, and the return information specified by the returntype parameter in the HTTP body of the HTML page. This page can be viewed in the browser by using returntype=B.

The status code and status message are listed in the following syntax:

```
WireStatusCode: <status_value>
 WireStatusMsg: <status_message>
```

See <u>Chapter 16, "Event Wire API Reference," Status Codes and Messages, page 256</u>.

gettrxnstatus

gettrxnstatus allows you to query Event Wire for the current status of transactions submitted via the processtrxn call. Since Event Wire communicates with the external system across a network, it is possible that due to network problems, the Event Wire response to a call may not reach the external system. Using the gettrxnstatus call, you can have Event Wire send to you:

• All responses to all valid transactions from a specific external system.

• All responses to all valid transactions from a specific external system within a specified time period.

• The response to a specific valid transaction.

Note. Invalid transactions (for example, those with missing parameters) are not stored in the Event Wire database, and thus are not returned by the gettrxnstatus call.

The Event Wire Control Center provides the Report feature that performs the gettrxnstatus function.

See Chapter 17, "Using the Event Wire Control Center," page 259.

gettrxnstatus Syntax

The syntax for the gettrxnstatus call is as follows (this request must be written as one line without any blank spaces):

```
http://<EventWire_domain[:port]>/Apps/DES/wire?
 method=gettrxnstatus&
 {externid=<external_sys_id> |
  externid=<external_sys_id>&trxnid=<transaction_id> |
  externid=<external_sys_id>&startdate=<date_time>&
  enddate=<date_time> }
```

where:

EventWire_domain	is the domain name of the machine where Event Wire is installed. (This is also the machine where the Dialog Server is installed.)
port	is the port on which to connect to Event Wire. The default is port 80.
method	specifies the operation to be performed by Event Wire. For this call, method must be set to gettrxnstatus. (The default value for method is processtrxn.)
externid	identifies the external system making the call. The externid is set up via the Event Wire Control Center.
trxnid	(Optional) This identifies the specific request for a particular external system.
startdate	(Optional) This is the starting date and time of the time period used to select transactions from the Event Wire database. The format is YYYYMMDDhhmmss, where hh is 0-24 hours (for example, to specify 1:00am on April 23, 2004, use 20040423010000).
enddate	(Optional) This is the ending date and time of the time period used to select transactions from the Event Wire database. The format is YYYYMMDDhhmmss, where hh is 0-24 hours (for example, to specify 2:30pm on April 23, 2004, use 20040423143000).

Note. Depending on the responses you want to receive, you must specify either the externid alone, the externid and trxnid, or externid with a startdate and enddate.

---

gettrxnstatus Return Values

Event Wire responds to the gettrxnstatus request with an HTML page, containing a status code and status message in the HTTP headers, and the requested transactions in the body of the HTML page.

The status code and status message are listed in the following syntax:

```
WireStatusCode: <status_value>
 WireStatusMsg: <status_message>
 WireNumTrxns: <number_of_matching_transactions>
 WireTrxn-1: <externid>+<trxnid>+
  <date/time_called>+<trxn_status_value>+
  <trxn_status_message>
```

where:

WireStatusCode	is one of the Event Wire status codes.
WireStatusMsg	is one of the Event Wire status messages.
WireNumTrxns	is the number of transactions that match the criteria specified in the gettrxnstatus call.
WireTrxn-1	is information about the transaction specified. This field is returned only when the gettrxnstatus call specifies a trxnid.
date/time_called	is the date and time that the call was made to Event Wire. The format is YYYYMMDDhhmmss, where hh is 0-24 hours (for example, 20040423173000 specifies 5:30pm on April 23, 2004).
trxn_status_code	is the status code for the transaction. If the transaction completed properly, the status code is 0.
trxn_status_message	is the status message for the transaction.

An example of some headers containing a returned successful WireTrxn-1 field is given here:

```
WireStatusCode: 0
 WireStatusMsg: Success
 WireNumTrxns: 1
 WireTrxn-1: Mystore+a1203+20040223143000+0+Success
```

If the gettrxnstatus request is not successful, the WireStatusCode will not be 0, and Event Wire will return WireStatusCode and WireStatusMsg in the body of the HTML page.

See Chapter 16, "Event Wire API Reference," Status Codes and Messages, page 256.

short

short returns a list of all cookies in the current browser that are readable by Event Wire.

Except for the method=short name/value pair, it takes no parameters. Use this method for debugging only.

Status Codes and Messages

The following table lists the status codes and messages returned by Event Wire.

Status Code	Status Message	Description and Solution
0	Successful call.	This is the normal response for successful calls.
1	Could not connect to the Dialog Server: <hostname>	The Dialog Server is not running. (Not currently used)
2	Invalid Dialog Page URL: <lpurl>	The lpurl did not match a known URL. Verify that there are no typographical errors in the URL and that you are using the correct URL.
3	Missing Wire required parameters	Not all of the Event Wire required parameters were included in the call.
4	Invalid method	The method specified is not a valid Event Wire method. The method must be either getparams, processtrxn, or gettrxnstatus.
5	No available page exists for the lpurl	The Dialog Server dialog ID may have changed due to a change in the dialog's status. To resolve this, ensure that the dialog is live.
6	Duplicate trxnid	The transaction was processed previously and was successful. This message only appears when Transaction ID is set to Required in the Event Wire Control Center.
7	DB connection failed	Event Wire cannot establish a connection with the database. The values set in the configuration file may be incorrect or another problem may be inhibiting the connection.
8	Event Wire internal error	Restart the application server. If this error persists, report it to PeopleSoft technical support.
9	Invalid external system ID	Either the externid was specified incorrectly or it was not set up in the Event Wire Control Center.
10	Missing dialog page required parameters (could not submit)	Fields on the Landing Page that are specified as required in the Online Marketing dialog are missing from the processtrxn call.
11	Invalid p, q, or r value	The tracking number (magic number) being passed to Event Wire is not valid. The URL may have been generated while the dialog was in Testing status, or a mistake was made when specifying a static URL in the external system. Check and correct the URLs being used.

Status Code	Status Message	Description and Solution
12	The dialog is paused	The Online Marketing dialog is paused. Event Wire can only access live dialogs. The transaction will be automatically retried if the Scheduler has been set for this external system.
13	Invalid date	A date specified in the gettrxnstatus call is not in the correct format. Correct the date format and resubmit the call.
14	Invalid trxnid	The value of the trxnid parameter is invalid (such as incorrect characters, or too long).
15	Invalid returntype	The value of the returntype parameter is invalid. The returntype must be either 0, 1, 2, or 3.
16	The dialog is inactive.	The dialog is not in an active status to accept requests. (For example, it might be in the In Design or Complete status.)
17	Invalid trxn log option	The value for dblog is not valid (valid values are 0, 1, and 2).
18	Invalid useDefaultValue option	The value for the useDefaultValue parameter is not 0 or 1.
19	Invalid dialog parameter value	The input parameter value is not one of the acceptable choices.
20	Missing Event Wire required parameters (could not submit)	An Event Wire required parameter (not covered by the other error messages) is missing or invalid.
21	r number points to an external web link	The target of the VC Web Link is an external URL. Event Wire only supports "r" magic numbers that point to a dialog standalone or landing page.
99	Webserver or DCS error	Possibly due to the webserver's not being able to forward the request from Event Wire to the Dialog Server, or some other unexpected error. The transaction will be automatically retried if the Scheduler has been set for this external system.

Sample Java Code

The following simple Java example makes a processtrxn call and prints the status code and status message.

```
import java.lang.*;
import java.net.*;
import java.io.*;
 class wiretest
 {
```

```
  public static void main(String[] args)
   throws Exception
  {
   URL wire_url = new
 URL("http://test.foo.com/Apps/DES/wire?lpurl=http%3a%2f%2f
test.foo.com%2fApps%2fDES%2fmcp%3fq=ST100tTEjyc_t8&externid=test2&returntype=3
&Email=x@a.com&useDefaultValue=1");
   URLConnection yc = wire_url.openConnection();
   System.out.println("WireStatusCode: " +
   yc.getHeaderField("WireStatusCode"));
   System.out.println("WireStatusMsg: " +
   yc.getHeaderField("WireStatusMsg"));
  }
}
```

CHAPTER 17

Using the Event Wire Control Center

The PeopleSoft Online Marketing Event Wire Control Center allows you to perform a number of administrative tasks on Event Wire.

This chapter discusses how to:

• Register external systems

• Use the Transactions Report

• View the Retried Transactions Report

Registering External Systems

All external systems must be registered with Event Wire. Registering an external system identifies that system and allows Event Wire to process calls coming from that system. External systems span all business units.

Pages Used to Register External Systems

Page Name	Object Name	Navigation	Usage
External System Registration	RY_EXTERNAL_SYSTEM	Marketing, Dialog Monitoring, Event Wire, External System Registry	Register an external system for use with Event Wire

Registering an External System

To register an external system, use the External System Registry (RY_EXTERNAL_SYSTEM) component.

Access the External System Registration page.

External System Registration page

External System ID	The string that will identify the external system making the call (externid). The externid must be used when making a call to Event Wire, and is entered in the Event Wire database. The only characters allowed in the externid are alphanumeric characters, underscores, and dashes.
Is Active?	Select this check box to specify that calls from this external system ID are to be processed by Event Wire.
Is Transaction ID required?	Select this check box Required to specify that calls from this external system ID must include a unique Transaction ID to identify the type of request being made.
	If the check box is not selected, the trxnid (Transaction ID) field is ignored for this external system. The field is not stored in the trxnid column in the log as a result of the processtrxn call. However, because Event Wire saves the entire call in the database, if the trxnid was provided in the call, it is saved in the database along with the call, just not in the trxnid column.
	If the Is Transaction ID required? setting was not selected but is selected later, any subsequent trxnids will be properly logged.
Alternate URL	Specify the URL of an HTML page to be displayed if Event Wire is unable to contact the Online Marketing Dialog Execution Server (processtrxn return type=2)
Retry Schedule Options	The Scheduler allows you to schedule Event Wire to regularly retry incomplete transactions.
	For a variety of reasons, some calls from the external system could be received by Event Wire, but the transaction with the Online Marketing Dialog Execution Server might not be completed (for example, if the dialog is paused). These transactions can be retried at a later time using the Scheduler.

The Scheduler allows you to set Event Wire to periodically check its database for incomplete transactions that fall within a specified time period, and resubmit those transactions to the Online Marketing Dialog Execution Server.

When Event Wire retries transactions, they are logged and their details can be obtained through the reports feature. Event Wire does not send any responses or return codes to the external system. Also, retries should be performed during off hours to prevent unnecessarily loading the system.

Frequency: Select whether you want the transaction to retry once, repeat, or not retry.

Start Date and Time: If you select Retry Once or Repeat in the Frequency field, enter the date and time that the transaction should first be retried.

Number of: If you select Repeat in the Frequency field, fill in the interval at which the repeats will occur. For example, if you enter 2 hours, Event Wire will retry the transaction every two hours.

Days to Retry: The time period that Event Wire checks for incomplete transactions. This value specifies the number of days preceding the retry that should be checked for incomplete transactions.

This value is set independently from the retry schedule; however, you should make sure that the interval is at least as long as the scheduled period to ensure that any incomplete transactions will be caught.

If no interval is specified, no transactions will be retried by the retry process.

Audit History   Displays information about the users who created and modified the registration.

Viewing the Transactions Report

Event Wire displays a report containing transaction information for external systems

Pages Used to View the Transaction Report

Page Name	Object Name	Navigation	Usage
Event Wire Transaction Report	RY_WIRE_TRANSACTION	Marketing, Dialog Monitoring, Event Wire, Transactions Report	Displays a list of all transactions attempted by Event Wire, along with their status.

Interpreting the Transaction Report

Access the Event Wire Transaction Report. You can search for specific transactions by entering information in the search fields, or click Search with all the fields blank to view all transactions.

Event Wire Transaction Report

Search Results   Customize | Find | View All | 🔲   First ◀ 1-4 of 4 ▶ Last

Trxn ID	Date/Time Created	Last Modified Date/Time	Status	Description	URL
	03/15/2004 2:42PM	03/15/2004 2:42PM	0	Successful call.	/?method=processtrxn&lpurl=http%3A%2F% 2Fanntdv01.dsi-fw.peoplesoft.com%3A82% 2FDCS%2Fmcp%3Fp% 3D821l03555035550000000&externid=test
	03/15/2004 5:53PM	03/15/2004 5:53PM	0	Successful call.	/?method=processtrxn&lpurl=http%3A%2F% 2Fanntdv01.dsi-fw.peoplesoft.com%3A82% 2FDCS%2Fmcp%3Fp% 3D821l03555035550000000&externid=test
	03/15/2004 6:09PM	03/15/2004 6:09PM	0	Successful call.	/?First%24Name=&Last% 24Name1=&Email1=&method=processtrxn&lpurl =http%3A%2F%2Fanntdv01.dsi- fw.peoplesoft.com%3A82%2FDCS%2Fmcp% 3Fp% 3D821l34wa34wZ034wZ0000000&externid=test
	03/15/2004 6:25PM	03/15/2004 6:25PM	0	Successful call.	/?First%24Name=X&Last% 24Name1=40&Email1=x%40% 40xyz.com&method=processtrxn&lpurl=http% 3A%2F%2Fanntdv01.dsi-fw.peoplesoft.com% 3A82%2FDCS%2Fmcp%3Fp% 3D821l34wa34wZ034wZ0000000&externid=test

▽ **Search**

Use Saved Search [_____] [▼]

External System ID [begins with ▼] [_____] 🔍

Transaction ID [begins with ▼] [_____]

Added [= ▼] [_____] 📅 **Time** [_____]

Last Modified [= ▼] [_____] 📅 **Time** [_____]

[Search]   [Clear]   Basic Search   💾 Save Search Criteria 🗑 Delete Saved Search   🔍 Personalize Search

Event Wire Transaction Report

Trxn ID (Transaction ID)	The Transaction ID to which the information refers.
Date/Time Created	The date and time when the transaction was first created.
Last Modified Date/Time	The date and time when the transaction was last modified.
Status	The status code for the transaction.
Description	Message describing the transaction's status.
URL	The URL that was used for this transaction in the Event Wire API call.

See <u>Chapter 16, "Event Wire API Reference," Status Codes and Messages, page 256</u>.

Viewing the Retried Transactions Report

This section discusses how to interpret the Retried Transactions Report.

Page Used to View the Retried Transaction Report

Page Name	Object Name	Navigation	Usage
Event Wire Retried Transaction Report	RY_WIRE_RETRY	Marketing, Dialog Monitoring, Event Wire, Retried Transaction Report	Display a list of all retries attempted by Event Wire, along with their status.

Interpreting the Retried Transactions Report

Access the Event Wire Retried Transaction Report.

Note. You can search for specific transactions by entering information in the search fields, or you can view all transactions by clicking Search with all the fields blank.

Event Wire Retried Transaction Report

Trxn ID (transaction ID)   The identifier of the retried transaction.

Retried Date/Time   The date and time at which the transaction was retried.

Status   The status code for the transaction.

Description   Message describing the transaction's status.

URL   The URL that was used for this retry action in the Event Wire API call.

See Chapter 16, "Event Wire API Reference," Status Codes and Messages, page 256.

CHAPTER 18

Using Extensions

This chapter provides an overview of the process of creating Extensions. It contains the following sections:

- Understanding Extensions
- Overview of Benefits and Usage
- Common Usage Scenarios
- Creating and Using Extensions
- Extension Programming Reference
- Sample Servlets

Understanding Extensions

This chapter assumes that you are familiar with the software development process and the creation of Java servlets and PeopleCode functions. It further assumes familiarity with the Online Marketing system and its architecture and database structure.

PeopleSoft recommends that you use the expertise of PeopleSoft's technical consultants for the development of any Extensions you need, as they have expertise in writing Java servlets and PeopleCode functions along with a thorough knowledge of PeopleSoft Online Marketing and its database structure. If you are a licensed customer you can also use this documentation to develop extensions using your own software developers.

Note. Support of any custom-written Extension (defined as any extension that does not ship with the Online Marketing product) is not offered through PeopleSoft's Customer Connection organization. Therefore, if you choose to develop Extensions in-house and need assistance (such as troubleshooting or testing assistance) beyond what this documentation provides, contact your PeopleSoft account manager who can help you decide which consulting services are appropriate.

There are two kinds of Extensions:

- Custom Content: Extensions included in Online Marketing documents.
- Custom Actions: Extensions included in the Online Marketing Dialog process

Overview of Benefits and Usage

Online Marketing provides the ability to merge data dynamically into documents using the Merge capability. The custom content extension extends this capability by allowing you to merge in external, customized content dynamically based on the profile interests of each recipient and your marketing strategy.

The custom action extension enables you to extend actions in the dialog process. Custom actions are custom Java Servlets or People Code Application classes that can execute business logic, update or retrieve profile information, and even retrieve or post information to external systems. You can insert custom actions as subtasks in both the Reach and Response actions of the Online Marketing dialog process.

Common Usage Scenarios

The following scenarios show examples of how Extensions can be used.

Custom Content Scenarios

The following scenarios illustrate some uses for custom content.

- A music e-retailer sends out a weekly email newsletter to its 10,000 registered subscribers. A Custom Content servlet enables the content in the newsletter to be customized, inserting that week's top 10 country albums in one subscriber's email with a web link in the content going to the Country section of the e-retailer's website, while another subscriber receives the list of the top 10 R&B albums with a link to the R&B section of their website.

- A networking company sends out a weekly customer newsletter. When the customers sign up to receive it, they can specify which of the 6 categories of the newsletter are of interest to them. Each week, they get new content delivered for their categories. At any time, they can modify their profiles to change which categories they wish to receive, and that change will be reflected in their next newsletter.

- An online mortgage broker gathers preferences from customers on the specific types of loans they are interested in (home, car, etc.), the terms of the loan (fixed, variable, balloon payments), the overall amount of the loan, and so on. Customers opt in to receive email each time a new loan is available that meets their criteria. Each day, the new loan data is loaded in the broker's database. Online Marketing is used to send out a daily email that pulls the latest loan information from the broker's database.

- A financial institution sends out a monthly financial update to their subscribers and tailors the information to the individual customer. If the customer is over 60 years old and has a 401K, the customer sees a section of their email which has information on low-risk mutual fund choices for 401Ks. If the customer is in the 20-30-year age bracket and does not have a 401K, that customer sees a section in their email encouraging them to set up a 401K, showing the benefits of starting to save when they are young.

Custom Action Scenarios

The following scenarios illustrate some uses for custom actions.

- A company would like to send leads that are generated using Online Marketing to their Sales Force Automation system. They would like to make sure the leads are well qualified before sending them, so they continuously update a prospects lead profile with the strength of a lead and the lead's timeframe to buy. A custom action can take this profile information and export it into an SFA system on a scheduled basis or when triggered by an event such as a contact filling out a registration page.

- A company would like to distribute their leads using a "round-robin" system. For each sales rep in a region, the company wants to send one lead to each person in that region, then start again at the first person. Custom actions can be used to first determine the region where a lead should go (based on demographic or other information) and then to track where the next lead should be sent, ensuring that the correct rep receives the information.

- A company would like to update their Online Marketing profiles with information from their customer support database. They would like to know the last time that a customer opened a trouble-ticket so they can periodically follow up with a custom support survey. A custom action can be used to update the profiles in real time.

- A company wants to have multiple lead profiles for each contact, as one person can be interested in multiple products at different times. A custom action can update their lead profile, a "many rows per contact" profile. As a prospect fills out a registration form, they answer questions that help the company determine how strong a lead that prospect is. Using a custom action, they can populate the lead profile with the quality of the lead (Hot, Warm, or Cold), where the lead was generated, and other information from the qualification questions (such as their timeframe to buy and whether they have an approved budget).

Creating and Using Extensions

Creating and using an Extension consists of the following steps. Each step will be described in greater detail in this section.

1. Define your extension requirements

2. Write the extension (a Java servlet compiled into class files or a PeopleCode Application class). If your extension is developed in People Code, you can skip step 3.

3. Package your extension java class file in a jar file and supply the name of the jar file directory in the extensionsDir parameter (set on the Online Marketing Settings page).

4. Register the extension using Online Marketing.

5. For custom content extensions, insert the Online Marketing formatted syntax using the Merge Content page to choose an extension, then specifying any needed parameters and their values in the desired email or web document. For custom action extensions, insert the custom action in the dialog process, specifying any needed parameters and their values.

6. Test the extension in a development environment.

7. Test the extension on your Online Marketing production system, testing the dialog that uses the extension.

8. After the dialog is successfully tested, go live with the test dialog to a test audience.

9. Go live with the extension in a production dialog to the desired audience.

See Also

Defining Extension Requirements

Every Extension is different, determined by the business needs of the person who will be using it. Before you begin work on an extension, ascertain your business needs. Determine what you want the extension to do, any particular needs or wishes you have, and what your expectations are (including expectations for error handling). Try to get as much specific detail as you can—the more you understand your needs, the more effectively you can meet them.

After you have determined your needs, create a detailed statement of work describing the extension, what it will do, the parameters it needs, and how you will implement it. Create a design for the extension before you begin writing it.

Write the Java Servlet

It is beyond the scope of this chapter to describe the general process for creating a Java servlet. However, there are some aspects of servlet creation specific to an Online Marketing Extension servlet. These are discussed in this section. Also, Online Marketing ships with three sample servlets named HelloWorld, SampleLiveExtension, and EXStockQuotes, which you can find in com.peoplesoft.crm.omk.examples.jar. You can use these servlets for custom content extension testing purposes and as a guide for creating your own servlets.

Servlet Imports

The servlet should include the following import statement to access the Extension framework:

```
import com.peoplesoft.crm.omk.external.GenericAnnuncioServlet
```

Note. The class of com.peoplesoft.crm.omk.external.GenericAnnuncioServlet is included in the jar file com.peoplesoft.crm.omk.jar, so you can use it to compile your extensions. This jar file can be found in the PeopleSoft Application Server install root/class directory.

Servlet Class Inheritance

The servlet class should be declared to extend the GenericAnnuncioServlet class. For example:

```
Public class myDemoServlet extends GenericAnnuncioServlet
```

This extension provides access to logging and tracing.

Note. Because the GenericAnnuncioServlet class is extended from Java servlets (not from HTTP servlets), the Extensions framework does not fully support HTTP protocol (such as HTTP sessions).

Output

Extension output for merge purposes can use the standard servlet ServletOutputStream provided with the servlet class via its response mechanism.

Note. Output is applicable only to custom content extensions; it will be ignored by custom action extensions.

Extension Framework Error Handling

The Extension framework handles errors for custom content extensions in the following ways, depending on the type of document:

Document Type	Error Handling Method
Web documents and single emails	Communication is assumed to be synchronous. If asynchronous communication is used, no default values will be rendered. A configurable timeout period, global for all dialogs, ensures that if content is not returned in a specified period of time, a default is inserted in place of the content. (It is possible to insert one or more blank lines as a default.) The Online Marketing log files provide information to help diagnose why the original content was not returned. The timeout period can also be set for a specific function call.
Broadcast email jobs	A predefined timeout period ensures that if email content is not returned after this period, the entire remaining broadcast email job aborts. In the case of errors that prevent content from being properly inserted into the emails, the emails are not sent. A thrown VCSingleContactException will also result in an individual email not being sent. The Online Marketing log files provide information to help diagnose why the content could not be accessed. Whether because of timeout or other error, if any emails that are part of a broadcast email job are not sent, you can use the Online Marketing Control Center to identify which emails were not sent and then resend them. This does not happen automatically, as it might be necessary to investigate the problem before resending the emails. Note that timeouts and errors that occur when processing asynchronous extensions do not prevent email from being sent. This is in contrast to synchronous behavior.

Extensions That Call Classes in External jar Files

If the custom extension needs to call classes in external jar files (such as CI methods or third-party methods), then these jar files must be added to the webserver's system classpath to be available to the extensions. The procedures for doing so are as follows:

WebLogic:

1. Put the jar files in a known location (for example, C:\Jars\myci.jar).
2. Go to <PS_HOME>/webserv/omk.
3. Open the setenv.cmd file.
4. Scroll to near the end, where you will see a line setting the CLASSPATH variable. For example:

```
SET CLASSPATH=%PSCLASSPATH%;%PLATFORM_PATCH%;%JAVA_HOME%\lib\tools.jar;%WL_HOME%\
server\lib\weblogic_sp.jar;%WL_HOME%\server\lib\weblogic.jar
```

5. Add your jar file location to the end of the CLASSPATH setting. For example:

```
SET CLASSPATH=%PSCLASSPATH%;%PLATFORM_PATCH%;%JAVA_HOME%\lib\tools.jar;%WL_HOME%\
server\lib\weblogic_sp.jar;%WL_HOME%\server\lib\weblogic.jar;c:\Jars\myci.jar
```

6. Restart the DES server.

WebSphere:

1. Go to the *lib* directory of the WebSphere installation.

2. Put the external jar file in this directory.

3. Restart the DES server.

Write the PeopleCode Function

It is beyond the scope of this chapter to describe the general process for creating a PeopleCode function. Refer to your PeopleCode documentation for more information.

Note. PeopleCode extensions can only be used as Custom Actions in the Online Marketing dialog flow.

Example PeopleCode Function

The following is an example extension, written in a PeopleCode extension class, that uses MessageBox to write its parameter names and values to the Application Server log:

```
import RY_DATAOBJS:*;

class CustomAction;
   method CustomAction();
   method actionMethod(&params As MapObj);
end-class;

method CustomAction
end-method;

method actionMethod
   /+ &params as RY_DATAOBJS:MapObj +/
   Local string &msg;
   Local array of string &keys;
   Local integer &i;
   &msg = "actionMethod(";
   &keys = &params.keys();
   For &i = 1 To &keys.Len
      If &i > 1 Then
         &msg = &msg | ",";
      End-If;
      &msg = &msg | &keys [&i] | "=" | &params.get(&keys [&i]).value;
   End-For;
   &msg = &msg | ");";

   MessageBox(0, "", 0, 0, &msg);
end-method;
```

The custom action receives a single parameter of type RY_DATAOBJS:MapObj. This is a name/value map which maps parameter names to parameter values. All names are strings; all values are of type RY_DATAOBJS.StringObj.

To get a PeopleCode string from StringObj, use its value property. The contents of the map will consist of all parameters defined when the action was registered, any additional parameters added when the action was included in a dialog, plus any document/profile fields on the page that was submitted to cause the action to be invoked.

PeopleCode actions are invoked asynchronously, and need not return a value.

See Also

Enterprise PeopleTools 8.48 PeopleBook: PeopleCode Language Reference

Enterprise PeopleTools 8.48 PeopleBook: PeopleCode Developer's Guide

Install the Extension Class Files on DES and Mailcaster Machines

If you have written a Java servlet for your Extension and compiled it as class files, perform the following installation steps:

1. Add the class file in a jar file with the full package path.

2. Set the jar file name on the Extension Registration page.

3. Put the jar file in a directory that includes other Extension jar files for Online Marketing. The directory name must be set to the value of the parameter extensionsDir on the Setting page.

If the DES and Mailcaster are installed on different machines, and the location of the extension jar file is not accessible from one of the machines, the extensionsDir value for individual service can be overwritten in the service's configuration file. For example, if the Extension jar can be accessed from DES, but not from all the Online Marketing other services (Mail service, WatchDog, and Email Response Processor), you should do the following:

1. Install the Extension jar file in a location accessible to DES. Set the jar location to extensionsDir in the DES Settings page.

2. Install the Extension jar file in a location where it is accessible to other Online Marketing services (such as Mailcaster).

3. For each services instance, add `extensionsDir="extension jar dir"` (see step 2 above) in the relevant configuration file (for example, MCR.config for Mailcaster).

In this case, DES will load the Extension jar file by using the value of extensionsDir from settings, and the Mailcaster will load the Extension jar by using the value of extensionsDir from the MCR.config file.

Create the Online Marketing Formatted Syntax

For custom content extensions (used in web and email documents), merge content is used to specify an extension to be executed. The merge content format is similar to the Online Marketing merge content format. It is not necessary to create this Online Marketing formatted syntax for custom action extensions.

The basic format for custom content extensions is:

```
<pstag:extension name="<name>" default="<details of function>" id="<VC Reference⇒
 ID>"/>
```

The merge content identifier that identifies the extension to execute is pstag: extension name="<name>", where

pstag	is the Online Marketing VC Tag identifier.
name="<name>"	The name of the extension.

default value	If the extension has no result, specify a default value to be used in the document.
id	The merge content reference identifier.

This tag must appear first in the merge content syntax. For example:

```
<pstag:extension name="Hello" default="<details of function>" id="1234" />
```

Global Extension Parameters

The following parameters can also be used in Extensions, and can appear in any order. These parameters apply to both custom content and custom action extensions. They are set in the Settings feature.

Parameter	Allowable Values
timeout	0 Indicates that the request is not subject to timeout management. 1..n Any valid integer greater than zero (0) indicates the number of seconds before timeout occurs. All other values including value parsing errors result in the system default timeout being used. The default value is 45.
async	true Indicates that this is an asynchronous request. The default value is false for custom content extensions (extensions inserted into documents) and custom action extensions (extensions inserted into the dialog process). The return value from an asynchronous extension is ignored. All other values including value parsing errors result in a synchronous request. *Warning!* PeopleSoft strongly recommends against using asynchronous communication for custom content extensions in broadcast emails, as the rendering of the extension might not keep pace with the speed of the Mailcaster. Synchronous communication can provide a "throttling" mechanism that prevents the extensions from using up all system resources.
default	any character string Indicates that the specified character string will be merged exactly as typed into the merge content. This is the default value.

Notes on Designing Extensions

The following usage notes describe things you should be aware of when creating and using Extensions.

• Caching Extensions

  Because caching custom content extensions has a direct impact on the WebLogic or WebSphere Application Server memory usage, you may need to modify the memory settings of the webservers to support cache content. You should tune elements of the system based on usage; caching all extensions is not necessarily a good idea. Exceeding the memory size value can result in unpredictable DES behavior.

• Checking for Timeout

The Extension framework cannot force a running servlet to stop when it is timed out—it can only request that the servlet stop processing and clean up after itself. Therefore, a well-behaved servlet should periodically check to see if it has been timed out, and stop processing if it has been.

The recommended way to do this is to check to see if the servlet's thread has been interrupted. This can be accomplished using the following call sequence:

```
import java.lang.Thread
...
boolean keepRunning = Thread.currentThread().isInterrupted();
if (!keepRunning)
{
 //... cleanup and exit code goes here
}
```

Note that default timeouts have an order of precedence depending on where they occur. The order in which they are used, from first to last, is:

1. The value specified in the merge content.

2. The value specified where the extension is registered

3. The global default value registered for the Extension framework

4. The internal, hard-coded default

A good rule to follow is that you should not specify a timeout in merge content unless it is very important to override the more general defaults.

• Throwing Exceptions

If the extension is to be used by the Mailcaster, you have control as to whether the entire job or only a single email is aborted.

If you want to abort the entire job, the servlet should throw a ServletException. You should do this, for example, if there is some resource needed for all contacts that is unavailable. The user can then reschedule the mail job after the problem is corrected.

If you want to suppress the sending of mail to the single contact then a VCSingleContactException should be thrown. This would be useful in the case where a resource for a single end user was not available.

Register the Extension in Online Marketing

To register and configure the Extension, you must have Dialog Administrator permission or permission to change settings.

Follow these steps to register and configure extensions:

1. Navigate to Set Up CRM, Product Related, Online Marketing, Extension Summary.

   The Extension page displays a list of current extensions.

2. In the Implement Type list, specify if the extension you want to register is a Java servlet or a PeopleCode application class.

3. Click the Add Extension button.

Registering a Java Extension

Access the Extension Registration page.

Extension Registration - Java servlet

Name	Specify a name for the extension. Spaces are allowed.
Description	Enter a brief description of the extension's function.
Status	Indicates whether the extension is ready for use by the system. An extension starts in the In Design status. You can change it to Active when it is ready to be used. Once an extension is Active, you can change it to Archived to prevent new references or usage in a document or flow. (Existing references will still continue to work.)
Type	Indicates whether the extension is written in Java or PeopleCode.
Usage	Select In Document if the extension is to be used to retrieve content for display in a document, or Process if the extension will perform a function as part of the dialog process.
Servlet Class Name	Specify a class name for the Java servlet, using the fully qualified name of the servlet (for example, com.peoplesoft.crm.omk.external.HelloWorld).
Servlet Jar File Name	Specify the name of the servlet's jar file.
Wait Return Before Process	Select this check box if the extension is to be processed synchronously, or leave it cleared if the extension is to be processed asynchronously.

Timeout	If specified, this value will override the global default specified in the extensionTimeout parameter set in the Settings component.
Custom Action Icon	When you select In Process as the Usage, you can upload a custom icon that will appear in the dialog flow when the custom action is selected. Click Upload Image to specify an image, or Delete Image to remove a previously specified image. If you do not supply a custom icon, the default custom action icon is used.
Parameters	You can define a default list of parameters for the extension during registration. These values can be overwritten by individual references to the extension in the Custom Action or Custom Content objects. All the parameters and values from the registration page, along with the overwritten or additional parameters from the specific references are passed to the system for processing.
	You cannot use merge content syntax in the parameter or value fields on the registration page.
Add Parameter	Click this button to add a new parameter to the list.

Note. If your extension requires third-party classes that came in a separate jar file from the extension jar file, you must package the third-party classes in the extension jar or else ensure that the third-party jar is available in the web container's class path.

Registering a PeopleCode Extension

Registering a PeopleCode extension is similar to registering a Java extension, except that a PeopleCode extension cannot be used in the Dialog Process tree. Because of this, the Usage check box is selected and disabled.

Extension Registration - PeopleCode function

Application Class Path   Enter the application package and class name for the PeopleCode function.

Class Method   Enter the method of the application class.

See <u>Chapter 18, "Using Extensions," Register the Extension in Online Marketing, page 273</u>.

Managing Extensions

Only users with the role of Dialog Administrator can register extensions or change global settings. Once an extension is registered and its status set to Active, it cannot be deleted from system. However, the following modifications can be made, depending on the extension's status:

Extension Status	Modifications
In Design	• Delete an extension on the Extension Summary page. • Delete an extension parameter on the Extension Registration page.
Active	• Change a parameter's value (but not delete it). • Add a new parameter. • Change the status to Archived (but not back to In Design). **Note.** You cannot change the extension's Name or Usage in this state. Also, when you make changes to an extension in Active state, you must restart the Dialog Execution Server for the changes to take effect.
Archived	This status is similar to Active, except that you cannot change the extension's Status. New references or usages are not allowed in either the Custom Content or Custom Action objects.

System Delivered Extension

One system extension, Update Case Score, is delivered in this release. It is used by Case Integration to update survey scores to Support and HelpDesk. You cannot modify the Update Case Score extension using the Extension Registration page, which is disabled for this extension.

See <u>Chapter 6, "Designing Web Documents," Understanding Surveys, page 84</u>.

See *PeopleSoft Enterprise CRM 9 Call Center Applications PeopleBook*, "Processing Cases," Sending Case Surveys.

Custom Action Runtime Behavior

If you will be using custom actions to update profiles (for example, updating a profile value to a document field value or a fixed value), it is important to understand custom action runtime behavior.

The Update Profile custom action updates the profile data to the cache first. It saves the information to the database with other profile updates after all the actions are completed and before it displays the next page to the user.

Custom Action Runtime Behavior: Extension Management

If Custom Actions are used in updating user profiles (such as updating a user profile using values from document fields or fixed values), the Update Profile Custom Action updates the profile data in the cache first. The Custom Action saves to the database with all other profile updates after all of the actions are completed, and before returning the next page in the dialog flow.

Note that in the case where a Custom Action must read data from Custom Profiles (User Defined Profiles), or other Customer Data Model (CDM) profile data from database, a Page Submit action is required in order for the data to be saved to the database so that a Custom Action can read that data. To accomplish this, use an Intermediate Page Action to ensure that data is submitted to the database before the Custom Action occurs in your Dialog Flow. Custom Actions that occur before a Final Page action do not meet this requirement as the Final Page action has no Submit action.

Since profile data from Online Marketing web pages and Update Profile actions are saved to the database at the end of action execution, data from a Custom Action is saved only after it is executed. Therefore, it is recommended that in order for a Custom Action to access current profile data, it should make use of the Profile based Variable Contents in the Custom Action parameter.

Test in a Development Environment

Before attempting to deploy the Extension in a production environment, test it thoroughly in a development environment.

Test in a Staging Environment

After you have configured the Extension, test it in a staging environment, within a test dialog, to a test audience. If possible, test in an independent development system that "mirrors" the production system because the impact to the system and the DES is unknown until the Extension has been tested.

Go Live!

First, you should go live with the Extension on your production system, using a test dialog and a test audience.

After completing testing of the extension, you are now ready to deploy it in a production dialog to your desired audience.

Extension Programming References

This section provides reference information useful when writing your own Extensions. The following topics are covered:

- Reserved Words
- Merge Content Syntax
- Available CGI Environment Values
- RFC 2616 Request Headers
- Netscape Enterprise Server-Specific Request Headers

Reserved Words

The following reserved words should not be used in your extensions except when using them in their explicit Online Marketing-specific sense.

• name

• timeout

• async

• default

See Chapter 18, "Using Extensions," Create the Online Marketing Formatted Syntax, page 271.

Merge Content Syntax

Merge content can be used when calling the extension in parameters or within the actual servlet code.

The following is the basic syntax for merge content:

```
{pstag:vctype [value="value"]
  [ default="defaultValue"]}
```

where

pstag	is the Online Marketing VC Tag identifier.
vctype	The merge content type (such as profile, document, and so on).
default	The keyword used to identify the default value for the merge content.
defaultValue	The value used as the default for any merge content that does not have a value. If there are spaces in the default, the value will appear within double quotes ("defaultValue").

See Appendix A, "Merge Content Specification," page 289.

Extension Merge Content—Company

The merge content syntax for companies in the profile database is:

```
<pstag:profile value="Organizations.profileName.fieldName" />
```

where

Organizations	indicates that the merge content data is a person or company in your profile database.
profileName	is the name of the profile.
fieldName	is the name of the profile element.

Note. Field names use the plain-text Element Name rather than the Element Permanent Name.

The following examples show Extension parameter merge content where a parameter value is set to be the value of Company merge content:

```
<pstag:profile value="Organizations.Companies.Organization Name" />
```

```
<pstag:profile value="Organizations.Companies.ZIP Code" />

<pstag:profile value="Organizations.Companies.Web Site Address" />

<pstag:profile value="Organizations.Companies.Organization Phone" />
```

Extension Merge Content—contact

The merge content syntax for people in your profile database is:

```
<pstag:profile value="Individuals.profileName.fieldName" />
```

where

Individuals	indicates that the merge content data is an individual or organization in your profile database.
profileName	is the name of the profile.
fieldName	is the name of the profile element.

> **Note.** Field names use the plain-text Element Name rather than the Element Permanent Name.

The following examples show Extension merge content where a parameter value is set to be the value of Individuals merge content:

```
<pstag:profile value="Individuals.People.Source ID" />
<pstag:profile value="Individuals.People.Email" />
<pstag:profile value="Individuals.People.ZIP Code" />
<pstag:profile value="Individuals.People.Last Name" />
```

Extension Merge Content—document

The merge content syntax for documents is:

```
<pstag:document value="documentName.fieldName" id="VC Reference ID"/>
```

where

document	indicates that the merge content data is a field from a document.
documentName	indicates the name of the Online Marketing web or email document
fieldName	is the name of the field from the document.
id	The merge content Reference identifier.

The following example shows an Extension merge content where a document is used in merge content:

```
<pstag:document value="doc_enter.ticker: id="123" />
```

Extension Merge Content—Constants

Constants can be passed as parameters to extensions or called from within the extension. The merge content syntax for constants is:

```
<pstag:constantName/>
```

where

constantName   is the name of the constant to be used in the merge content.

The following examples show Extension merge content where a constant is used in merge content:
```
<pstag:currentTime format="HH:MM" />
<pstag:recipientID/>
<pstag:dialogID/>
```

The following constants can be called in Extension constant merge content.

- emailTrackingBlock

- trackingNumber

- url

- currentDate

- currentTime

- recipientID

- baseURL

- activate_page_action_name

- dialogID

- actionID

- response_handler_id

- sourceActionID

- individualID

- organizationID

- individualBOID

- organizationBOID

- individualRoleTypeID

- organizationRoleTypeID

- documentLanguageCode

- dialogBusinessUnit

- documentSetID

Available CGI Environment Values

The following CGI environment values are available for inclusion in Extensions. These values are typically passed from the web server.

- SERVER_NAME

- SERVER_PROTOCOL

- SERVER_PORT

- REQUEST_METHOD

- PATH_INFO
- PATH_TRANSLATED
- PATH_TRANSLATED
- SCRIPT_NAME
- DOCUMENT_ROOT
- QUERY_STRING
- REMOTE_HOST
- REMOTE_ADDR
- AUTH_TYPE
- REMOTE_USER
- CONTENT_TYPE
- CONTENT_LENGTH
- HTTP_ACCEPT
- HTTP_USER_AGENT
- HTTP_REFERER

RFC 2616 Request Headers

The following RFC 2616 request headers are available for inclusion in Extensions.

- Accept
- Accept-Charset
- Accept-Encoding
- Accept-Language
- Accept-Ranges
- Age
- Allow
- Authorization
- Cache-Control
- Connection
- Content-Encoding
- Content-Language
- Content-Length
- Content-Location
- Content-MD5
- Content-Range
- Content-Type
- Date

- ETag
- Expert
- Expires
- From
- Host
- If-Match
- If-Modified-Since
- If-None-Match
- If-Range
- If-Unmodified-Since
- Last-Modified
- Location
- Max-Forwards
- Pragma
- Proxy-Authenticate
- Proxy-Authorization
- Range
- Referrer
- Retry-After
- Server
- TE
- Trailer
- Transfer-Encoding
- Upgrade
- User-Agent
- Vary
- Via
- Warning
- WWW-Authenticate

Netscape Enterprise Server-Specific Request Headers

The following Netscape Enterprise Server-Specific request headers are available for inclusion in Extensions.

- auth-user
- REMOTE_USER
- ip

Sample Servlets

This section provides information about the sample servlets shipped with Online Marketing Extensions:

• HelloWorld

• SampleLiveExtension

• EXStockQuotes

The HelloWorld servlet is a small extension you can use to test custom content extensions. The SampleLiveExtension servlet is designed to show some possibilities of the Online Marketing Extension architecture. Both are described in detail in this section.

The EXStockQuotes servlet, also included, is described briefly on page 94.

Location of Sample Servlets

For all of the sample servlets, the class files are provided and are packaged in the jar file com.peoplesoft.crm.omk.examples.jar.

where selected_path is the pathname where you chose to install the files.

Note. The files exist on machines where Online Marketing Dialog Server or Mailcaster is installed.

The "HelloWorld" Servlet

The test Java servlet named HelloWorld can be used to test custom content extensions. The following shows the source for this servlet.

```
//****************************************************************/
//        Confidentiality Information:                          /
//                                                              /
// This module contains confidential and proprietary information   /
// of PeopleSoft, Inc.; it is not to be copied, reproduced, or     /
// transmitted in any form, by any means, in whole or in part,     /
// nor is it to be used for any purpose other than that for        /
// which it is expressly provided under the applicable license     /
// agreement.                                                   /
//                                                              /
// Copyright (c) 2000-2002 PeopleSoft, Inc. All Rights Reserved.    /
//****************************************************************/
/*--- formatted by Jindent 2.1, (www.c-lab.de/~jindent) ---*/

package com.peoplesoft.crm.omk.external;
import java.io.PrintWriter;

/**
* HelloWorld servlet simply outputs the string "Hello World!"
*/
public class HelloWorld extends GenericAnnuncioServlet
{
  /**
```

```
 * HelloWorld constructor.
 */
public HelloWorld()
{
 super();
}
/**
 * Retrieves the servlet info string
 * @return String the servlet info string
 */
 public String getServletInfo()
{
 return ("HelloWorld, Annuncio Software, 4/2000");
}
/**
 * service method.
 */
 public void service(javax.servlet.ServletRequest req,
 javax.servlet.ServletResponse res)
    throws javax.servlet.ServletException, java.io.IOException
{
 PrintWriter out = res.getWriter();
 if (out != null)
 {
  out.print("Hello World!");
 }
 else
 {
  System.err.println("Can't get a PrintWriter.");
 }
 }
}
/*--- formatting done in "Annuncio Convention" style on 06-20-2000 ---*/
```

The "SampleLiveExtension" Servlet

The SampleLiveExtension servlet is a custom content extension that builds HTML on a web page based on a content's profile information. It shows how to achieve the following operations:

• Pass parameters, including profile information, to a Online Marketing Extension

• Retrieve external data to be merged into a document

• Manage a cache to improve performance while ensuring thread safety:

  - Refresh mechanism

  - Access synchronization

• Log error messages to the Online Marketing log files

This section is divided into the following subsections:

• Audience: who should use this Online Marketing Extension?

- Functionality: What the Online Marketing Extension does

- Content storage: How the extension stores the content in files

- Cache mechanism: Which rules determine the reloading of the content

- Registering the extension: How to register the extension with the Online Marketing Dialog Server

- Using the extension: How to build a simple dialog using this extension

Audience

The audience for this extension consists of users who want to understand Online Marketing Extensions and those who want to write them.

Warning! This extension is provided as an example only; it should never be used in a production dialog.

Functionality

The SampleLiveExtension servlet expects the following parameters:

Name	Description
path	The path where the files containing the content are stored. This parameter should be set in the Extension Registration's parameter list but can be overridden at the moment of the call.
firstName	The first name of the contact. This parameter should be merge content.
state	The state where the contact lives. This parameter should be merge content.
refresh	(Optional) Set this parameter to true if you want to force the data to be reloaded from the file and not read from cache. This parameter should be set in the Extension Registration's parameter list.
refreshTime	The content to display is refreshed every day at this time. If not specified or invalid, the default time used is midnight. This parameter must be defined in the Extension Registration's parameter list and cannot be overridden when you call the function. The allowed formats are HH:MM (24 hour format) or HH:MM AM|PM (12 hour format).

The servlet displays the following message:

- A welcome message:
  - "Welcome!" if the first name of the contact is unspecified
  - "Welcome, <First Name>!" if the first name of the contact is known.

- Data about the state given as a parameter:
  - If no state is specified, a detailed error message is displayed
  - If no data is available for that state, a detailed error message is displayed
  - If some data is available for that state, it is retrieved and displayed.

Content Storage

The servlet expects that the content is stored in files. The path of the files must be specified in the path parameter. File names should be in the following format:

```
<path_value>\<state_abbreviation>.txt
```

For example, if the path is equal to C:\states\ and the state is California, the data would be searched in the following file:

```
C:\states\CA.txt
```

The content of each state data file is expected to be a list of key/value pairs. The following keys are searched and merged into the document:

• Population

• Area

• Senators

A valid file would look similar to this:

```
Population=33,145,121 inhabitants
Area=158,869 square miles
Senators=Barbara Boxer, Dianne Feinstein
```

All information available in the file will be displayed on the web page.

Cache Mechanism

To limit the number of disk accesses, the content of each file is kept in memory after being read. However, two mechanisms are implemented to allow the update of the data:

• If the refresh parameter is set to true, any data in the cache is removed. The data to display will be automatically reloaded from the file and not pulled from the cache.

• If the refreshTime has been crossed since the last loading of the data, the content is automatically refreshed from the file.

Note. The use of the refresh parameter only refreshes the cache on the Online Marketing component where the servlet is executed—this can be the Online Marketing Dialog Server (for web page content) or a Mailcaster (for email content).

Registering the Extension

Before you can use the SampleLiveExtension servlet, you must register it.

Note. The design of the SampleLiveExtension servlet is more appropriate for usage as a custom content extension within a web page. However, it can also be used as a custom content extension within an email. The following registration instructions allow the registration of the servlet on the Online Marketing Dialog Execution Server, which is used to display web page content. If you want to use the extension with email, you must register the function on all the Mailcasters. (In this case, step 1 in the following instructions must be done only once in Extension Registration, but steps 2 and 3 must be done for each component that will call the extension.)

Follow these instructions to register the servlet:

1. Navigate to the Extension Registration Page for Java servlets and add the servlet SampleLiveExtension. Set the following parameter values within it:

Name	Value
Servlet Class Name	com.peoplesoft.crm.omk.external.CFlibrary.SampleLiveExtension

path	The path where you will store the files containing the content. You must include a final backslash (\) for Windows or slash (/) for Solaris, for example:
	
	`C:\states\`
	
	or
	`/usr/foo/states/`

refreshTime	The time when you want the content to be refreshed each day.

2. Change the status to Active and save the changes.

3. After you have finished, restart the Dialog Execution Server.

4. If you are calling the extension from an email, restart the Mailcasters that will call this extension.

See <u>Chapter 18, "Using Extensions," Register the Extension in Online Marketing, page 273</u>.

See <u>Part 1, "PeopleSoft Online Marketing User Guide," page 1</u>.

Using the Extension

One of the simplest dialogs that allows you to use the SampleLiveExtension servlet is composed of the following:

• One landing page where the contact can submit personal information, including at least:

  - First name

  - Email address

  - State of residence

• A final page containing a call to the Online Marketing Extension that will generate the whole content.

• A web link to the landing page.

The call to the Online Marketing Extension would look like this:

```
<pstag:extension name="SampleLiveExtension"
 id="a number">
```

You can use the previous example as a model.

Hint: You can associate the refresh parameter with the value of a Yes/No document field on the landing field so you can easily see its effects.

After the files with the content have been created, you can set the dialog to Live (or In Test), generate a link report, and try out the functionality of the Online Marketing extension.

Additional Sample: EXStockQuotes

An additional sample servlet, EXStockQuotes, is also provided. It is similar to the SampleLiveExtension servlet.

You can use the EXStockQuotes servlet in three different ways within Online Marketing dialogs:

- Insert it directly into broadcast or follow-up emails

- Insert it directly into web documents

- Insert it into the Content section(s) of a Dynamic Content object in an email document

In the third scenario the extension is used to retrieve content posted at an external URL, while the conditions specifying which content is to be displayed to whom are set up within the Dynamic Content object (in Online Marketing). Typically in this case, as in this sample, one or two parameters would be passed to retrieve the appropriate content. Each Content Section of the Dynamic Content object could have an extension inserted to retrieve content, or the Dynamic Content object could have a mix where some Content Sections have internally-stored content (content that is inserted or copy/pasted into the Content tab) while other Content Sections have an extension designed to retrieve content.

See Also

Chapter 18, "Using Extensions," The "SampleLiveExtension" Servlet, page 284

APPENDIX A

Merge Content Specification

Throughout most of Online Marketing you can personalize your email and web documents for each recipient or respondent by adding merge content to include their name, email address or any other information from the profiles.

Merge content syntax appears in Online Marketing when you use the Merge button to embed content into a document, email subject line, or other similar location. You can also use it when manually typing in merged content placeholders in Online Marketing or in an exported web document.

This appendix describes the merge content syntax used in Online Marketing

See Also

Chapter 6, "Designing Web Documents," Editing Items in a Document, page 95

Chapter 5, "Designing Email Documents," Defining Email Documents, page 68

Merge Content Syntax

The basic format for merge content syntax is as follows:

```
<pstag:contentType
[name=contentName]
value=value
[format=value]
[default=value]
[id=value]
[attribX=valueX] />
```

where

contentType   A valid predefined content type, in the following format:

- profile
- document
- webLink
- dynamicContent
- trackingNumber
- recipientID
- currentDate
- currentTime

- extension

- javascript

- url

name	The name of the merge content object. For Dynamic Content, Web Link and Extension types, the user usually specifies this name at the time of merge. For other predefined types, the system generates a unique name based on the type name and a number.
value	A pointer to the merged content (a text string or a value stored in the database).
format	The format used to display the content.
default	The default value to display if the data has not been populated.
id	A unique system identifier.

The following restrictions apply to merge content syntax:

- Spaces are not allowed between the equal sign and an attribute value.

- All tags are case sensitive.

The following table shows examples of the syntax used in merge content objects.

Merge Content Object	Syntax Example
Profile field	`<pstag:profile value="Individuals.Subscriber.Favorite Sport" default="Football" />`
Document field	`<pstag:document value="RegistrationPage.First Name" id="123" default="Registrant" />`
Web link (external)	`<pstag:url name="My Yahoo Link" value="http://www.yahoo.com" format="HTML" id="55" />`
Web link (internal)	`<pstag:webLink name="Link To Load Basics" value="load basics.Landing Page1" dialog_id="20" format="Text" id="123" />`
Dynamic content	`<pstag:dynamicContent name="Favorite Food" id="234" />` **Note.** You cannot type this syntax into a web document; you must use the Merge functionality to enter it.
Recipient ID	`<pstag:recipientID />`

Merge Content Object	Syntax Example
Tracking number	`<pstag:trackingNumber />`
Current date	`<pstag:currentDate format="MM/DD/YYYY" />` Format values include: • DD/MM/YYYY • DD-MM-YYYY • MM/DD/YYYY • MM-DD-YYYY • YYYY/MM/DD • YYYY-MM-DD
Current time	`<pstag:currentTime format="HH:MM" />` Format values include: • HH:MM (24-hour format) • HH:MM AM • HH:MM PM
Embed JavaScript	`<pstag: javascript />` This tag is used only in exported web documents, to replace the JavaScript that is written out as part of the exported contents. This tag is optionally included in the web document during the export process. You have the option of deleting the tag and replacing it with custom JavaScript.
Extension	`<pstag:extension name="extensionName" id="222" [default="someValue"] />`

See Also

Extension Merge Content Syntax

The following examples show the merge content syntax used in Extensions:

```
<pstag:extension name="Hello World Servlet" id="123456" default="Hello" />
```

Note. The parameters for extensions are specified in the Merge Content builder. They are not displayed as part of the syntax.

See .

Merge Content as Parameters to Extensions

Additional merge syntaxes are available for obtaining various dialog-related information. These syntaxes are typically used in parameters to extensions, but can also be embedded in your documents. The following table shows the syntaxes available:

Type	Syntax
Action ID	`<pstag:actionID />`
Base URL	`<pstag:baseURL />`
Dialog Business Unit	`<pstag:dialogBusinessUnit />`
Dialog ID	`<pstag:dialogID />`
Document Language Code	`<pstag:documentLanguageCode />`
Document SetID	`<pstag:documentSetID />`
Individual BOID	`<pstag:individualBOID />`
Individual ID	`<pstag:individualID />`
Individual Role Type ID	`<pstag:individualRoleTypeID />`
Organization BOID	`<pstag:organizationBOID />`
Organization ID	`<pstag:organizationID />`
Organization Role Type	`<pstag:organizationRoleTypeID />`
Source Action ID	`<pstag:sourceActionID />`

APPENDIX B

Predefined Profiles

Online Marketing makes use of several predefined profiles: three system profiles and a few user profiles. The system profiles are designed to contain basic information about individuals and organizations. For example: name, address, email address, and telephone number. The profile attributes' names and types have been predefined for you.

The three system profiles are called People, Companies, and Sales Leads. One of the predefined user profiles is called Privacy Options, and is used throughout Online Marketing. The rest of the predefined profiles are used for integration with PeopleSoft Student Administration.

This appendix provides the definitions of the fields in four of the predefined profiles. It contains the following sections:

- People System Profile
- Companies System Profile
- Sales Leads System Profile
- Privacy Options Profile

Note. There are actually two Sales Leads system profiles: one is in the Individuals folder and the other is in the Companies folder. The two are identical; the Individuals profile is for individuals, while the Companies profile is for companies.

In addition, this document has an overview of the Student Administration profiles, but more information on them can be found in the Marketing/Student Administration documentation.

You should be aware that the *Individuals* and *Organizations* group names, as well as the *People* and *Companies* basic profile names are fixed in the English language, and will not change even if a non-English base language is specified.I If you swap to a non-English database and had translated these names, you must ensure that they are changed back to their English versions or Online Marketing will not function correctly.

Further, you should also be aware that the Profile and Attribute are not translatable in Online Marketing, but they are in Marketing. Since the Profile and Attribute name cannot change after the profile has been first activated, swapping the database violates that restriction. The base language name must be manually restored (via SQL) after a swap has occurred.

People System Profile

The following table shows the fields in the People system profile, located in the Individuals profile group:

Field Name	Description	Type	Length
Address1	First line of the individual's mailing address.	Text Entry	55
Address2	Second line of the individual's mailing address (if needed).	Text Entry	55

Field Name	Description	Type	Length
Address 3	Third line of the individual's mailing address (if needed)	Text Entry	55
Address 4	Fourth line of the individual's mailing address (if needed)	Text Entry	55
Birth Date	Birth Date	Date	n/a
City	City	Text Entry	30
Company ID	A unique identifier that Online Marketing assigns to each company.	Number Entry	18
Country	3–letter country code	Choose One	3
Department	Department in which the contact works	Text Entry	40
Do Not Contact	Indicates whether the customer wishes to be contacted.	Yes/No	1
Do Not Email	Indicates that the contact does not want to receive email.	Yes/No	1
Email	Email address	Text Entry	70
Email Alternative	Alternative email address, for contacts with more than one email address.	Text Entry	70
Email Alt 2	Second alternative email address. By default, this value is reserved for merges and will only be populated by the Email Address of a merge-from individual. Thus, if this value is set via a dialog, the dialog value will be ignored. (*This field is reserved for future use*.)	Text Entry	70
Email Alt 3	Third alternative email address. By default this value is reserved for merges and will only be populated if Email Alt 2 is already populated. (*This field is reserved for future use*.)	Text entry	70
Email Domain	The section of the email address following the @ sign.	Text Entry	50
External ID	An identifier used to match persons to your external list or system.	Text Entry	20

Field Name	Description	Type	Length
Fax	Fax number	Text Entry	24
Fax Country Code	Fax country code	Text	3
First Name	First Name	Text Entry	30
Functional Title	Functional job title	Text Entry	40
Gender	Gender	Choose One	1
HTML Email	Whether the individual can receive HTML email	Text Entry	1
Home Phone	Home phone number	Text Entry	24
Home Phone Country Code	Home phone country code	Text Entry	3
Home Phone Extension	Home phone extension	Text Entry	6
Language Code	Language code	Choose one	3
Last Name	Last Name	Text Entry	30
Middle Name	Middle Name	Text Entry	30
NCOA Last Overlay Date	Date and time that NCOA overlay was last applied.	Date	n/a
Origin	Origin	Text Entry	40
Preferred Communication	Preferred communication method	Choose One	1
Role Type	Role type	Choose One with Rating	9
Salutation	Salutation (Mr., Ms., etc.)	Text Entry	4
Salutation Code	Salutation (Mr., Ms., etc.)	Choose One	1
SetID	SetID	Text	5
Social Security Number	Social Security number (must be in format ###-##-####)	Text Entry	11
Source ID	Identifies the list or dialog that is the source of the name	Number Entry	18
State	U.S. state	Choose One	6
Suffix	Suffix (Jr., MD, etc.)	Text Entry	15
Title	Job title	Text Entry	40

Field Name	Description	Type	Length
Work Phone	Work phone number	Text Entry	24
Work Phone Country Code	Work phone country code	Text Entry	3
Work Phone Extension	Work phone extension	Text Entry	6
Number 1	Home number 1	Text Entry	6
Number 2	Home number 2	Text Entry	4
House Type	House Type	Choose One	1
County	County	Text Entry	30

Companies System Profile

The following table shows the fields in the Companies system profile:

Field Name	Description	Type	Length
Address1	First line of the organization's mailing address.	Text Entry	55
Address2	Second line of the organization's mailing address.	Text Entry	55
Address 3	Third line of the organization's mailing address.	Text Entry	55
Address 4	Fourth line of the organization's mailing address.	Text Entry	55
City	City for organization address	Text Entry	30
Country	Country for organization address	Single Choice	3
DUNS Number	Standard number assigned to an organization by Dun and Bradstreet.	Text Entry	20
External ID	An identifier that can be used to match the organization to an external list or system.	Text Entry	20
Organization Fax	Organization fax number	Text Entry	15
Organization Fax Country Code	Organization fax country code	Text Entry	3

Field Name	Description	Type	Length
Organization Name	Name of the organization	Text Entry	50
Organization Phone	Organization phone number	Text Entry	24
Organization Phone Country Code	Organization phone country code	Text Entry	3
Organization Phone Extension	Organization phone extension	Text Entry	6
Partner Program	Partner program	Text	15
Role Type	Marketing role type.	Rating Choice	12
SetID	SetID corresponding to the business unit the organization was added to	Text Entry	5
State	U. S. State	Single Choice	6
Web Site address	Web site URL for organization	Text Entry	130
ZIP Code	Web site URL for organization	Text Entry	12
Number 1	House number 1	Text Entry	6
Number 2	House number 2	Text Entry	4
House Type	House Type	Choose One	1
County	County	Text Entry	30

Sales Leads Profile

The following table shows the fields in the Sales Leads profile (the fields are identical for the Sales Leads profile in the Individuals folder and the one in the Companies folder):

Note. Sales Leads profiles are non-updatable (you cannot update them through a dialog web form or a data import).

Field Name	Description	Type	Length
Activity Name	Marketing campaign activity name	Text Entry	50
Business Unit	Sales business unit	Map Field Choice to Prompt	10
Campaign Name	Marketing campaign name	Text Entry	50

Field Name	Description	Type	Length
Currency Code	Map Field Choice to Prompt	Estimated Revenue currency code	n/a
Date Created	Lead creation date	Date	n/a
Description	Lead description	Text Entry	50
Dialog Name	Dialog name	Text Entry	254
Lead ID	Unique lead identifier	Text Entry	15
Lead Priority	Lead priority	Choose One	1
Lead Rating	Lead rating	Choose One	2
Lead Source ID	Source of the lead	Map Field Choice to Prompt	15
Lead Status	Lead status	Choose One	2
Marketing Channel	Marketing channel	Choose One	4
Promotion Code	Marketing promotion code	Map Field Choice to Prompt	35
Region	Sales region	Map Field Choice to Prompt	15
Revenue	Estimated revenue	Decimal	10
Sales Rep Name	Sales representative name	Text Entry	50
Territory	Sales territory	Map Field Choice to Prompt	15
Territory Tree	Sales territory tree	Map Field Choice to Prompt	10

Privacy Options Profile

The following table shows the fields in the Privacy Options profile:

Field Name	Description	Type	Length
Do Not Contact	Indicates that the contact does not wish to be contacted.	Choose One	10
Do Not Call	Indicates that the contact does not wish to be contacted via telephone.	Choose One	10

Field Name	Description	Type	Length
Do Not Email	Indicates that the contact does not want to receive email.	Choose One	10
Do Not Mail	Indicates that the contact does not want to receive mail.	Choose One	10

Note. This profile is shipped in Requested state. You must change its state to Activated before you can use it.

Online Marketing / Student Administration Profiles

Twenty-three profiles are included with the CRM database for the Marketing / Student Administration integration. These profiles are split into two parts: one-row profiles used for online applications (data from Online Marketing to Student Administration) and mostly many-row profiles used for applicant information (data from SA back to the CDM). These profiles are all shipped in Requested state; you should only take them Live if the OLM/SA integration is being implemented at your site .

The lists below shows the profiles; for more information refer to the Marketing/Student Administration Integration documentation.

- Profiles that hold Online Application data in CRM before it is transferred to Student Administration. These are One Row profiles used in the two Online Application sample dialogs:

  - CS-Appl Academic

  - CS-Appl Academic Documents

  - CS-Appl Academic History

  - CS-Appl Biographic

  - CS-Appl Employment

  - CS-Appl Honors Awards Extra Curr

  - CS-Appl Parents Emerg Contact

- Profiles that hold applicant data after it has been transferred from Student Administration to CRM. These are mostly Many Row profiles used for audience segmentation.

  - CS-ADM Academic History.

  - CS-ADM Academic Interests.

  - CS-ADM Applicant Data.

  - CS-ADM-Applicant Plan.

  - CS-ADM Applicant Program.

  - CS-ADM Applicant Recruiter.

  - CS-ADM Applicant Sub-Plan.

  - CS-ADM Extracur Activity.

  - CS-ADM Service Indicators.

  - CS-ADM Test Results.

  - CS-PRS Prospect Career.

- CS-PRS Prospect Plan.

- CS-PRS Prospect Program.

- CS-PRS Prospect Recruiters.

- CS-PRS Prospect Sub-Plan.

APPENDIX C

Mailcaster States

The following diagrams show the possible states for the scheduler, for parent mail jobs, for child mail jobs, and for frequency email.

Single Mailer State Flow Diagram

The following diagrams shows the Single Mailer state flow.
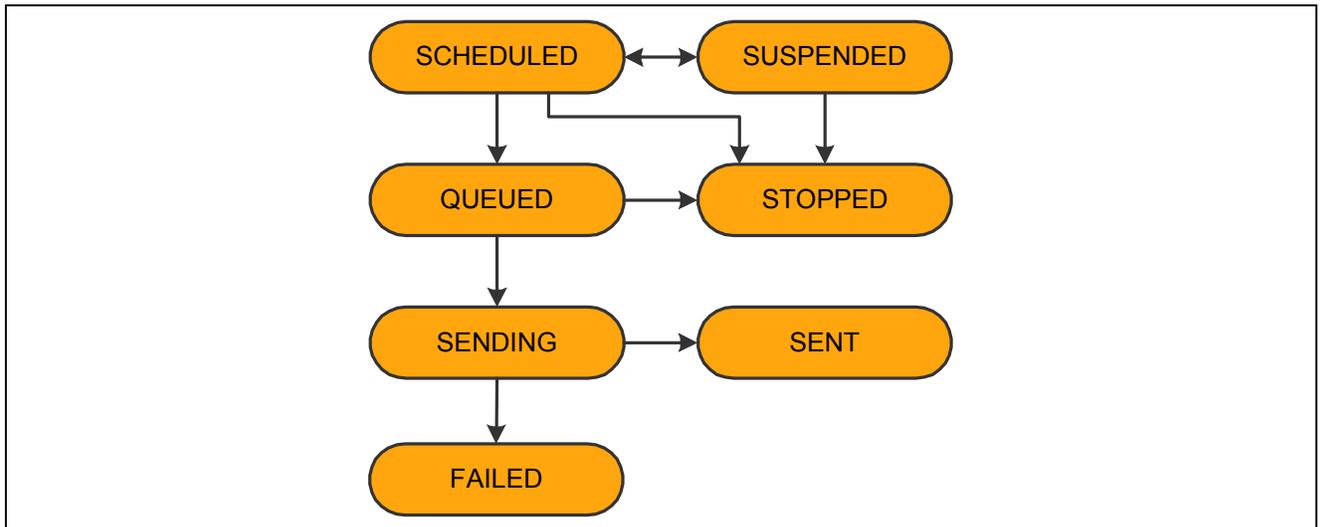
Single Mailer state flow

State	Label	Description
QUE	Queued	Email has been inserted into the mail queue and is ready to send.
FAIL	Failed	Email failed in either rendering or delivery.
SEND	Sending	The Email Service is in the process of sending this email.
SCHD	Scheduled	Email is scheduled to be sent at a later time.
SUSP	Suspended	Email has been suspended.
STOP	Stopped	Email has been stopped.
SENT	N/A	Not an actual state, since the row is deleted when the message is sent.

Scheduler State Tree Diagram

The following diagram shows the various scheduler states and their relationships.
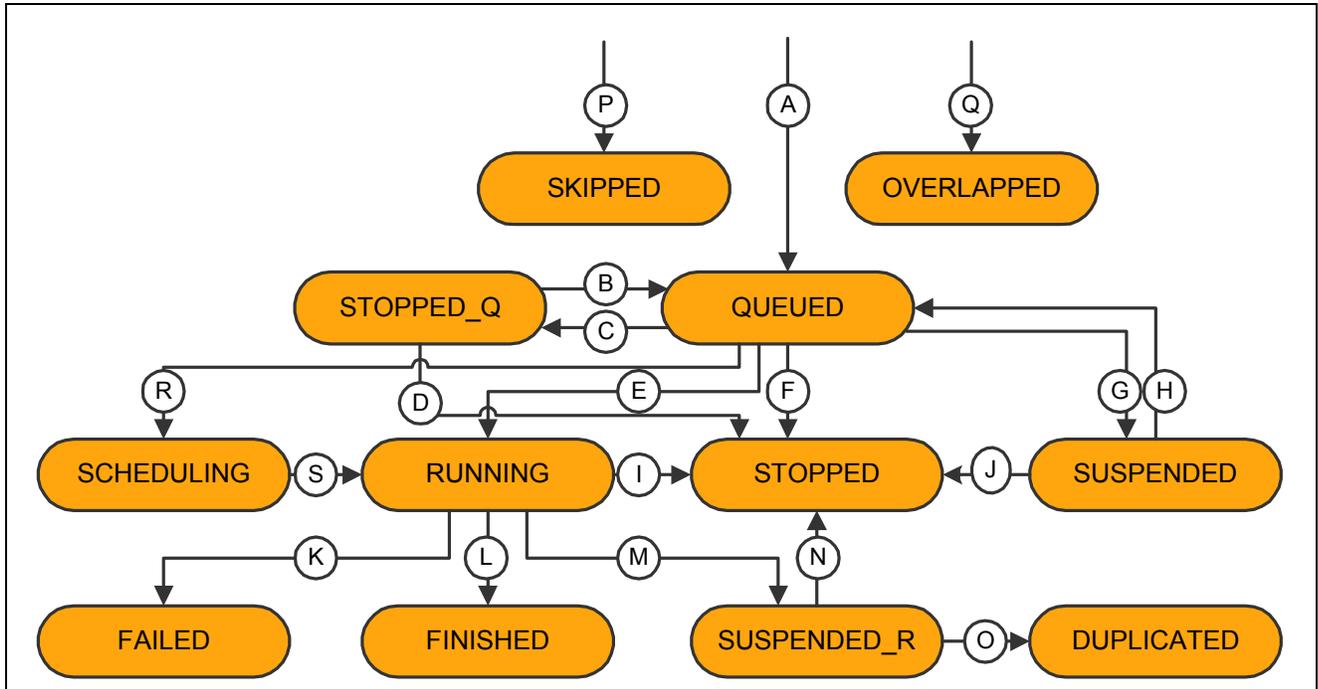
Scheduler State Tree diagram

Letter	Description
A	New scheduled event created for a single or repeating event.
B	Stopping a QUEUED job in the Control Center.
C	Restarting a STOPPED_Q job in the Control Center.
D	Deleting the trigger from Online Marketing.
E	Scheduled job is activated by the Scheduler and starts running.
F	Deleting the trigger from Online Marketing.
G	Putting the dialog in Paused or Broadcast Hold status from Online Marketing.
H	Returning the dialog to Live status.
I	Deleting the trigger from Online Marketing.
J	Deleting the trigger from Online Marketing.
K	Job failed—set by the DES.
L	Job finished successfully.

Letter	Description
M	Job stopped by the Control Center.
N	Deleting the trigger from Online Marketing.
O	Returning a Broadcast Hold dialog to Live status—a new event is created and this event is left in a DUPLICATED state.
P	Repeating Date/Time Trigger created a SKIPPED event.
Q	Repeating Date/Time Trigger created an OVERLAPPED event.
R	Scheduler gets ready event, marks itself as owner, and marks it SCHEDULING to run.
S	Schedule event handler receives the event and starts processing it by marking it RUNNING.

Parent Mail Jobs

The following diagram shows the states of parent mail jobs and their relationships.
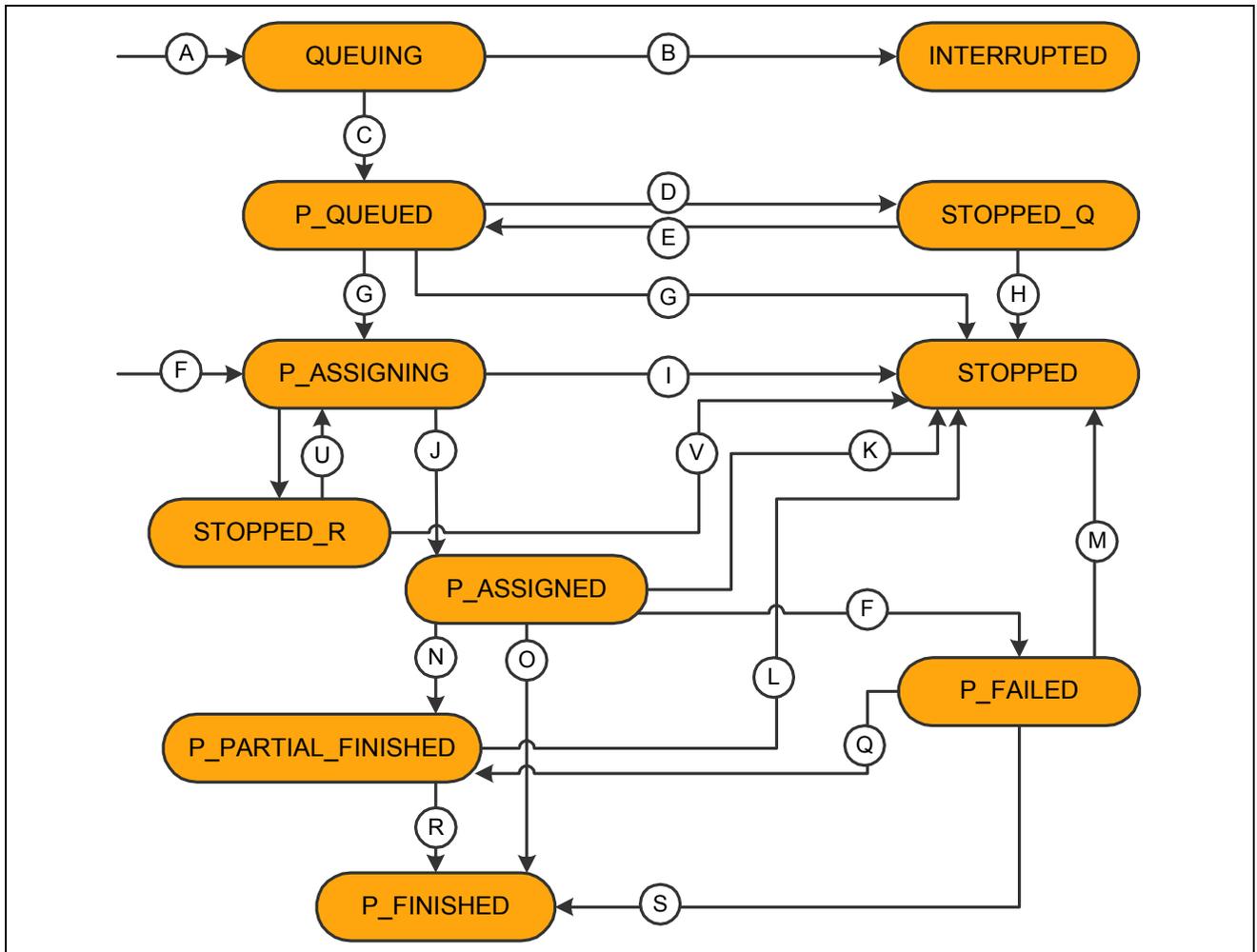
Parent Mail Job diagram

Letter	Description
A	New mailjob created by DES—deduping in progress.
B	Mailjobs that were left in a QUEUING state when the application server crashed during a dedup. Cleaned up on the next run of the scheduler and marked INTERRUPTED.
C	Job is finished deduping and is determined to be a large job. Ready for Mailcasters to start work.
D	Job is stopped in Control Center while in P_QUEUED state.
E	Job is restarted from the Control Center.
F	Job in progress by a Mailcaster. A new child mail job has been created. Not all mails have yet been apportioned by Mailcasters.
G	Online Marketing stops the dialog.
H	Online Marketing stops the dialog.

Letter	Description
I	Online Marketing stops the dialog.
J	All mails have been assigned to Mailcasters. The last child job has been created.
K	Online Marketing stops the dialog.
L	Online Marketing stops the dialog.
M	Online Marketing stops the dialog.
N	Job completed with some child jobs FINISHED and some FAILED.
O	Job completed with all child jobs FINISHED.
P	Job completed with all child jobs FAILED.
Q	Child job restarted by Control Center and some finish and some fail.
R	Child job restarted by Control Center and finishes.
S	Child job restarted by Control Center and finishes.
T	Job is stopped from the Control Center.
U	Job is restarted from the Control Center.
V	Online Marketing stops the dialog.

Small and Child Mail Jobs

The following diagram shows the states of small and child mail jobs and their relationships.
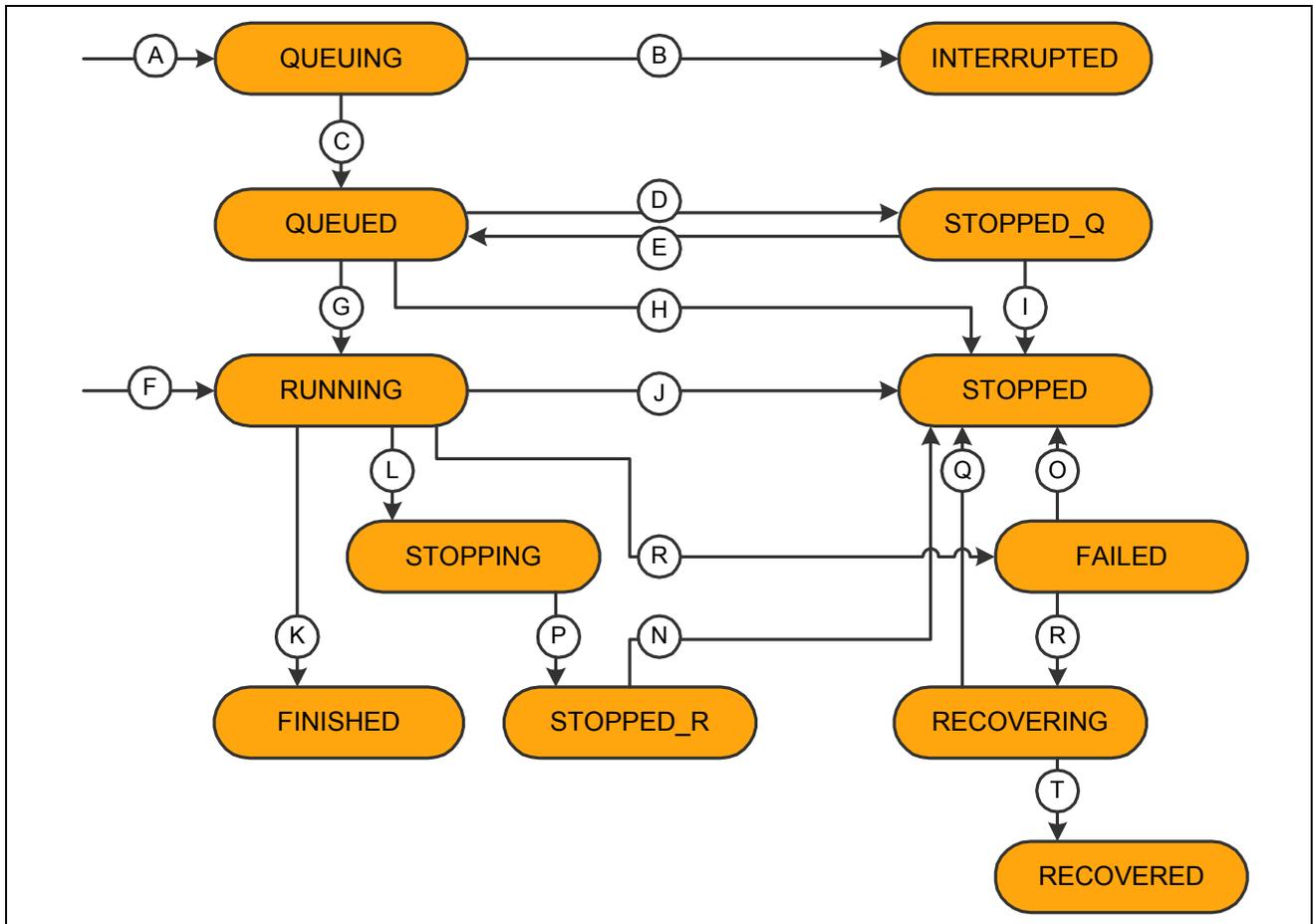
Small Mail Job diagram

Letter	Description
A	New mail job created by DES—deduping in progress
B	Reboot recovered mail job that was in a QUEUING state when the system was started.
C	Job is finished deduping and determined to be a small job. Ready for Mailcasters to start work.
D	Job is stopped in the Control Center.
E	Job is restarted from the Control Center.
F	New child job created by parent job in P_ASSIGNING or P_ASSIGNED state.
G	Mailcaster picks up job and starts running it.
H	Online Marketing stops the dialog.
I	Online Marketing stops the dialog.

Letter	Description
J	Online Marketing stops the dialog.
K	The job finishes successfully.
L	Job is stopped by the Control Center—the STOPPING state will last until the Mailcaster fully stops the job.
M	Job fails.
N	Online Marketing stops the dialog.
O	Online Marketing stops the dialog.
P	After the job has successfully stopped, the job state is set to STOPPED_R.
Q	Online Marketing stops the dialog.
R	Job is restarted by the Control Center.
S	Job is restarted by the Control Center.
T	Recovery is complete. A new job is created to run the recovered job and this event remains in the RECOVERED state.

Frequency Queue Email States

The following diagram shows the states of frequency queue email jobs and their relationships.
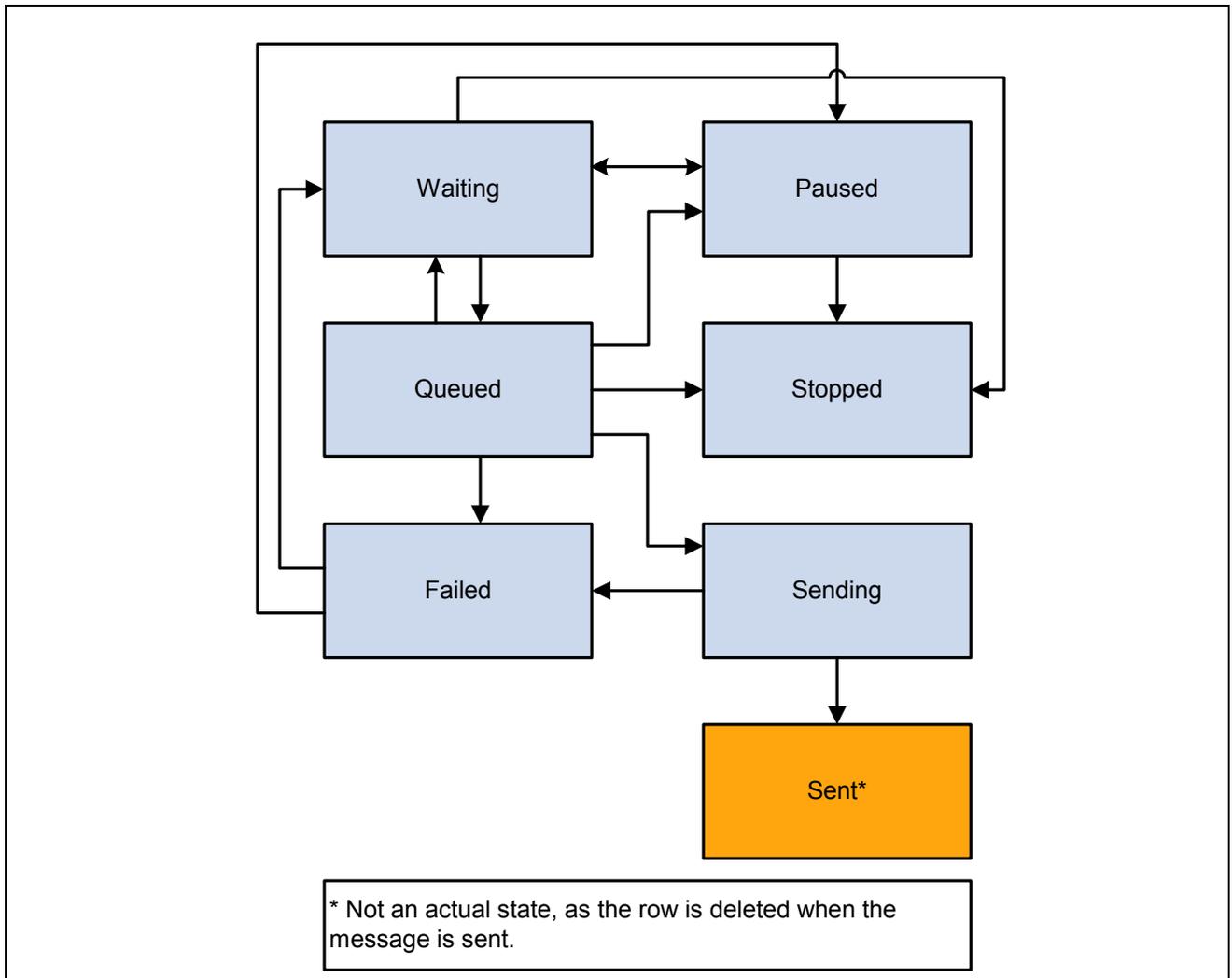
Frequency Queue Email States

State	Label	Description
QUE	Queued	Email is ready to send.
FAIL	Failed	Email failed in either rendering or delivery
SEND	Sending	Email service is in the process of sending the email.
WAIT	Waiting	Email is in a wait state.
PAUS	Paused	Email has been paused.
STOP	Stopped	Email has been stopped.

APPENDIX D

Data Integration

This chapter describes the integration of data between the Student Administration and CRM applications. It includes the following sections:

- Integration Services Repository.
- Understanding Data Integration.
- Student Administration Setup/Translate Data.
- User Security-Related Data.
- Applicant/Prospect Specific Data.
- Communication — Email History.
- Application (via TS189 Staging).
- Setting User Security by Audience.
- Profiles.

Integration Services Repository

PeopleSoft publishes integration technical detail on a web site on Customer Connection called the Integration Services Repository (ISR).

The technical detail in the ISR includes:

- Message schemas – record hierarchy and field list of each integration point. (Note that message schemas exist only for structured messages.)
- Business process information
- Data rules

See http://www.peoplesoft.com/corp/en/iou/isr/index.jsp

Understanding Data Integration

To provide easy integration between PeopleSoft Student Administration and PeopleSoft Enterprise CRM, an interface solution provides users with flexibility and scalability, enabling them to work seamlessly between the two systems.

The data integration between Student Administration and Online Marketing includes three sets of data:

- Student Administration setup/translate data used in building prompts and lists of valid values on the CRM side.

- User security-related data moved from Student Administration to CRM to ensure that data access through the CRM application is consistent with data access as defined within Student Administration

- Data specific to prospects and applicants that will flow back and forth between Student Administration and CRM.

Note. This chapter describes the integration and the incremental steps you can take following initial installation and setup. For information about initial setup of your system for the Marketing to Student Administration integration, refer to your installation documentation.

The following illustration shows the integration points between the Student Administration and CRM applications.
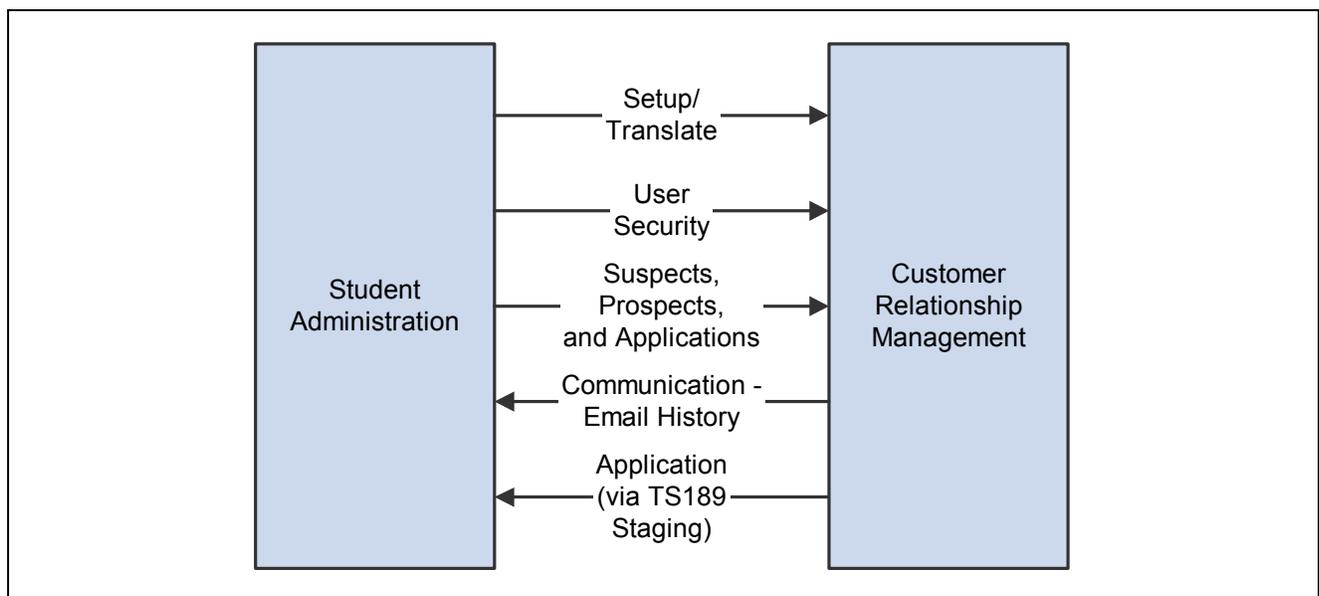
Student Administration/CRM Data Integration Points

The integration involves Recruiting and Admission on the Student Administration side, and Marketing, Online Marketing, and Telemarketing on the CRM side. It consists of a one-way movement of applicant, prospect, and suspect data from Student Administration to CRM.

Student Administration Setup/Translate Data

This aspect of the interface process provides key Student Administration prompt and translate values, including academic structure data and bio demo data values such as prefix and suffix. The integration process is one-way and modifies a set of CRM profiles (by updating the set of legal choices) used in assembling Online Marketing documents and dialogs. After the initial load this is a manual on-demand process and should be run when related data in Student Administration is changed.

Note. Given the infrequent nature of most changes to setup data, it is recommended that incremental changes be made manually to profiles. Note that some of the data (such as Plan and Sub-Plan values) might change more often—weekly or monthly—and will require more frequent updates.

The following Student Administration data structures are included as setup data:

CS_PRFL_ATTR_CHOICES_FULLSYNC

This message populates data in the CRM profiles created for this integration.

The following Student Administration records are the source tables for the choices:

PS_SA_TEST_TBL

PS_SA_TEST_CMP_TBL

PS_TERM_VAL_TBL

PS_SRVC_IND_CD_TBL

PS_ACAD_SUBPLN_TBL

PS_EXT_SUMM_TP_TBL

PS_REFERL_SRCE_TBL

PS_PROG_RSN_TBL

PS_ADM_RECRCTR_TBL

PS_RECRUIT_CAT_TBL

PS_ACAD_PROG_TBL

PS_ACAD_PLAN_TBL

PS_INSTITUTION_TBL

PS_GPA_TYPE_TBL

PS_EXT_TERM_TBL

PS_EXT_SUBJECT_TBL

PS_CAMPUS_TBL

PS_ADMIT_TYPE_TBL

PS_EXTR_ACTVTY_TBL

PS_ADM_APPLCTR_TBL

PS_ADM_ACTION_TBL

See *PeopleSoft Enterprise CRM 9 Supplemental Installation Guide, "Installing PeopleSoft Online Marketing and Student Administration Integration"*

See *PeopleSoft Enterprise CRM 9 Business Object Management PeopleBook.*

User Security-Related Data

This aspect of the interface process replicates Student Administration User Security tables in CRM to ensure that Application Center and Recruiting Center security is maintained in CRM for the audience creation process. This means that users will have access to the same applicants and prospects in both systems. After the initial data load, the Student Administration user security for admissions and recruiting can be kept in sync by scheduling the following messages to run as a nightly process:

• CS_SCRTY_APPL_CTR_FULLSYNC

• CS_SCRTY_RECR_CTR_FULLSYNC

This can be done using the full data publish utility in Student Administration (Home, Define Business Rules, Manage Integration Rules, Process, Full Data Publish).

Note. This section and the Applicant/Prospect-Specific Data section of the integration process are initially performed together when setting up the system, but you can also break them out and run them separately later.

When generating audiences, the user ID in CRM should match exactly with the user ID from Student Administration.

Applicant/Prospect Specific Data

This interface process deals with the synchronization of transactional data between CRM and Student Administration. There are many different components to this type of data and a relatively complex set of data flows and rules to ensure accurate data in both systems. The major components of that flow include:

• The ability to run a mass update of all data from Student Administration to CRM. On the CRM system, this data is stored in various profiles that are available for users to use in segmenting and audience creation

• The ability for CRM users to assemble online applications. These dialogs result in data being stored in a common profile. Data from this common CRM profile is messaged to the TS189 Staging tables in Student Administration and is used with delivered TS189 process to create applicant records.

• The ability for CRM users to assemble dialogs that generate emails encouraging prospects and applicants to follow links to dialog pages. These Online Marketing transactions are sent to Student Administration where they are tracked as Communication records.

Note. This section and the User Security-Related Data section of the integration process are initially performed together when setting up the system, but you can also break them out and run them separately later.

Performing Synchronization Manually

When the Marketing to Student Administration integration is first installed, a full synchronization is performed to transfer Student Administration setup data into CRM profile choices, and student transaction data into CRM custom profile tables. After this initial load, the integration provides the ability to update setup data manually in the profile definition or by running the appropriate setup messages. However, care should be taken to move the profile out of an active status before adding new choices. The profile must be reactivated after the new choices are added.

For the student transaction data, a nightly job can be scheduled to run the full synchronization process. This is done using the run control page described in this section. The data values selected are the lower limit date values that will be used to select applicants, prospects, and suspects. This gives an institution the ability to exclude historical data from the integration. To increase performance, the personal data message can be restricted to publish records that have been added or changed since the last run. This procedure is outlined in the installation documentation.

Event Selection page

Important! You should make sure that you have your data set up correctly (that is, your Student Administration data updated properly) before you perform the sync operation, because subsequent operations must be performed manually using Set Up CRM, Common Objects, Profile Definitions.

To restrict the dataset and perform a manual synchronization of data:

1. Navigate to Set Up SACR, Product Related, Recruiting and Admissions, Manage CRM Integration, Populate ID Control Table.

2. Click Add a New Value.

3. Enter a run control ID.

4. Enter the lower limit date for applicant data, if applicable.

5. Enter the lower limit date for prospect data, if applicable.

6. Enter the lower limit date for test scores, if applicable.

The dates you enter on this page will be used to create a control list of EMPLIDs that will be integrated with CRM. Only applicants and prospects created on or after the dates specified will be considered for integration with CRM. Further, only suspects with test scores loaded on or after the test score date specified will be integrated.

See Also

PeopleSoft Enterprise CRM 9 Supplemental Installation Guide, "Installing PeopleSoft Online Marketing and Student Administration Integration"

PERSON_BASIC_SYNC Message

The CRM system subscribes to the PERSON_BASIC_SYNC message. PERSON_BASIC_SYNC is the interface used to synchronize changes made to the basic information regarding an employee or applicant. It contains information such as name, address, email address, and so forth, and is used it to keep basic information synchronized about an employee or applicant across HR, ERP and third party applications. Note that a person can be a student and a worker, and the PERSON_BASIC_SYNC is used for both HelpDesk and Student processing. The role of a consumer (which represents a student in CRM) is only added after the data is received in CS_TEST_SCORES_FULLSYNC.

Because the PERSON_BASIC_SYNC message is also used by other CRM integrations with HRMS, you should carefully consider your implementation when deciding whether to enable incremental changes via this message.

CS_STUDENT_TOPIC_SYNC Message

During profile and dialog definition, you might want to prompt the student or prospect with specific questions. These question texts are stored in the profile and dialog setup tables. The question texts are used with the integration to Student Administration for File Attachments and Long Text responses.

For file upload and long text types, an application message, CS_STUDENT_TOPIC_SYNC, can be used to facilitate the process of sending the question texts to Student Administration. This message gets the latest active dialog labels (question texts) and publishes them to the Student Administration Topic table which is located under Set Up SACR, Product Related, Recruiting and Admissions, Manage CRM Integration, Topic Table. The standard PeopleTools Full Data Publish Utility program is used to publish the message. No Run Control Component Page is required.

Setting Up the Full Data Publish Rules

Initially, it is necessary to set up the Full Data Publish Rules for the CS_STUDENT_TOPIC_SYNC message.

Navigate to Enterprise Components, Integration Definitions, Full Data Publish Rules.

Full Data Publish Rules page

Submitting the Process

You submit the process using Full Data Publish.

To submit the process:

1. Navigate to Enterprise Components, Initiate Processes, Full Data Publish.

2. Enter the Run Control ID PUBLISH_STUDENT_TOPIC.

3. Click Run.

Process Request

Setting Up the Process Scheduler Request

On the Process Scheduler Request page, select Table Replication Publish and click the OK button.

Process Scheduler Request

Student Administration will subscribe the CS_STUDENT_TOPIC_SYNC message and populate the corresponding SAD_CRM_TPC_TBL table.

See Also

Enterprise PeopleTools 8.48 PeopleBook: PeopleSoft Process Scheduler

Communication — Email History

. The email notification process provides a way to create 3C Communication records in Student Administration from dialog-generated emails.

When the process is run, it publishes a message to Student Administration containing the required fields to populate the 3C Event Trigger Table. You then run the 3C Engine process in Student Administration to create the applicable Communication records. The run control record for this process is CS_RUN_CNTL_EML. The state record used is CS_EML_DLG_AET.

The run control page requires three parameters: Activity ID, Institution, and Event ID.

CS Communication Sync page

To run the process:

1. Navigate to Marketing, Execution, CS Email Notification.

2. Select an Activity ID from the list of available choices. It is associated with a dialog and selected by the email title.

3. Enter the Institution. This represents the Student Administration institution code that will be associated with the emails when they are inserted into Student Administration. This value is entered manually. It is not available as a prompt value so you should verify the information before processing.

4. Enter the Event ID. This is the Student Administration Event ID code that will be assigned to the batch of emails. This value is not available as a prompt value so you should verify the information before processing.

   Important! The Event ID must be associated with a GEN administrative function.

See Also

PeopleSoft 8 SP1 Campus Community Fundamentals PeopleBook, "Understanding the 3Cs—Communications"

PeopleSoft 8 SP1 Campus Community Fundamentals PeopleBook, "Using the 3C Engine"

Application (via TS189 Staging)

This process, which involves data from the Online Application for Admission flowing from CRM to Student Administration, is described in the Online Application for Admission documentation.

See Also

Setting User Security by Audience

Because Student Administration recruiters prefer to keep their list of prospects confidential, Student Administration includes the ability to limit access to prospects and applicants by user. Access is limited in the following way:

• Each prospect can be associated with one or more Recruiting Centers. An Institution can have multiple Recruiting Centers (Undergraduate, Law, and Medical, for example). All users associated with a given Recruiting Center are allowed to see data about all prospects linked to that center. . Users can have access to all Recruiting Centers

• A similar approach is used for applicants. Each applicant can be associated with one or more Application Centers. An Institution can have multiple Application Centers (Undergraduate, Law, and Medical, for example). All users associated with a given Application Center are allowed to see data about all prospects linked to that center. . Users can have access to all Application Centers.

In the CRM environment, audience definition is enhanced to provide the same level of functionality as provided by Student Administration. To achieve this:

• Each application and prospect record stored in CRM can contain a reference to a Recruiting Center and Application Center, respectively

• Two tables are included with CRM—one for Recruiting Center security and the other for Application Center security. These tables indicate which users have access to which centers. If a user is not included in these tables, that user has access to all centers (meaning all prospects and/or all applicants). Student Administration publishes the content of these tables to CRM.

• In order to utilize the Recruiting Center or Application Center security that is messaged from Student Administration, you must define the same user IDs in CRM that you use in Student Administration. (For example, Pat Smith's Student Administration user ID is *psmith*. She has security defined for that user ID in Student Administration. In CRM, *psmith* must be defined as a user ID in order for her to have the same security in CRM.) In CRM 8.9, the audience definition facility was changed to allow the addition of a subquery to all SQL queries. If the current user is not included in the applicant or prospect tables, no subquery is generated. If the current user does exist in one or both of these tables, a subquery is generated and appended to the SQL string that defines the audience. This allows that user access to the appropriate recruiting center(s).

See Also

PeopleSoft Enterprise CRM 9 Marketing Applications PeopleBook, "Using Audiences"

Profiles

This section describes the profiles that are added to the CRM system for the Marketing to Student Administration integration. These system profiles store student data created for the Marketing to Student Administration integration.

There are two sets of profiles:

• Profiles that hold Online Application data in CRM before it is transferred to Student Administration. These are One Row profiles used in the two Online Application sample dialogs:

- CS-Appl Academic

- CS-Appl Academic Documents

- CS-Appl Academic History

- CS-Appl Biographic

- CS-Appl Employment

- CS-Appl Honors Awards Extra Curr

- CS-Appl Parents Emerg Contact

• Profiles that hold applicant data after it has been transferred from Student Administration to CRM. These are mostly Many Row profiles used for audience segmentation.

- CS-ADM Academic History.

- CS-ADM Academic Interests.

- CS-ADM Applicant Data.

- CS-ADM-Applicant Plan.

- CS-ADM Applicant Program.

- CS-ADM Applicant Recruiter.

- CS-ADM Applicant Sub-Plan.

- CS-ADM Extracur Activity.

- CS-ADM Service Indicators.

- CS-ADM Test Results.

- CS-PRS Prospect Career.

- CS-PRS Prospect Plan.

- CS-PRS Prospect Program.

- CS-PRS Prospect Recruiters.

- CS-PRS Prospect Sub-Plan.

The following illustration shows the relationships between the profiles:
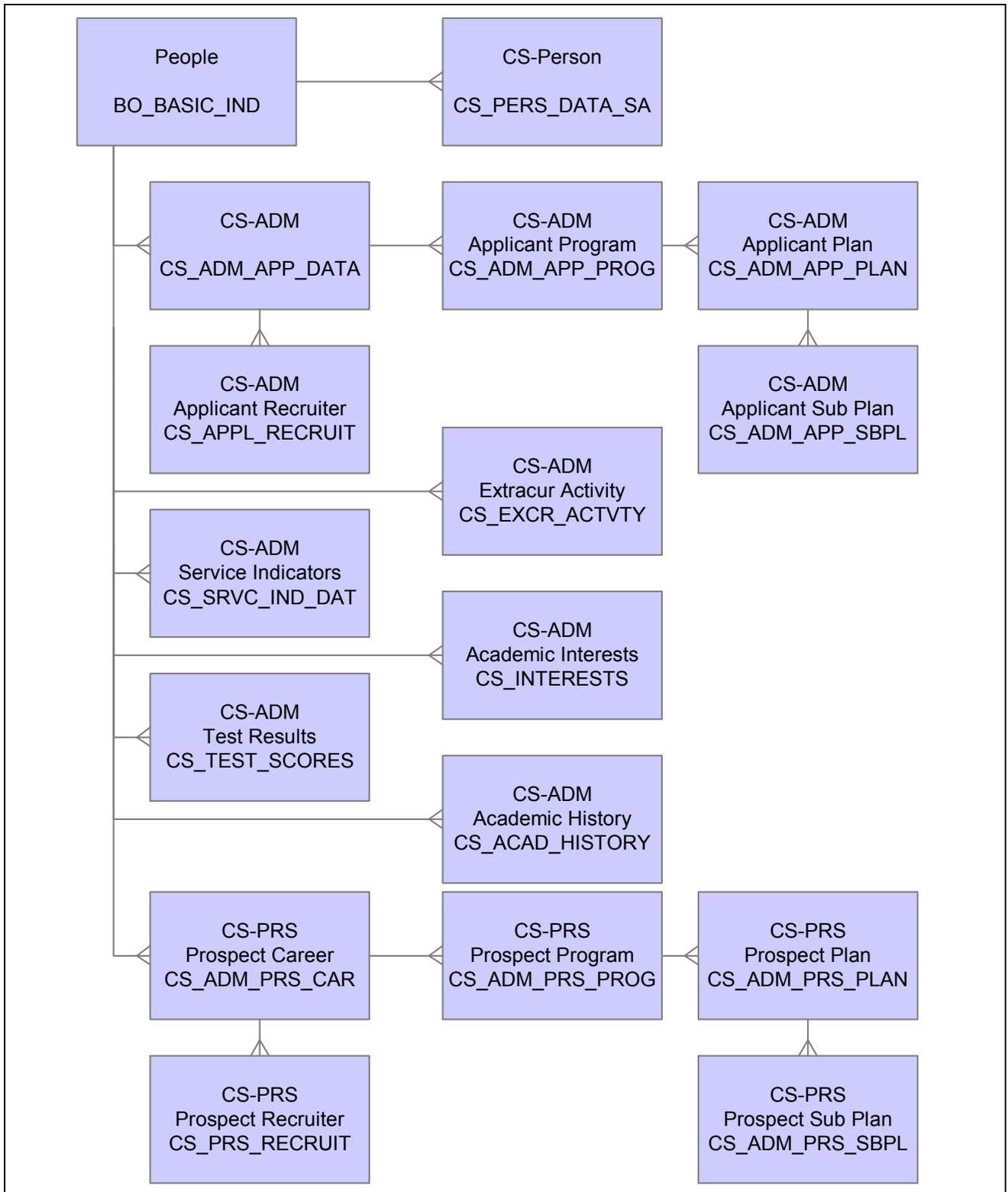
Student Administration marketing profiles

APPENDIX E

Online Application for Admission

This chapter describes the two sample Online Application for Admission dialogs included with the Online Marketing to Student Administration integration. It includes the following sections:

• Understanding the Online Application for Admission.

• Dialog Flow.

• Broadcast Email Document.

• User Authentication.

• Audience Definition.

• Web Documents.

• Confirmation Email.

• Banner Ad Response.

• Moving Data from CRM to Student Administration.

• Making Changes to the Online Application

Understanding the Online Application for Admission

The Online Application for Admission provides a self-service channel in which prospective students can apply for admission to the academic institution by completing an online application.

Prospective students access the online application for admission either by clicking a link in a broadcast email message or by clicking an online banner ad. The institution can also choose to have the student provide a user name and password before being allowed access to the application. If the student is contacted via a broadcast email message, he or she has the option of "opting out" of the dialog and not receiving further email communication from the institution.

The Online Application for Admission is delivered as an example of how Online Marketing dialogs can be used for this purpose. Because the example Online Application might not meet your school-specific requirements, you should always clone it and customize it to fit your needs.

Two sample Online Applications are included in the Marketing to Student Administration integration:

• Great Lakes University undergraduate application (CS_GLAKE_UGRD_APP).

• PS University School of Law application (CS_PSUNV_LAW_APP).

The Great Lakes application includes "attractive" web pages and many inputted items, and requires the user to log in before completing it. The PS University School of Law application includes simpler web pages and does not require login.

Both sample online applications use the business unit EGUBU.

Note. The illustrations in this chapter show the Online Application customized to use the logo and graphical style of Great Lakes University. Images of email messages and web pages show the Preview version of the document—the preview tags in curly braces ({}) represent content that will be merged when the document is Live.

Dialog Flow

The following illustration shows the flow of the Online Application for Admission:
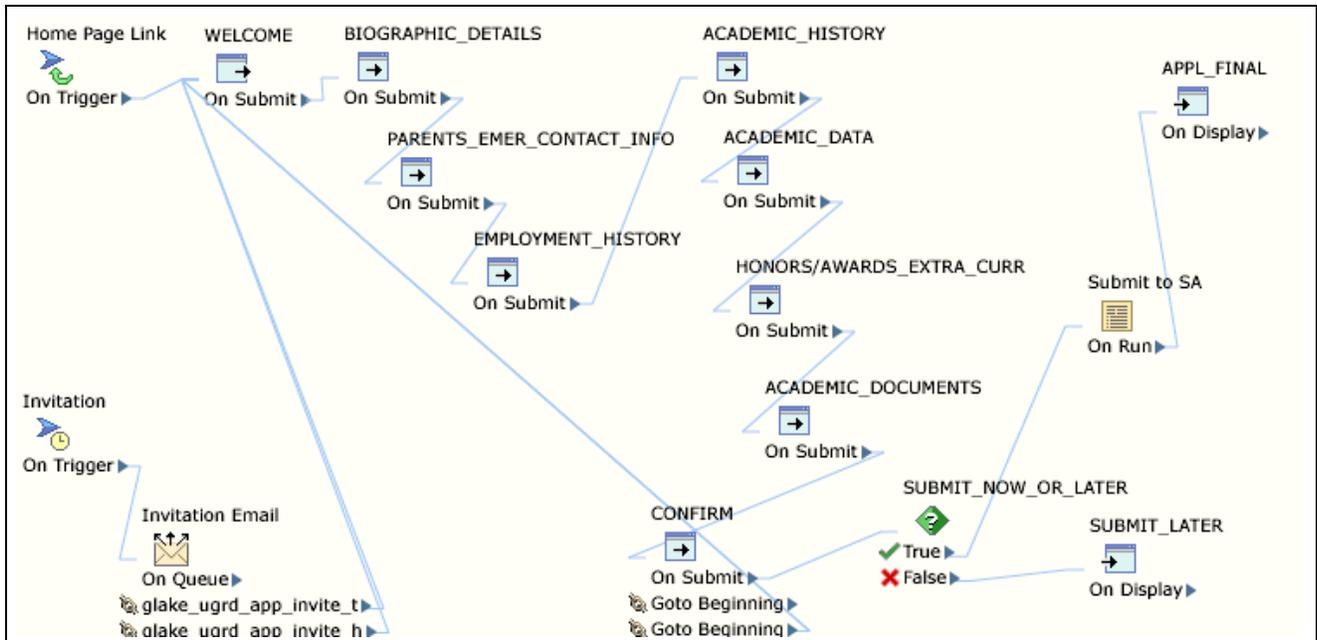
Online Application for Admission Dialog Flow

See <u>Chapter 3, "Designing Online Dialogs," page 27</u>.

Broadcast Email Document

The broadcast email document invites the prospect to apply for admission. Prospects can click a link to proceed, or click another link to opt out of future mailings.

Login Page

Application for Admission Broadcast Email Document

The Apply for Admission link takes the prospect to the Application Welcome and Instructions page.

The Opt Out link takes the prospect to the Opt Out dialog.

See Chapter 5, "Designing Email Documents," page 67.

User Authentication

Online dialogs can be either authenticated (login required) or non-authenticated (no login required). In the included sample application dialogs, the Great Lakes University dialog is authenticated and the PeopleSoft University School of Law dialog is non-authenticated.

In the Great Lakes University example, before an applicant can access the authenticated Online Application, he or she must log in with a user name and password. When the applicant clicks on the link in the invitation email, the Login screen is displayed. If the applicant already has a user ID and password, he or she can enter it; otherwise, the Create an Account link allows the creation of a new login.

After the applicant is authenticated, he or she is taken to the Welcome page.

Note. An institution can choose to display the Welcome page before the login page, as opposed to following it as shown in the sample dialog. To do this, you must create a separate dialog with the Welcome page and then include a cross-dialog link to bring applicants from the Welcome page to the login page.

Login Page

Note. You can customize the Login page using Set Up CRM, Product Related, Online Marketing, Global Options, Dialog Login Page, but the default appearance is as shown. Note also that the Login page is a system page, so any changes you make to it will be reflected in all dialogs that require authentication.

See Also

Non-Authenticated Dialogs

In a dialog that does not use authentication (users do not need to log in), applicants are added as new individuals by means of an Update Profile activity included in the dialog flow rather than by using their login information. Clicking on the link in the email takes the applicant directly to the first page of the application process.

Because the Online Applications use solely custom profile fields (not basic profile fields), the Update Profile action updates the CDM data in the basic profiles with the applicant's entered Last Name and Email Address. The rest of the applicant's data (address, phone number, and so forth) is not saved in the CDM core details at this time, but when the data is transferred back to the CRM database from the Student Administration system, it will be populated into the CRM core data fields at that point.

Note. An alternative approach to saving contact information is to include the minimum required fields Last Name and Email Address from the Individual Basics profile in the Personal Information page: however, the custom profile fields should still be updated with that information since that is the data being sent to the Student Administration system.

Authentication and Email Addresses

The values of the Email Address and Alternative Email Address fields are dependent on the context of the dialog's marketing role. If the dialog is targeted for Consumers, then the Email Address is assumed to be the Home Email Address, and the Alternative Email Address is the Business Email Address. If the dialog is targeted toward Contacts, then the Email Address is assumed to be the Business Email Address and the Alternative Email Address is the Home Email Address. This can cause confusion with authenticated dialogs if a new role is added to an existing individual. If the role types are different, the user might see that the email addresses are changed from their values when they were previously entered, due to the role mapping.

Audience Definition

The audiences for the Online Application for admission are named CS_GLAKE_UGRD_APPL (for Great Lakes University) and CS_PSUNV_LAW_APPL (for PeopleSoft University School of Law) and consist of people who meet the following criteria:

- Have never received the broadcast email.

- Have "Do Not Email" set to "N" or empty.

- Have a valid email address (Email Address is not empty).

- Are not deceased (Deceased flag is "N" or empty).

- Are prospects, not applicants.

- Have selected Institution "X" and Career "Y".

- Admit Term is 1047 (starting in Fall of 2004).

The sample audiences have a SetID of PSUSI.

The audience content is also limited based on the user's security profile. This is discussed in the chapter describing data integration.

Web Documents

This section describes the web documents included as part of the Online Application for Admission. These include:

- Welcome page.

- Personal Information page.

- Parental and Emergency Contact Information page.

- Employment History page.

- Educational Background page.

- Admission Term and Program page.

- Honors/Awards and Extracurricular Activities page.

- Academic Documents page.

- Thank You page.

The application is built at the Institution/Career level. Each application must be assigned to an Application Center, allowing you to control who can view applicants for each institution/career. The application contains three hidden fields: Application Center, Institution, and Career. By default these values are set to PSUNV for PeopleSoft University School of Law and GLAKE for Great Lakes University. When you clone the dialog to customize it for your needs, you can set these values as needed.

See Also

PeopleSoft 8 SP1 Application Fundamentals for Student Administration and Contributor Relations Solutions PeopleBook, "Securing Recruiting and Admissions"

Welcome Page

This page introduces the applicant to the online application process and describes the information needed to complete the application.

Note. The applicant does not need to complete the application in one session; the system saves the applicant's progress so he or she can resume later. Previous answers are pre-filled, and the applicant can click the Next button to reach the stopping point.

Online Application Welcome Page

Clicking the Begin Application button takes the applicant to the Personal Information page.

Personal Information Page

This page is where the applicant provides basic personal data: name, address, contact information, citizenship status, and so forth.

Online Application Personal Information Page (1 of 2)

Online Application Personal Information Page (2 of 2)

Clicking the Save and Continue button saves the progress and takes the applicant to the Parental and Emergency Contact page.

Parental and Emergency Contact Information Page

The Parental and Emergency Contact Information page is where the applicant enters information about his or her parents, along with a person to contact in case of emergency.

Online Application Parental and Emergency Contact Information

Clicking the Save and Continue button saves the progress and takes the applicant to the Employment History page.

Employment History Page

The Employment History page is where the applicant provides information about his or her most recent job(s).

Online Application Employment History Page

Clicking the Save and Continue button saves the progress and takes the applicant to the Educational Background page.

Educational Background Page

The Educational Background page is where the applicant provides information about previous high school and post-secondary education. The applicant can use the School Search tool to locate the ID number for an institution or, if the ID is not in the system, enter the name manually.

The School Search Tool invokes a Student Administration search page that allows you to search for schools. You can search by country, state, and city. After the school is found, you must copy the organization ID from the lookup page to the appropriate fields on the page. If a school cannot be found, you can complete the High School ID Not Found section of the page.

Undergraduate Online Application
Educational Background

Enter the schools you've attended and the degrees you have received.

High School Education

    *High School Graduation Date {Individuals.CS-, (mm/dd/yyyy)

Please list the high schools you have attended. Enter dates in mm/dd/yyyy format (e.g., 05/31/2005). Use the 🔍 School Search Tool to find your schools' ID.
High Schools Attended

*High School 1 ID {Individuals.CS-Appl Academic Hist	***From Date** {Individuals.CS-,	***To Date** {Individuals.CS-,
🔍 School Search Tool			
High School 2 ID {Individuals.CS-Appl Academic Hist	**From Date** {Individuals.CS-,	**To Date** {Individuals.CS-,
🔍 School Search Tool			
High School 3 ID {Individuals.CS-Appl Academic Hist	**From Date** {Individuals.CS-,	**To Date** {Individuals.CS-,
🔍 School Search Tool			

High School ID Not Found

School Name {Individuals.CS-Appl Academic Hist	**From Date** {Individuals.CS-,	**To Date** {Individuals.CS-,
City {Individuals.CS-Appl Academic Hist	**State** [　　　▼]	**Country** [United States ▼]

Online Application Educational Background Page (1 of 3)

Post Secondary Education

Please list the post secondary schools you have attended. Enter dates in mm/dd/yyyy format (e.g., 05/31/2005). Use the 🔍 School Search Tool to find your schools' ID.

Post Secondary School 1

School ID {Individuals.CS-Appl Academic Hist	**From Date** {Individuals.CS-,	**To Date** {Individuals.CS-,
🔍 School Search Tool		

  Degrees Received

Degree 1 {Individuals.CS-Appl Academic Hist	**Date Received** {Individuals.CS-,
Degree 2 {Individuals.CS-Appl Academic Hist	**Date Received** {Individuals.CS-,
Degree 3 {Individuals.CS-Appl Academic Hist	**Date Received** {Individuals.CS-,

Post Secondary School 2

School ID {Individuals.CS-Appl Academic Hist	**From Date** {Individuals.CS-,	**To Date** {Individuals.CS-,
🔍 School Search Tool		

  Degrees Received

Degree 1 {Individuals.CS-Appl Academic Hist	**Date Received** {Individuals.CS-,
Degree 2 {Individuals.CS-Appl Academic Hist	**Date Received** {Individuals.CS-,
Degree 3 {Individuals.CS-Appl Academic Hist	**Date Received** {Individuals.CS-,

Online Application Educational Background Page (2 of 3)

Online Application Educational Background Page (3 of 3)

Clicking the Save and Continue button saves the progress and takes the applicant to the Admission Term and Program page.

Admission Term and Program Page

The Admission Term and Program page is where the applicant supplies information about the term, program, and plan for which he or she is applying.

Online Application Admission Term and Program Page

Clicking the Save and Continue button saves the progress and takes the applicant to the Honors/Awards and Extracurricular Activities page.

Honors/Awards and Extracurricular Activities Page

The Honors/Awards and Extracurricular Activities page is where the applicant provides information about honors and awards he or she has received, along with any extracurricular activities in which he or she participated.

Online Application Honors and Extracurricular Activities page

Clicking the Save and Continue button saves the progress and takes the applicant to the Academic Documents page.

Academic Documents Page

The Academic Documents page allows the applicant to include an essay and also to upload documents relative to the application (such as a letter of recommendation).

Note. You can only upload one file to the File field; if you upload another file, the first one is overwritten. If it is necessary for the applicant to include more than one file, you will need to customize this page and add more File fields.

Online Application Academic Documents page

Clicking the Save and Continue button saves the progress and takes the applicant to the Submit Application page.

Submit Application Page

After you have completed all the forms in the application, you can submit it. Submission populates a message to pass the user entries to EDI TS189 Staging, CRM File Attachment and CRM Long Text tables in Student Administration.

Online Application Submit Application Page

To submit the application, select Yes and click the Continue button to submit the application. The applicant can also click the web link to return to the Welcome page and review or change the information he or she has entered before submitting.

Saving Without Submitting

If you're not ready to submit the application yet, select No and click the Continue button. The system displays the Application Saved But Not Submitted page.

Application Saved But Not Submitted Page

If the application is saved without submitting and the applicant has provided the required data, next time he or she clicks the link in the broadcast email to resume the application process the previously entered data is pre-filled on the web pages.

Thank You Page

After the applicant submits the application, this page thanks the applicant for the submission.

Online Application Thank You Page

Opt Out Dialog

The Online Applications include a link to an Opt Out dialog that allows respondents to choose not to receive further mailings.

Refer to the Sample Dialogs documentation for a description of the Opt Out dialog.

Banner Ad Response

Not all applications for admission are received as a result of a broadcast email invitation. Within a school's web site at the Institution Career level, a banner ad link can invoke the application dialog for that combination of Institution and Career. The dialog as initiated by the banner ad is almost identical to that initiated by the broadcast email; this section describes the differences.

Dialog Flow

The dialog flow is identical to the broadcast email version, with the following exceptions:

• There is no broadcast email element. Applicants start the dialog by clicking the link in the banner ad, which takes them to the first page of the application.

• There is no opt-out capability, as this concept does not apply if the applicant initiates contact.

Web Documents

The following differences apply to the dialog's web documents:

• There is no opportunity to pre-fill information, since the applicant is not known in advance.

• There are no opt-out documents.

Moving Data from CRM to Student Administration

Once the data has been collected from the applicant, a PeopleCode custom action named CS_CRM_TS189 consolidates the related data into a CRM record that is then used to construct an application message to send to Student Administration. The submissions are subscribed to the EDI TS189 Staging, CRM File Attachments, and CRM Long Text Responses components in the Student Administration system under Develop Enrollment, Process External Data, Use A-F.

The following diagram shows the process:
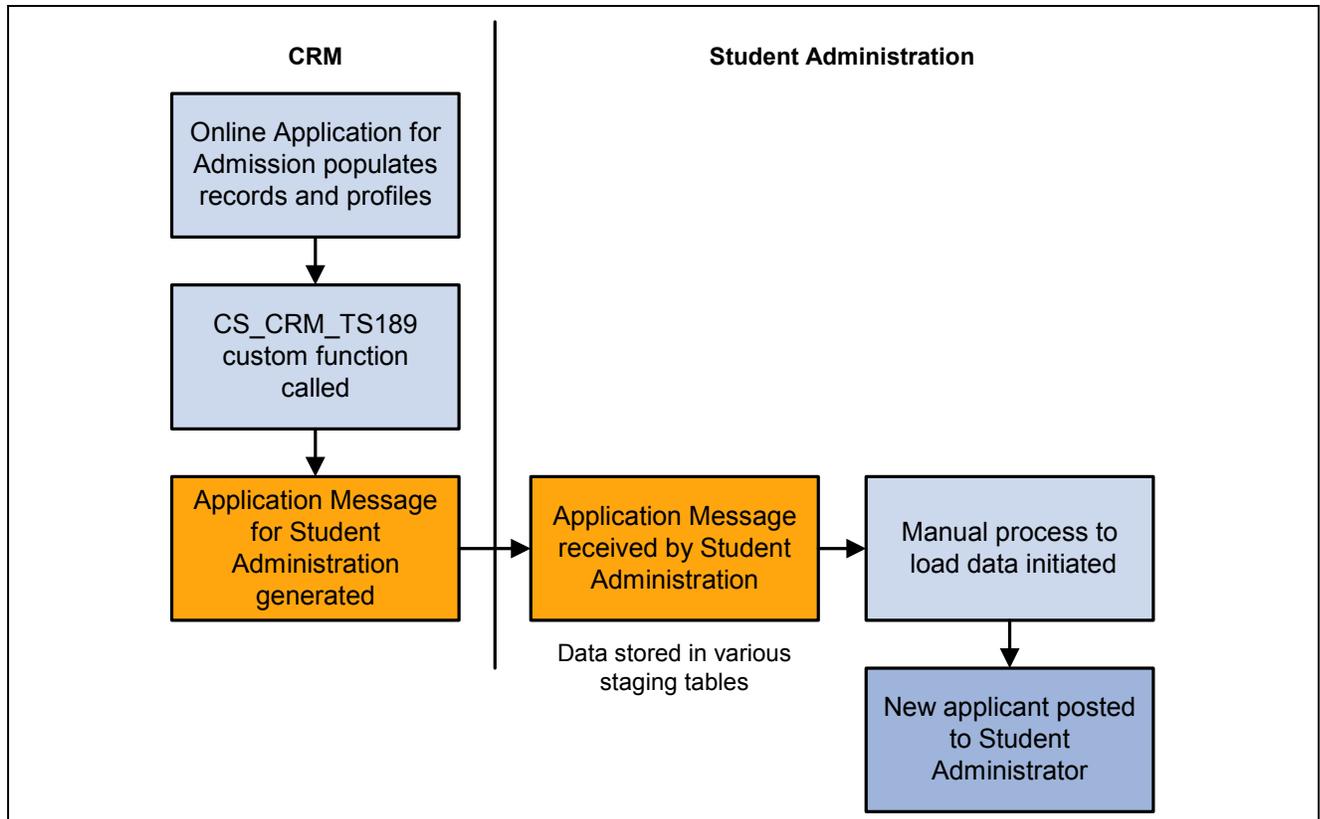
Process for Moving Data to Student Administration

Processing Applications in Student Administration

After the data has been loaded into these staging tables, Long Text (the application essay) can be viewed under Student Admissions, External Test Score Processing, CRM Long Text Attachments, while File Attachment (letters of recommendation) can be viewed under Student Admissions, External Test Score Processing, CRM File Attachments. Run the EDI TS189 Org Search and the EDI TS189 Person Search/Post processes to post the application data into the Student Administration system. When running the EDI TS189 Person Search/Post process, run the PSJob called ADCRMPST. This job runs the EDI TS189 Search/Post process as well as posting the File Attachments and Long Text Responses for the applicant. You can optionally run the ADAPPPST process first, then run the SAD_CRM_SYN2 Application Engine program if you wish to run each process separately. Once the application data has been posted, run the EDI TS189 Purge process to remove the data from the EDI TS189 Staging tables.

File Attachments

Long Text Responses

Student Administration Questions and File Attachments

Essay questions are subscribed in the CRM Long Text Responses component. File attachments are subscribed in the CRM Attachments component. Both components are found under Develop Enrollment, Process External Data, Use A-F. When the application is posted, essays and file attachments are stored under Develop Enrollment, Evaluate Applicants, Use. The post process stores this data according to the ID, Institution, and Career for which the application was created.

The file attachments are transferred from the file server used with the dialog for the online application. You must define the Student FTP Server ID and the CRM FTP Server ID on the Application Center Table under Design Student Administration, Design Admissions, Setup, Application Center Table for this transfer to occur.

Application Center Table

CS_CRM_TS189 Custom Action

The CS_CRM_TS189 custom action consolidates data into a CRM record that is used to construct the application message to send the information to Student Administration. It has the following parameters:

Parameter Name	Description
dialogID	The Online Marketing dialog ID for the dialog from which the data is being sent.
bas_sys_id	The temporary ID the system assigns to the applicant for the duration of the application process.

See Also

http://www.peoplesoft.com/corp/en/products/appconnect/catalog/eip_catalog.jsp

PeopleSoft 8 SP1 Recruiting and Admissions PeopleBook, "Performing EDI TS189 Application Transactions"

Chapter 18, "Using Extensions," page 265

Making Changes to the Online Application

For detailed information on how to make changes to Online Marketing dialogs (including the Online Application), refer to your Online Marketing documentation.

Adding Fields to the Online Application

Adding Long Text (Text Block) and File attachments as well as other field types to the Online Applications requires customizations to the dialogs that are discussed in the Online Marketing documentation. You may also contact PeopleSoft Global Services for more details.

See Chapter 3, "Designing Online Dialogs," page 27.

Considerations When Cloning the Online Application

You should keep the same considerations in mind when cloning the Online Application that you observe when cloning the sample dialogs. Refer to the Sample Dialogs documentation for more information.

See Appendix F, "Sample Dialogs," page 341.

APPENDIX F

Sample Dialogs

This chapter describes the structure of several of the sample dialogs delivered with the Online Marketing to Student Administration integration. You should use these dialogs for your own needs by cloning them and then changing the relevant information. The dialogs are provided as examples of how Student Administration tasks can be performed using online dialogs. The two sample Online Application for Admission dialogs are discussed in a separate chapter.

This chapter describes these sample dialogs and includes the following sections:

• Prospect Recruitment—Please Visit Campus.

• Applicant Enrichment—Housing Survey.

• Applicant/Admitted Student Conversion—Attend an Event in Your Area.

• Admitted Student Conversion—Attend an On-Campus Pre-Registration Event.

• Opt Out Dialog.

• Considerations When Cloning the Sample Dialogs.

Note. These sample dialogs depict a fictitious university and its undergraduate program. The web documents in the dialogs refer to a template, CS_LAKE_UGRD, and the HTML email documents contain stylesheet information and references to a Great Lakes University image file. The web template and image are packaged and installed as part of the installation and setup process. Images of sample email messages display a preview version of the email—tags in curly braces ({{}}) represent content that will be merged when the dialog is Live. The sample dialogs belong to business unit of EGUBU and their audiences are part of SetID PSUSI.

See Also

PeopleSoft Enterprise CRM 9 Supplemental Installation Guide

Prospect Recruitment—Please Visit Campus Dialog

The purpose of the Prospect Recruitment—Please Visit Campus dialog is to invite the prospect to visit the campus. The dialog contains two broadcast email messages:

• The first broadcast email invites prospects to visit.

• The second broadcast email is sent to those prospects who started the dialog (clicked the link in the email), but quit without requesting a campus visit.

Each combination of Institution and Career should have a separate dialog.

Dialog Flow

The following diagram shows the dialog flow for the Prospect Recruitment—Please Visit Campus dialog:
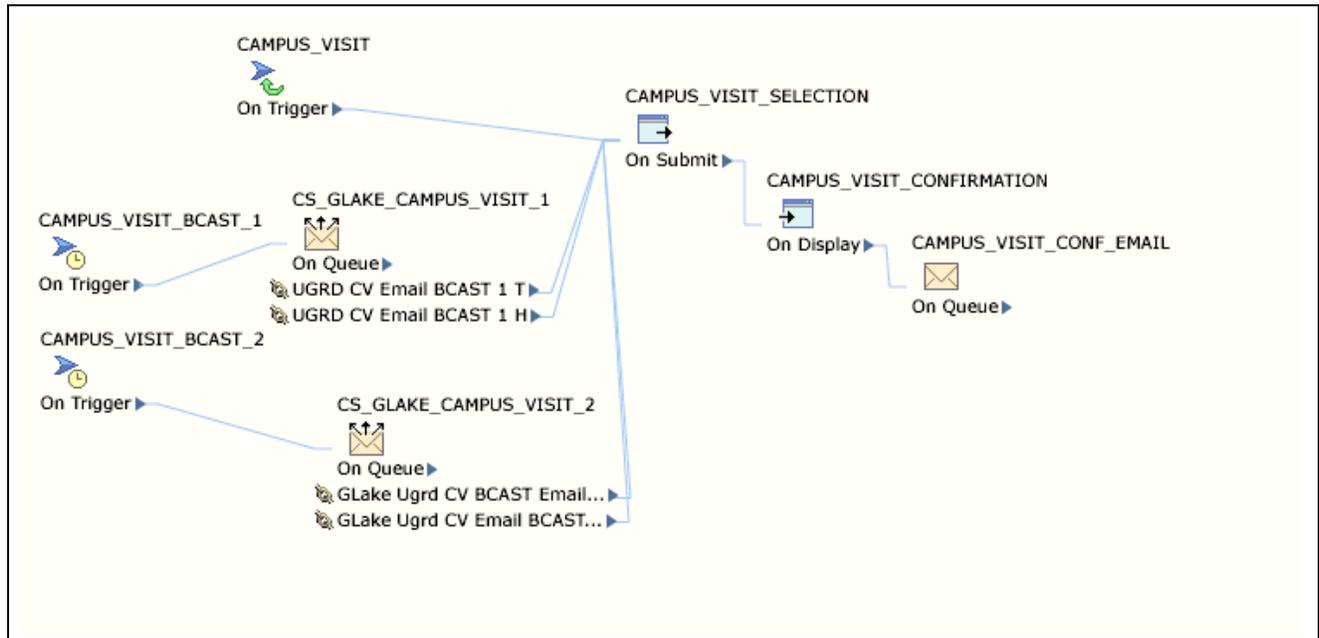
Prospect Recruitment—Please Visit Campus Dialog Flow

Broadcast Email

The Prospect Recruitment—Please Visit Campus dialog has two broadcast emails:

• Campus Invitation.

• Campus Visit Reminder.

Campus Invitation

The first broadcast email sent to prospects invites them to set up a campus visit to learn more about the university. The prospect can click on a link that provides more information about the campus visit, or opt out of future emails.

Prospect Recruitment—Please Visit Campus Broadcast Email 1

The campus visit link takes the prospect to a campus visit selection page; the opt-out link goes to the opt-out dialog.

Campus Visit Reminder

The second broadcast email is sent to the prospect if two weeks passes without a response to the first broadcast email. It reminds the prospect about the importance of a campus visit, once again invites him or her to set up a visit, and offers the opportunity to opt out of future communications.

Prospect Recruitment—Please Visit Campus Dialog Broadcast Email 2

External Event Trigger

The dialog also contains an External Event Trigger (for example, a banner ad) that takes the visitor directly to the campus visit selection page.

Audience Definition

This section describes the audience definitions for Broadcast Emails 1 and 2.

Broadcast Email 1 Audience Definition

The audience definition criteria for the first broadcast email is named CS_GLAKE_UGRD_CAMPUS_VISIT1 and consists of people who:

• Have never received this broadcast email.

• Have the DO NOT EMAIL flag set to "N" or empty.

• Have specified an email address. (EMAIL ADDRESS is not empty).

• Are not deceased. (Deceased Flag set to "N" or empty.

• Are prospects, not applicants.

• Have set Institution to "X" and Career to "Y".

• Are starting in the Fall of 2004. (ADMIT TERM = 1047).

The audience content is also limited based on the user's security profile.

Broadcast Email 2 Audience Definition

The audience definition criteria for the second broadcast email is named CS_GLAKE_UGRD_CAMPUS_ VISIT2 and consists of people who:

• Have started the dialog but failed to complete it.

• Have the DO NOT EMAIL flag set to "N" or empty.

• Are not deceased. (Deceased Flag set to "N" or empty.

Web Documents

The dialog's web documents consist of:

• Campus Visit Selection page.

• Confirmation and Thank You page.

Campus Visit Selection Page

The Campus Visit Selection page allows the prospect to select a date for a visit to the campus.

Campus Visit Selection Page

Confirmation and Thank You Page

The Confirmation and Thank You page verifies the date selected by the prospect and the location for the campus visit, along with thanking the prospect for the selection.

Follow-Up Email

Each prospect who selected a campus visit receives an email confirming their choices.

Campus Visit Confirmation Email

Opting Out

The respondent is given the opportunity to opt out of future mailings by clicking a web link in the broadcast email. This link takes the respondent to a separate dialog where he or she can indicate the desire to opt out.

Applicant Enrichment—Housing Survey Dialog

The purpose of this dialog is to provide the applicant an opportunity to complete a questionnaire about campus housing interests. The user is asked to rate six housing types in terms of importance. Based upon the input, the user is shown a list of residence halls that match each of his or her interests. For each indicated interest, the user is asked to rank the set of residence halls.

Each institution should have a different version of this dialog.

Dialog Assumptions

In this sample dialog, assume the following:

The housing types are:

- Honors Living Area.
- ROTC Living Area.
- Substance Free (no alcohol, tobacco, etc.) Living Area.
- Single Gender Living Area.
- Co-Ed Living Area.
- Married Living Area.

The possible ratings are:

- Very Important.
- Somewhat Important.
- Not Important.

The residence halls and their associated living types are shown in the following table:

	Honors	ROTC	Substance Free	Single Gender	Co-Ed	Married
Washington	X		X		X	X
Jefferson	X			X		
Lincoln	X		X	X		
Kennedy	X				X	X
Sherman		X	X	X		
Nimitz		X	X		X	
Pershing		X		X		
Hendrix			X		X	

Dialog Flow

The following illustration shows the flow of the Applicant Enrichment dialog:
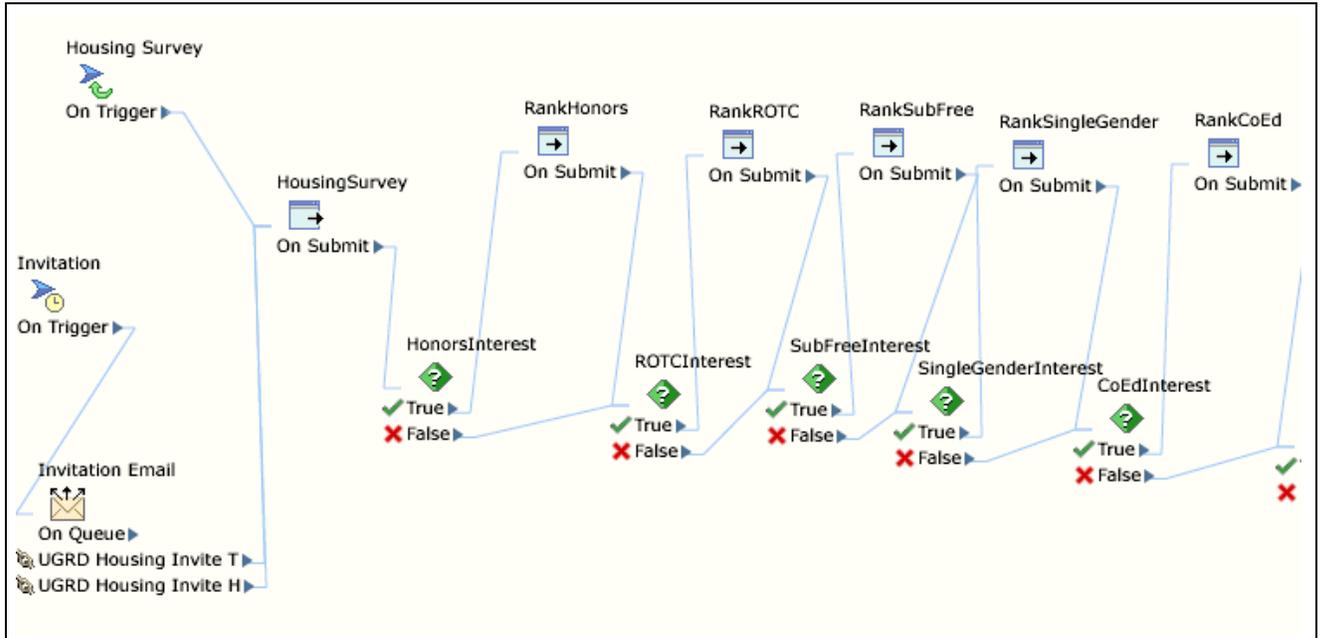
Applicant Enrichment Housing Survey Dialog Flow

Note. The entire dialog flow is not visible in the illustration.

Broadcast Email

Each member of the audience receives a broadcast email message inviting them to participate in the housing survey. They can click a link to proceed, or click another link to opt out of future mailings.

Applicant Enrichment Dialog—Housing Survey Broadcast Email

The first link takes the user to the Applicant Enrichment page.

The second link takes the user to the Opt-Out dialog.

External Event Trigger

The dialog also contains an External Event Trigger (for example, a banner ad) that takes the visitor directly to the housing survey page.

Audience Definition

The audience definition criteria for the broadcast email is named CS_GLAKE_UGRD_HOUSING_SURVEY and consists of people who:

• Have never received this broadcast email.

• Have DO NOT EMAIL set to "N" or empty.

• Have a valid email address on file (EMAIL ADDRESS is not empty).

• Are not deceased (Deceased Flag is "N" or empty).

• Are applicants, not prospects.

• Have Institution set to "X" and Career to "Y".

• Are starting in the Fall of 2004 (ADMIT TERM = 1047).

The audience content is also limited based on the user's security profile.

See Appendix D, "Data Integration," Setting User Security by Audience, page 318.

Web Documents

The dialog's web documents consist of:

• Housing Survey page.

• Ranking pages (one for each residence hall type).

Housing Survey Page

This page displays the survey. The user completes the survey by clicking a choice (Very, Somewhat, or Not Important) for each type of housing. When the form is submitted, the user's input is analyzed to determine which ranking pages will be shown to the user. If the user indicated a type of housing is either "Very" or "Somewhat" important, they are taken to a page for that housing type. If the user indicated a housing type as "Not" important, that housing type page is not shown.

Housing Survey Page

Ranking Pages

Each ranking page allows the user to rank choices for residence halls based on choices of Very Interested or Somewhat Interested on the Housing Survey page.

The ranking pages are shown in order based on the respondent's choices on the housing survey. For each housing type, the ranking page displays the available residence halls that fit the specified requirement. Clicking the Submit button on a ranking page takes the user to the next available ranking page based on interest in the housing type.

Housing Survey Ranking Page

Survey Thank You Page

This page thanks the respondent for completing the survey.

Opting Out

The respondent is given the opportunity to opt out of future mailings by clicking a web link in the broadcast email. This link takes the respondent to a separate dialog where he or she can indicate the desire to opt out.

Applicant/Admitted Student Conversion—Attend an Event in Your Area Dialog

The Applicant/Admitted Student Conversion—Attend an Event in Your Area dialog invites applicants and admitted students to attend an event in their area. Each combination of Institution and Career should have its own dialog.

Dialog Flow

The following illustration shows the flow of the Applicant/Admitted Student Conversion—Attend an Event in Your Area dialog:
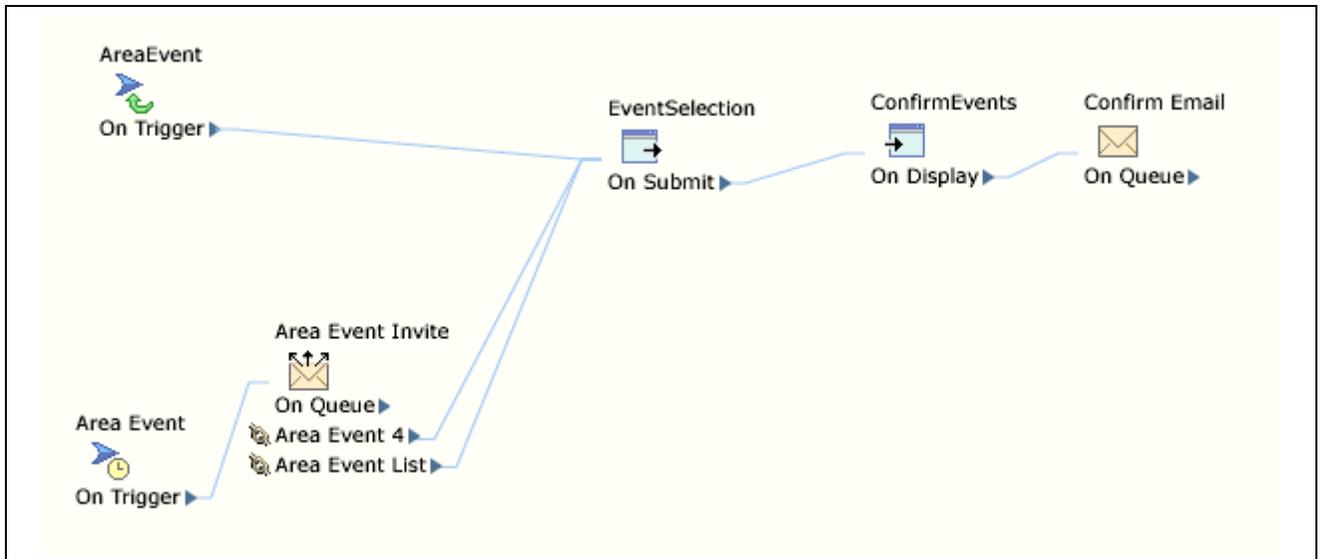
Applicant/Admitted Student Conversion—Attend an Event in Your Area dialog flow

Broadcast Email

Each member of the audience receives an email inviting them to attend an off-campus event occurring in the applicant's area. The applicant is asked to click a link to proceed, or offered the chance to opt out of future emails.
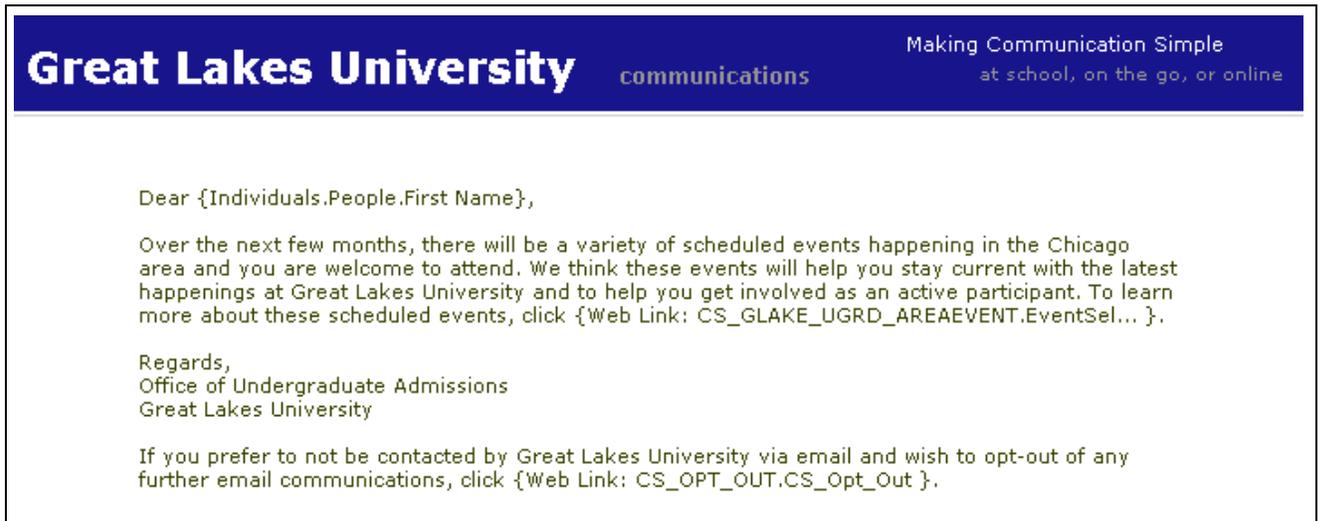
Applicant/Admitted Student Conversion—Attend an Event in Your Area Broadcast Email

The Area Event web link takes the respondent to the Area Event Selection page. The Opt Out link points to the Opt Out page.

External Event Trigger

The dialog also contains an External Event Trigger (for example, a banner ad) that takes the visitor directly to the area event selection page.

Audience Definition

The audience definition criteria for the broadcast email is named CS_GLAKE_UGRD_AREAEVENT and consists of people who:

• Have never received this broadcast email.

• Have DO NOT EMAIL set to "N" or empty.

• Have a valid email address on file (EMAIL ADDRESS is not empty).

• Are not deceased (Deceased Flag is "N" or empty).

• Are applicants, not prospects.

• Have Institution set to "X" and Career to "Y".

• Have City set to "CHICAGO" and State set to "IL".

• Are starting in the Fall of 2004 (ADMIT TERM = 1047).

The audience content is also limited based on the user's security profile.

See <u>Appendix D, "Data Integration," Setting User Security by Audience, page 318</u>.

Web Documents

The Applicant/Admitted Student Conversion—Attend an Event in Your Area dialog uses the following web documents:

• Area Event Selection page.

• Confirmation and Thank You page.

Area Event Selection Page

The Area Event Selection displays the upcoming opportunities to attend off-campus events. The user is asked to select one or more events. When the page is submitted, the applicant is taken to a confirmation and thank you page.

Area Event Selection Page

Confirmation and Thank You Page

The Confirmation and Thank You page thanks the user for registering and displays a list of the off-campus events he or she has chosen.

Confirmation Email

Each prospect who selected events to attend receives an email confirming their choices.

Preview E-mail

Dear {Individuals.People.First Name Default:},

We are very pleased that you are taking the opportunity to attend one or more Great Lakes University events. You are registered to attend the following:

{CS_GLAKE_UGRD_SELECT_AREAEVENT.Choose Many Default:}

If you are unable to attend one or more of these sessions, please call us at 800-222-1234.

Regards,
Office of Undergraduate Admissions
Great Lakes University
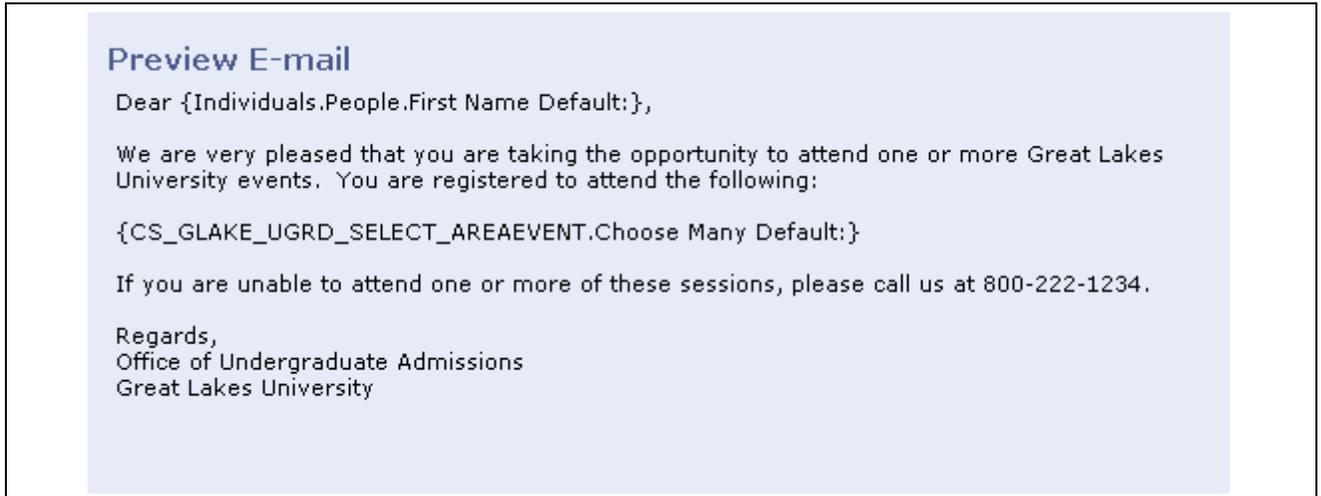
Applicant/Admitted Student Conversion—Attend an Event in Your Area Confirmation Email

Opting Out

The respondent is given the opportunity to opt out of future mailings by clicking a web link in the broadcast email. This link takes the respondent to a separate dialog where he or she can indicate the desire to opt out.

See .

Admitted Student Conversion—Attend an On-Campus Pre-Registration Event Dialog

The Admitted Student Conversion—Attend an On-Campus Pre-Registration Event invites the admitted student to attend an on-campus event prior to registration. Each combination of Institution and Career should have a separate dialog.

Dialog Flow

The following illustration shows the flow of the Admitted Student Conversion—Attend an On-Campus Pre-Registration Event dialog:
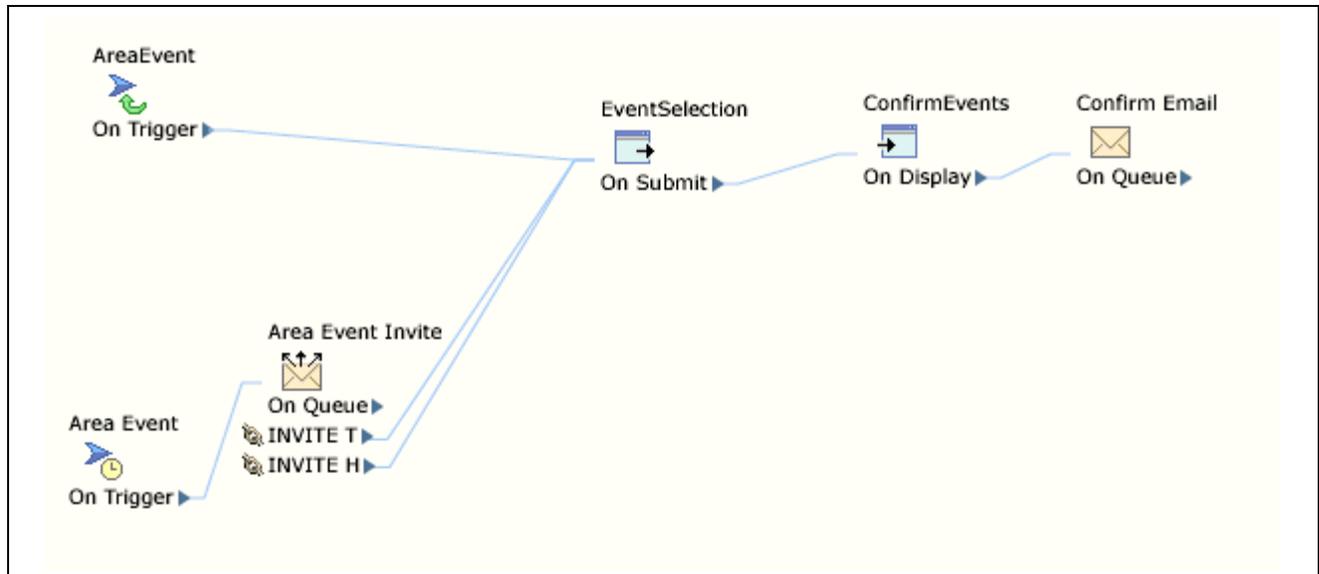
Admitted Student Conversion—Attend an On-Campus Pre-Registration Event Dialog Flow

Broadcast Email

Each member of the audience receives an email inviting them to attend an on-campus preregistration event. The student can click a link to proceed, or click another link to opt out of future emails.
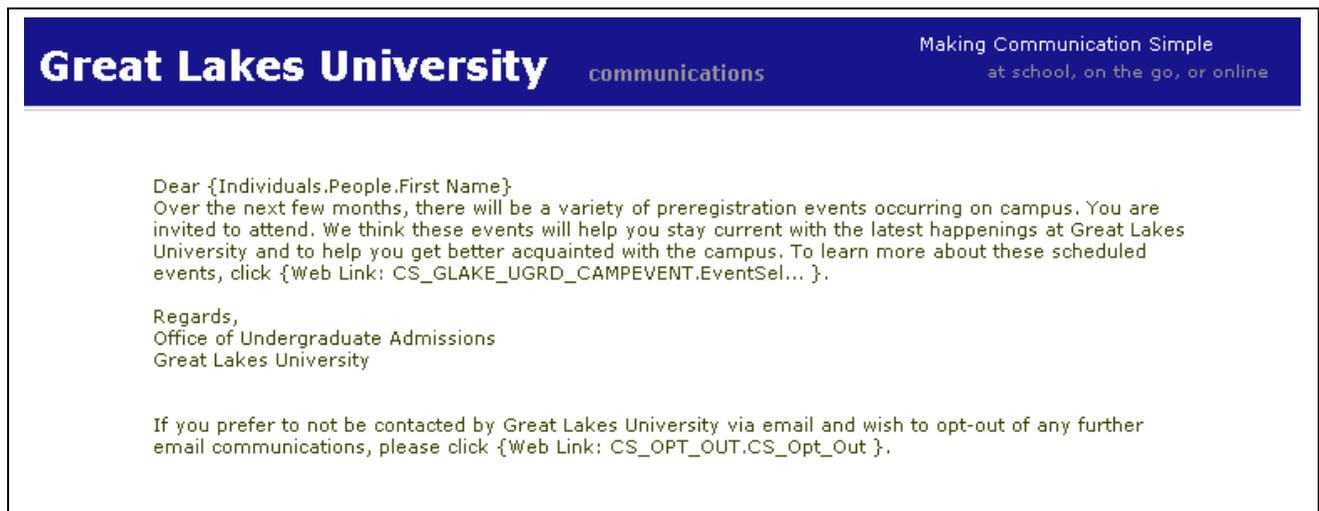
Admitted Student Conversion—Attend an On-Campus Pre-Registration Event Broadcast Email

External Event Trigger

The dialog also contains an External Event Trigger (for example, a banner ad) that takes the visitor directly to the pre-registration event selection page.

Audience Definition

The audience definition criteria for the broadcast email is named CS_GLAKE_UGRD_CAMPEVENT and consists of people who:

• Have never received this broadcast email.

- Have DO NOT EMAIL set to "N" or empty.
- Have a valid email address on file (EMAIL ADDRESS is not empty).
- Are not deceased (Deceased Flag is "N" or empty).
- Are admitted applicants, not prospects or non-admitted applicants.
- Have Institution set to "X" and Career to "Y".
- Are starting in the Fall of 2004 (ADMIT TERM = 1047).

The audience content is also limited based on the user's security profile.

See Appendix D, "Data Integration," Setting User Security by Audience, page 318.

Web Documents

The Admitted Student Conversion—Attend an On-Campus Pre-Registration Event dialog uses the following web documents:

- Pre-Registration Event Selection page.
- Confirmation and Thank You page.

Pre-Registration Event Selection Page

The Pre-Registration Event Selection page shows the user a list of available events on the campus. The user is asked to select one or more events. When the page is submitted, the user is taken to a confirmation and thank you page.

Pre-Registration Event Selection Page

Confirmation and Thank You Page

The Confirmation and Thank You page thanks the user for registering and displays a list of the pre-registration events he or she has chosen.

Confirmation Email

Each applicant who selected an event receives a confirmation email confirming their event choices.

Preview E-mail

Dear {Individuals.People.First Name Default:},

We are very pleased that you are taking the opportunity to attend one or more Great Lakes University events. You are registered to attend the following:

{CS_GLAKE_UGRD_SELECT_CAMPEVENT.Choose Many Default:}

If you are unable to attend one or more of these sessions, please call us at 800-222-1234.

Regards,
Office of Undergraduate Admissions
Great Lakes University

Admitted Student Conversion—Attend an On-Campus Pre-Registration Event Confirmation Email

Opting Out

The respondent is given the opportunity to opt out of future mailings by clicking a web link in the broadcast email. This link takes the respondent to a separate dialog where he or she can indicate the desire to opt out.

See .

Opt-Out Dialog

The sample dialogs include a link to an Opt-Out dialog that allows respondents to choose not to receive further mailings. The Opt-Out dialog includes two documents:

• Opt Out page.

• Opt Out Thank You page.

Note. Because all the sample dialogs in the Marketing to Student Administration integration (including the Online Applications for Admission) are crosslinked to the Opt-Out dialog, any changes you make to the Opt-Out dialog will be displayed when visitors access it from any of the sample dialogs.

Opt Out Page

The Opt Out page offers the prospect the opportunity to opt out of any future mailings. Prospects can choose Yes, which sets the Do Not Email flag to Y, or No, which does not change the flag.

Opt Out Thank You Page

The Opt Out Thank You page thanks the prospect and verifies that he or she has chosen to opt out of future mailings.

Considerations When Cloning the Sample Dialogs

If you choose to use or clone the sample web documents included with the Marketing to Student Administration integration, you must perform a few steps in order to retain their formatting. This section describes these steps.

Note. If you create your own original web documents, you do not need to perform the steps in this section.

After running the message to populate the choices from Student Administration, perform the following steps:

1. Export the imported documents from both the GLAKE and PSUNV LAW applications and save them. This includes the following documents:

   • Academic Data.

   • Academic History.

   • Personal Information.

   • Employment History.

   • Parents/Emergency Contact.

2. Discard the current imported contents of the documents. (At this point, the documents can be edited).

3. Go through each document and delete the choices from the choice elements. (On average, each document contains about 5-6 choice elements per page).

4. Click the Refresh Choices button for each of the choice elements. At this point, the Student Administration choices should appear.

5. Export the document again to a temporary file.

6. Copy and paste the choices from the temporary file into the file you saved in step 1.

7. Re-import the modified file from step 1 back into the document.

See Also

Chapter 6, "Designing Web Documents," page 83

Appendix D, "Data Integration," page 309

Glossary of PeopleSoft Enterprise Terms

absence entitlement	This element defines rules for granting paid time off for valid absences, such as sick time, vacation, and maternity leave. An absence entitlement element defines the entitlement amount, frequency, and entitlement period.
absence take	This element defines the conditions that must be met before a payee is entitled to take paid time off.
academic career	In PeopleSoft Enterprise Campus Solutions, all course work that a student undertakes at an academic institution and that is grouped in a single student record. For example, a university that has an undergraduate school, a graduate school, and various professional schools might define several academic careers—an undergraduate career, a graduate career, and separate careers for each professional school (law school, medical school, dental school, and so on).
academic institution	In PeopleSoft Enterprise Campus Solutions, an entity (such as a university or college) that is independent of other similar entities and that has its own set of rules and business processes.
academic organization	In PeopleSoft Enterprise Campus Solutions, an entity that is part of the administrative structure within an academic institution. At the lowest level, an academic organization might be an academic department. At the highest level, an academic organization can represent a division.
academic plan	In PeopleSoft Enterprise Campus Solutions, an area of study—such as a major, minor, or specialization—that exists within an academic program or academic career.
academic program	In PeopleSoft Enterprise Campus Solutions, the entity to which a student applies and is admitted and from which the student graduates.
accounting class	In PeopleSoft Enterprise Performance Management, the accounting class defines how a resource is treated for generally accepted accounting practices. The Inventory class indicates whether a resource becomes part of a balance sheet account, such as inventory or fixed assets, while the Non-inventory class indicates that the resource is treated as an expense of the period during which it occurs.
accounting date	The accounting date indicates when a transaction is recognized, as opposed to the date the transaction actually occurred. The accounting date and transaction date can be the same. The accounting date determines the period in the general ledger to which the transaction is to be posted. You can only select an accounting date that falls within an open period in the ledger to which you are posting. The accounting date for an item is normally the invoice date.
accounting split	The accounting split method indicates how expenses are allocated or divided among one or more sets of accounting ChartFields.
accumulator	You use an accumulator to store cumulative values of defined items as they are processed. You can accumulate a single value over time or multiple values over time. For example, an accumulator could consist of all voluntary deductions, or all company deductions, enabling you to accumulate amounts. It allows total flexibility for time periods and values accumulated.
action reason	The reason an employee's job or employment information is updated. The action reason is entered in two parts: a personnel action, such as a promotion, termination, or change from one pay group to another—and a reason for that action. Action reasons are used by PeopleSoft Enterprise Human Resources, PeopleSoft Enterprise Benefits

Administration, PeopleSoft Enterprise Stock Administration, and the COBRA Administration feature of the Base Benefits business process.

action template
In PeopleSoft Enterprise Receivables, outlines a set of escalating actions that the system or user performs based on the period of time that a customer or item has been in an action plan for a specific condition.

activity
In PeopleSoft Enterprise Learning Management, an instance of a catalog item (sometimes called a class) that is available for enrollment. The activity defines such things as the costs that are associated with the offering, enrollment limits and deadlines, and waitlisting capacities.

In PeopleSoft Enterprise Performance Management, the work of an organization and the aggregation of actions that are used for activity-based costing.

In PeopleSoft Enterprise Project Costing, the unit of work that provides a further breakdown of projects—usually into specific tasks.

In PeopleSoft Workflow, a specific transaction that you might need to perform in a business process. Because it consists of the steps that are used to perform a transaction, it is also known as a step map.

address usage
In PeopleSoft Enterprise Campus Solutions, a grouping of address types defining the order in which the address types are used. For example, you might define an address usage code to process addresses in the following order: billing address, dormitory address, home address, and then work address.

adjustment calendar
In PeopleSoft Enterprise Campus Solutions, the adjustment calendar controls how a particular charge is adjusted on a student's account when the student drops classes or withdraws from a term. The charge adjustment is based on how much time has elapsed from a predetermined date, and it is determined as a percentage of the original charge amount.

administrative function
In PeopleSoft Enterprise Campus Solutions, a particular functional area that processes checklists, communication, and comments. The administrative function identifies which variable data is added to a person's checklist or communication record when a specific checklist code, communication category, or comment is assigned to the student. This key data enables you to trace that checklist, communication, or comment back to a specific processing event in a functional area.

admit type
In PeopleSoft Enterprise Campus Solutions, a designation used to distinguish first-year applications from transfer applications.

agreement
In PeopleSoft Enterprise eSettlements, provides a way to group and specify processing options, such as payment terms, pay from a bank, and notifications by a buyer and supplier location combination.

allocation rule
In PeopleSoft Enterprise Incentive Management, an expression within compensation plans that enables the system to assign transactions to nodes and participants. During transaction allocation, the allocation engine traverses the compensation structure from the current node to the root node, checking each node for plans that contain allocation rules.

alternate account
A feature in PeopleSoft Enterprise General Ledger that enables you to create a statutory chart of accounts and enter statutory account transactions at the detail transaction level, as required for recording and reporting by some national governments.

analysis database
In PeopleSoft Enterprise Campus Solutions, database tables that store large amounts of student information that may not appear in standard report formats. The analysis database tables contain keys for all objects in a report that an application program can use to reference other student-record objects that are not contained in the printed report. For instance, the analysis database contains data on courses that are considered

for satisfying a requirement but that are rejected. It also contains information on courses captured by global limits. An analysis database is used in PeopleSoft Enterprise Academic Advisement.

Application Messaging PeopleSoft Application Messaging enables applications within the PeopleSoft Enterprise product family to communicate synchronously or asynchronously with other PeopleSoft Enterprise and third-party applications. An application message defines the records and fields to be published or subscribed to.

AR specialist Abbreviation for *receivables specialist.* In PeopleSoft Enterprise Receivables, an individual in who tracks and resolves deductions and disputed items.

arbitration plan In PeopleSoft Enterprise Pricer, defines how price rules are to be applied to the base price when the transaction is priced.

assessment rule In PeopleSoft Enterprise Receivables, a user-defined rule that the system uses to evaluate the condition of a customer's account or of individual items to determine whether to generate a follow-up action.

asset class An asset group used for reporting purposes. It can be used in conjunction with the asset category to refine asset classification.

attribute/value pair In PeopleSoft Enterprise Directory Interface, relates the data that makes up an entry in the directory information tree.

audience In PeopleSoft Enterprise Campus Solutions, a segment of the database that relates to an initiative, or a membership organization that is based on constituent attributes rather than a dues-paying structure. Examples of audiences include the Class of '65 and Undergraduate Arts & Sciences.

authentication server A server that is set up to verify users of the system.

base time period In PeopleSoft Enterprise Business Planning, the lowest level time period in a calendar.

benchmark job In PeopleSoft Enterprise Workforce Analytics Solution, a benchmark job is a job code for which there is corresponding salary survey data from published, third-party sources.

billing career In PeopleSoft Enterprise Campus Solutions, the one career under which other careers are grouped for billing purposes if a student is active simultaneously in multiple careers.

bio bit or bio brief In PeopleSoft Enterprise Campus Solutions, a report that summarizes information stored in the system about a particular constituent. You can generate standard or specialized reports.

book In PeopleSoft Enterprise Asset Management, used for storing financial and tax information, such as costs, depreciation attributes, and retirement information on assets.

branch A tree node that rolls up to nodes above it in the hierarchy, as defined in PeopleSoft Tree Manager.

budgetary account only An account used by the system only and not by users; this type of account does not accept transactions. You can only budget with this account. Formerly called "system-maintained account."

budget check In commitment control, the processing of source transactions against control budget ledgers, to see if they pass, fail, or pass with a warning.

budget control In commitment control, budget control ensures that commitments and expenditures don't exceed budgets. It enables you to track transactions against corresponding budgets and terminate a document's cycle if the defined budget conditions are not met.

	For example, you can prevent a purchase order from being dispatched to a vendor if there are insufficient funds in the related budget to support it.
budget period	The interval of time (such as 12 months or 4 quarters) into which a period is divided for budgetary and reporting purposes. The ChartField allows maximum flexibility to define operational accounting time periods without restriction to only one calendar.
business activity	The name of a subset of a detailed business process. This might be a specific transaction, task, or action that you perform in a business process.
business event	In PeopleSoft Enterprise Receivables, defines the processing characteristics for the Receivable Update process for a draft activity.
	In PeopleSoft Enterprise Sales Incentive Management, an original business transaction or activity that may justify the creation of a PeopleSoft Enterprise Incentive Management event (a sale, for example).
business process	A standard set of 17 business processes are defined and maintained by the PeopleSoft Enterprise product families and are supported by the Business Process Engineering group. An example of a business process is Order Fulfillment, which is a business process that manages sales orders and contracts, inventory, billing, and so forth.
	See also *detailed business process*.
business task	The name of the specific function depicted in one of the business processes.
business unit	A corporation or a subset of a corporation that is independent with regard to one or more operational or accounting functions.
buyer	In PeopleSoft Enterprise eSettlements, an organization (or business unit, as opposed to an individual) that transacts with suppliers (vendors) within the system. A buyer creates payments for purchases that are made in the system.
campus	In PeopleSoft Enterprise Campus Solutions, an entity that is usually associated with a distinct physical administrative unit, that belongs to a single academic institution, that uses a unique course catalog, and that produces a common transcript for students within the same academic career.
catalog item	In PeopleSoft Enterprise Learning Management, a specific topic that a learner can study and have tracked. For example, "Introduction to Microsoft Word." A catalog item contains general information about the topic and includes a course code, description, categorization, keywords, and delivery methods. A catalog item can have one or more learning activities.
catalog map	In PeopleSoft Enterprise Catalog Management, translates values from the catalog source data to the format of the company's catalog.
catalog partner	In PeopleSoft Enterprise Catalog Management, shares responsibility with the enterprise catalog manager for maintaining catalog content.
categorization	Associates partner offerings with catalog offerings and groups them into enterprise catalog categories.
category	In PeopleSoft Enterprise Campus Solutions, a broad grouping to which specific comments or communications (contexts) are assigned. Category codes are also linked to 3C access groups so that you can assign data-entry or view-only privileges across functions.
channel	In PeopleSoft MultiChannel Framework, email, chat, voice (computer telephone integration [CTI]), or a generic event.
ChartField	A field that stores a chart of accounts, resources, and so on, depending on the PeopleSoft Enterprise application. ChartField values represent individual account numbers, department codes, and so forth.

ChartField balancing	You can require specific ChartFields to match up (balance) on the debit and the credit side of a transaction.
ChartField combination edit	The process of editing journal lines for valid ChartField combinations based on user-defined rules.
ChartKey	One or more fields that uniquely identify each row in a table. Some tables contain only one field as the key, while others require a combination.
checkbook	In PeopleSoft Enterprise Promotions Management, enables you to view financial data (such as planned, incurred, and actual amounts) that is related to funds and trade promotions.
checklist code	In PeopleSoft Enterprise Campus Solutions, a code that represents a list of planned or completed action items that can be assigned to a staff member, volunteer, or unit. Checklists enable you to view all action assignments on one page.
class	In PeopleSoft Enterprise Campus Solutions, a specific offering of a course component within an academic term.
	See also *course*.
Class ChartField	A ChartField value that identifies a unique appropriation budget key when you combine it with a fund, department ID, and program code, as well as a budget period. Formerly called *sub-classification*.
clearance	In PeopleSoft Enterprise Campus Solutions, the period of time during which a constituent in PeopleSoft Enterprise Contributor Relations is approved for involvement in an initiative or an action. Clearances are used to prevent development officers from making multiple requests to a constituent during the same time period.
clone	In PeopleCode, to make a unique copy. In contrast, to *copy* may mean making a new reference to an object, so if the underlying object is changed, both the copy and the original change.
cohort	In PeopleSoft Enterprise Campus Solutions, the highest level of the three-level classification structure that you define for enrollment management. You can define a cohort level, link it to other levels, and set enrollment target numbers for it.
	See also *population* and *division*.
collection	To make a set of documents available for searching in Verity, you must first create at least one collection. A collection is set of directories and files that allow search application users to use the Verity search engine to quickly find and display source documents that match search criteria. A collection is a set of statistics and pointers to the source documents, stored in a proprietary format on a file server. Because a collection can only store information for a single location, PeopleTools maintains a set of collections (one per language code) for each search index object.
collection rule	In PeopleSoft Enterprise Receivables, a user-defined rule that defines actions to take for a customer based on both the amount and the number of days past due for outstanding balances.
comm key	See *communication key*.
communication key	In PeopleSoft Enterprise Campus Solutions, a single code for entering a combination of communication category, communication context, communication method, communication direction, and standard letter code. Communication keys (also called *comm keys* or *speed keys*) can be created for background processes as well as for specific users.

compensation object	In PeopleSoft Enterprise Incentive Management, a node within a compensation structure. Compensation objects are the building blocks that make up a compensation structure's hierarchical representation.
compensation structure	In PeopleSoft Enterprise Incentive Management, a hierarchical relationship of compensation objects that represents the compensation-related relationship between the objects.
component interface	A component interface is a set of application programming interfaces (APIs) that you can use to access and modify PeopleSoft Enterprise database information using a program instead of the PeopleSoft client.
condition	In PeopleSoft Enterprise Receivables, occurs when there is a change of status for a customer's account, such as reaching a credit limit or exceeding a user-defined balance due.
configuration parameter catalog	Used to configure an external system with PeopleSoft Enterprise. For example, a configuration parameter catalog might set up configuration and communication parameters for an external server.
configuration plan	In PeopleSoft Enterprise Incentive Management, configuration plans hold allocation information for common variables (not incentive rules) and are attached to a node without a participant. Configuration plans are not processed by transactions.
constituents	In PeopleSoft Enterprise Campus Solutions, friends, alumni, organizations, foundations, or other entities affiliated with the institution, and about which the institution maintains information. The constituent types delivered with PeopleSoft Enterprise Contributor Relations Solutions are based on those defined by the Council for the Advancement and Support of Education (CASE).
content reference	Content references are pointers to content registered in the portal registry. These are typically either URLs or iScripts. Content references fall into three categories: target content, templates, and template pagelets.
context	In PeopleCode, determines which buffer fields can be contextually referenced and which is the current row of data on each scroll level when a PeopleCode program is running.
	In PeopleSoft Enterprise Campus Solutions, a specific instance of a comment or communication. One or more contexts are assigned to a category, which you link to 3C access groups so that you can assign data-entry or view-only privileges across functions.
	In PeopleSoft Enterprise Incentive Management, a mechanism that is used to determine the scope of a processing run. PeopleSoft Enterprise Incentive Management uses three types of context: plan, period, and run-level.
control table	Stores information that controls the processing of an application. This type of processing might be consistent throughout an organization, or it might be used only by portions of the organization for more limited sharing of data.
cost-plus contract line	A rate-based contract line associated with a fee component of Award, Fixed, Incentive, or Other. Rate-based contract lines associated with a fee type of None are not considered cost-plus contract lines.
cost profile	A combination of a receipt cost method, a cost flow, and a deplete cost method. A profile is associated with a cost book and determines how items in that book are valued, as well as how the material movement of the item is valued for the book.
cost row	A cost transaction and amount for a set of ChartFields.
course	In PeopleSoft Enterprise Campus Solutions, a course that is offered by a school and that is typically described in a course catalog. A course has a standard syllabus and

credit level; however, these may be modified at the class level. Courses can contain multiple components such as lecture, discussion, and lab.

See also *class*.

course share set	In PeopleSoft Enterprise Campus Solutions, a tag that defines a set of requirement groups that can share courses. Course share sets are used in PeopleSoft Enterprise Academic Advisement.
current learning	In PeopleSoft Enterprise Learning Management, a self-service repository for all of a learner's in-progress learning activities and programs.
data acquisition	In PeopleSoft Enterprise Incentive Management, the process during which raw business transactions are acquired from external source systems and fed into the operational data store (ODS).
data cube	In PeopleSoft Analytic Calculation Engine, a data cube is a container for one kind of data (such as Sales data) and works with in tandem with one or more dimensions. Dimensions and data cubes in PeopleSoft Analytic Calculation Engine are unrelated to dimensions and online analytical processing (OLAP) cubes in PeopleSoft Cube Manager.
data elements	Data elements, at their simplest level, define a subset of data and the rules by which to group them.
	For Workforce Analytics, data elements are rules that tell the system what measures to retrieve about your workforce groups.
dataset	A data grouping that enables role-based filtering and distribution of data. You can limit the range and quantity of data that is displayed for a user by associating dataset rules with user roles. The result of dataset rules is a set of data that is appropriate for the user's roles.
delivery method	In PeopleSoft Enterprise Learning Management, identifies the primary type of delivery method in which a particular learning activity is offered. Also provides default values for the learning activity, such as cost and language. This is primarily used to help learners search the catalog for the type of delivery from which they learn best. Because PeopleSoft Enterprise Learning Management is a blended learning system, it does not enforce the delivery method.
	In PeopleSoft Enterprise Supply Chain Management, identifies the method by which goods are shipped to their destinations (such as truck, air, and rail). The delivery method is specified when creating shipment schedules.
delivery method type	In PeopleSoft Enterprise Learning Management, identifies how learning activities can be delivered—for example, through online learning, classroom instruction, seminars, books, and so forth—in an organization. The type determines whether the delivery method includes scheduled components.
detailed business process	A subset of the business process. For example, the detailed business process named Determine Cash Position is a subset of the business process called Cash Management.
dimension	In PeopleSoft Analytic Calculation Engine, a dimension contains a list of one kind of data that can span various contexts, and it is a basic component of an analytic model. Within the analytic model, a dimension is attached to one or more data cubes. In PeopleSoft Cube Manager, a dimension is the most basic component of an OLAP cube and specifies the PeopleSoft metadata to be used to create the dimension's rollup structure. Dimensions and data cubes in PeopleSoft Analytic Calculation Engine are unrelated to dimensions and OLAP cubes in PeopleSoft Cube Manager.
directory information tree	In PeopleSoft Enterprise Directory Interface, the representation of a directory's hierarchical structure.

division	In PeopleSoft Enterprise Campus Solutions, the lowest level of the three-level classification structure that you define in PeopleSoft Enterprise Recruiting and Admissions for enrollment management. You can define a division level, link it to other levels, and set enrollment target numbers for it.
	See also *population* and *cohort.*
document sequencing	A flexible method that sequentially numbers the financial transactions (for example, bills, purchase orders, invoices, and payments) in the system for statutory reporting and for tracking commercial transaction activity.
dynamic detail tree	A tree that takes its detail values—dynamic details—directly from a table in the database, rather than from a range of values that are entered by the user.
edit table	A table in the database that has its own record definition, such as the Department table. As fields are entered into a PeopleSoft Enterprise application, they can be validated against an edit table to ensure data integrity throughout the system.
effective date	A method of dating information in PeopleSoft Enterprise applications. You can predate information to add historical data to your system, or postdate information in order to enter it before it actually goes into effect. By using effective dates, you don't delete values; you enter a new value with a current effective date.
EIM ledger	Abbreviation for *Enterprise Incentive Management ledger.* In PeopleSoft Enterprise Incentive Management, an object to handle incremental result gathering within the scope of a participant. The ledger captures a result set with all of the appropriate traces to the data origin and to the processing steps of which it is a result.
elimination set	In PeopleSoft Enterprise General Ledger, a related group of intercompany accounts that is processed during consolidations.
entry event	In PeopleSoft Enterprise General Ledger, Receivables, Payables, Purchasing, and Billing, a business process that generates multiple debits and credits resulting from single transactions to produce standard, supplemental accounting entries.
equitization	In PeopleSoft Enterprise General Ledger, a business process that enables parent companies to calculate the net income of subsidiaries on a monthly basis and adjust that amount to increase the investment amount and equity income amount before performing consolidations.
equity item limit	In PeopleSoft Enterprise Campus Solutions, the amounts of funds set by the institution to be awarded with discretionary or gift funds. The limit could be reduced by amounts equal to such things as expected family contribution (EFC) or parent contribution. Students are packaged by Equity Item Type Groups and Related Equity Item Types. This limit can be used to assure that similar student populations are packaged equally.
event	A predefined point either in the Component Processor flow or in the program flow. As each point is encountered, the event activates each component, triggering any PeopleCode program that is associated with that component and that event. Examples of events are FieldChange, SavePreChange, and RowDelete.
	In PeopleSoft Enterprise Human Resources, also refers to an incident that affects benefits eligibility.
event propagation process	In PeopleSoft Enterprise Sales Incentive Management, a process that determines, through logic, the propagation of an original PeopleSoft Enterprise Incentive Management event and creates a derivative (duplicate) of the original event to be processed by other objects. PeopleSoft Enterprise Enterprise Sales Incentive Management uses this mechanism to implement splits, roll-ups, and so on. Event propagation determines who receives the credit.
exception	In PeopleSoft Enterprise Receivables, an item that either is a deduction or is in dispute.

exclusive pricing In PeopleSoft Enterprise Order Management, a type of arbitration plan that is associated with a price rule. Exclusive pricing is used to price sales order transactions.

fact In PeopleSoft Enterprise applications, facts are numeric data values from fields from a source database as well as an analytic application. A fact can be anything you want to measure your business by, for example, revenue, actual, budget data, or sales numbers. A fact is stored on a fact table.

financial aid term In PeopleSoft Enterprise Campus Solutions, a combination of a period of time that the school determines as an instructional accounting period and an academic career. It is created and defined during the setup process. Only terms eligible for financial aid are set up for each financial aid career.

forecast item A logical entity with a unique set of descriptive demand and forecast data that is used as the basis to forecast demand. You create forecast items for a wide range of uses, but they ultimately represent things that you buy, sell, or use in your organization and for which you require a predictable usage.

fund In PeopleSoft Enterprise Promotions Management, a budget that can be used to fund promotional activity. There are four funding methods: top down, fixed accrual, rolling accrual, and zero-based accrual.

gap In PeopleSoft Enterprise Campus Solutions, an artificial figure that sets aside an amount of unmet financial aid need that is not funded with Title IV funds. A gap can be used to prevent fully funding any student to conserve funds, or it can be used to preserve unmet financial aid need so that institutional funds can be awarded.

generic process type In PeopleSoft Process Scheduler, process types are identified by a generic process type. For example, the generic process type SQR includes all SQR process types, such as SQR process and SQR report.

gift table In PeopleSoft Enterprise Campus Solutions, a table or so-called *donor pyramid* describing the number and size of gifts that you expect will be needed to successfully complete the campaign in PeopleSoft Enterprise Contributor Relations. The gift table enables you to estimate the number of donors and prospects that you need at each gift level to reach the campaign goal.

GL business unit Abbreviation for *general ledger business unit.* A unit in an organization that is an independent entity for accounting purposes. It maintains its own set of accounting books.

See also *business unit.*

GL entry template Abbreviation for *general ledger entry template.* In PeopleSoft Enterprise Campus Solutions, a template that defines how a particular item is sent to the general ledger. An item-type maps to the general ledger, and the GL entry template can involve multiple general ledger accounts. The entry to the general ledger is further controlled by high-level flags that control the summarization and the type of accounting—that is, accrual or cash.

GL Interface process Abbreviation for *General Ledger Interface process.* In PeopleSoft Enterprise Campus Solutions, a process that is used to send transactions from PeopleSoft Enterprise Student Financials to the general ledger. Item types are mapped to specific general ledger accounts, enabling transactions to move to the general ledger when the GL Interface process is run.

group In PeopleSoft Enterprise Billing and Receivables, a posting entity that comprises one or more transactions (items, deposits, payments, transfers, matches, or write-offs).

In PeopleSoft Enterprise Human Resources Management and Supply Chain Management, any set of records that are associated under a single name or variable to

run calculations in PeopleSoft business processes. In PeopleSoft Enterprise Time and Labor, for example, employees are placed in groups for time reporting purposes.

incentive object In PeopleSoft Enterprise Incentive Management, the incentive-related objects that define and support the PeopleSoft Enterprise Incentive Management calculation process and results, such as plan templates, plans, results data, and user interaction objects.

incentive rule In PeopleSoft Enterprise Sales Incentive Management, the commands that act on transactions and turn them into compensation. A rule is one part in the process of turning a transaction into compensation.

incur In PeopleSoft Enterprise Promotions Management, to become liable for a promotional payment. In other words, you owe that amount to a customer for promotional activities.

initiative In PeopleSoft Enterprise Campus Solutions, the basis from which all advancement plans are executed. It is an organized effort targeting a specific constituency, and it can occur over a specified period of time with specific purposes and goals. An initiative can be a campaign, an event, an organized volunteer effort, a membership drive, or any other type of effort defined by the institution. Initiatives can be multipart, and they can be related to other initiatives. This enables you to track individual parts of an initiative, as well as entire initiatives.

inquiry access In PeopleSoft Enterprise Campus Solutions, a type of security access that permits the user only to view data.

See also *update access*.

institution In PeopleSoft Enterprise Campus Solutions, an entity (such as a university or college) that is independent of other similar entities and that has its own set of rules and business processes.

integration A relationship between two compatible integration points that enables communication to take place between systems. Integrations enable PeopleSoft Enterprise applications to work seamlessly with other PeopleSoft Enterprise applications or with third-party systems or software.

integration point An interface that a system uses to communicate with another PeopleSoft Enterprise application or an external application.

integration set A logical grouping of integrations that applications use for the same business purpose. For example, the integration set ADVANCED_SHIPPING_ORDER contains all of the integrations that notify a customer that an order has shipped.

item In PeopleSoft Enterprise Inventory, a tangible commodity that is stored in a business unit (shipped from a warehouse).

In PeopleSoft Enterprise Demand Planning, Inventory Policy Planning, and Supply Planning, a noninventory item that is designated as being used for planning purposes only. It can represent a family or group of inventory items. It can have a planning bill of material (BOM) or planning routing, and it can exist as a component on a planning BOM. A planning item cannot be specified on a production or engineering BOM or routing, and it cannot be used as a component in a production. The quantity on hand will never be maintained.

In PeopleSoft Enterprise Receivables, an individual receivable. An item can be an invoice, a credit memo, a debit memo, a write-off, or an adjustment.

item shuffle In PeopleSoft Enterprise Campus Solutions, a process that enables you to change a payment allocation without having to reverse the payment.

joint communication	In PeopleSoft Enterprise Campus Solutions, one letter that is addressed jointly to two people. For example, a letter might be addressed to both Mr. Sudhir Awat and Ms. Samantha Mortelli. A relationship must be established between the two individuals in the database, and at least one of the individuals must have an ID in the database.
keyword	In PeopleSoft Enterprise Campus Solutions, a term that you link to particular elements within PeopleSoft Enterprise Student Financials, Financial Aid, and Contributor Relations. You can use keywords as search criteria that enable you to locate specific records in a search dialog box.
KPI	An abbreviation for *key performance indicator.* A high-level measurement of how well an organization is doing in achieving critical success factors. This defines the data value or calculation upon which an assessment is determined.
LDIF file	Abbreviation for *Lightweight Directory Access Protocol (LDAP) Data Interchange Format file.* Contains discrepancies between PeopleSoft Enterprise data and directory data.
learner group	In PeopleSoft Enterprise Learning Management, a group of learners who are linked to the same learning environment. Members of the learner group can share the same attributes, such as the same department or job code. Learner groups are used to control access to and enrollment in learning activities and programs. They are also used to perform group enrollments and mass enrollments in the back office.
learning components	In PeopleSoft Enterprise Learning Management, the foundational building blocks of learning activities. PeopleSoft Enterprise Learning Management supports six basic types of learning components: web-based, session, webcast, test, survey, and assignment. One or more of these learning component types compose a single learning activity.
learning environment	In PeopleSoft Enterprise Learning Management, identifies a set of categories and catalog items that can be made available to learner groups. Also defines the default values that are assigned to the learning activities and programs that are created within a particular learning environment. Learning environments provide a way to partition the catalog so that learners see only those items that are relevant to them.
learning history	In PeopleSoft Enterprise Learning Management, a self-service repository for all of a learner's completed learning activities and programs.
ledger mapping	You use ledger mapping to relate expense data from general ledger accounts to resource objects. Multiple ledger line items can be mapped to one or more resource IDs. You can also use ledger mapping to map dollar amounts (referred to as *rates*) to business units. You can map the amounts in two different ways: an actual amount that represents actual costs of the accounting period, or a budgeted amount that can be used to calculate the capacity rates as well as budgeted model results. In PeopleSoft Enterprise Warehouse, you can map general ledger accounts to the EW Ledger table.
library section	In PeopleSoft Enterprise Incentive Management, a section that is defined in a plan (or template) and that is available for other plans to share. Changes to a library section are reflected in all plans that use it.
linked section	In PeopleSoft Enterprise Incentive Management, a section that is defined in a plan template but appears in a plan. Changes to linked sections propagate to plans using that section.
linked variable	In PeopleSoft Enterprise Incentive Management, a variable that is defined and maintained in a plan template and that also appears in a plan. Changes to linked variables propagate to plans using that variable.
LMS	Abbreviation for *learning management system.* In PeopleSoft Enterprise Campus Solutions, LMS is a PeopleSoft Enterprise Student Records feature that provides a

common set of interoperability standards that enable the sharing of instructional content and data between learning and administrative environments.

load
In PeopleSoft Enterprise Inventory, identifies a group of goods that are shipped together. Load management is a feature of PeopleSoft Enterprise Inventory that is used to track the weight, the volume, and the destination of a shipment.

local functionality
In PeopleSoft Enterprise HRMS, the set of information that is available for a specific country. You can access this information when you click the appropriate country flag in the global window, or when you access it by a local country menu.

location
Locations enable you to indicate the different types of addresses—for a company, for example, one address to receive bills, another for shipping, a third for postal deliveries, and a separate street address. Each address has a different location number. The primary location—indicated by a *1*—is the address you use most often and may be different from the main address.

logistical task
In PeopleSoft Enterprise Services Procurement, an administrative task that is related to hiring a service provider. Logistical tasks are linked to the service type on the work order so that different types of services can have different logistical tasks. Logistical tasks include both preapproval tasks (such as assigning a new badge or ordering a new laptop) and postapproval tasks (such as scheduling orientation or setting up the service provider email). The logistical tasks can be mandatory or optional. Mandatory preapproval tasks must be completed before the work order is approved. Mandatory postapproval tasks, on the other hand, must be completed before a work order is released to a service provider.

market template
In PeopleSoft Enterprise Incentive Management, additional functionality that is specific to a given market or industry and is built on top of a product category.

mass change
In PeopleSoft Enterprise Campus Solutions, mass change is a SQL generator that can be used to create specialized functionality. Using mass change, you can set up a series of Insert, Update, or Delete SQL statements to perform business functions that are specific to the institution.

See also *3C engine*.

match group
In PeopleSoft Enterprise Receivables, a group of receivables items and matching offset items. The system creates match groups by using user-defined matching criteria for selected field values.

MCF server
Abbreviation for *PeopleSoft MultiChannel Framework server*. Comprises the universal queue server and the MCF log server. Both processes are started when *MCF Servers* is selected in an application server domain configuration.

merchandising activity
In PeopleSoft Enterprise Promotions Management, a specific discount type that is associated with a trade promotion (such as off-invoice, billback or rebate, or lump-sum payment) that defines the performance that is required to receive the discount. In the industry, you may know this as an offer, a discount, a merchandising event, an event, or a tactic.

meta-SQL
Meta-SQL constructs expand into platform-specific SQL substrings. They are used in functions that pass SQL strings, such as in SQL objects, the SQLExec function, and PeopleSoft Application Engine programs.

metastring
Metastrings are special expressions included in SQL string literals. The metastrings, prefixed with a percent (%) symbol, are included directly in the string literals. They expand at run time into an appropriate substring for the current database platform.

multibook
In PeopleSoft Enterprise General Ledger, multiple ledgers having multiple-base currencies that are defined for a business unit, with the option to post a single

transaction to all base currencies (all ledgers) or to only one of those base currencies (ledgers).

multicurrency   The ability to process transactions in a currency other than the business unit's base currency.

national allowance   In PeopleSoft Enterprise Promotions Management, a promotion at the corporate level that is funded by nondiscretionary dollars. In the industry, you may know this as a national promotion, a corporate promotion, or a corporate discount.

need   In PeopleSoft Enterprise Campus Solutions, the difference between the cost of attendance (COA) and the expected family contribution (EFC). It is the gap between the cost of attending the school and the student's resources. The financial aid package is based on the amount of financial need. The process of determining a student's need is called *need analysis*.

node-oriented tree   A tree that is based on a detail structure, but the detail values are not used.

pagelet   Each block of content on the home page is called a pagelet. These pagelets display summary information within a small rectangular area on the page. The pagelet provide users with a snapshot of their most relevant PeopleSoft Enterprise and non-PeopleSoft Enterprise content.

participant   In PeopleSoft Enterprise Incentive Management, participants are recipients of the incentive compensation calculation process.

participant object   Each participant object may be related to one or more compensation objects.

                                   See also *compensation object*.

partner   A company that supplies products or services that are resold or purchased by the enterprise.

pay cycle   In PeopleSoft Enterprise Payables, a set of rules that define the criteria by which it should select scheduled payments for payment creation.

payment shuffle   In PeopleSoft Enterprise Campus Solutions, a process allowing payments that have been previously posted to a student's account to be automatically reapplied when a higher priority payment is posted or the payment allocation definition is changed.

pending item   In PeopleSoft Enterprise Receivables, an individual receivable (such as an invoice, a credit memo, or a write-off) that has been entered in or created by the system, but hasn't been posted.

PeopleCode   PeopleCode is a proprietary language, executed by the PeopleSoft Enterprise component processor. PeopleCode generates results based on existing data or user actions. By using various tools provided with PeopleTools, external services are available to all PeopleSoft Enterprise applications wherever PeopleCode can be executed.

PeopleCode event   See *event*.

**PeopleSoft Pure Internet   The fundamental architecture on which PeopleSoft 8 applications are constructed,
Architecture**   consisting of a relational database management system (RDBMS), an application server, a web server, and a browser.

performance measurement   In PeopleSoft Enterprise Incentive Management, a variable used to store data (similar to an aggregator, but without a predefined formula) within the scope of an incentive plan. Performance measures are associated with a plan calendar, territory, and participant. Performance measurements are used for quota calculation and reporting.

period context   In PeopleSoft Enterprise Incentive Management, because a participant typically uses the same compensation plan for multiple periods, the period context associates

371

a plan context with a specific calendar period and fiscal year. The period context references the associated plan context, thus forming a chain. Each plan context has a corresponding set of period contexts.

person of interest	A person about whom the organization maintains information but who is not part of the workforce.
personal portfolio	In PeopleSoft Enterprise Campus Solutions, the user-accessible menu item that contains an individual's name, address, telephone number, and other personal information.
plan	In PeopleSoft Enterprise Sales Incentive Management, a collection of allocation rules, variables, steps, sections, and incentive rules that instruct the PeopleSoft Enterprise Incentive Management engine in how to process transactions.
plan context	In PeopleSoft Enterprise Incentive Management, correlates a participant with the compensation plan and node to which the participant is assigned, enabling the PeopleSoft Enterprise Incentive Management system to find anything that is associated with the node and that is required to perform compensation processing. Each participant, node, and plan combination represents a unique plan context—if three participants are on a compensation structure, each has a different plan context. Configuration plans are identified by plan contexts and are associated with the participants that refer to them.
plan template	In PeopleSoft Enterprise Incentive Management, the base from which a plan is created. A plan template contains common sections and variables that are inherited by all plans that are created from the template. A template may contain steps and sections that are not visible in the plan definition.
planned learning	In PeopleSoft Enterprise Learning Management, a self-service repository for all of a learner's planned learning activities and programs.
planning instance	In PeopleSoft Enterprise Supply Planning, a set of data (business units, items, supplies, and demands) constituting the inputs and outputs of a supply plan.
population	In PeopleSoft Enterprise Campus Solutions, the middle level of the three-level classification structure that you define in PeopleSoft Enterprise Recruiting and Admissions for enrollment management. You can define a population level, link it to other levels, and set enrollment target numbers for it. See also *division* and *cohort*.
portal registry	In PeopleSoft Enterprise applications, the portal registry is a tree-like structure in which content references are organized, classified, and registered. It is a central repository that defines both the structure and content of a portal through a hierarchical, tree-like structure of folders useful for organizing and securing content references.
price list	In PeopleSoft Enterprise Pricer, enables you to select products and conditions for which the price list applies to a transaction. During a transaction, the system either determines the product price based on the predefined search hierarchy for the transaction or uses the product's lowest price on any associated, active price lists. This price is used as the basis for any further discounts and surcharges.
price rule	In PeopleSoft Enterprise Pricer, defines the conditions that must be met for adjustments to be applied to the base price. Multiple rules can apply when conditions of each rule are met.
price rule condition	In PeopleSoft Enterprise Pricer, selects the price-by fields, the values for the price-by fields, and the operator that determines how the price-by fields are related to the transaction.
price rule key	In PeopleSoft Enterprise Pricer, defines the fields that are available to define price rule conditions (which are used to match a transaction) on the price rule.

primacy number	In PeopleSoft Enterprise Campus Solutions, a number that the system uses to prioritize financial aid applications when students are enrolled in multiple academic careers and academic programs at the same time. The Consolidate Academic Statistics process uses the primacy number indicated for both the career and program at the institutional level to determine a student's primary career and program. The system also uses the number to determine the primary student attribute value that is used when you extract data to report on cohorts. The lowest number takes precedence.
primary name type	In PeopleSoft Enterprise Campus Solutions, the name type that is used to link the name stored at the highest level within the system to the lower-level set of names that an individual provides.
process category	In PeopleSoft Process Scheduler, processes that are grouped for server load balancing and prioritization.
process group	In PeopleSoft Enterprise Financials, a group of application processes (performed in a defined order) that users can initiate in real time, directly from a transaction entry page.
process definition	Process definitions define each run request.
process instance	A unique number that identifies each process request. This value is automatically incremented and assigned to each requested process when the process is submitted to run.
process job	You can link process definitions into a job request and process each request serially or in parallel. You can also initiate subsequent processes based on the return code from each prior request.
process request	A single run request, such as a Structured Query Report (SQR), a COBOL or Application Engine program, or a Crystal report that you run through PeopleSoft Process Scheduler.
process run control	A PeopleTools variable used to retain PeopleSoft Process Scheduler values needed at runtime for all requests that reference a run control ID. Do not confuse these with application run controls, which may be defined with the same run control ID, but only contain information specific to a given application process request.
product	A PeopleSoft Enterprise or third-party product. PeopleSoft organizes its software products into product families and product lines. Interactive Services Repository contains information about every release of every product that PeopleSoft sells, as well as products from certified third-party companies. These products appear with the product name and release number.
product category	In PeopleSoft Enterprise Incentive Management, indicates an application in the PeopleSoft Enterprise Incentive Management suite of products. Each transaction in the PeopleSoft Enterprise Incentive Management system is associated with a product category.
product family	A group of products that are related by common functionality. The family names that can be searched using Interactive Service Repository are Oracle's PeopleSoft Enterprise, PeopleSoft EnterpriseOne, PeopleSoft World, and third-party, certified partners.
product line	The name of a PeopleSoft Enterprise product line or the company name of a third-party certified partner. Integration Services Repository enables you to search for integration points by product line.
programs	In PeopleSoft Enterprise Learning Management, a high-level grouping that guides the learner along a specific learning path through sections of catalog items. PeopleSoft Enterprise Learning Systems provides two types of programs—curricula and certifications.

progress log	In PeopleSoft Enterprise Services Procurement, tracks deliverable-based projects. This is similar to the time sheet in function and process. The service provider contact uses the progress log to record and submit progress on deliverables. The progress can be logged by the activity that is performed, by the percentage of work that is completed, or by the completion of milestone activities that are defined for the project.
project transaction	In PeopleSoft Enterprise Project Costing, an individual transaction line that represents a cost, time, budget, or other transaction row.
promotion	In PeopleSoft Enterprise Promotions Management, a trade promotion, which is typically funded from trade dollars and used by consumer products manufacturers to increase sales volume.
prospects	In PeopleSoft Enterprise Campus Solutions, students who are interested in applying to the institution.
	In PeopleSoft Enterprise Contributor Relations, individuals and organizations that are most likely to make substantial financial commitments or other types of commitments to the institution.
publishing	In PeopleSoft Enterprise Incentive Management, a stage in processing that makes incentive-related results available to participants.
rating components	In PeopleSoft Enterprise Campus Solutions, variables used with the Equation Editor to retrieve specified populations.
record group	A set of logically and functionally related control tables and views. Record groups help enable TableSet sharing, which eliminates redundant data entry. Record groups ensure that TableSet sharing is applied consistently across all related tables and views.
record input VAT flag	Abbreviation for *record input value-added tax flag.* Within PeopleSoft Enterprise Purchasing, Payables, and General Ledger, this flag indicates that you are recording input VAT on the transaction. This flag, in conjunction with the record output VAT flag, is used to determine the accounting entries created for a transaction and to determine how a transaction is reported on the VAT return. For all cases within Purchasing and Payables where VAT information is tracked on a transaction, this flag is set to Yes. This flag is not used in PeopleSoft Enterprise Order Management, Billing, or Receivables, where it is assumed that you are always recording only output VAT, or in PeopleSoft Enterprise Expenses, where it is assumed that you are always recording only input VAT.
record output VAT flag	Abbreviation for *record output value-added tax flag.*
	See *record input VAT flag.*
recname	The name of a record that is used to determine the associated field to match a value or set of values.
recognition	In PeopleSoft Enterprise Campus Solutions, the recognition type indicates whether the PeopleSoft Enterprise Contributor Relations donor is the primary donor of a commitment or shares the credit for a donation. Primary donors receive hard credit that must total 100 percent. Donors that share the credit are given soft credit. Institutions can also define other share recognition-type values such as memo credit or vehicle credit.
reference data	In PeopleSoft Enterprise Sales Incentive Management, system objects that represent the sales organization, such as territories, participants, products, customers, and channels.
reference object	In PeopleSoft Enterprise Incentive Management, this dimension-type object further defines the business. Reference objects can have their own hierarchy (for example, product tree, customer tree, industry tree, and geography tree).

reference transaction	In commitment control, a reference transaction is a source transaction that is referenced by a higher-level (and usually later) source transaction, in order to automatically reverse all or part of the referenced transaction's budget-checked amount. This avoids duplicate postings during the sequential entry of the transaction at different commitment levels. For example, the amount of an encumbrance transaction (such as a purchase order) will, when checked and recorded against a budget, cause the system to concurrently reference and relieve all or part of the amount of a corresponding pre-encumbrance transaction, such as a purchase requisition.
regional sourcing	In PeopleSoft Enterprise Purchasing, provides the infrastructure to maintain, display, and select an appropriate vendor and vendor pricing structure that is based on a regional sourcing model where the multiple ship to locations are grouped. Sourcing may occur at a level higher than the ship to location.
relationship object	In PeopleSoft Enterprise Incentive Management, these objects further define a compensation structure to resolve transactions by establishing associations between compensation objects and business objects.
remote data source data	Data that is extracted from a separate database and migrated into the local database.
REN server	Abbreviation for *real-time event notification server* in PeopleSoft MultiChannel Framework.
requester	In PeopleSoft Enterprise eSettlements, an individual who requests goods or services and whose ID appears on the various procurement pages that reference purchase orders.
reversal indicator	In PeopleSoft Enterprise Campus Solutions, an indicator that denotes when a particular payment has been reversed, usually because of insufficient funds.
role	Describes how people fit into PeopleSoft Workflow. A role is a class of users who perform the same type of work, such as clerks or managers. Your business rules typically specify what user role needs to do an activity.
role user	A PeopleSoft Workflow user. A person's role user ID serves much the same purpose as a user ID does in other parts of the system. PeopleSoft Workflow uses role user IDs to determine how to route worklist items to users (through an email address, for example) and to track the roles that users play in the workflow. Role users do not need PeopleSoft user IDs.
roll up	In a tree, to roll up is to total sums based on the information hierarchy.
run control	A run control is a type of online page that is used to begin a process, such as the batch processing of a payroll run. Run control pages generally start a program that manipulates data.
run control ID	A unique ID to associate each user with his or her own run control table entries.
run-level context	In PeopleSoft Enterprise Incentive Management, associates a particular run (and batch ID) with a period context and plan context. Every plan context that participates in a run has a separate run-level context. Because a run cannot span periods, only one run-level context is associated with each plan context.
SCP SCBM XML message	Abbreviation for *Supply Chain Planning Supply Chain Business Modeler Extensible Markup Language message.* Supply Chain Business Modeler uses XML as the format for all data that it imports and exports.
search query	You use this set of objects to pass a query string and operators to the search engine. The search index returns a set of matching results with keys to the source documents.
search/match	In PeopleSoft Enterprise Campus Solutions and PeopleSoft Enterprise Human Resources Management Solutions, a feature that enables you to search for and identify duplicate records in the database.

seasonal address	In PeopleSoft Enterprise Campus Solutions, an address that recurs for the same length of time at the same time of year each year until adjusted or deleted.
section	In PeopleSoft Enterprise Incentive Management, a collection of incentive rules that operate on transactions of a specific type. Sections enable plans to be segmented to process logical events in different sections.
security event	In commitment control, security events trigger security authorization checking, such as budget entries, transfers, and adjustments; exception overrides and notifications; and inquiries.
serial genealogy	In PeopleSoft Enterprise Manufacturing, the ability to track the composition of a specific, serial-controlled item.
serial in production	In PeopleSoft Enterprise Manufacturing, enables the tracing of serial information for manufactured items. This is maintained in the Item Master record.
service impact	In PeopleSoft Enterprise Campus Solutions, the resulting action triggered by a service indicator. For example, a service indicator that reflects nonpayment of account balances by a student might result in a service impact that prohibits registration for classes.
service indicator	In PeopleSoft Enterprise Campus Solutions, indicates services that may be either withheld or provided to an individual. Negative service indicators indicate holds that prevent the individual from receiving specified services, such as check-cashing privileges or registration for classes. Positive service indicators designate special services that are provided to the individual, such as front-of-line service or special services for disabled students.
session	In PeopleSoft Enterprise Campus Solutions, time elements that subdivide a term into multiple time periods during which classes are offered. In PeopleSoft Enterprise Contributor Relations, a session is the means of validating gift, pledge, membership, or adjustment data entry . It controls access to the data entered by a specific user ID. Sessions are balanced, queued, and then posted to the institution's financial system. Sessions must be posted to enter a matching gift or pledge payment, to make an adjustment, or to process giving clubs or acknowledgements.
	In PeopleSoft Enterprise Learning Management, a single meeting day of an activity (that is, the period of time between start and finish times within a day). The session stores the specific date, location, meeting time, and instructor. Sessions are used for scheduled training.
session template	In PeopleSoft Enterprise Learning Management, enables you to set up common activity characteristics that may be reused while scheduling a PeopleSoft Enterprise Learning Management activity—characteristics such as days of the week, start and end times, facility and room assignments, instructors, and equipment. A session pattern template can be attached to an activity that is being scheduled. Attaching a template to an activity causes all of the default template information to populate the activity session pattern.
setup relationship	In PeopleSoft Enterprise Incentive Management, a relationship object type that associates a configuration plan with any structure node.
share driver expression	In PeopleSoft Enterprise Business Planning, a named planning method similar to a driver expression, but which you can set up globally for shared use within a single planning application or to be shared between multiple planning applications through PeopleSoft Enterprise Warehouse.
single signon	With single signon, users can, after being authenticated by a PeopleSoft Enterprise application server, access a second PeopleSoft Enterprise application server without entering a user ID or password.

source key process	In PeopleSoft Enterprise Campus Solutions, a process that relates a particular transaction to the source of the charge or financial aid. On selected pages, you can drill down into particular charges.
source transaction	In commitment control, any transaction generated in a PeopleSoft Enterprise or third-party application that is integrated with commitment control and which can be checked against commitment control budgets. For example, a pre-encumbrance, encumbrance, expenditure, recognized revenue, or collected revenue transaction.
speed key	See *communication key.*
SpeedChart	A user-defined shorthand key that designates several ChartKeys to be used for voucher entry. Percentages can optionally be related to each ChartKey in a SpeedChart definition.
SpeedType	A code representing a combination of ChartField values. SpeedTypes simplify the entry of ChartFields commonly used together.
staging	A method of consolidating selected partner offerings with the offerings from the enterprise's other partners.
standard letter code	In PeopleSoft Enterprise Campus Solutions, a standard letter code used to identify each letter template available for use in mail merge functions. Every letter generated in the system must have a standard letter code identification.
statutory account	Account required by a regulatory authority for recording and reporting financial results. In PeopleSoft Enterprise, this is equivalent to the Alternate Account (ALTACCT) ChartField.
step	In PeopleSoft Enterprise Sales Incentive Management, a collection of sections in a plan. Each step corresponds to a step in the job run.
storage level	In PeopleSoft Enterprise Inventory, identifies the level of a material storage location. Material storage locations are made up of a business unit, a storage area, and a storage level. You can set up to four storage levels.
subcustomer qualifier	A value that groups customers into a division for which you can generate detailed history, aging, events, and profiles.
Summary ChartField	You use summary ChartFields to create summary ledgers that roll up detail amounts based on specific detail values or on selected tree nodes. When detail values are summarized using tree nodes, summary ChartFields must be used in the summary ledger data record to accommodate the maximum length of a node name (20 characters).
summary ledger	An accounting feature used primarily in allocations, inquiries, and PS/nVision reporting to store combined account balances from detail ledgers. Summary ledgers increase speed and efficiency of reporting by eliminating the need to summarize detail ledger balances each time a report is requested. Instead, detail balances are summarized in a background process according to user-specified criteria and stored on summary ledgers. The summary ledgers are then accessed directly for reporting.
summary time period	In PeopleSoft Enterprise Business Planning, any time period (other than a base time period) that is an aggregate of other time periods, including other summary time periods and base time periods, such as quarter and year total.
summary tree	A tree used to roll up accounts for each type of report in summary ledgers. Summary trees enable you to define trees on trees. In a summary tree, the detail values are really nodes on a detail tree or another summary tree (known as the *basis* tree). A summary tree structure specifies the details on which the summary trees are to be built.
syndicate	To distribute a production version of the enterprise catalog to partners.

system function	In PeopleSoft Enterprise Receivables, an activity that defines how the system generates accounting entries for the general ledger.
system source	The system source identifies the source of a transaction row in the database. For example, a transaction that originates in PeopleSoft Enterprise Expenses contains a system source code of BEX (Expenses Batch).
	When PeopleSoft Enterprise Project Costing prices the source transaction row for billing, the system creates a new row with a system source code of PRP (Project Costing pricing), which represents the system source of the new row. System source codes can identify sources that are internal or external to the PeopleSoft Enterprise system. For example, processes that import data from Microsoft Project into PeopleSoft Enterprise applications create transaction rows with a source code of MSP (Microsoft Project).
TableSet	A means of sharing similar sets of values in control tables, where the actual data values are different but the structure of the tables is the same.
TableSet sharing	Shared data that is stored in many tables that are based on the same TableSets. Tables that use TableSet sharing contain the SETID field as an additional key or unique identifier.
target currency	The value of the entry currency or currencies converted to a single currency for budget viewing and inquiry purposes.
tax authority	In PeopleSoft Enterprise Campus Solutions, a user-defined element that combines a description and percentage of a tax with an account type, an item type, and a service impact.
template	A template is HTML code associated with a web page. It defines the layout of the page and also where to get HTML for each part of the page. In PeopleSoft Enterprise, you use templates to build a page by combining HTML from a number of sources. For a PeopleSoft Enterprise portal, all templates must be registered in the portal registry, and each content reference must be assigned a template.
territory	In PeopleSoft Enterprise Sales Incentive Management, hierarchical relationships of business objects, including regions, products, customers, industries, and participants.
third party	A company or vendor that has extensive PeopleSoft Enterprise product knowledge and whose products and integrations have been certified and are compatible with PeopleSoft Enterprise applications.
3C engine	Abbreviation for *Communications, Checklists, and Comments engine.* In PeopleSoft Enterprise Campus Solutions, the 3C engine enables you to automate business processes that involve additions, deletions, and updates to communications, checklists, and comments. You define events and triggers to engage the engine, which runs the mass change and processes the 3C records (for individuals or organizations) immediately and automatically from within business processes.
3C group	Abbreviation for *Communications, Checklists, and Comments group.* In PeopleSoft Enterprise Campus Solutions, a method of assigning or restricting access privileges. A 3C group enables you to group specific communication categories, checklist codes, and comment categories. You can then assign the group inquiry-only access or update access, as appropriate.
TimeSpan	A relative period, such as year-to-date or current period, that can be used in various PeopleSoft Enterprise General Ledger functions and reports when a rolling time frame, rather than a specific date, is required. TimeSpans can also be used with flexible formulas in PeopleSoft Enterprise Projects.

trace usage	In PeopleSoft Enterprise Manufacturing, enables the control of which components will be traced during the manufacturing process. Serial- and lot-controlled components can be traced. This is maintained in the Item Master record.
transaction allocation	In PeopleSoft Enterprise Incentive Management, the process of identifying the owner of a transaction. When a raw transaction from a batch is allocated to a plan context, the transaction is duplicated in the PeopleSoft Enterprise Incentive Management transaction tables.
transaction state	In PeopleSoft Enterprise Incentive Management, a value assigned by an incentive rule to a transaction. Transaction states enable sections to process only transactions that are at a specific stage in system processing. After being successfully processed, transactions may be promoted to the next transaction state and "picked up" by a different section for further processing.
Translate table	A system edit table that stores codes and translate values for the miscellaneous fields in the database that do not warrant individual edit tables of their own.
tree	The graphical hierarchy in PeopleSoft Enterprise systems that displays the relationship between all accounting units (for example, corporate divisions, projects, reporting groups, account numbers) and determines roll-up hierarchies.
tuition lock	In PeopleSoft Enterprise Campus Solutions, a feature in the Tuition Calculation process that enables you to specify a point in a term after which students are charged a minimum (or *locked*) fee amount. Students are charged the locked fee amount even if they later drop classes and take less than the normal load level for that tuition charge.
unclaimed transaction	In PeopleSoft Enterprise Incentive Management, a transaction that is not claimed by a node or participant after the allocation process has completed, usually due to missing or incomplete data. Unclaimed transactions may be manually assigned to the appropriate node or participant by a compensation administrator.
universal navigation header	Every PeopleSoft Enterprise portal includes the universal navigation header, intended to appear at the top of every page as long as the user is signed on to the portal. In addition to providing access to the standard navigation buttons (like Home, Favorites, and signoff) the universal navigation header can also display a welcome message for each user.
update access	In PeopleSoft Enterprise Campus Solutions, a type of security access that permits the user to edit and update data. See also *inquiry access*.
user interaction object	In PeopleSoft Enterprise Sales Incentive Management, used to define the reporting components and reports that a participant can access in his or her context. All PeopleSoft Enterprise Sales Incentive Management user interface objects and reports are registered as user interaction objects. User interaction objects can be linked to a compensation structure node through a compensation relationship object (individually or as groups).
variable	In PeopleSoft Enterprise Sales Incentive Management, the intermediate results of calculations. Variables hold the calculation results and are then inputs to other calculations. Variables can be plan variables that persist beyond the run of an engine or local variables that exist only during the processing of a section.
VAT exception	Abbreviation for *value-added tax exception.* A temporary or permanent exemption from paying VAT that is granted to an organization. This terms refers to both VAT exoneration and VAT suspension.
VAT exempt	Abbreviation for *value-added tax exempt.* Describes goods and services that are not subject to VAT. Organizations that supply exempt goods or services are unable to recover the related input VAT. This is also referred to as exempt without recovery.

VAT exoneration   Abbreviation for *value-added tax exoneration.* An organization that has been granted a permanent exemption from paying VAT due to the nature of that organization.

VAT suspension   Abbreviation for *value-added tax suspension.* An organization that has been granted a temporary exemption from paying VAT.

warehouse   A PeopleSoft Enterprise data warehouse that consists of predefined ETL maps, data warehouse tools, and DataMart definitions.

work order   In PeopleSoft Enterprise Services Procurement, enables an enterprise to create resource-based and deliverable-based transactions that specify the basic terms and conditions for hiring a specific service provider. When a service provider is hired, the service provider logs time or progress against the work order.

worker   A person who is part of the workforce; an employee or a contingent worker.

workset   A group of people and organizations that are linked together as a set. You can use worksets to simultaneously retrieve the data for a group of people and organizations and work with the information on a single page.

worksheet   A way of presenting data through a PeopleSoft Enterprise Business Analysis Modeler interface that enables users to do in-depth analysis using pivoting tables, charts, notes, and history information.

worklist   The automated to-do list that PeopleSoft Workflow creates. From the worklist, you can directly access the pages you need to perform the next action, and then return to the worklist for another item.

XML link   The XML Linking language enables you to insert elements into XML documents to create a links between resources.

XML schema   An XML definition that standardizes the representation of application messages, component interfaces, or business interlinks.

XPI   Abbreviation for *eXtended Process Integrator.* PeopleSoft XPI is the integration infrastructure that enables both real-time and batch communication with JD Edwards EnterpriseOne applications.

yield by operation   In PeopleSoft Enterprise Manufacturing, the ability to plan the loss of a manufactured item on an operation-by-operation basis.

zero-rated VAT   Abbreviation for *zero-rated value-added tax.* A VAT transaction with a VAT code that has a tax percent of zero. Used to track taxable VAT activity where no actual VAT amount is charged. Organizations that supply zero-rated goods and services can still recover the related input VAT. This is also referred to as exempt with recovery.

Index