PeopleSoft®

PeopleSoft Enterprise Online Marketing 8.9 PeopleBook

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Contents

General Preface
About This PeopleBook xiii
PeopleSoft Application Prerequisites........ xiii
PeopleSoft Application Fundamentals........ xiii
Related Documentation........ xiv
  Obtaining Documentation Updates........ xiv
  Ordering Printed Documentation........ xiv
Typographical Conventions and Visual Cues........ xv
  Typographical Conventions........ xv
  Visual Cues........ xvi
  Country, Region, and Industry Identifiers........ xvi
  Currency Codes........ xvii
Comments and Suggestions........ xvii
Common Elements in These PeopleBooks xvii

Preface
PeopleSoft Online Marketing Preface........ xix
PeopleSoft Application Fundamentals........ xix
PeopleSoft CRM Automation and Configuration Tools........ xx
PeopleTools PeopleBooks........ xx

Part 1
PeopleSoft Online Marketing User Guide

Chapter 1
Getting Started with PeopleSoft Online Marketing........ 3
PeopleSoft Online Marketing Overview........ 3
PeopleSoft Online Marketing Business Processes........ 4
PeopleSoft Online Marketing Integrations........ 5
PeopleSoft Online Marketing Implementation........ 6

Chapter 2

Setting Up PeopleSoft Online Marketing....7
Setting Up PeopleSoft Online Marketing....7
Pages Used in Setting Up Online Marketing....7
Defining Online Marketing Business Units....8
Setting Up Document Types....9
Setting Global Options....10
Defining Global Options....10
Defining Matching Rules....11
Defining Character Set Information....13
Defining Dialog Execution Server Configuration Settings....13
Setting Up Web Templates....14
Setting Up Mailboxes....15
Mailboxes and SetIDs....16
Mailboxes and Email Aliases....17
Merge Content in Mailboxes....17
Enabling Dialog Roles....17
Defining Extensions....19

Chapter 3

Designing Online Dialogs....21
Understanding Dialogs....21
Designing a Dialog—Overview....22
Understanding Target Audiences....22
Understanding Dialog Statuses....23
Creating a New Dialog....24
Pages Used for Creating a New Dialog....24
Adding a New Dialog....24
Defining the Flow of the Dialog....27
Selecting Target Audiences for a Dialog....44
Defining Documents for the Dialog....45
Viewing Dialog Elements....46
Defining Program Details....47
Defining Tasks....47
Defining Costs....47
Saving Online Dialogs....48
Cloning Online Dialogs....48
Setting Dialog Options....49

Chapter 4
Designing Web Templates........51
Creating Web Template Documents........51
Setting Up Web Templates........52
Pages Used in Setting Up Web Templates........52
Setting Up a Web Template........52
Using Web Templates........53
Permissions for Web Templates........53
Understanding Previewing and Live Rendering of Web Template Documents........54
Using Web Templates with Documents........54
Changing a Document to use a Web Template........54
Changing a Web Template........55

Chapter 5
Designing Email Documents........57
Understanding Email Documents........57
Understanding Personalization........57
Defining Email Documents........58
Pages Used to Define Email Documents........58
Defining Email Documents........58
Creating Email Content........59
Pages Used in Creating Email Content........60
Addressing an Email Document........60
Customizing the Email Subject Line........61
Copying Merge Content........63
Creating the Email Document Body........63
Adding a Web Link to an Email Document........64
Adding Dynamic Content to an Email Document........67
Importing HTML and Text into an Email Document........70

Chapter 6
Designing Web Documents........73
Understanding Web Documents........73
Understanding Document Elements........73
Creating and Working with Web Documents........74
Pages Used in Creating Web Documents........75
Creating a Web Document........75
Adding an Item........78

Cloning an Item.......79
Moving an Item.......79
Renaming an Item.......79
Deleting an Item.......79
Editing Items in a Document.......80
Building Paragraphs.......80
Building Entry Questions.......81
Building Choice Questions.......86
Adding a Button.......90
Adding a Horizontal Line.......91
Adding a Blank Line.......92
Adding Custom HTML.......92
Adding a Profile Field.......93
Adding Merged Content.......95
Formatting Items.......99
Previewing a Web Document.......100
Importing and Exporting Web Documents.......101
Importing Web Documents.......101
Exporting Web Documents.......102

Chapter 7
Designing the Flow for an Online Dialog.......105
Understanding Flows.......105
About the Dialog Flow.......105
Typical Dialog Flow.......106
Understanding Flow Actions.......106
Date/Time Trigger.......107
Repeating Date/Time Trigger.......107
External Event Trigger.......109
Broadcast Email.......109
Web Link Promo.......110
Custom Action Extensions.......110
Standalone Web Page.......110
Landing Page.......111
Intermediate Page.......111
Final Page.......111
Single Email.......112
Decision Point.......112
Update Profile.......112

Chapter 8
Deploying and Managing Online Dialogs.............113
Understanding Dialog Statuses.............113
Viewing Dialog Status.............114
Dialog Statuses and Audiences.............115
Deploying Dialogs.............116
Checking Online Dialogs.............116
Generating URLs for Web Link Promos and External Event Triggers.............118
Testing your Online Dialog.............119
Going Live with an Online Dialog.............121
Managing Live Dialogs.............122
How Online Marketing Handles Email Bounces.............122
Making Changes to a Live Online Dialog.............122
Stopping a Dialog (Complete).............127
Archiving a Dialog.............127

Chapter 9
PeopleSoft Online Marketing Event Wire.............129
Understanding Event Wire.............129
How Event Wire Works.............130
Customers Originate at the External System (Scenario 1).............130
Customers Originate at an Online Marketing Dialog (Scenario 2).............131
Customers can Originate at Both Sources (Scenario 3).............133
Sample Event Wire Implementation.............134
Components of the Dialog.............135
Creating the Web Documents.............135
Programming the External System.............135
Testing and Deploying the Dialog.............136
Creating Dialogs that use Event Wire.............136
How Customers can Enter the External System.............137
How the External System Obtains the Landing Page URL.............137
Setting the Landing Page URL in the External System.............139
Using Multiple Dialogs with the same External System.............139
How Online Marketing can Handle Passed Data.............139
Deploying Dialogs.............140
Making Changes to a Live Dialog.............140

Part 2
PeopleSoft Online Marketing Administration

Chapter 10

Mail Service Operation........145
Understanding Mailcasters........145
Small Job Only Mailcaster........145
Small Job Priority Mailcaster........146
Large Job Priority Mailcaster........146
Large Job Only Mailcaster........146
How the Mailcaster Works........146
The Mail Queue........147
Job Types........147
How Job Size is Determined........147
Job Assignment Priority........148
Mail Job States........149
Mailcaster Recovery........150
Automatic Recovery........151
Manual Recovery........151
Recovery Expiration........151
Mailcaster Operation........151
Mailcasters........151
Mail Queue........152
The Process........152
Mailcaster Configuration Parameter Reference........155
Understanding the Single Mailer........156

Chapter 11

Using the Control Center........159
Understanding Control Center........159
Determining DES Status........159
Pages Used to Determine DES Status........160
Viewing Server Monitor Details........160
Clearing Caches........161
Viewing Memory Usage........162
Changing DES Debug Flags........163
Viewing Email Service Information........164
Administering Scheduler Events........165

Pages Used to Administer Scheduler Events......165
Viewing the Scheduler Event Report......165
Administering Email Job Reports......167
Pages Used to Administer Email Job Reports......167
Viewing the Mail Job Report......167
Viewing the Dedup Report......170
Pages Used to View Dedup Email Jobs......170
Viewing the Dedup Report......170
Administering Single Email Failure and Recovery......171
Pages Used in Single Email Failure and Recovery......171
Administering Single Email Failure and Recovery......171
Administering the Single Email Queue......172
Pages Used to View the Single Email Queue......173
Administering the Single Email Queue......173
Maintaining Dialog Servers......174
Pages Used to Maintain Dialog Servers......174
Maintaining Dialog Servers......174

Chapter 12
Using WatchDog......177
Understanding WatchDog......177
How WatchDog Works......177
Running Email Response Processor......178
Accessing WatchDog......178
The WatchDog Tests......178
Testing the Online Marketing Dialog Server......180
Command-Line Parameters......182

Chapter 13
Email Response Processor......183
Understanding the Email Response Processor......183
How the Email Response Processor Works......184
Running Email Response Processor......184
Email Response Processor Configuration Files......184
Parameter Section......184
Rules Section......186
Error Handling Section......187
Script Reference......187

Conditions........187
Actions........190
Database Actions........190
Error Handling........192
Email Response Processor Performance Issues........192
Email Response Processor Keywords........192

Part 3
PeopleSoft Online Marketing Integration

Chapter 14
Setting Up Online Marketing Event Wire........197
Understanding Event Wire........197
Setting up Event Wire........197
Setting up your External System........198
Verifying your Setup........198
Event Wire and your External System........198
Passing the Landing Page URL to the External System........199
Calling Event Wire........199
Using Required Fields on Landing Pages........202
Field Matching Rules in the Dialog........202
Displaying Web Pages to Customers........203
Checking the Status of Event Wire........203
Making Changes to a Live Dialog........203
Retrying Transactions........204
Typical Reasons Why Calls Fail........204
Event Wire Security........204

Chapter 15
Event Wire API Reference........205
The Event Wire API........205
getparams........205
processtrxn........207
gettrxnstatus........209
short........211
Status Codes and Messages........211
Sample Java Code........213

Chapter 16
Event Wire Control Center........215
Registering External Systems........215
Pages Used to Register External Systems........215
Registering an External System........215
Viewing the Transactions Report........217
Pages Used to View the Transaction Report........217
Interpreting the Transaction Report........217
Viewing the Retried Transactions Report........218
Pages Used to View the Retried Transactions Report........219
Interpreting the Retried Transactions Report........219

Chapter 17
Using Extensions........221
Understanding Extensions........221
Overview of Benefits and Usage........221
Common Usage Scenarios........222
Custom Content Scenarios........222
Custom Action Scenarios........222
Creating and Using Extensions........223
Defining Extension Requirements........223
Write the Java Servlet........224
Write the PeopleCode Function........226
Install the Extension Class Files on DES and Mailcaster Machines........227
Create the Online Marketing Formatted Syntax........227
Register the Extension in Online Marketing........229
Test in a Development Environment........232
Test in a Staging Environment........232
Go Live!........232
Extension Programming References........232
Reserved Words........233
Merge Content Syntax........233
Available CGI Environment Values........236
RFC 2616 Request Headers........236
Netscape Enterprise Server-Specific Request Headers........238
Sample Servlets........238
Location of Sample Servlets........238
The “HelloWorld” Servlet........238
The “SampleLiveExtension” Servlet........239

Additional Sample: EXStockQuotes........243

Appendix A
Merge Content Specification........245
Merge Content Syntax........245
Extension Merge Content Syntax........247
Merge Content as Parameters to Extensions........248

Appendix B
Predefined Profiles........249
People System Profile........249
Companies System Profile........251
Sales Leads Profile........252
Privacy Options Profile........253

Appendix C
Mailcaster States........255
Single Mailer State Flow Diagram........255
Scheduler State Tree Diagram........256
Parent Mail Jobs........257
Small and Child Mail Jobs........259

Appendix D
ISO Country and Currency Codes........263
ISO Country Codes........263
ISO Currency Codes........272

Glossary of PeopleSoft Terms........283

Index 299

About This PeopleBook

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

This preface discusses:

- PeopleSoft application prerequisites.
- PeopleSoft application fundamentals.
- Related documentation.
- Typographical conventions and visual cues.
- Comments and suggestions.
- Common elements in PeopleBooks.

Note. PeopleBooks document 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. Elements that are common to all PeopleSoft applications are defined in this preface.

PeopleSoft 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 applications.

You might also want to complete at least one PeopleSoft introductory training course.

You should be familiar with navigating the system and adding, updating, and deleting information by using PeopleSoft windows, menus, and pages. 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 applications most effectively.

PeopleSoft Application Fundamentals

Each application PeopleBook provides implementation and processing information for your PeopleSoft database. However, additional, essential information describing the setup and design of your system appears in a companion volume of documentation called the application fundamentals PeopleBook. Each PeopleSoft product line has its own version of this documentation.

The application fundamentals PeopleBook consists of important topics that apply to many or all PeopleSoft applications across a product line. 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 this central PeopleBook. It is the starting point for fundamentals, such as setting up control tables and administering security.

Related Documentation

This section discusses how to:

- Obtain documentation updates.
- Order printed documentation.

Obtaining Documentation Updates

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

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

See Also

PeopleSoft Customer Connection, https://www.peoplesoft.com/corp/en/login.jsp

Ordering Printed Documentation

You can order printed, bound volumes of the complete PeopleSoft documentation that is delivered on your PeopleBooks CD-ROM. PeopleSoft makes printed documentation available for each major release shortly after the software is shipped. Customers and partners can order printed PeopleSoft documentation by using any of these methods:

- Web
- Telephone
- Email

Web

From the Documentation section of the PeopleSoft Customer Connection website, access the PeopleBooks Press website under the Ordering PeopleBooks topic. The PeopleBooks Press website is a joint venture between PeopleSoft and MMA Partners, the book print vendor. Use a credit card, money order, cashier's check, or purchase order to place your order.

Telephone

Contact MMA Partners at 877 588 2525.

Email

Send email to MMA Partners at peoplesoftpress@mmapartner.com.

See Also

PeopleSoft Customer Connection, https://www.peoplesoft.com/corp/en/login.jsp

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, method names, language constructs, and PeopleCode reserved words that must be included literally in the function call.
Italics	Indicates field values, emphasis, and PeopleSoft 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 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.

See Appendix D, "ISO Country and Currency Codes," ISO Country Codes.

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.

See Appendix D, "ISO Country and Currency Codes," ISO Currency Codes.

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 PeopleSoft reference and training materials. Please send your suggestions to:

PeopleSoft Product Documentation Manager PeopleSoft, Inc. 4460 Hacienda Drive Pleasanton, CA 94588

Or send email comments to doc@peoplesoft.com.

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

Common Elements in These 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.

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).

Process Monitor — Click to access the Process List page, where you can view the status of submitted process requests.

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.

Request ID — An ID that represents a set of selection criteria for a report or process.

User ID — An ID that represents the person who generates a transaction.

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.

PeopleSoft Online Marketing Preface

This preface discusses:

- PeopleSoft CRM application fundamentals.
- PeopleSoft CRM automation and configuration tools.
- 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 8.9 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 8.9 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 8.9 Application Fundamentals PeopleBook

PeopleSoft CRM Automation and Configuration Tools

The *PeopleSoft Enterprise CRM 8.9 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.

There are four parts to the *PeopleSoft Enterprise CRM 8.9 Automation and Configuration Tools PeopleBook*:

- Correspondence management.

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

- Automation tools.

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

- Configuration tools.

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

- Knowledge management.

  This part discusses the setup of Natural Language Processing (NLP) and verity search.

See Also

PeopleSoft Enterprise CRM 8.9 Automation and Configuration Tools PeopleBook

PeopleTools PeopleBooks

Cross-references to PeopleTools documentation refer to the PeopleTools 8.45 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
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.

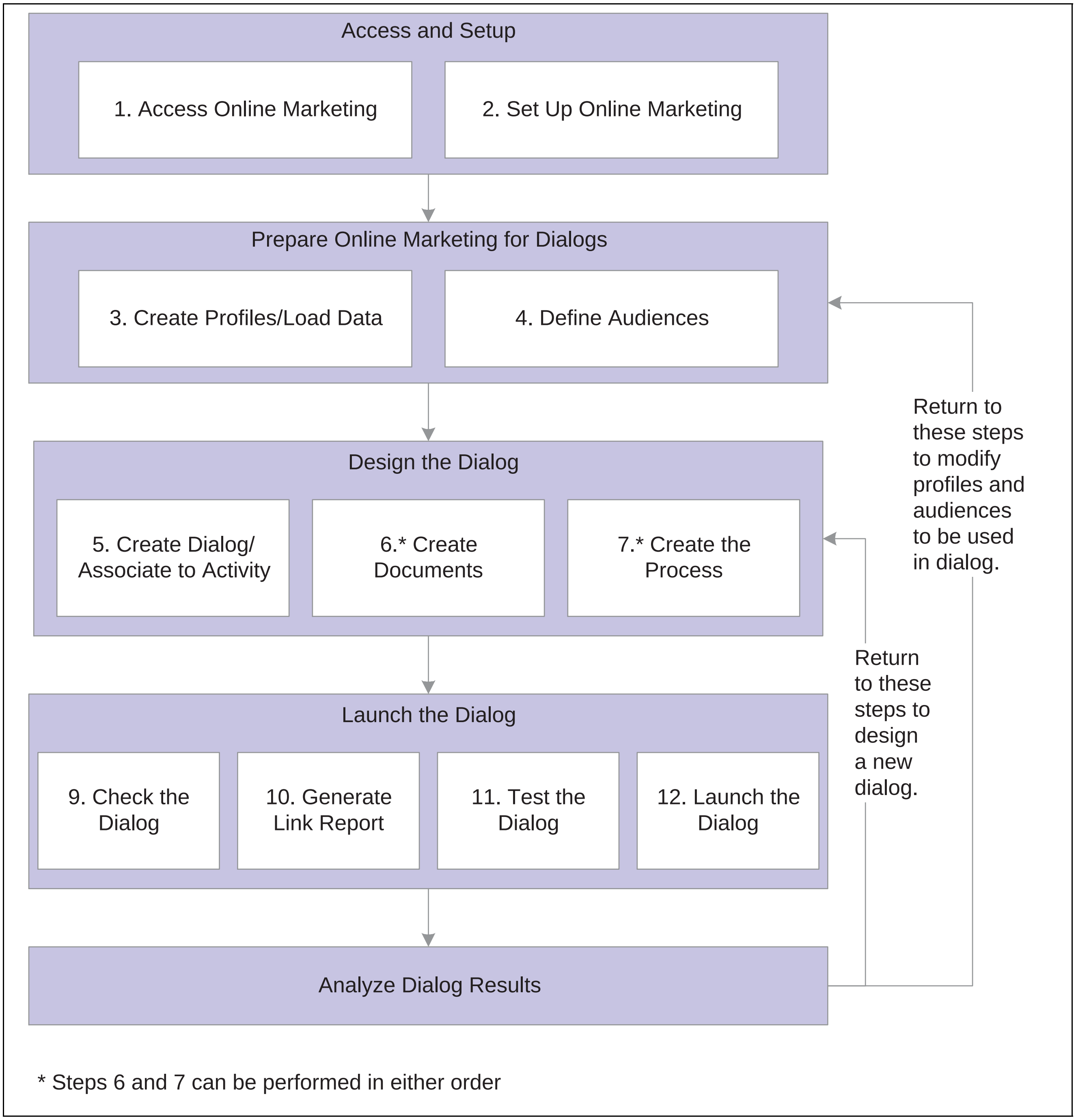
With PeopleSoft Online Marketing, the entire online marketing dialog can be handled using electronic channels. You can create a dialog by designing email messages to be sent to your target audience and web pages where interested recipients can respond. You can also create advertisements that include 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 8.9 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 8.9 Application Fundamentals PeopleBook*, *PeopleSoft Enterprise CRM 8.9 Business Object Management PeopleBook* and *PeopleSoft Enterprise CRM 8.9 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 8.9 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

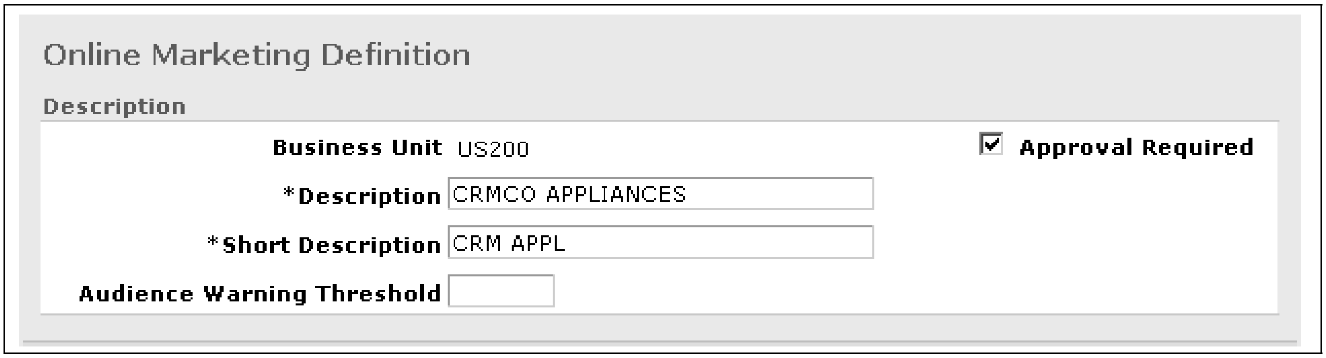
Page Name	Object Name	Navigation	Usage
Online Marketing Definition	BUS_UNIT_TBL_RY	Set Up CRM, Business Unit Related, Online Marketing Definition	Define Online Marketing business units that will be used by dialogs.
Document Types	RYE_DOC_TYPES	Set Up CRM, Product Related, Online Marketing, Document Types	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 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

You use the Online Marketing Definition page to set up business units to be used with online dialogs.

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

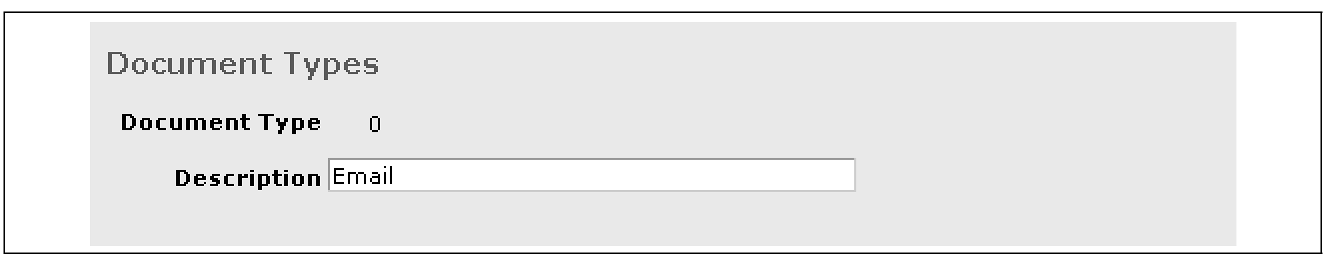
Chapter 2, "Setting Up PeopleSoft Online Marketing," Setting Global Options, page 10

Chapter 8, "Deploying and Managing Online Dialogs," Checking Online Dialogs, page 116

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

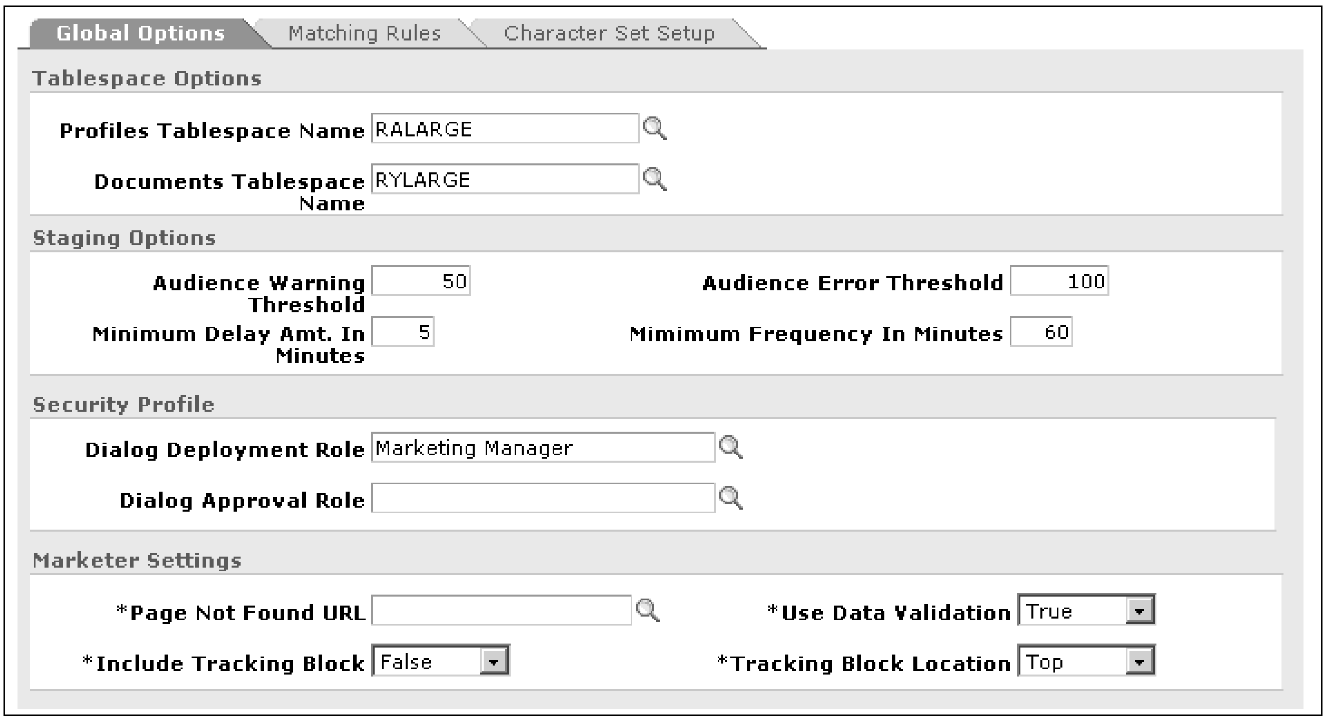
This section describes how to set global options for Online Marketing. It includes:

- Global Options.
- Matching rules.
- Character sets.

Defining Global Options

To set global options, use the Global Options (RY_DIALOG_OPTIONS) component

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".

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 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 "PeopleSoft" as their company name, but the name in the Organizations.Companies.Organization Name profile is "PeopleSoft Inc.," there would be no match. Likewise, there would be no match if the respondent entered "Peoplesoft" or "PeopleSoft inc."

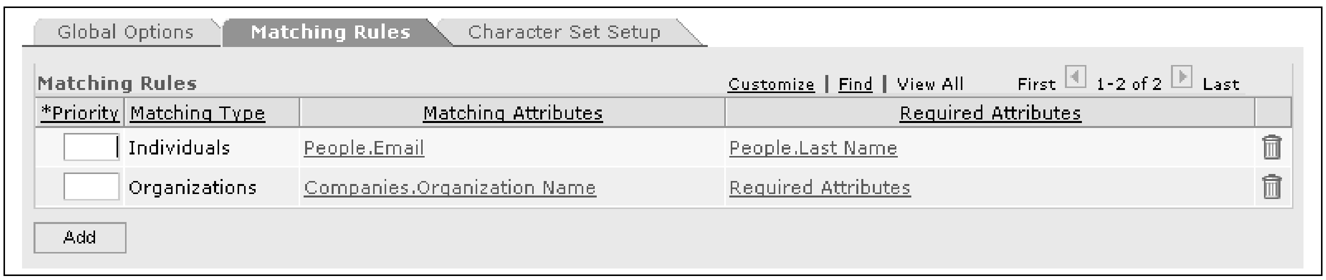
When a respondent does not match any individuals in the system, Online Marketing can insert the respondent as a new individual in the system, as long as the respondent has provided values for all the fields specified in one of the matching rules along with any Additional required attributes specified 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.

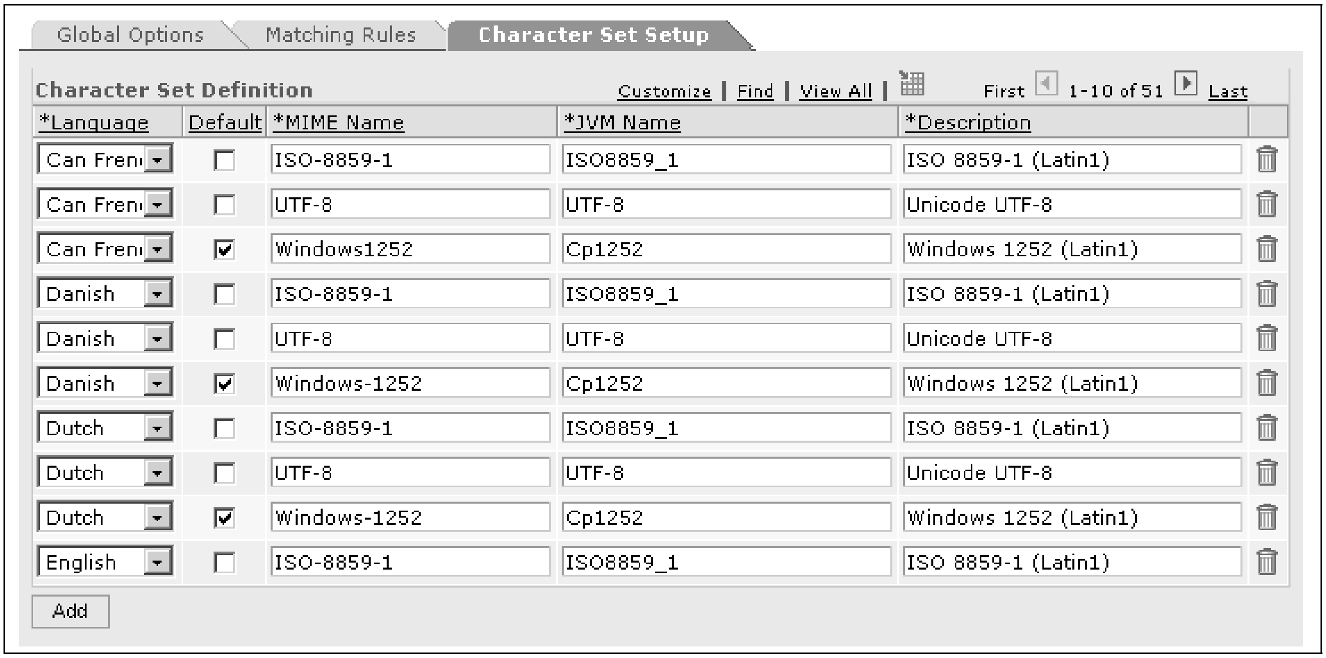
Required Attributes This column is only used when a response does not match any of the rules specified for the matching fields. The profile attributes in this column provide additional fields that are required in order to insert a new individual or organization to the system.

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.

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.



Character Set Setup page

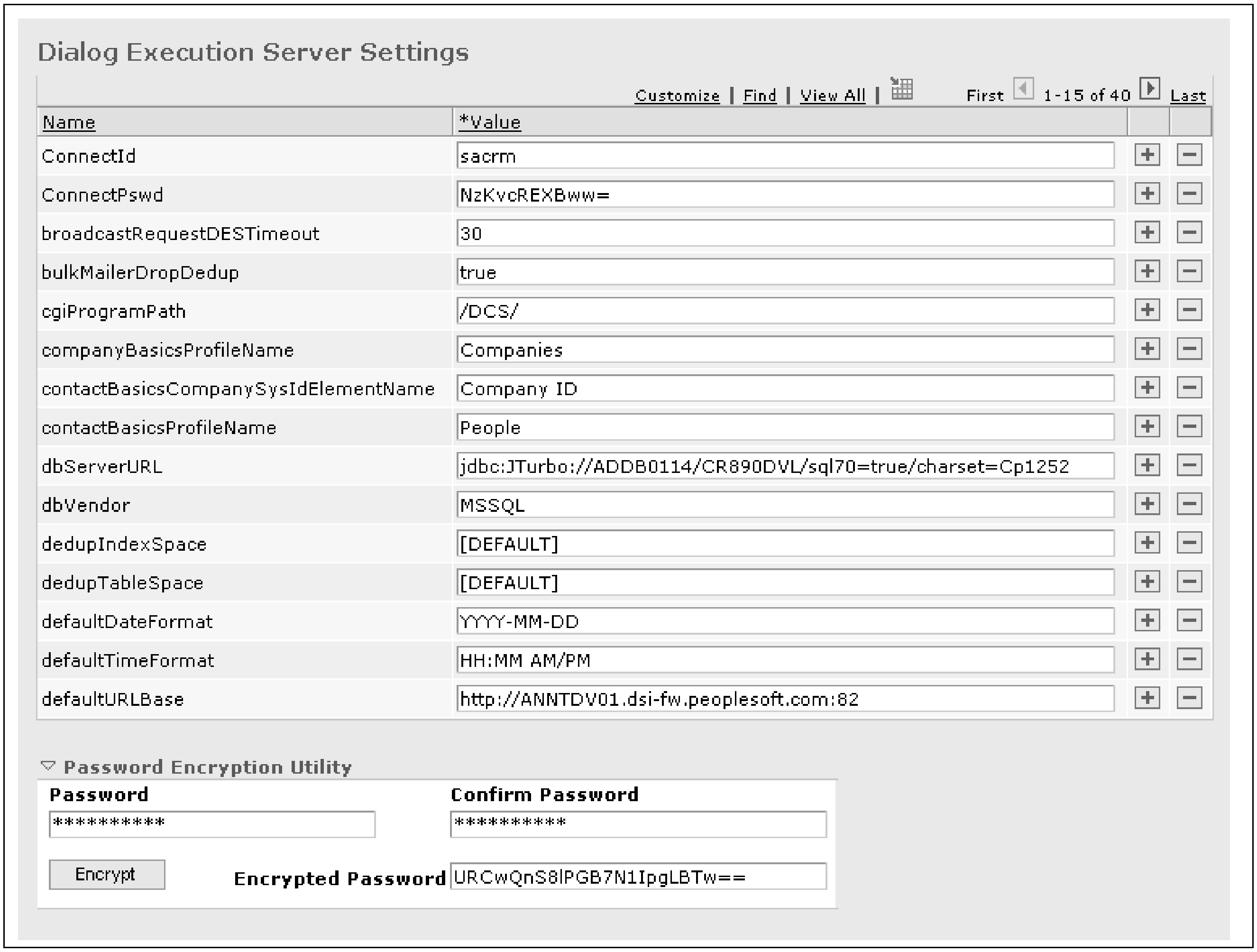
Language	Specify the language.
Default	When multiple character sets are available for a language, selecting this check box for one of the specifies that it will be the default character set used for that language.
MIME Name	The character set to use for the language in MIME documents.
JVM Name	Character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

Defining Dialog Execution Server Configuration Settings

To specify Dialog Execution Server configuration settings, use the Dialog Execution Server Settings (RY_DES_SETTINGS) 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 page

Name The name of the parameter.

Value The value for the parameter setting.

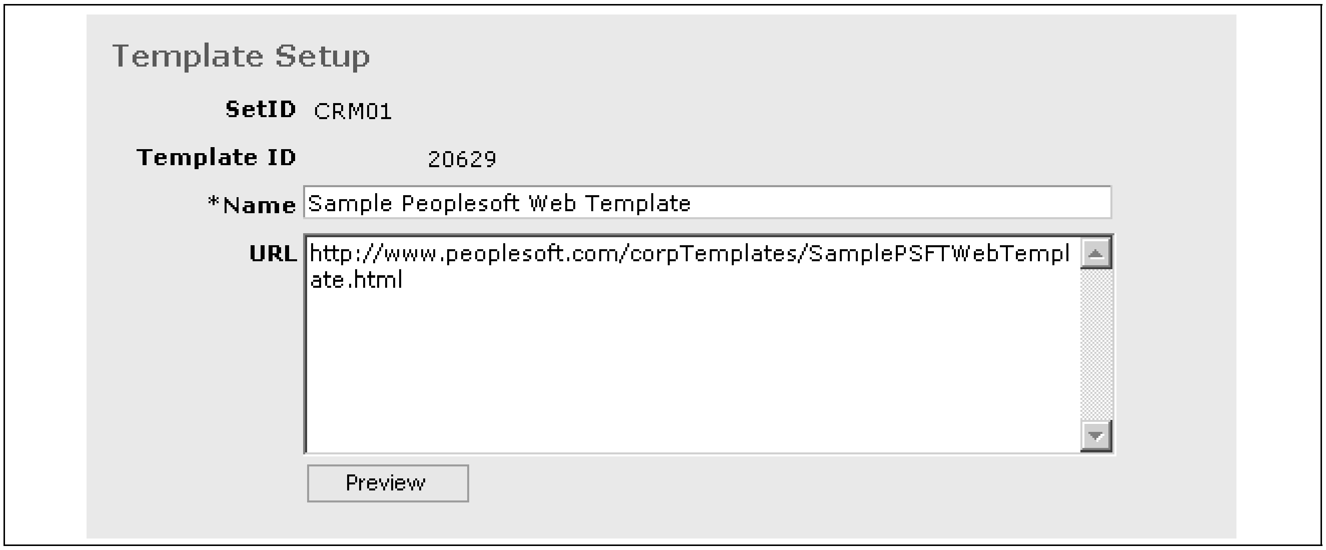
See Also

Chapter 11, “Using the Control Center,” page 159

PeopleSoft Enterprise CRM 8.9 Supplemental Installation Guide

Setting Up Web Templates

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

Chapter 4, “Designing Web Templates,” page 51

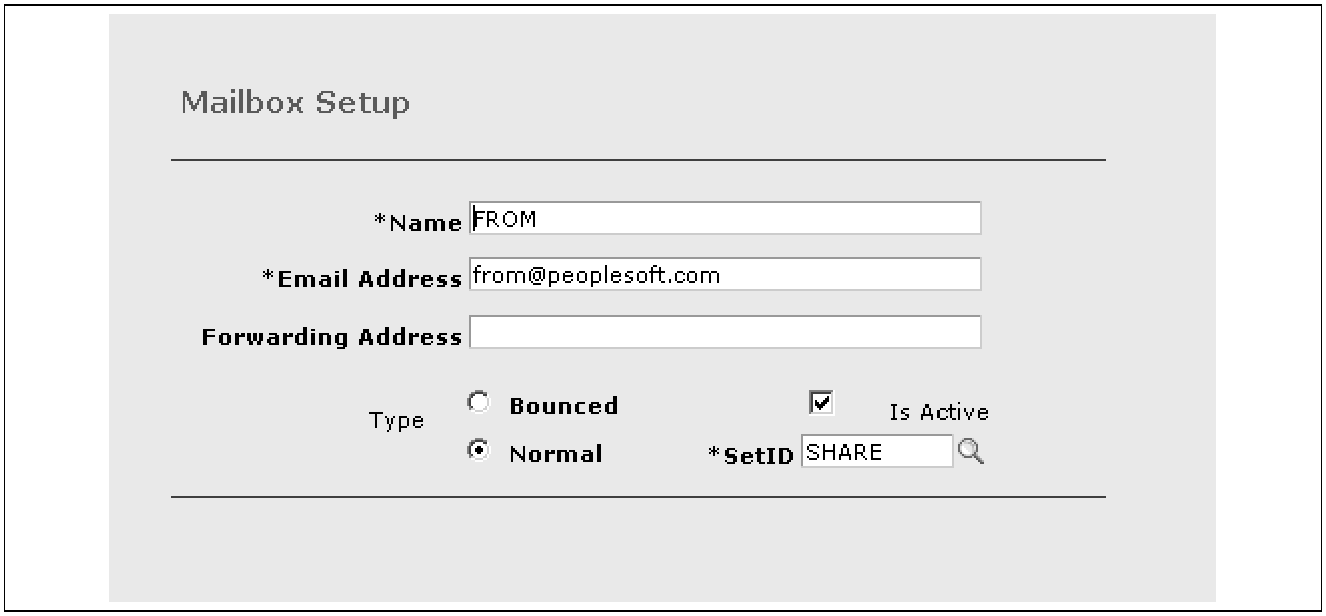
Setting Up Mailboxes

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

Chapter 5, "Designing Email Documents," page 57

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

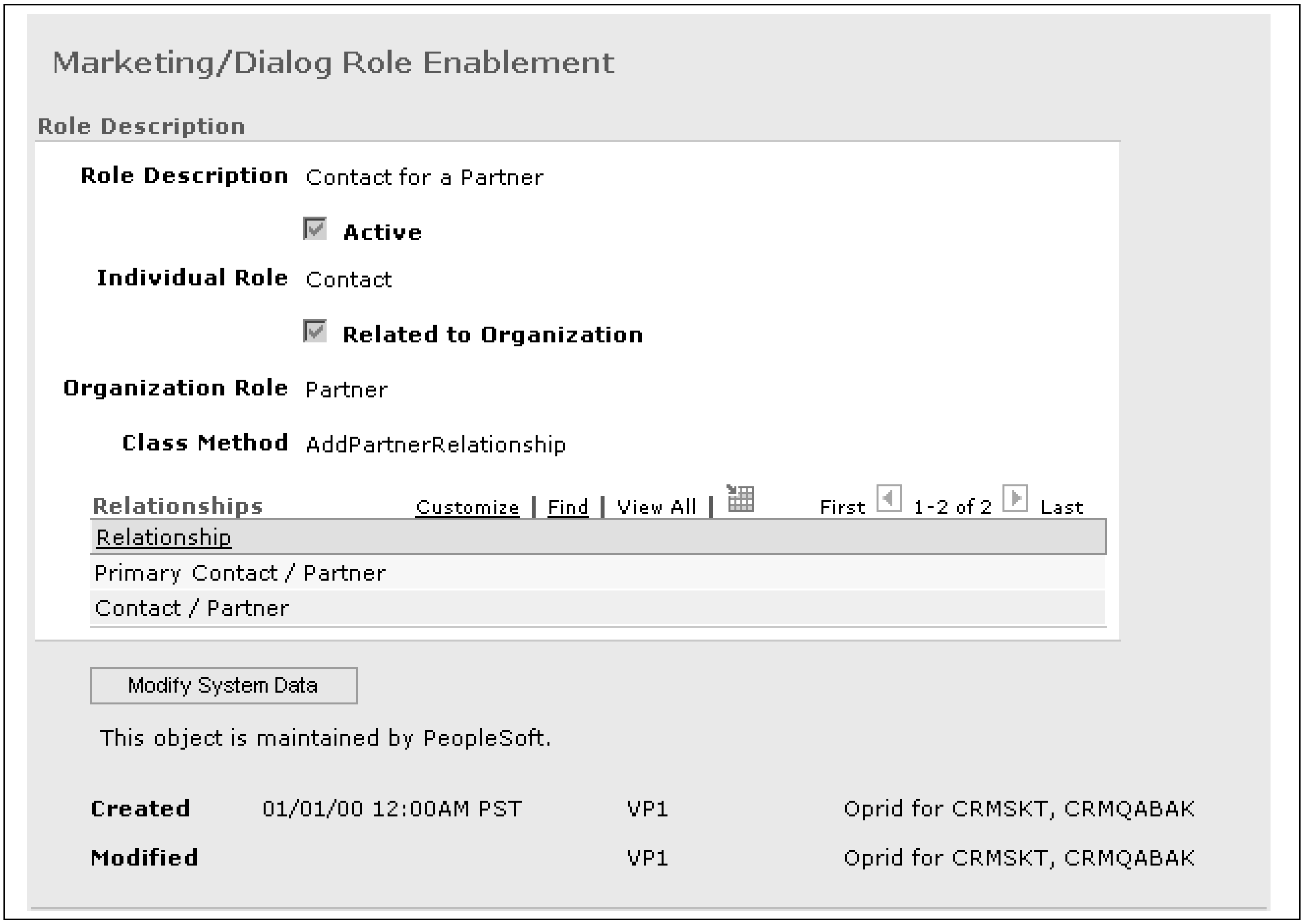
Chapter 17, “Using Extensions,” page 221

Appendix A, “Merge Content Specification,” page 245

Enabling Dialog Roles

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

Access the Marketing/Dialog Role Enablement page.

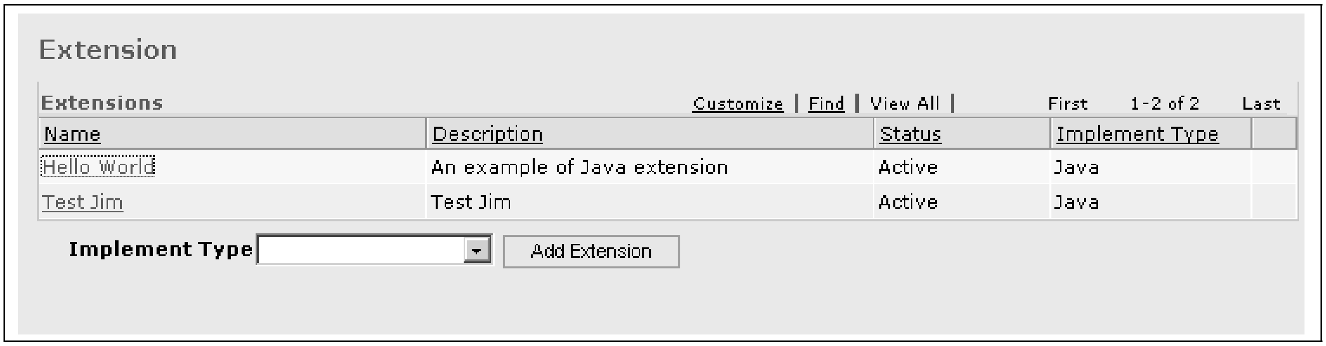


Marketing/Dialog Role Enablement page

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

Access the Extension Summary page.



Extension 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 17, “Using Extensions,” page 221

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

See Chapter 6, “Designing Web Documents,” page 73.

See Chapter 5, “Designing Email Documents,” page 57.

See Chapter 7, “Designing the Flow for an Online Dialog,” page 105.

Understanding Target Audiences

A target 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 target audiences in your dialog allows Online Marketing to track each group separately, and provide statistics for the individual target 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 target audiences, it is possible that the same person is listed in more than one target audience. To avoid confusing recipients with multiple emails, Online Marketing automatically detects any duplicates among target 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 target audience listed on the element. For each subsequent target 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

Chapter 3, "Designing Online Dialogs," Selecting Target Audiences for a Dialog, page 44

PeopleSoft Enterprise CRM 8.9 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

Chapter 8, "Deploying and Managing Online Dialogs," Understanding Dialog Statuses, page 113

Creating a New Dialog

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

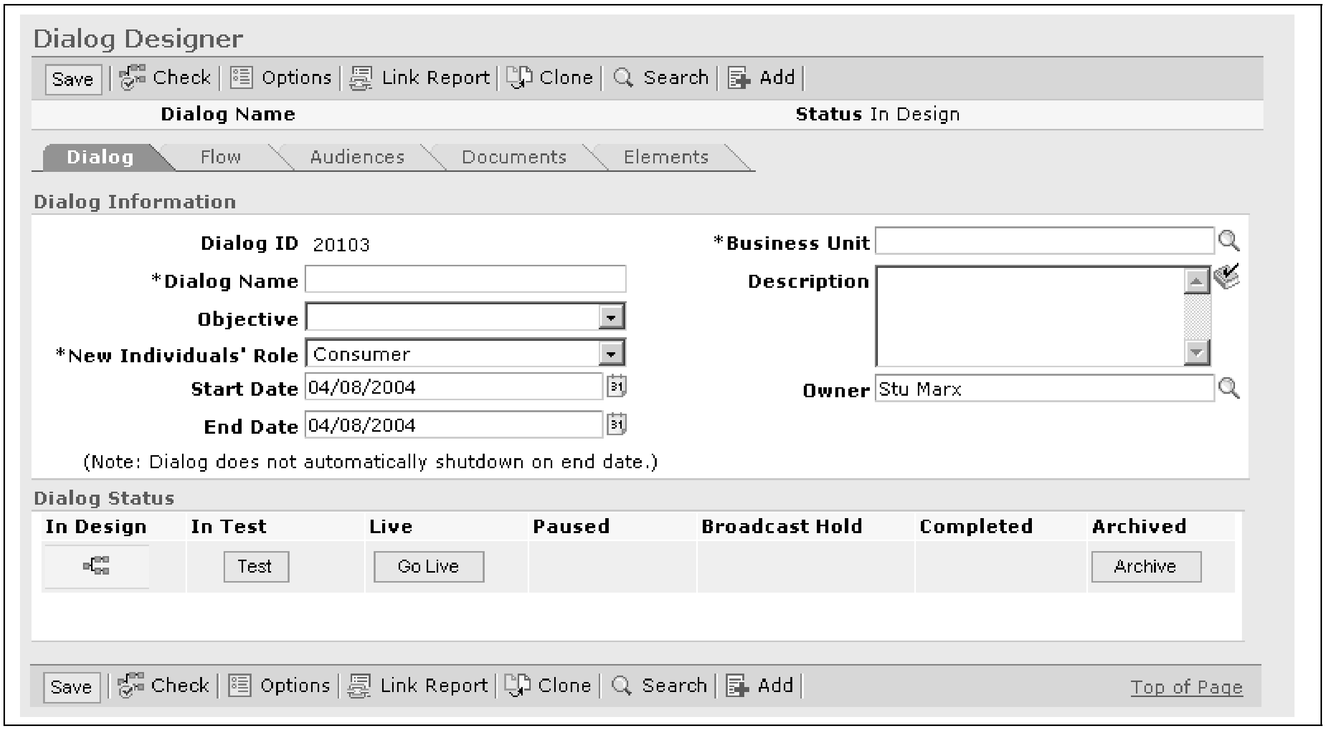
Pages Used for Creating a New Dialog

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 role that a new user is assigned when created if no information exists to place the user in a specific role. Values are Consumer, Contact for a Company, and Contact for a Partner.

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

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 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.

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).

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.

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

Current State	Can move into
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 target 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 document elements can connect to which other document 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		
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.)

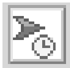
Using the Graphical Interface

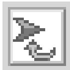
With the graphical dialog design interface you can add, delete, and edit dialog elements, as well as move them around on the canvas to help you visualize the dialog's flow. The following table shows how to perform the various actions needed to define the dialog flow.

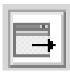
Action	How to Perform
Select an element	Single-click the element you want to highlight.
Drag and place an element	Select the element, hold down the left mouse button, and move the element to the desired location. Release the mouse button to place the element. If an element has connections, they will 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.
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.

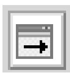
Graphical Interface Buttons and Controls

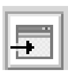
The following table shows the buttons available in the Graphical Interface.

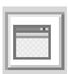

Date-Time Trigger

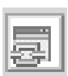

External Event Trigger

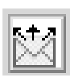

Landing Page

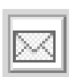

Intermediate Page


Final Page


Standalone Page


Web Link Promotion

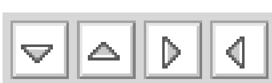

Broadcast Email

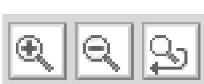

Single Email


Update Profile


Decision Point


Custom Action


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

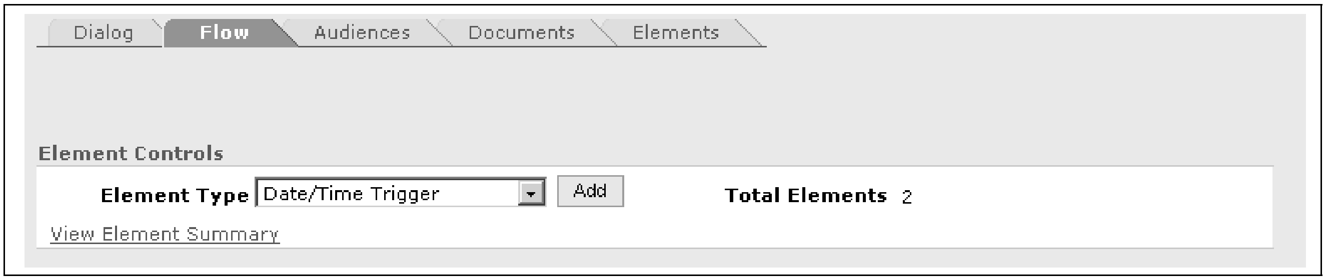

Canvas view buttons—use to zoom in, zoom out, and return to original view

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

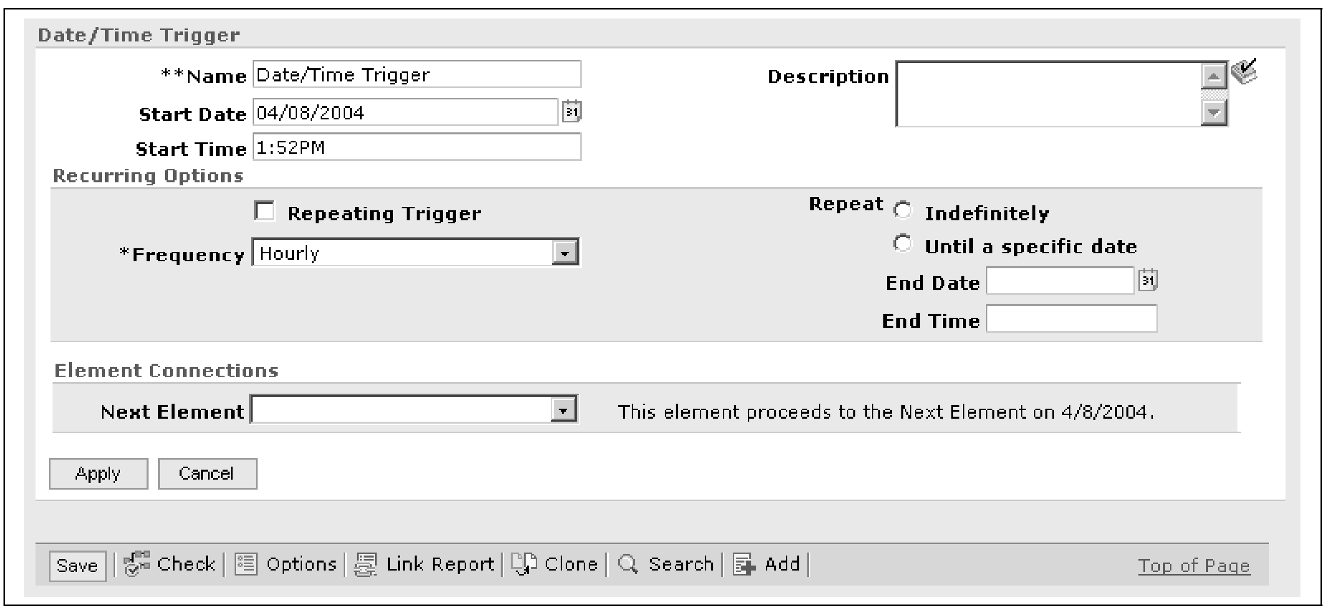
Click the View Element Summary link to view the Element summary on the Elements tab.

See Chapter 3, "Designing Online Dialogs," Setting Dialog Options, page 49.

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.

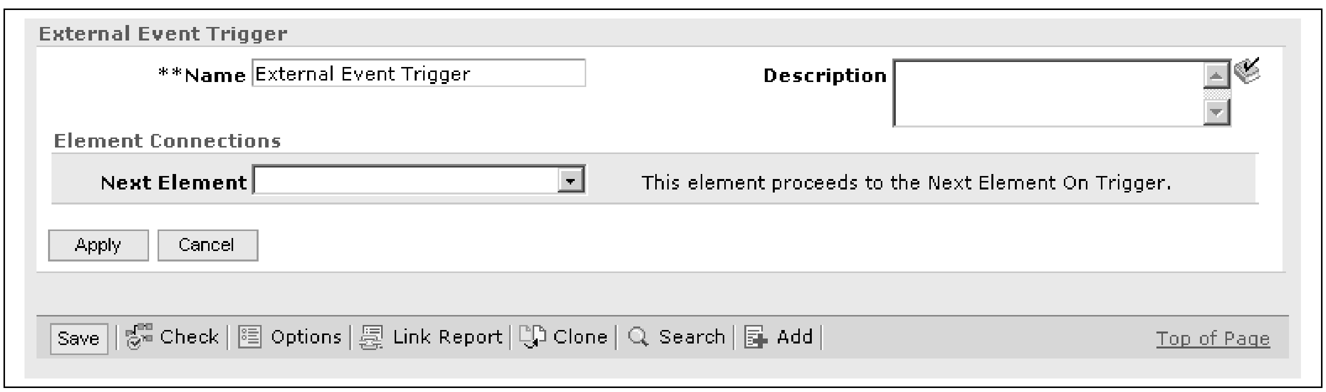
Repeat If you selected the Repeating Trigger check box, select an option for the trigger to repeat: Indefinitely if you want it to continue firing at the selected frequency until you explicitly stop it, or Until a specific date if you want it to stop firing at specific date and time. If you choose Until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

See Chapter 7, “Designing the Flow for an Online Dialog,” page 105.

External Event Trigger

External Event triggers are used to allow an external system to trigger a dialog. The External Event Trigger represents an URL that can access a Landing or Standalone Page if connected directly to one of those page types, or it represents multiple URLs if connected to a Web Link Promotion. The URLs contain magic numbers to notify the system that it has been triggered.

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



External Event Trigger

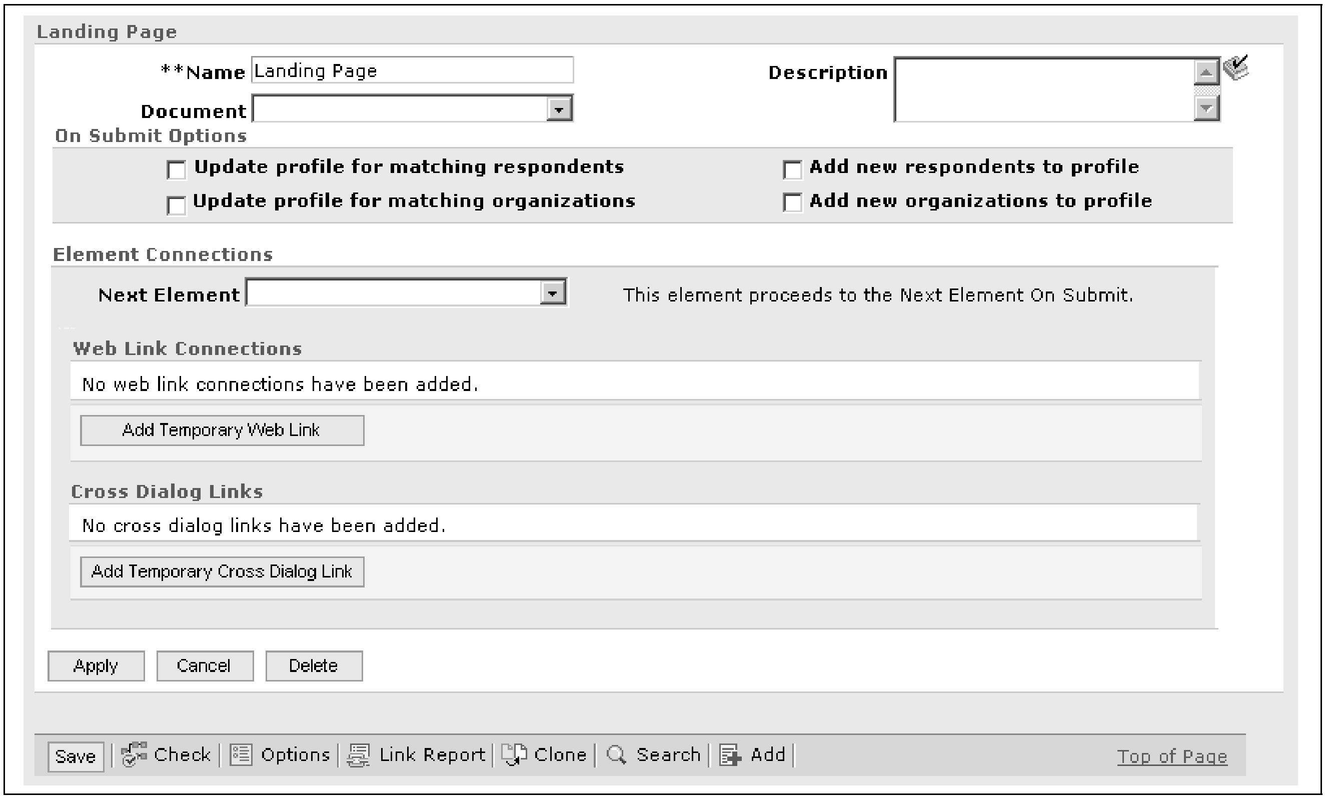
Name You must specify a unique name for the trigger when you create it.

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.

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.

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

Used to control where cross-dialog links embed in the document's 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.

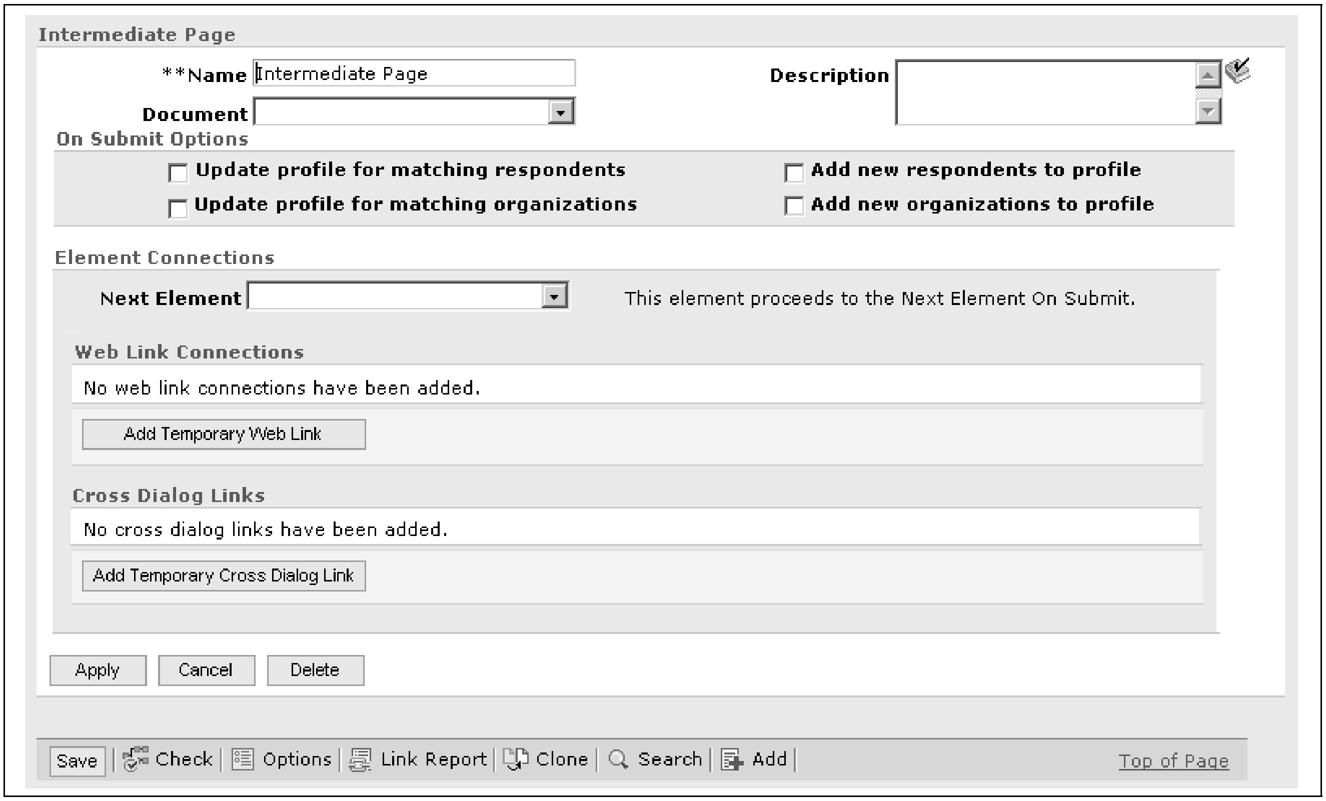
Note. When a document is associated with an element, any temporary cross-dialog links that are named identically to document web links of type Cross-Dialog contained in the associated document will be replaced for convenience. This functionality reduces the amount of additional work you must do since 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.

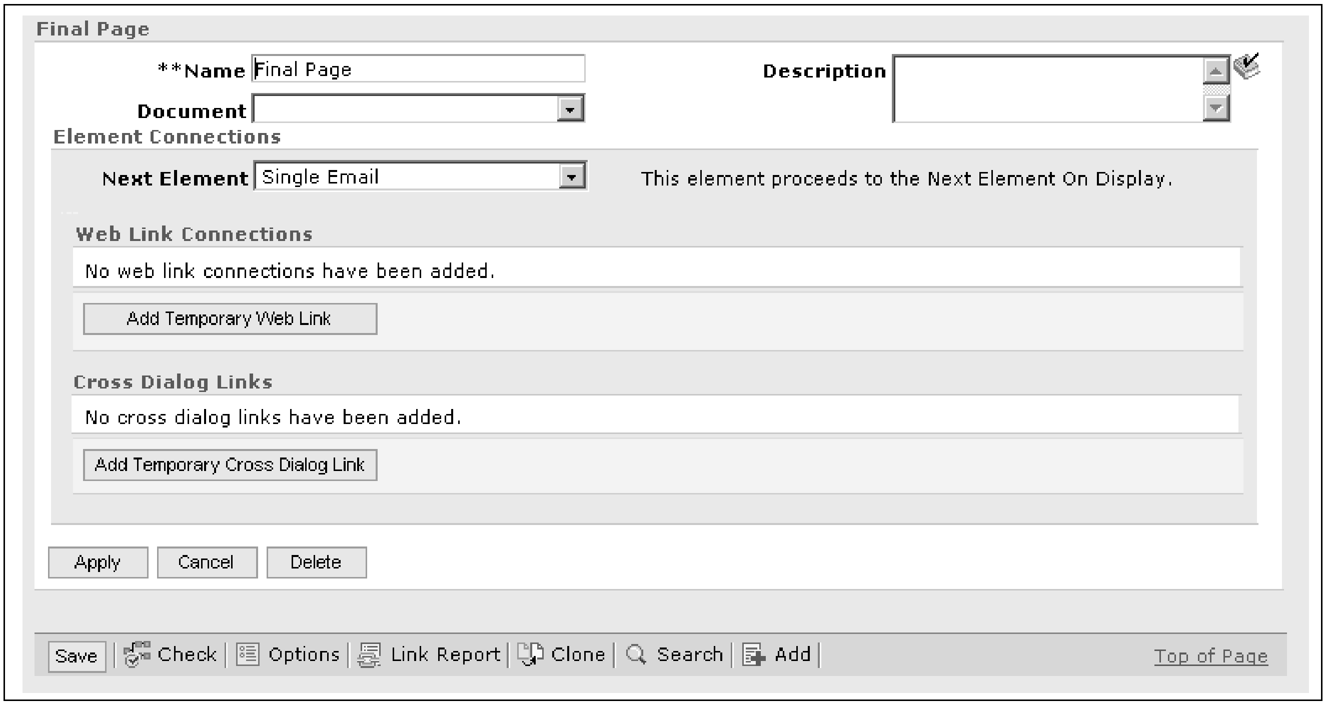
Note. Documents that are associated with the Intermediate Page element must have a Submit button in order to be validated by the Dialog Check.



Intermediate Page

Final Page

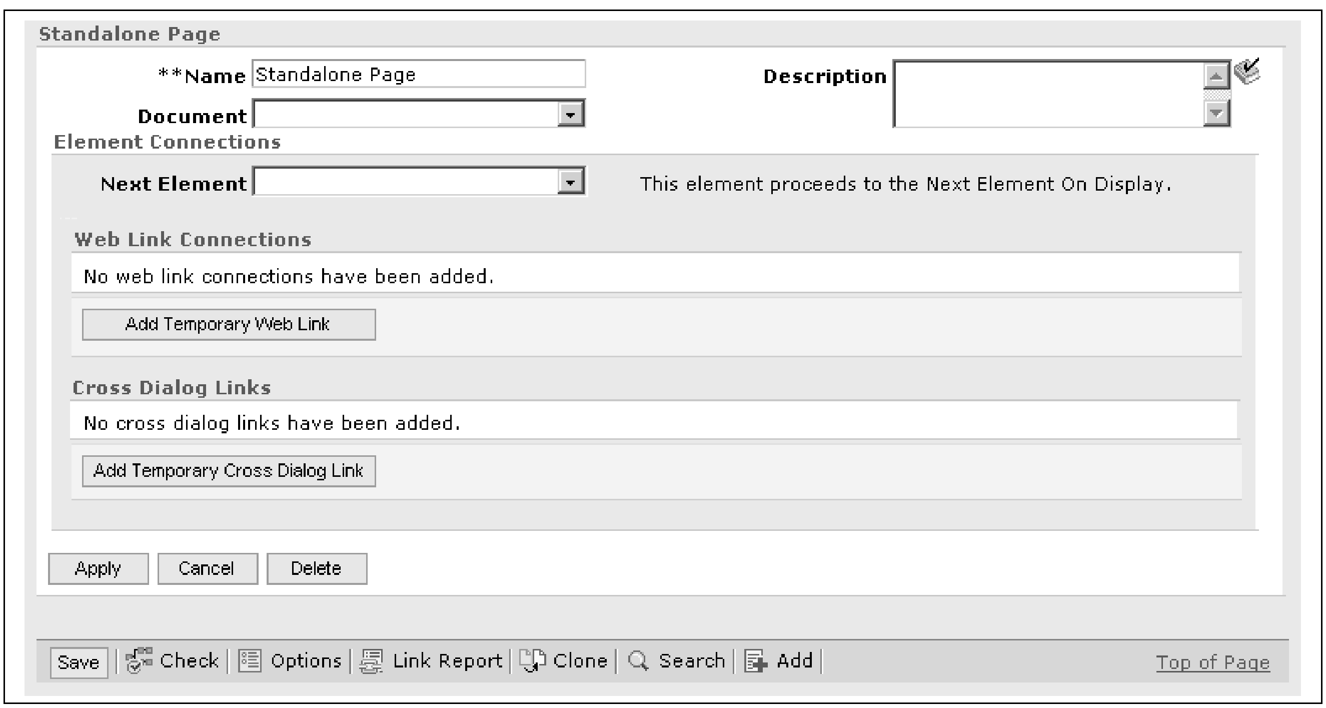
A Final Page is used to end a path with either a lone Landing Page or a Landing Page followed by one or more Intermediate Pages. The Final Page has no On Submit button specified in its associated document, and only Web Links (from the document with which it is associated) can originate from it.



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).



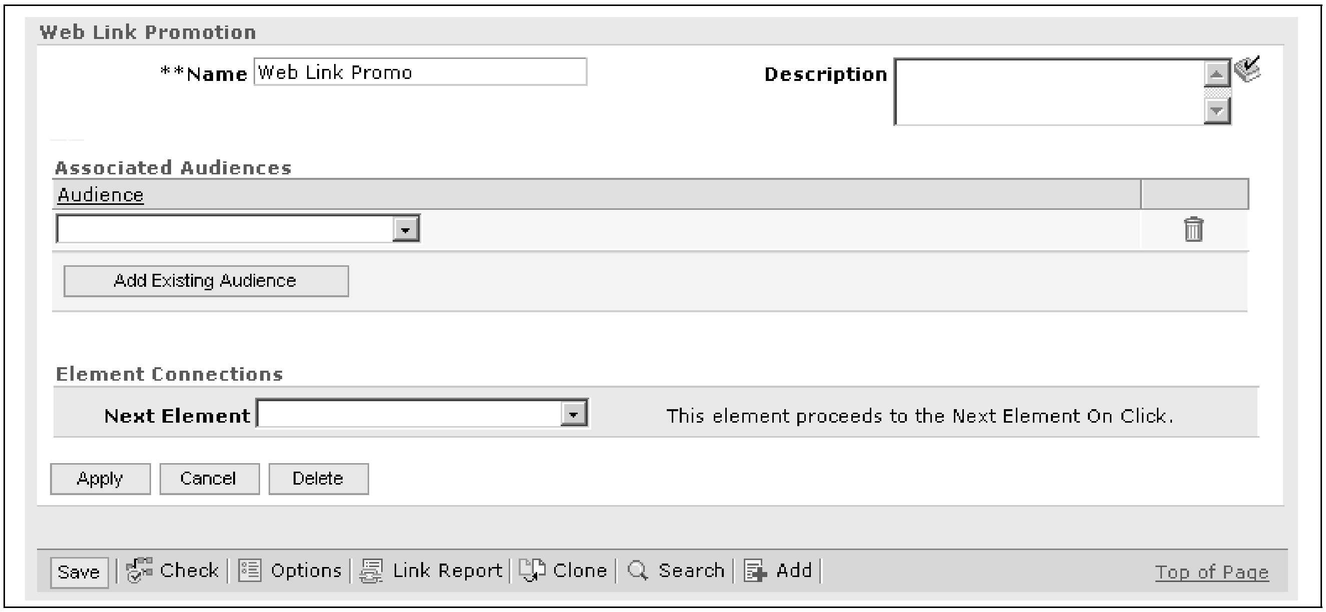
Standalone Page

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 target audience. Whenever respondents access a web page, Online Marketing tracks them by their audience to ensure accurate statistics in CRM Analytics.

You can specify one or more target audiences. Online Marketing will generate a separate URL in the Link Report for each audience you specify.

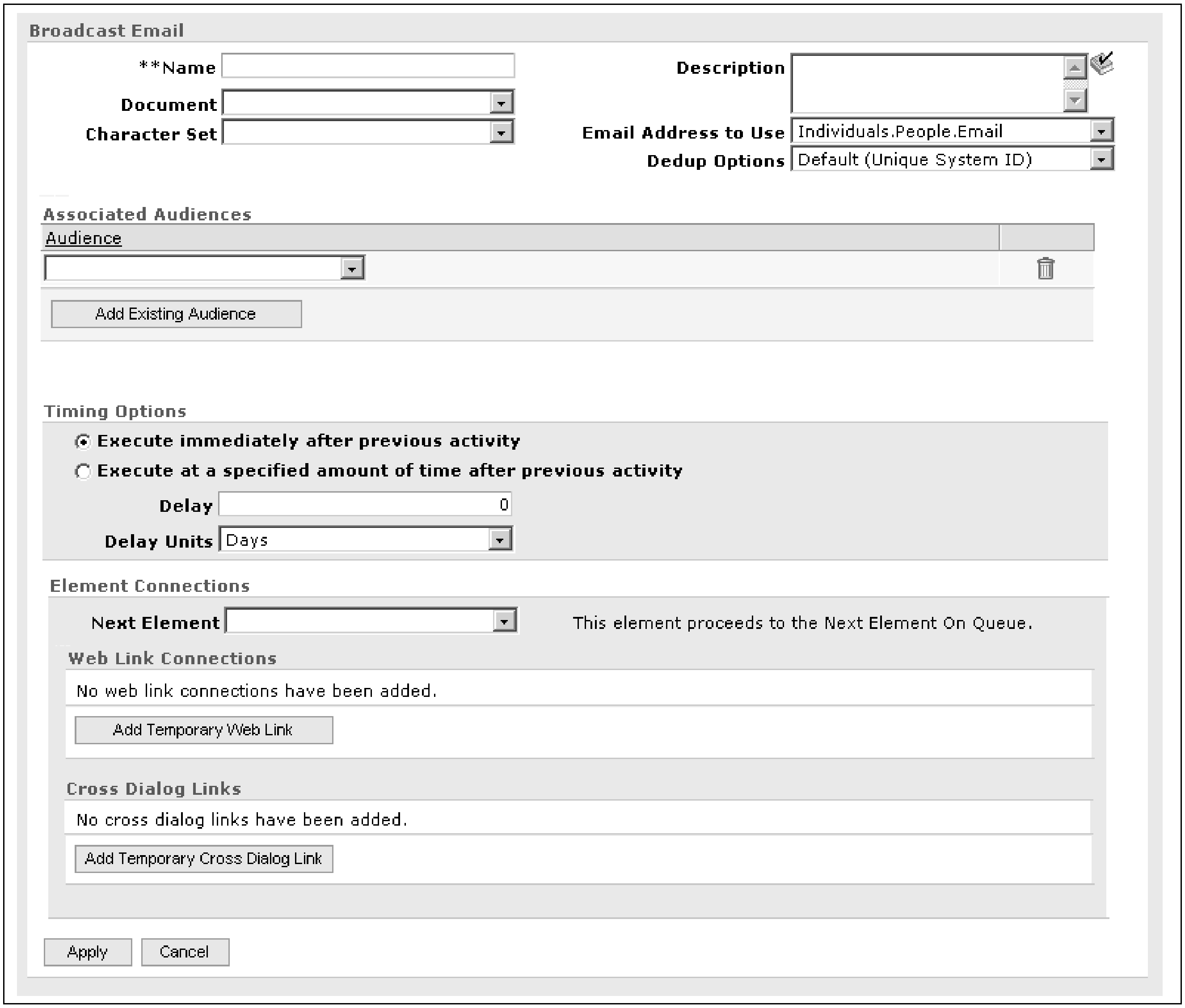
Note. In order to appear in the Audience list, audiences must be added on the Audience page.

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 email 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.

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.

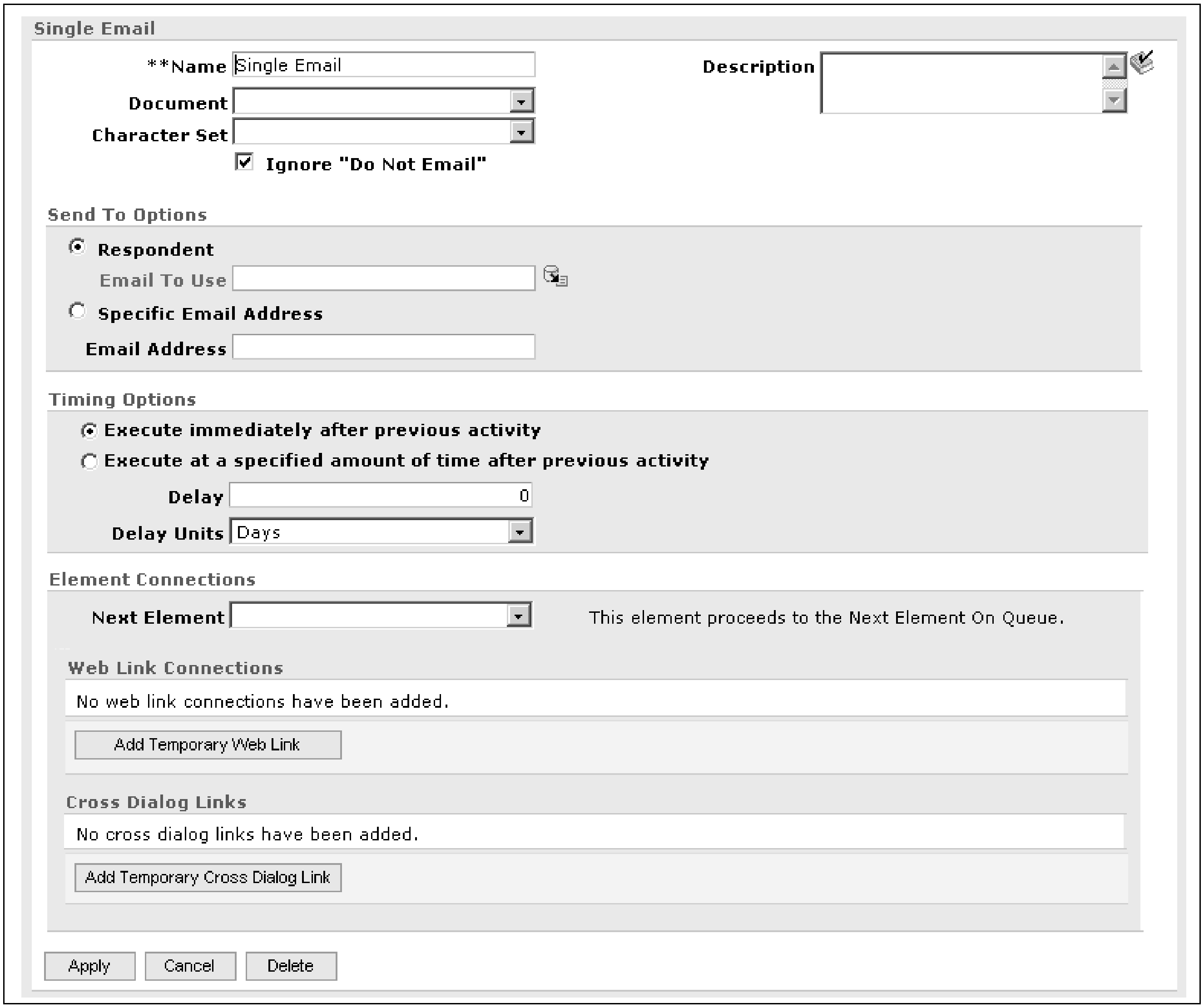
Add Existing Audience Click this button to specify another existing audience for the email's recipient list.

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.

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).

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.

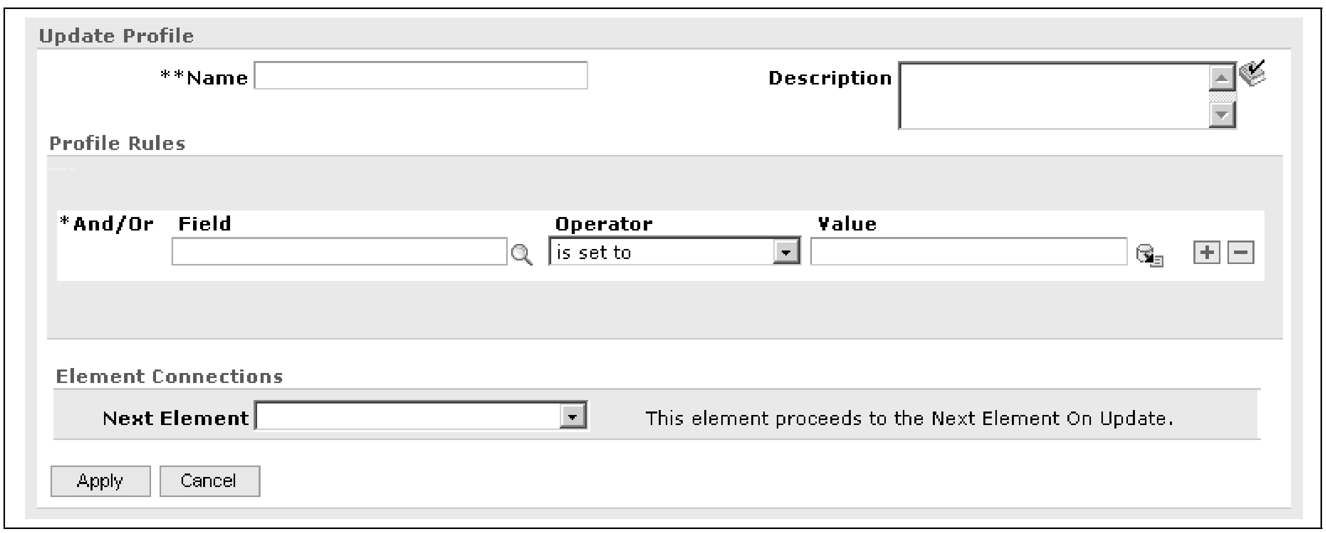
Timing Options

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.

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 pre-determined values.



Update Profile

Profile Rules

Specify the profile fields to be updated.

Field: Select the profile field you want to update.

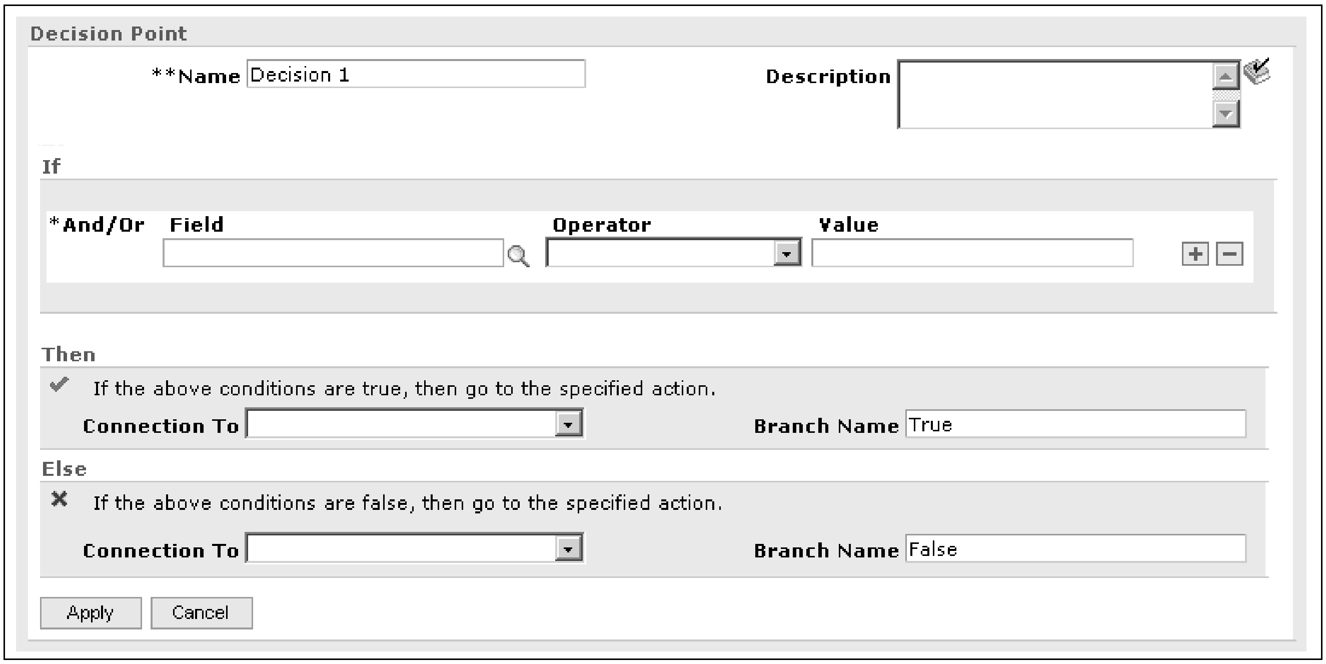
Operator: Select either is set to, or, for numeric attributes, you can also select Increment or Decrement.

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.

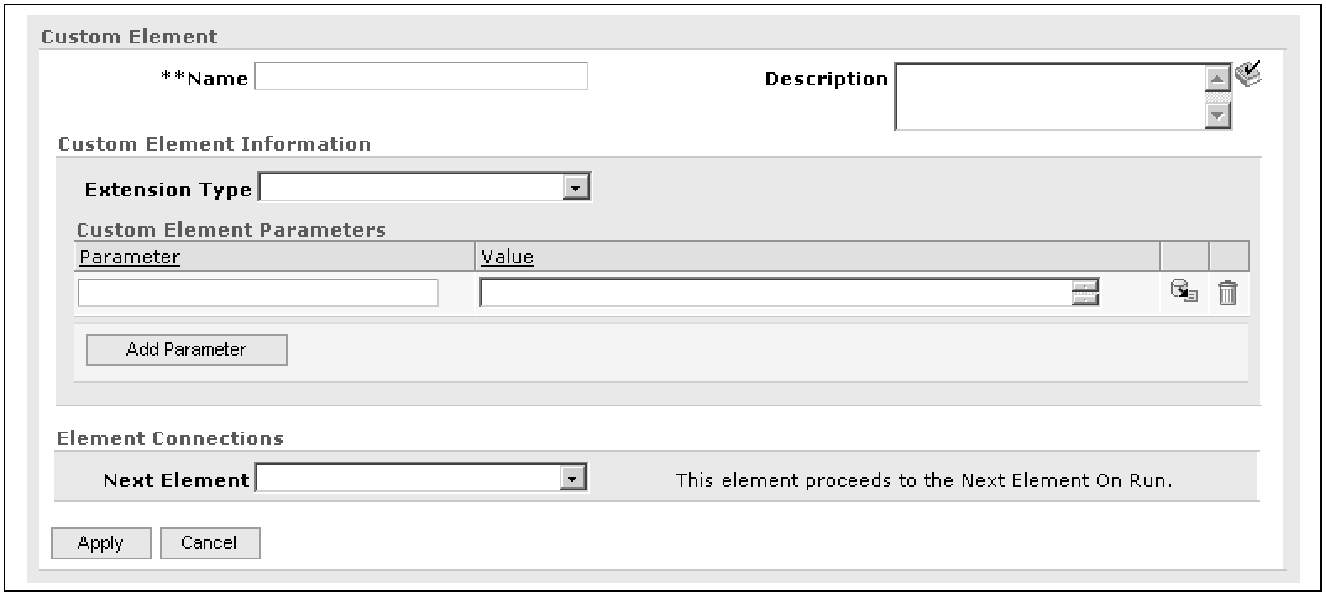
Then Specify the connection to be made if the condition specified is true.

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 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.

Add Parameter Click this button to add a new parameter to the Custom Element.

See Also

Chapter 3, "Designing Online Dialogs," Setting Dialog Options, page 49

Selecting Target Audiences for a Dialog

Target audiences are the contacts you want to reach in your dialog. Each dialog must have at least one target 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 8.9 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 menu navigation, a link from the Dialog Designer, or a link from the CRM Marketing Audience Designer.
2. Define the desired search criteria.
3. Click the Save Search Criteria link.

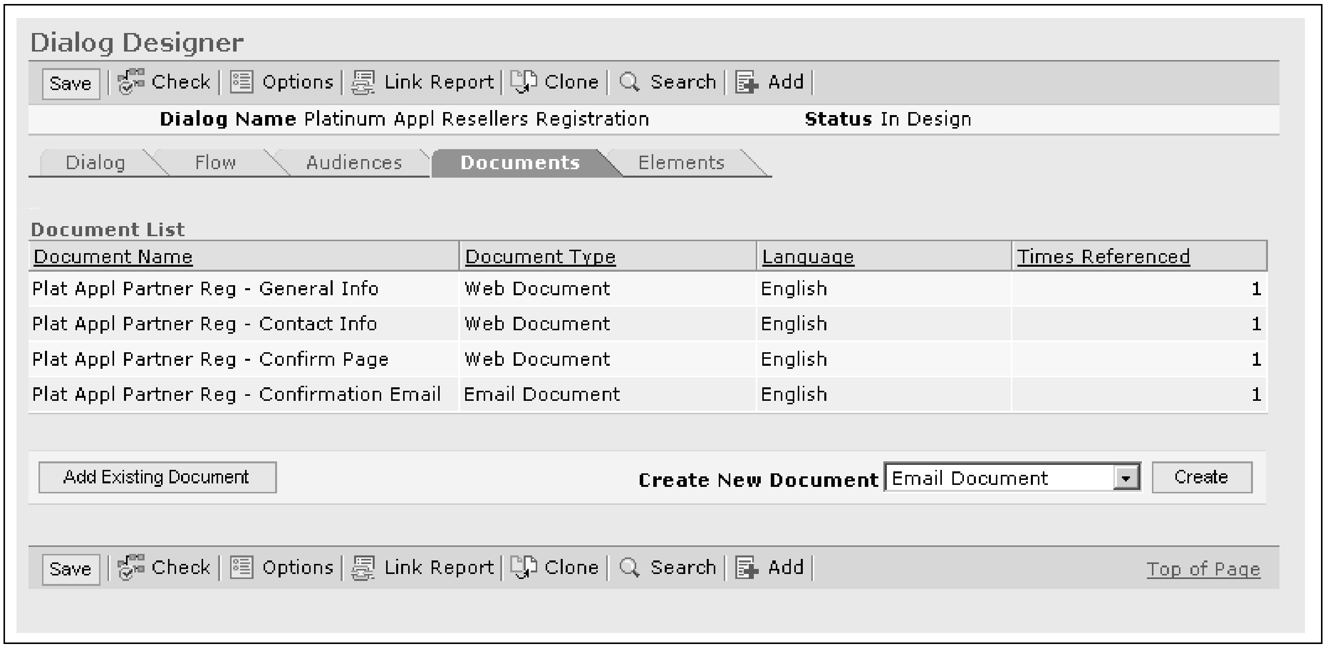
   The Save Search As page is displayed.
4. Select the Save As Audience check box.
5. Enter a name for the audience. The default audience name is based on an existing Saved Search Audience link. If no such link exists, the name is defaulted based on the Saved Search name. Audience names must be unique across 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 8.9 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. Once a document is part of a dialog that has gone Live, it can not 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

Chapter 6, "Designing Web Documents," page 73

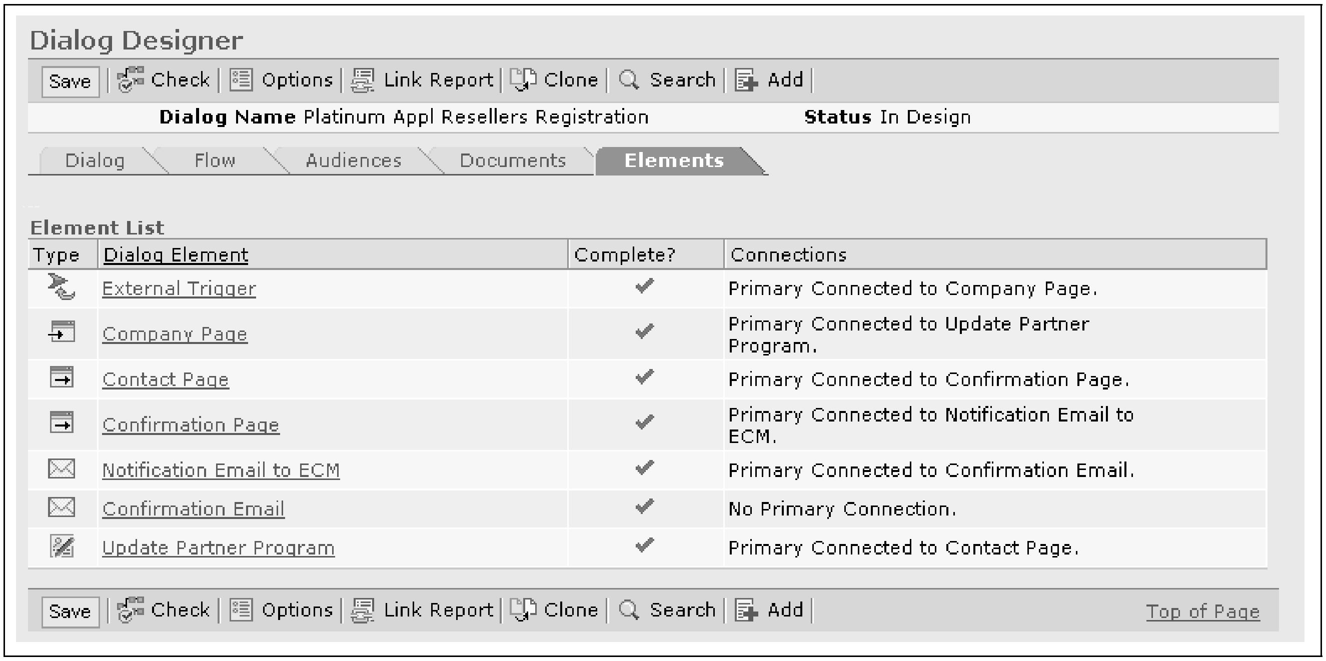
Chapter 5, "Designing Email Documents," page 57

Chapter 4, "Designing Web Templates," page 51

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, a green check mark displays. If incomplete, 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 8.9 Marketing Applications PeopleBook.*

Defining Tasks

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

See *PeopleSoft Enterprise CRM 8.9 Marketing Applications PeopleBook.*

Defining Costs

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

See *PeopleSoft Enterprise CRM 8.9 Marketing Applications PeopleBook.*

Saving Online Dialogs

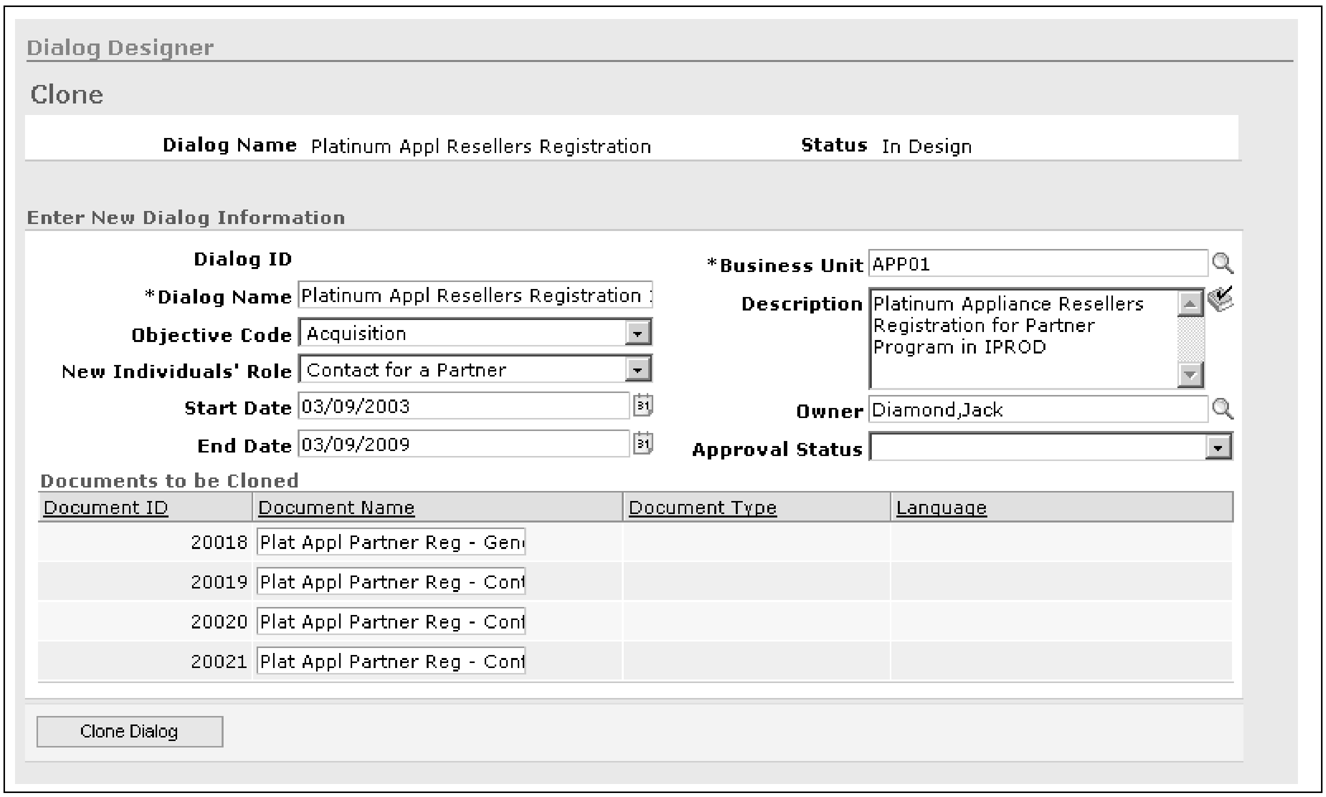
Whenever you make any changes to an online dialog, you must save the dialog to ensure that your changes are not discarded. Whenever you attempt to go to another Online Marketing feature (such as Web Templates) without first saving changes you have made to the dialog, Online Marketing prompts you to save 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 re-create them.

Access the Dialog Designer - Clone page.



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 IntroEmail1, but if the original document's name was IntroEmail2, the clone would be named IntroEmail3.)

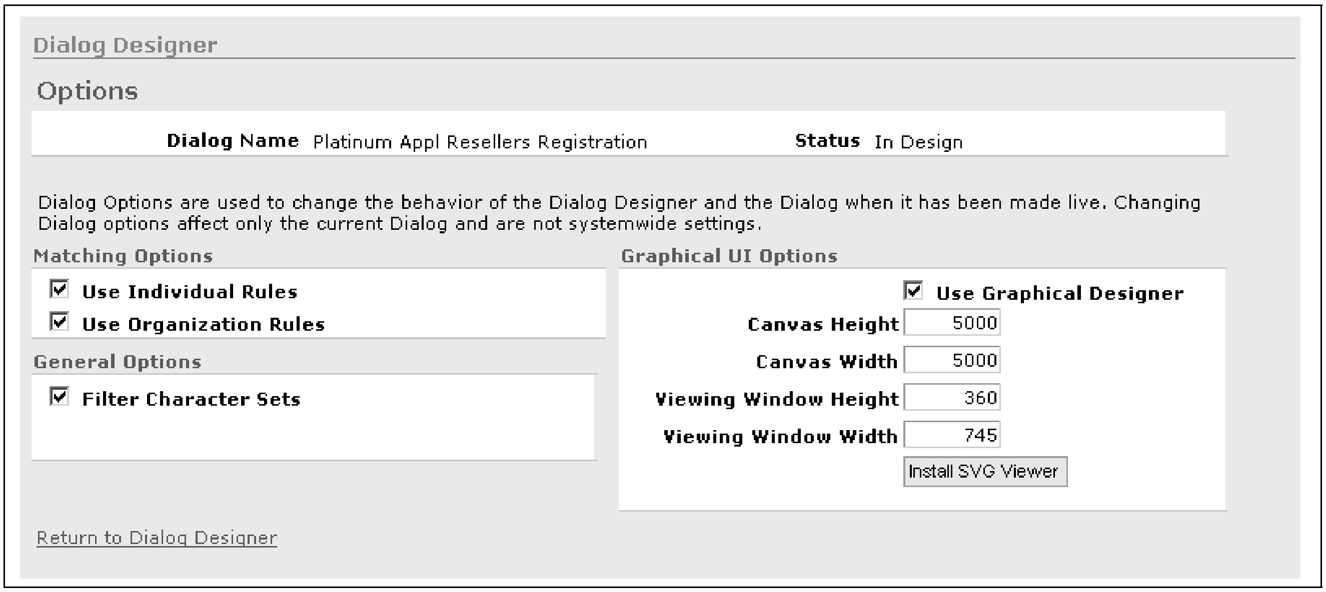
To clone documents associated with the dialog, give each document a new name. If you do not provide a new name for a document, the system appends the next available number to the end of the document name to make it unique.

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.

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 Chapter 2, "Setting Up PeopleSoft Online Marketing," page 7.

See *PeopleSoft Enterprise CRM 8.9 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 245.

Setting Up Web Templates

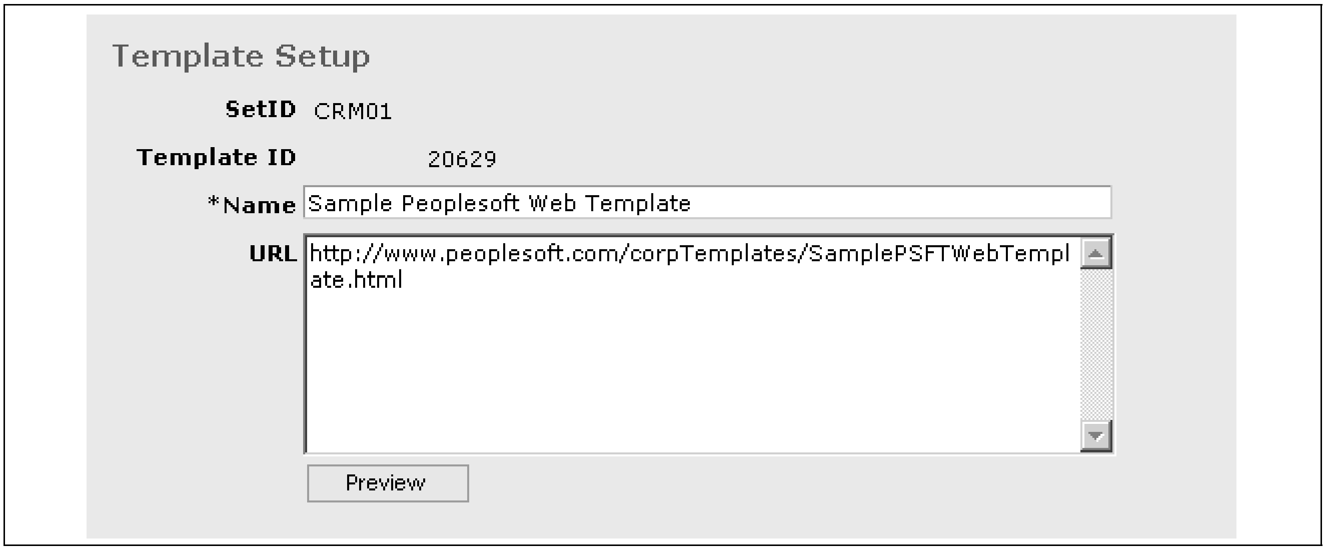
Before you can use an HTML document as a web template, you must perform a few setup tasks.

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 re-check 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 8.9 Application Fundamentals PeopleBook*, “Setting Up PeopleSoft Customer Relationship Management 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 159

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 73

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

Chapter 6, “Designing Web Documents,” page 73

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.

See Chapter 5, “Designing Email Documents,” Adding Dynamic Content to an Email Document, page 67.

See Chapter 5, “Designing Email Documents,” Customizing the Email Subject Line, page 61.

Defining Email Documents

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

Pages Used to Define Email Documents

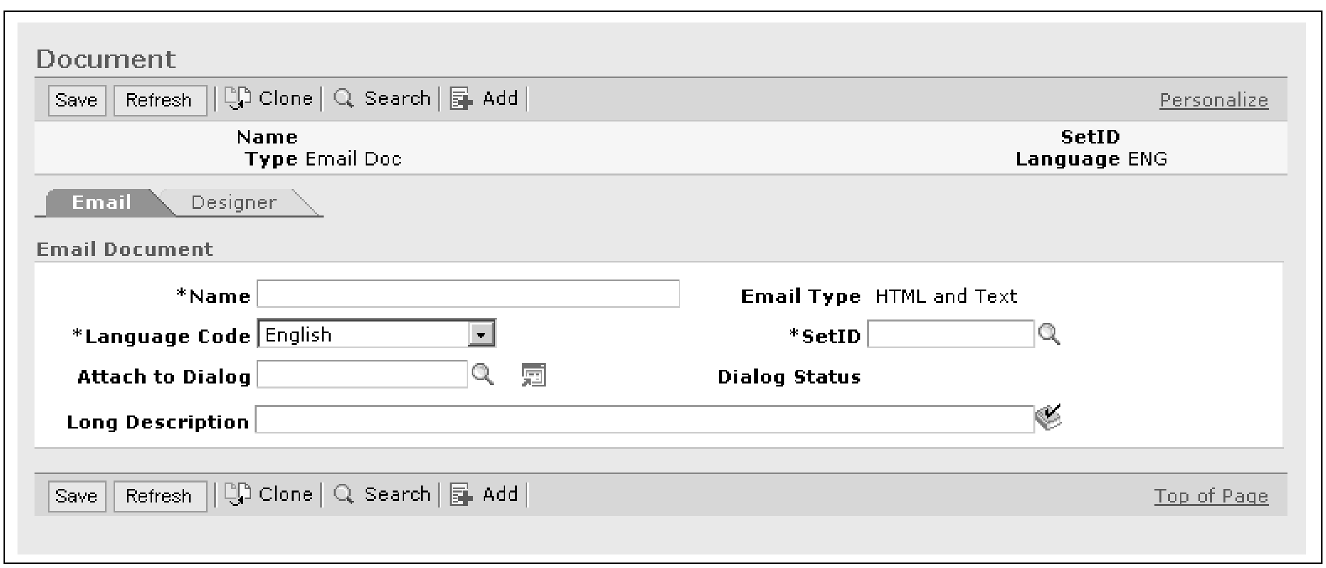
Page Name	Object Name	Navigation	Usage
Email Document	RY_EDOC	Marketing, Document Designer, Email Document	Define general information about email documents

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

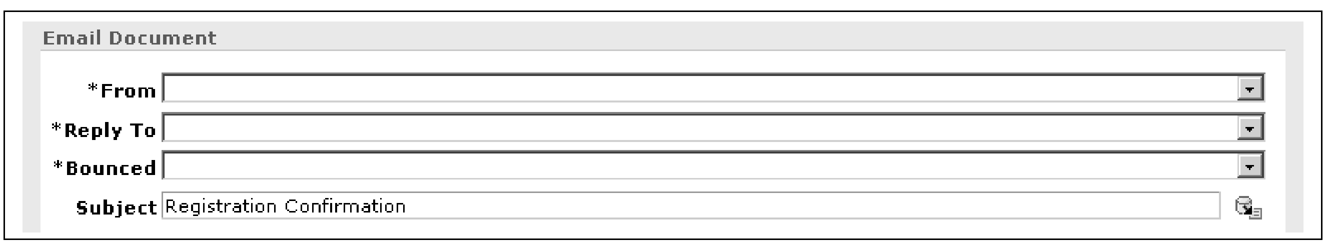
Email messages must have From, Reply-To, and Bounce email addresses associated with them. Within the body of the email, you can insert any text, HTML, or merge content fields.

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

Chapter 2, “Setting Up PeopleSoft Online Marketing,” Setting Up Mailboxes, page 15

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.

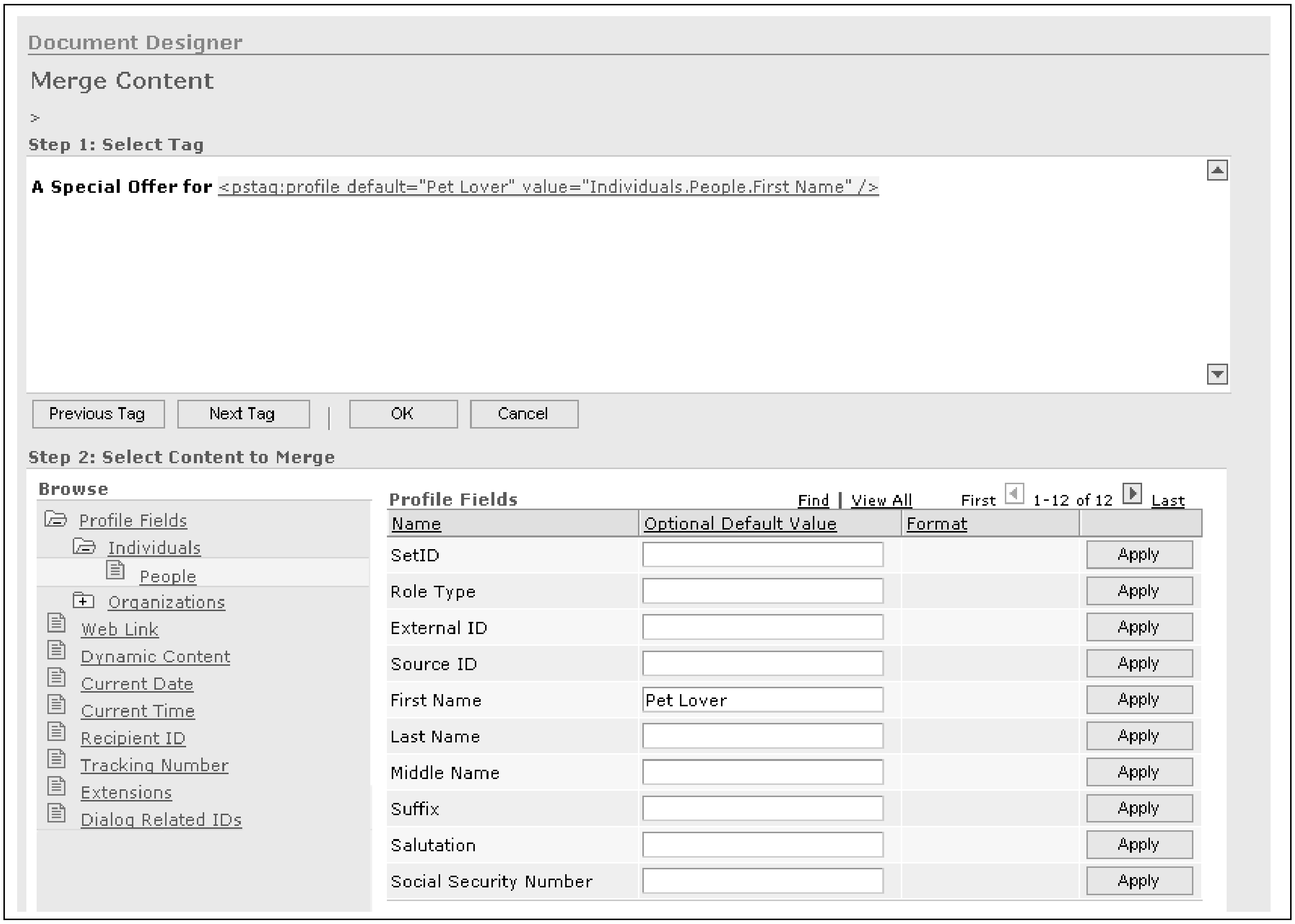
   Notice that each set of curly braces you included in your Subject line now contains a merge content button. By default the first button is highlighted, indicating that it is active. You can make any button active by clicking on it.
5. To select the content to merge, browse the folders in the Browse section 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 17, “Using Extensions,” page 221

Appendix A, “Merge Content Specification,” page 245

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 64

Chapter 5, "Designing Email Documents," Adding Dynamic Content to an Email Document, page 67

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

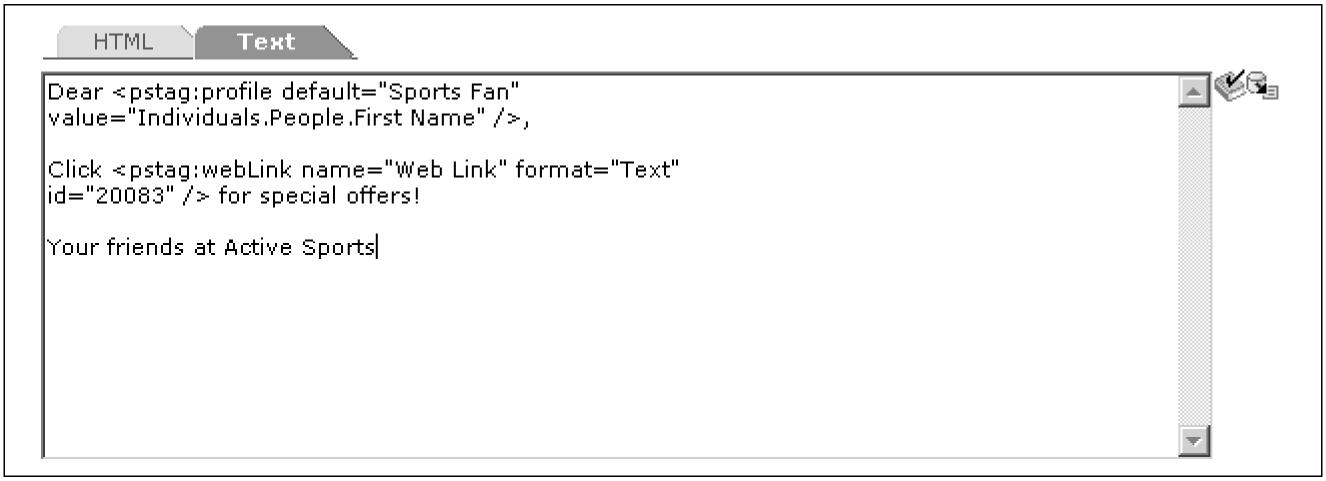
To enter plain text information in the body of an email document:

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 Chapter 5, “Designing Email Documents,” Importing HTML and Text into an Email Document, page 70.

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 Chapter 5, “Designing Email Documents,” Importing HTML and Text into an Email Document, page 70.

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 64

Chapter 5, “Designing Email Documents,” Adding Dynamic Content to an Email Document, page 67

Chapter 5, “Designing Email Documents,” Importing HTML and Text into an Email Document, page 70

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	(*External link type only*): 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.
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 CRM Real-Time Advisor 8.9 PeopleBook.*

See Chapter 3, “Designing Online Dialogs,” page 21.

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 Chapter 3, “Designing Online Dialogs,” page 21.

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.

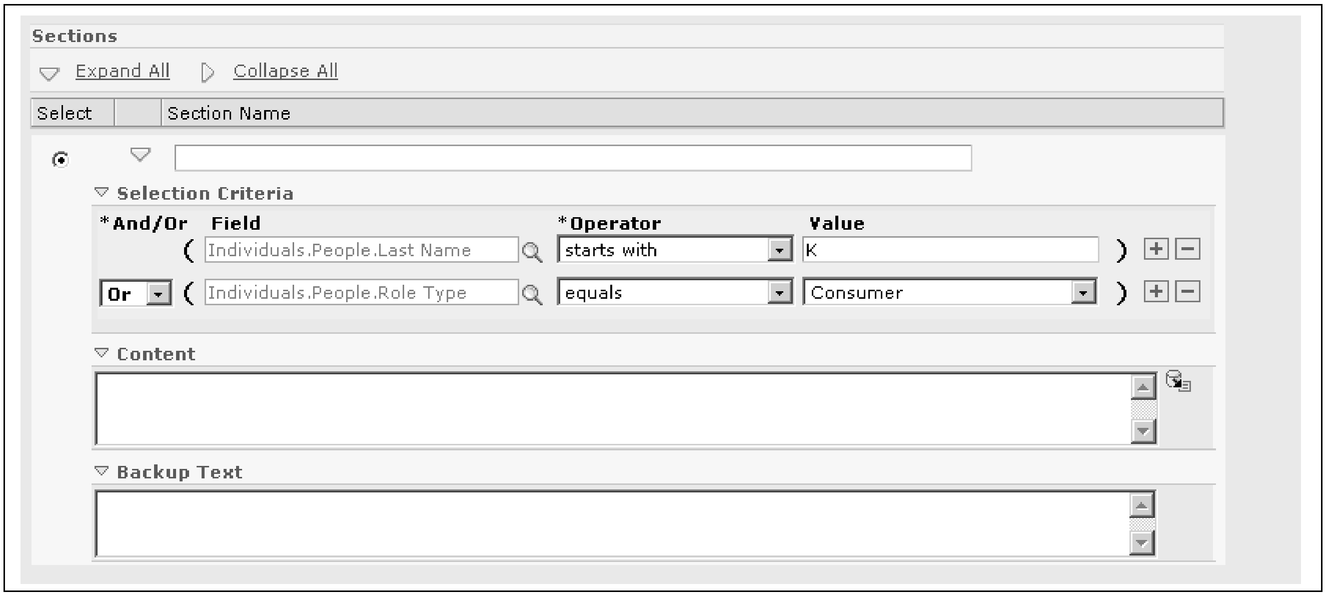
   The Name uniquely identifies the dynamic content object within the dialog. When you create a dynamic content object from an existing profile or document element, that element’s name is pre-filled in this field.

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

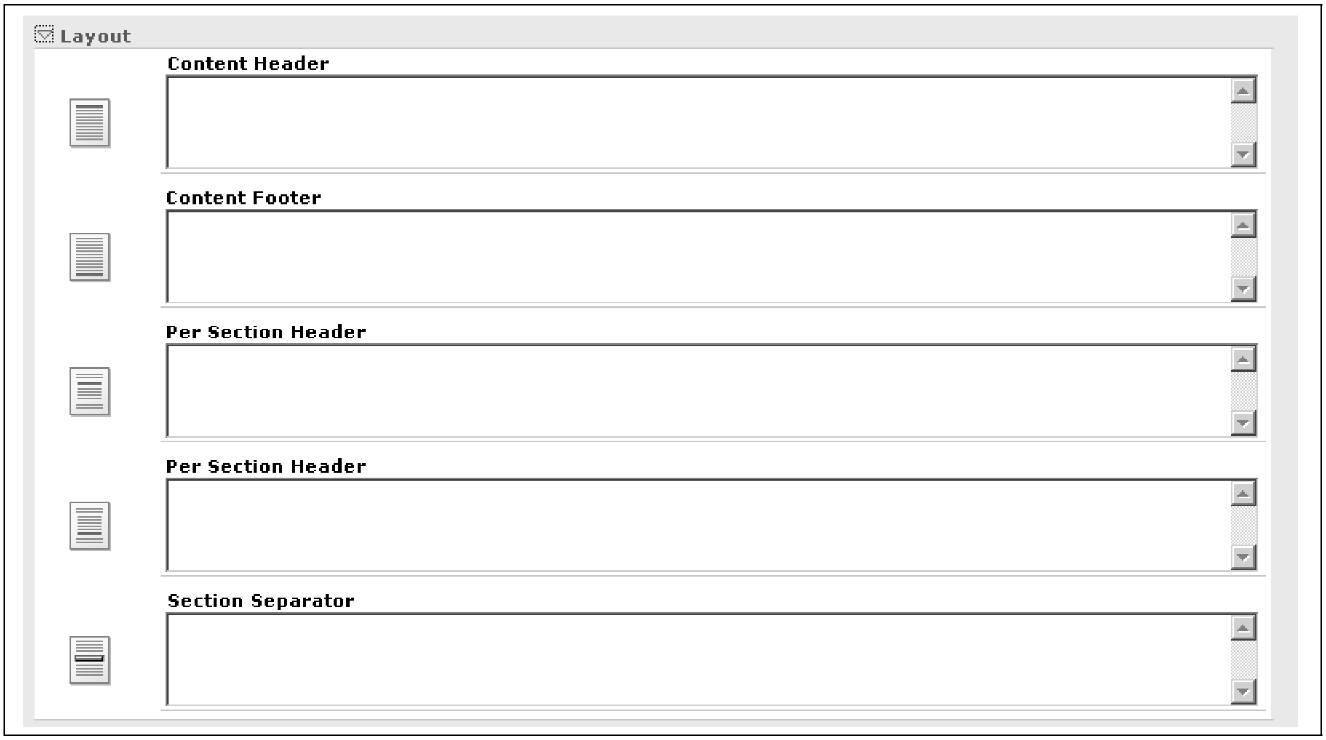
The backup text is optional—you can enter text to be displayed if problems are encountered evaluating conditions for the content section.

See Chapter 17, “Using Extensions,” page 221.

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

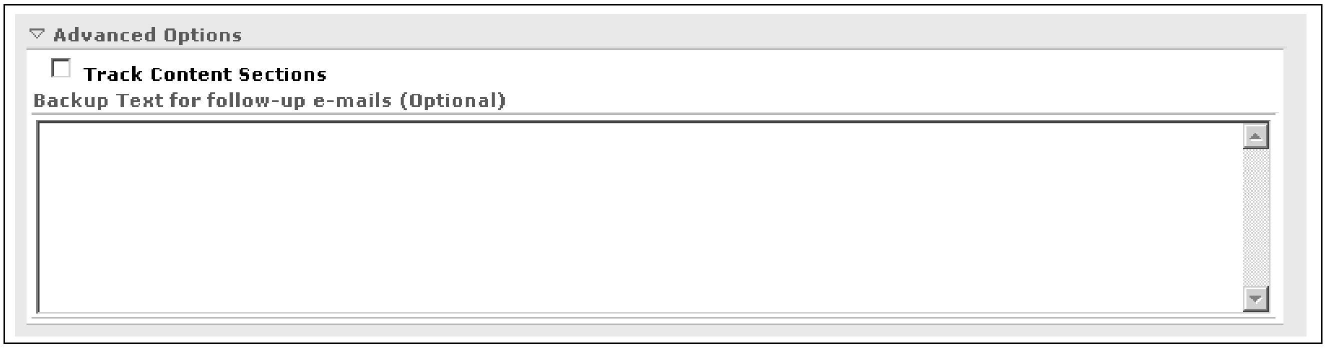
Content Header	The contents of this text area are displayed immediately preceding the rendered dynamic content.
Content Footer	The contents of this text area are displayed immediately following the rendered dynamic content.
Per Section Header	The contents of this text area are displayed before each content 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.

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 5, “Designing Email Documents,” Creating Email Content, page 59

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 51

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 five types of entry questions for Text Entry, Number Entry, Decimal Entry, Date Entry, and Time 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 moved up or down in the document to change the order in which they are displayed.

Creating and Working with Web Documents

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

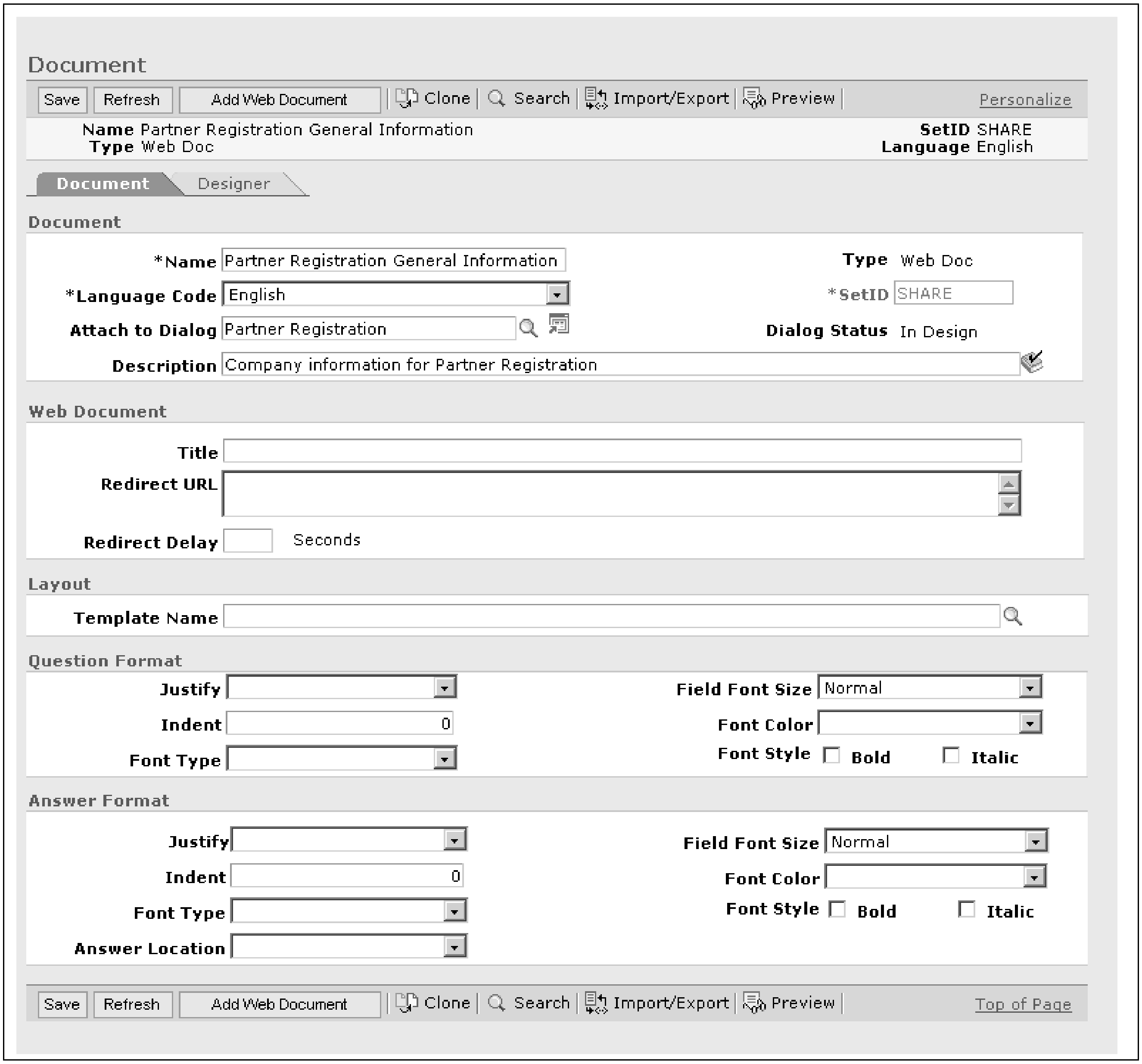
Pages Used in Creating Web Documents

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 button	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.

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.

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
	Choose One with Rating
	Choose Many
	Yes/No
	Text Entry

Number Entry

Decimal Entry

Date Entry


Time Entry


Button

The item is added to the Document Designer. If other items already exist in the document, the new item appears at the bottom.

You can move the item up or down in the list by selecting it and using the Move Up and Move Down buttons.

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 at the bottom of the document.

Moving an Item

The order of the items in the list determines their order in the web document. For this reason, you may find it necessary to move the item in the items list.

To move an item in a web document, select its Select radio button and use the up and down buttons to move to the desired location in the list.

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.

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

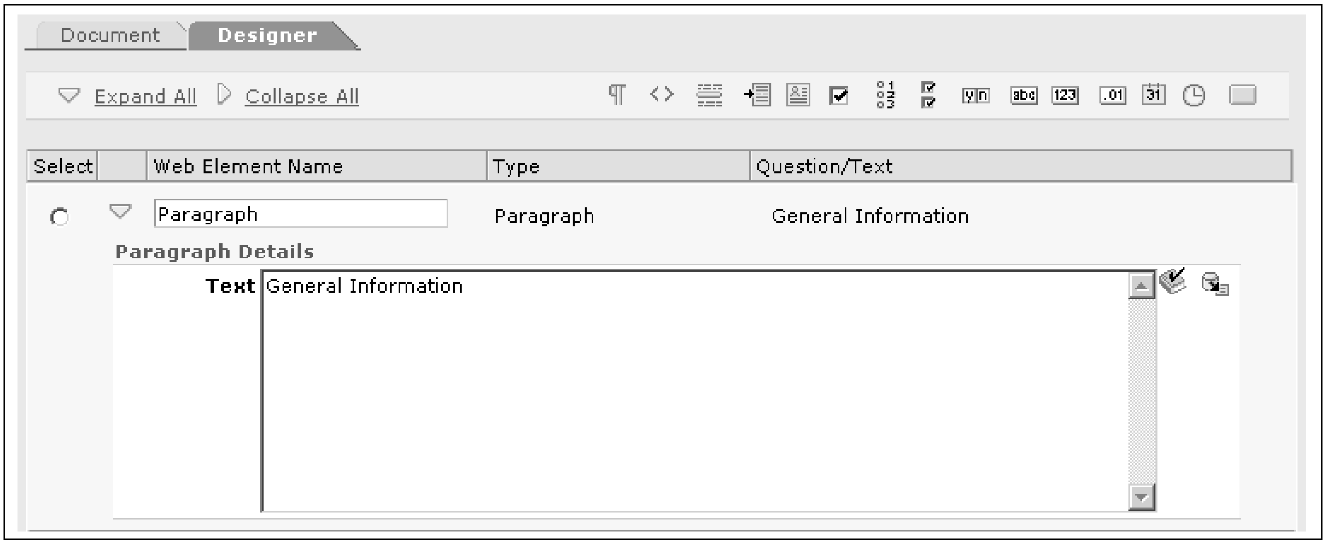
There are six types of items that you can use in a web page: paragraph, questions (entry questions and choice questions), buttons, rule and line break elements, and HTML paragraphs. You can also add items from the profile database. This section describes how to work with these items, and how to:

- 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

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 95.

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

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.

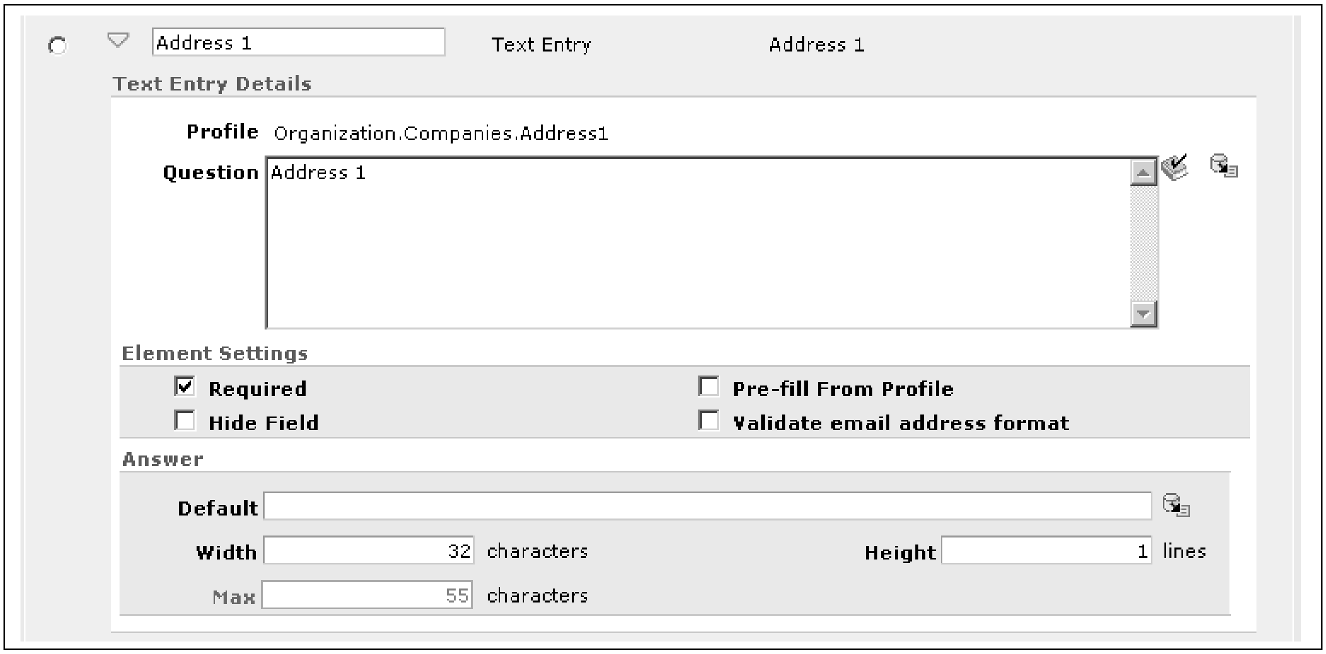
When designing questions, you should be aware that certain fields are needed by the system in order to properly update individual and organization profile attributes. To ensure proper updates, you should make these attributes required when designing your web pages.

- 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 24.

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 Address 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 checked, 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 box is checked and Required is not checked, null values are allowed in the field. You must check 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.

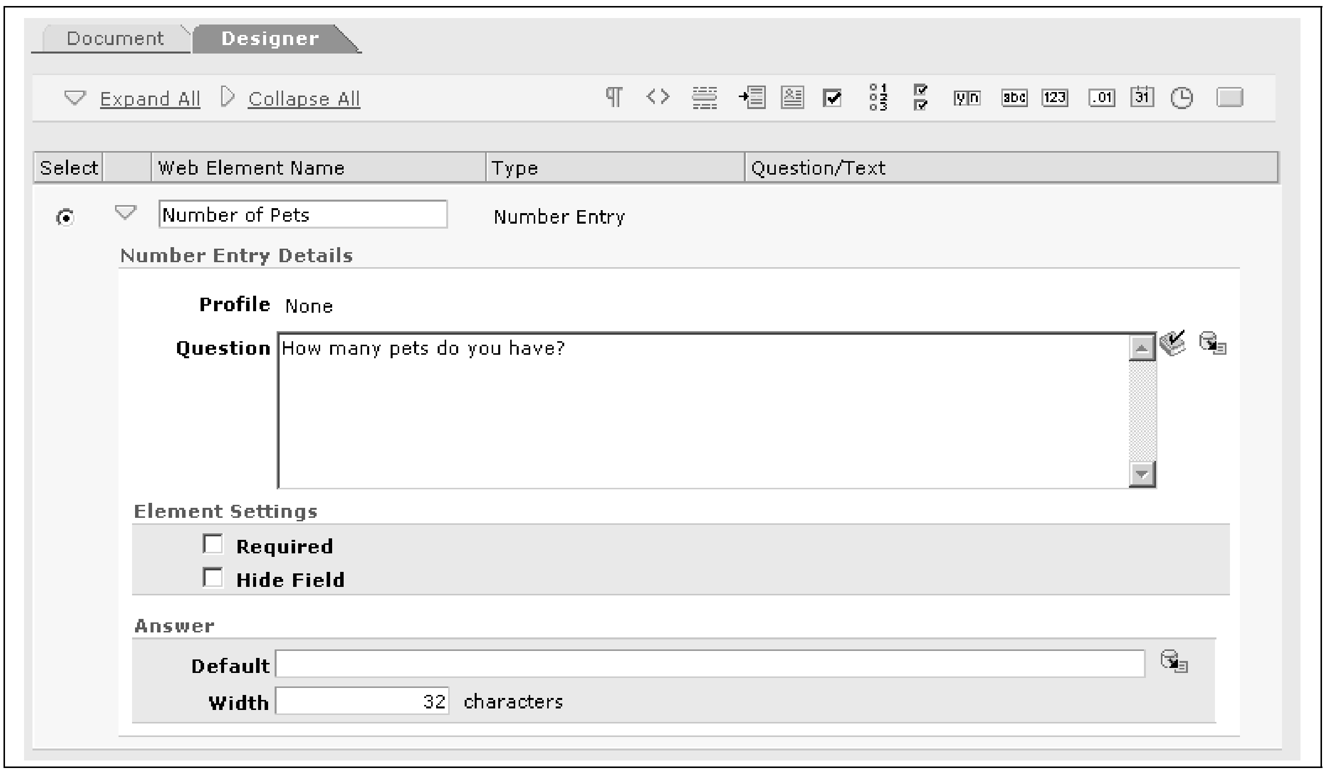
Height Specify the number of lines of text in the entry field. The default is 1.

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.

Number Entry Questions

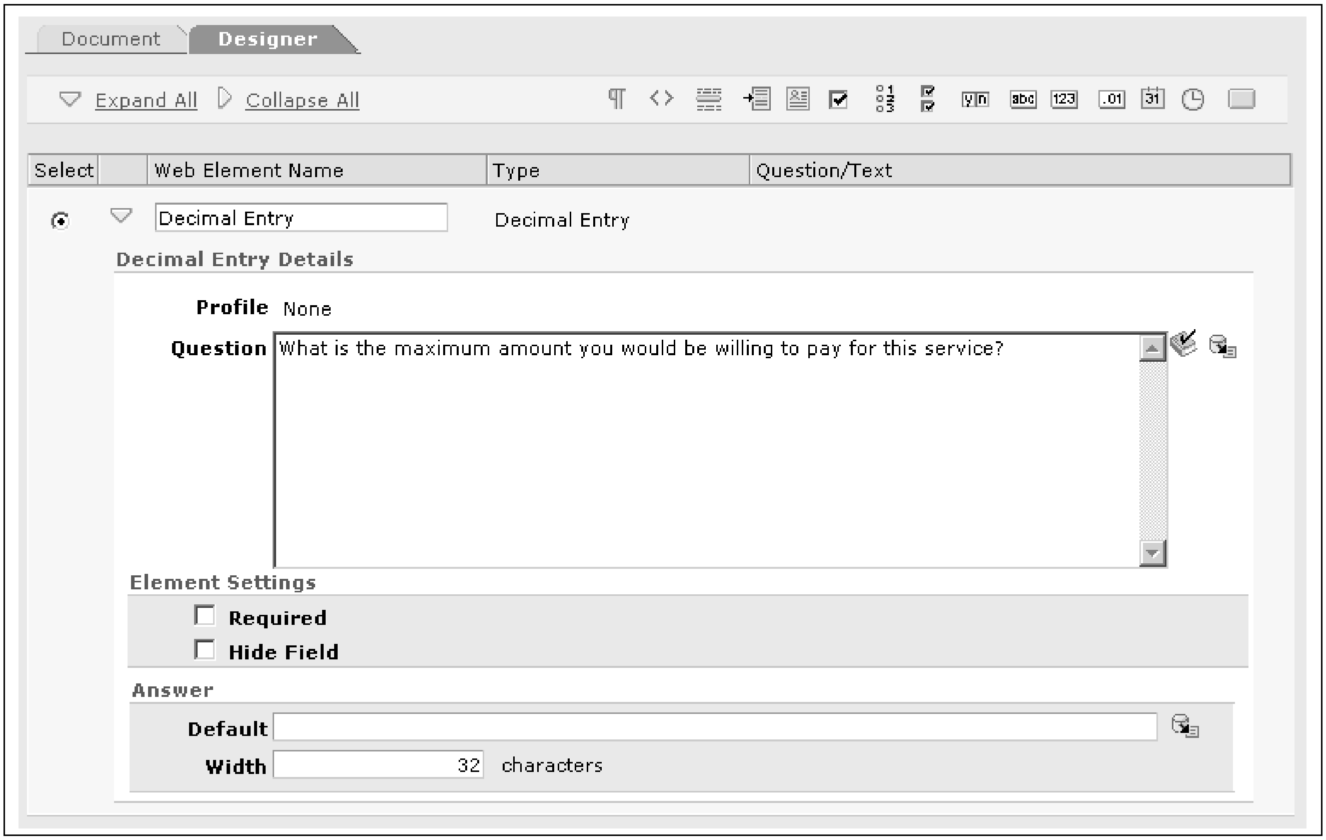
A Number Entry Box allows you to include a question with an entry field where the respondent can enter a whole number.



Document Designer - Number Entry box

Decimal Entry Questions

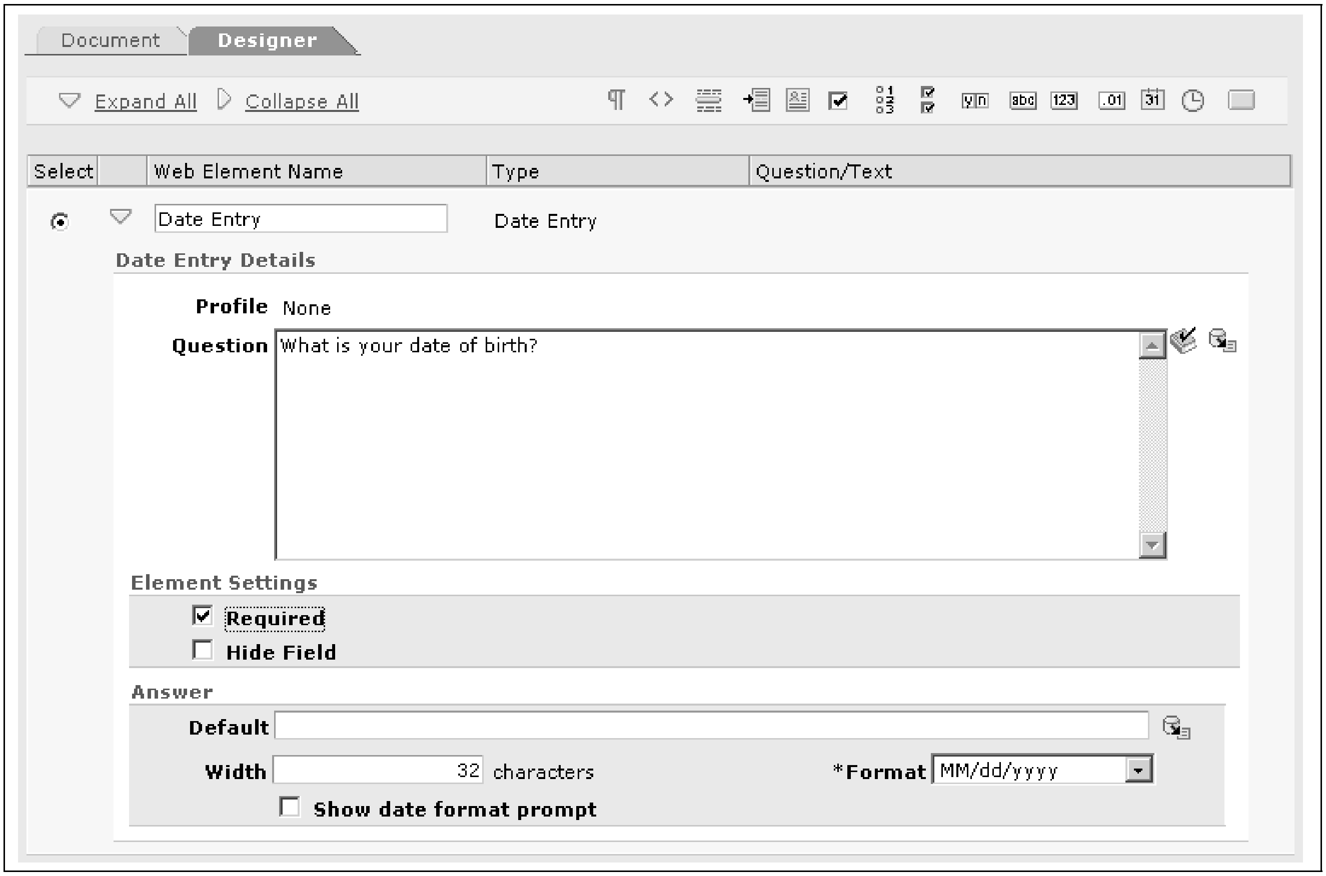
A Decimal Entry Box allows you to include a question with an entry field where the respondent can enter a number with a decimal point. This item uses the same dialog box as the Number Entry box, shown previously.



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.

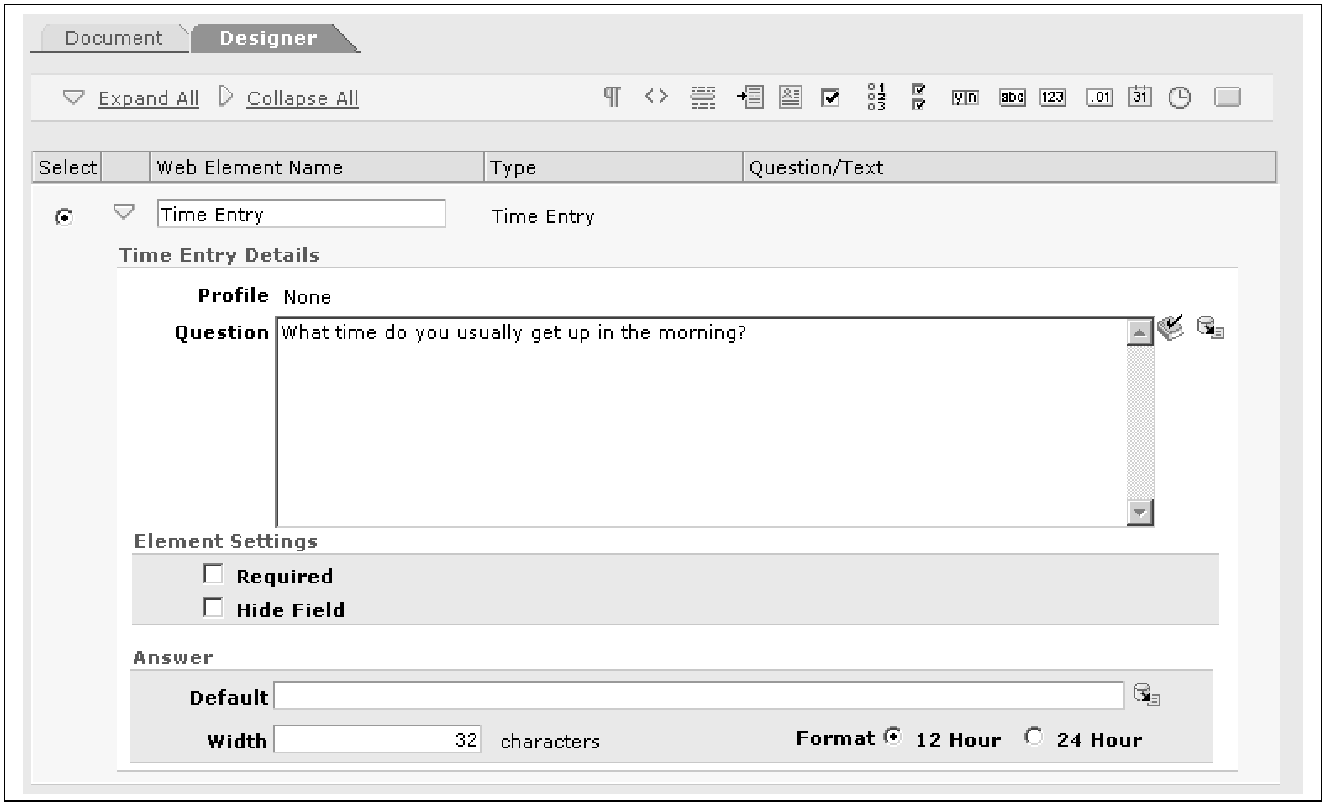


Document Designer - Date Entry box

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.

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

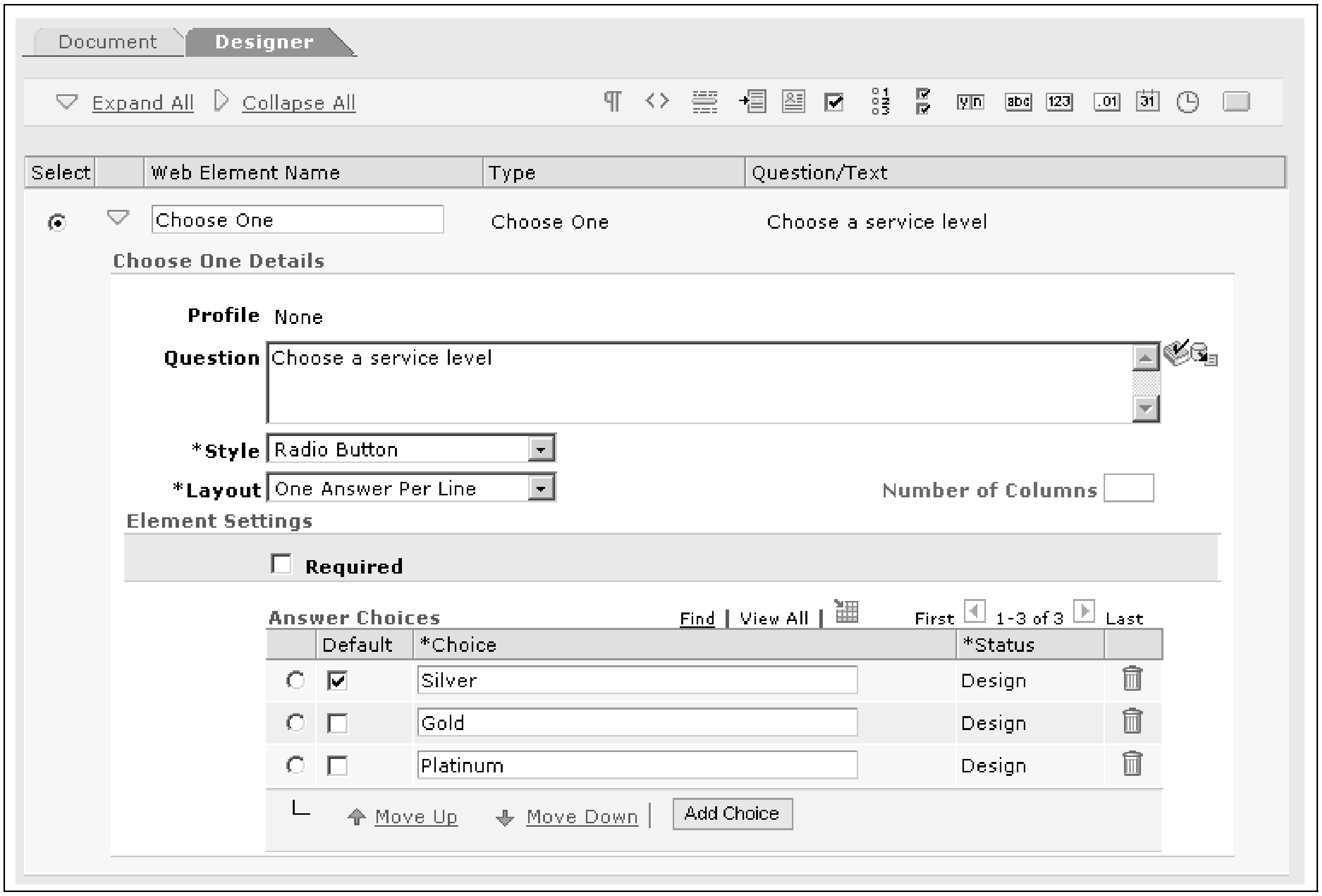
For the Choose One and Choose One with Rating question types, the answer list is where you specify the choices that will be made available to the respondent.

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.

Required
Select this check box if the respondent must answer this question before being allowed to submit the form.

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.

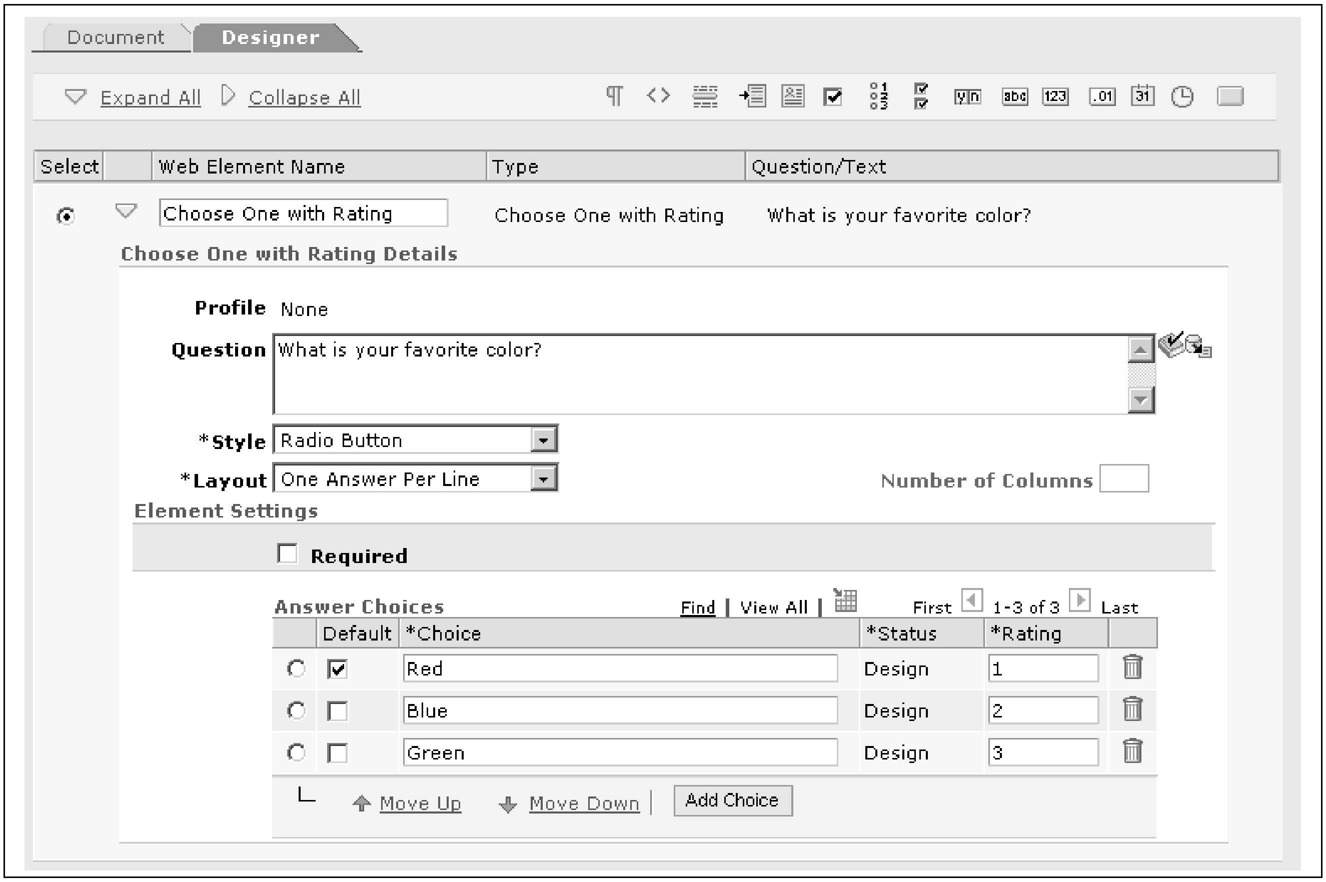
Add Choice
Click this button to add another answer choice row.

See Chapter 6, “Designing Web Documents,” Adding Merged Content, page 95.

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).



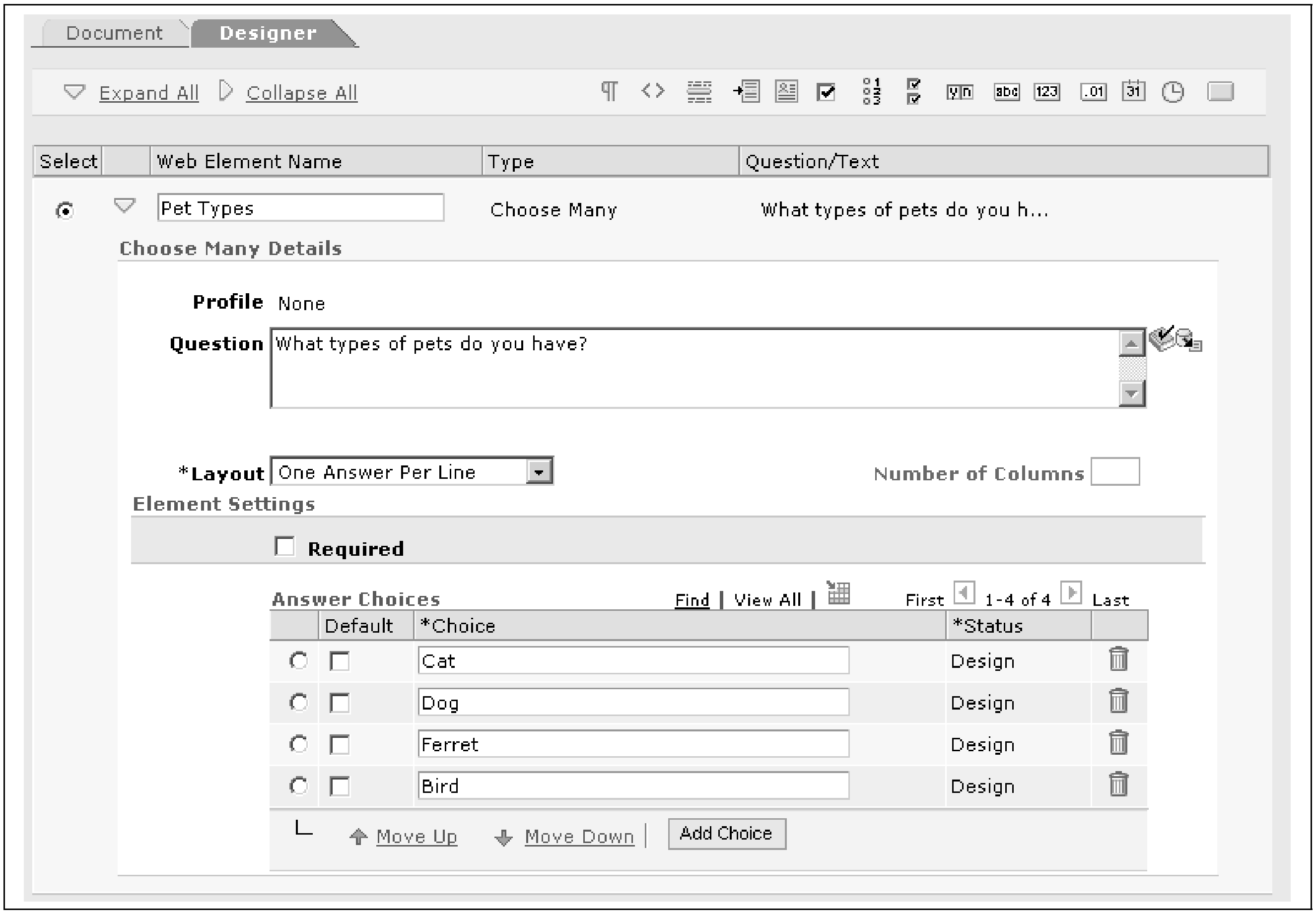
Document Designer - Choose One with Rating

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.



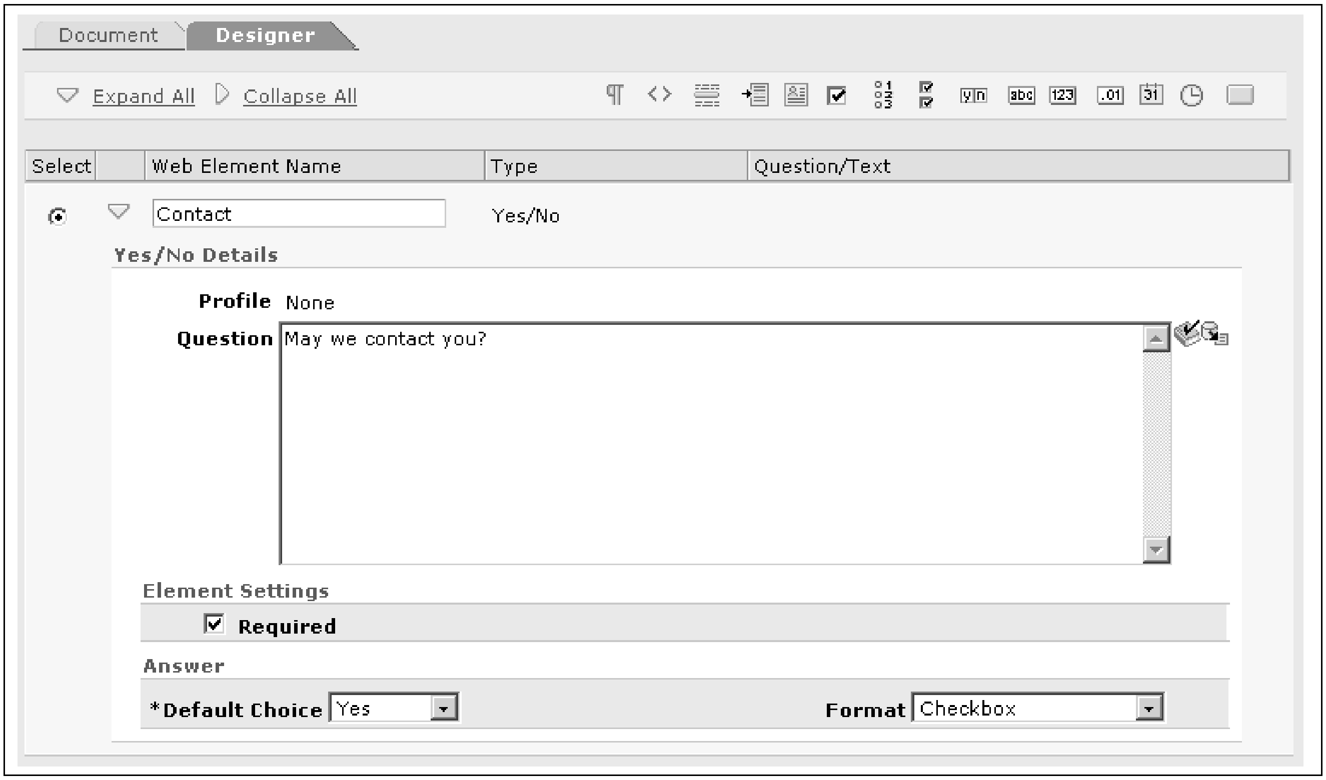
Document Designer - Choose Many

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

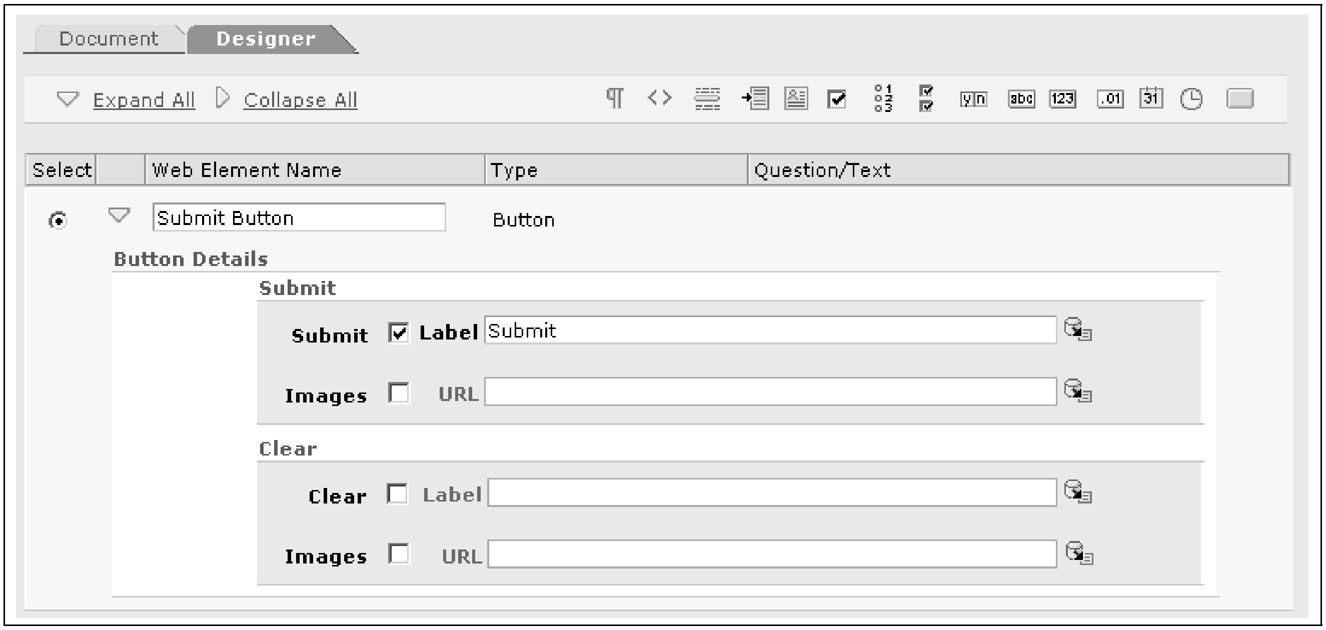
Default Choice Select Yes or No as the question's default answer choice.

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.

Format Choose a format for the question: Radio Buttons or Checkbox.

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.

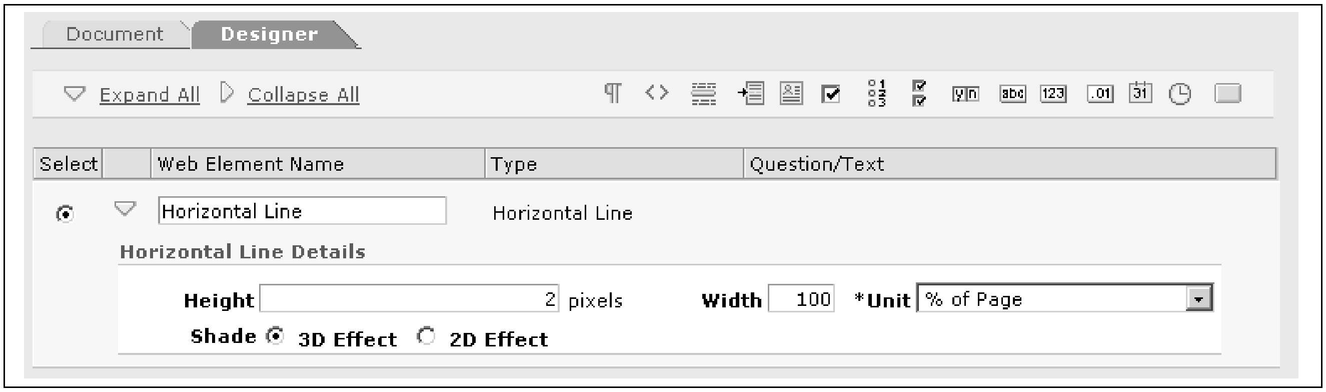
See Also

Chapter 6, "Designing Web Documents," Adding Merged Content, page 95

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.



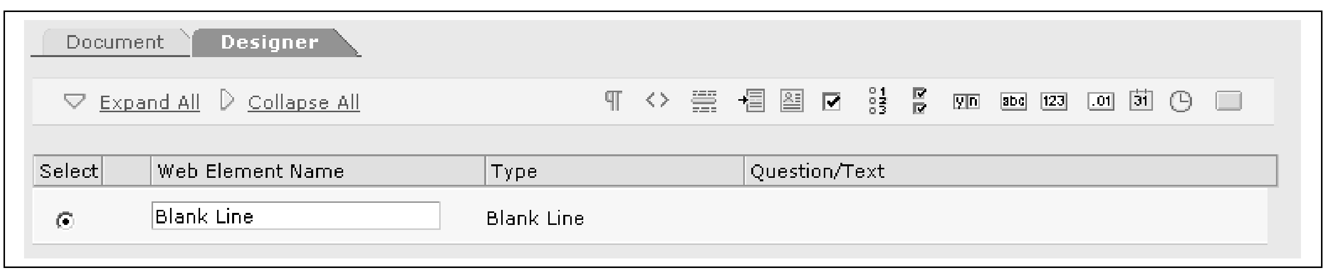
Document Designer - Horizontal Line

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.
Horizontal Width	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.

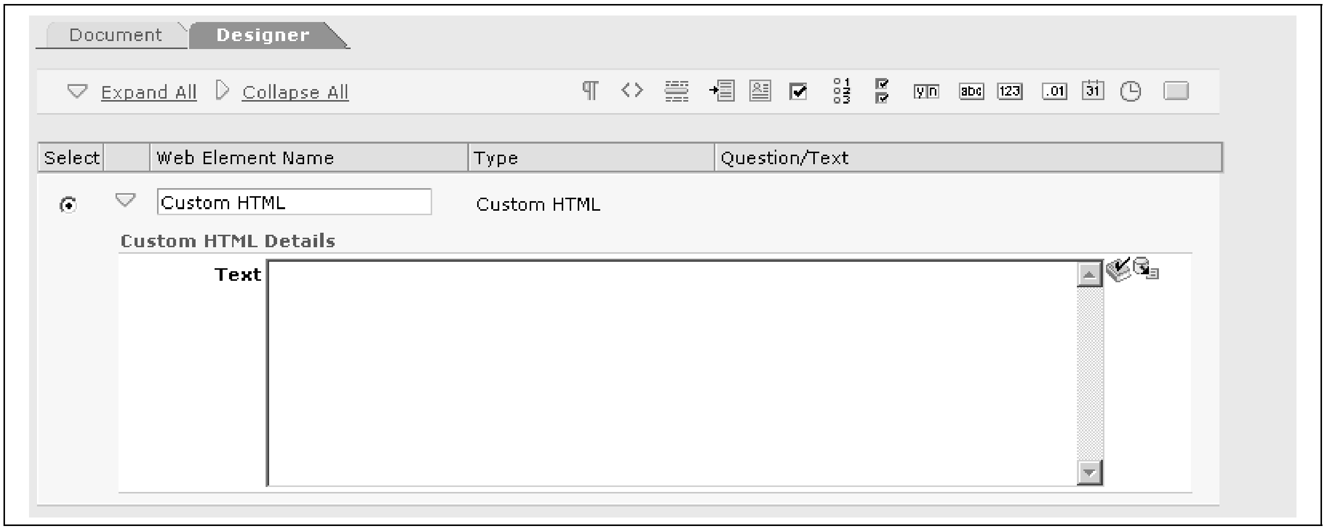
To insert a blank line into your web document, click the Blank Line button.



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 51

Chapter 6, “Designing Web Documents,” Importing Web Documents, page 101

Adding a Profile Field

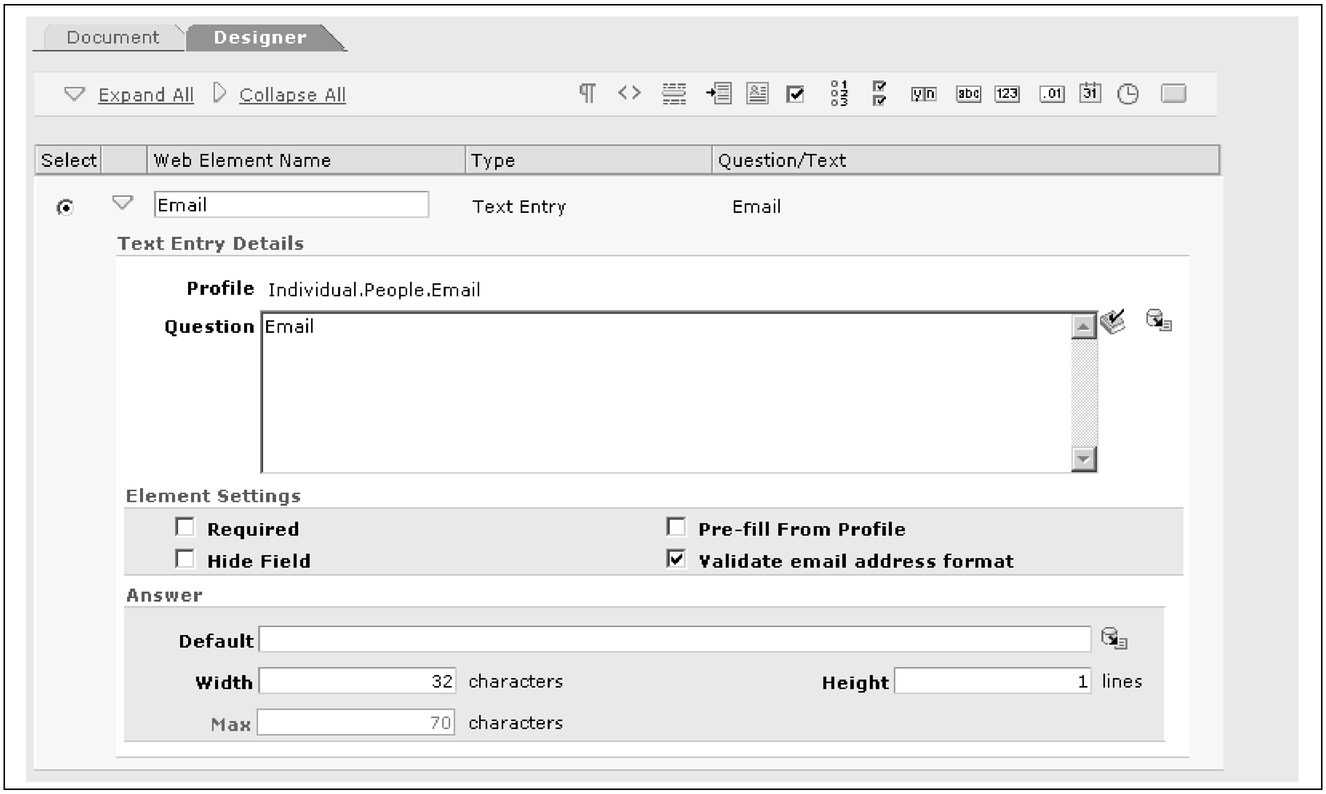
Document fields can be created based on profile fields that are marked as profile questions and have a status of Active in the profile definition. These document fields inherit all the attributes of the profile field.

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 datatypes (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. Note that this Refresh button is not the same as the Refresh button on the toolbar.

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.



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. Click the Apply button for the desired attribute.

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

4. 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 Address	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 8.9 Marketing Applications PeopleBook

Chapter 6, "Designing Web Documents," Building Entry Questions, page 81

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:

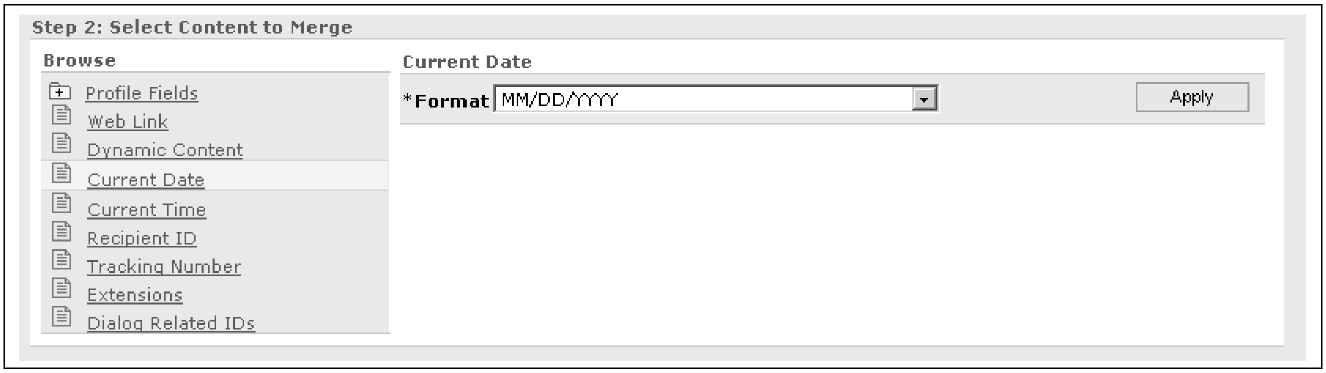
1. Insert the field into the web document.
2. At the location where you want the merge content to appear, enter a pair of curly braces ({}) in the text box.
3. After you have entered all the tags for merge content you want to include, click the Merge button.

   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.

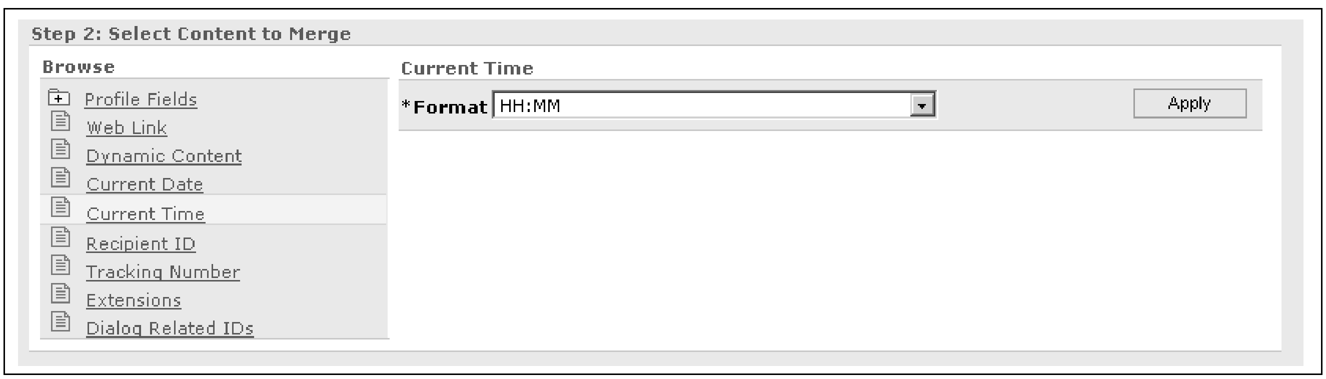


Merge content - Current Date

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.

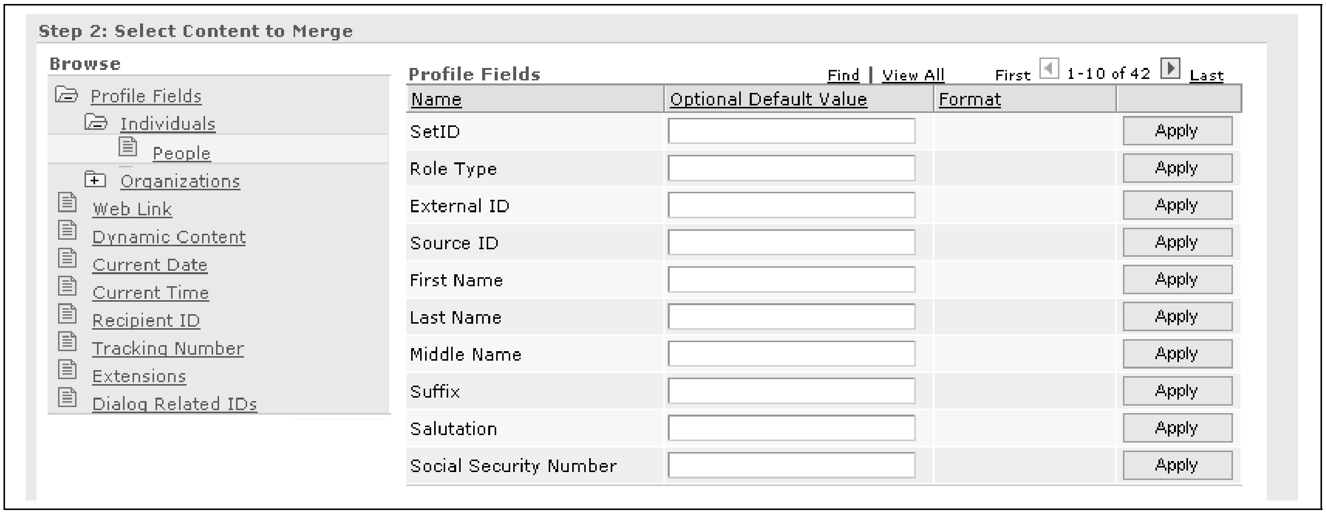
Adding a Tracking Number

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

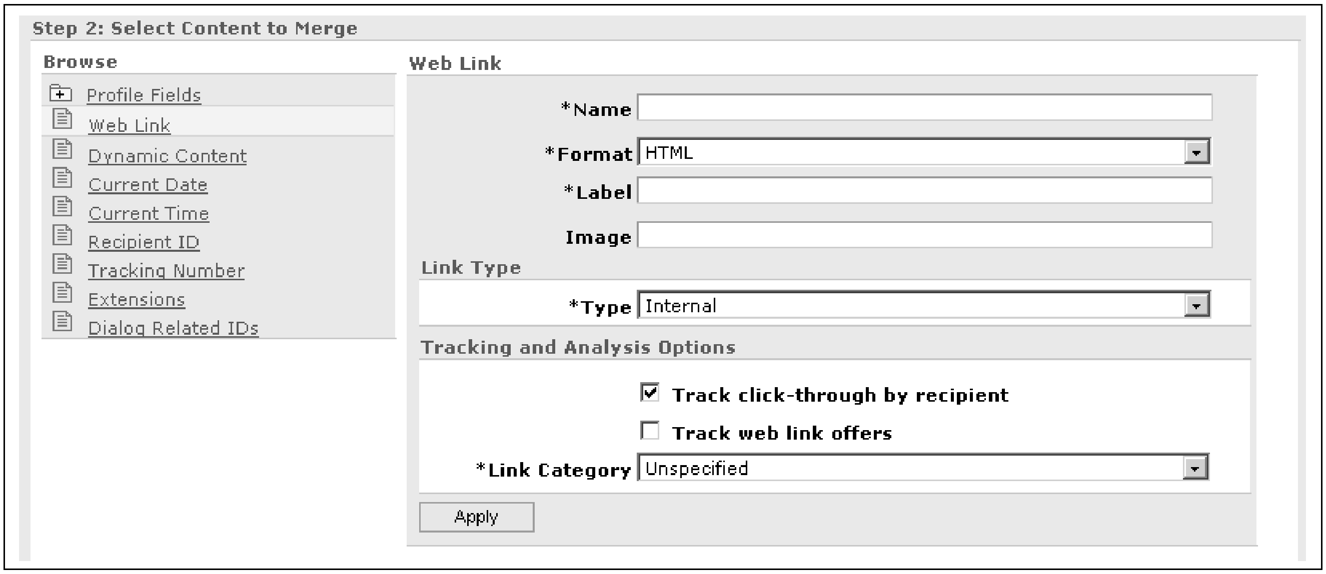
Note. The following characters may not be used as any part of a profile definition including field values, profile name, or audience name: ampersand (&), apostrophe or single quote (’), double quote ("), greater than (>), less than (<), or period (.).

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.
3. Click Apply.



Merge content - Web Link

See Chapter 5, “Designing Email Documents,” Adding a Web Link to an Email Document, page 64.

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.
3. Click Apply.

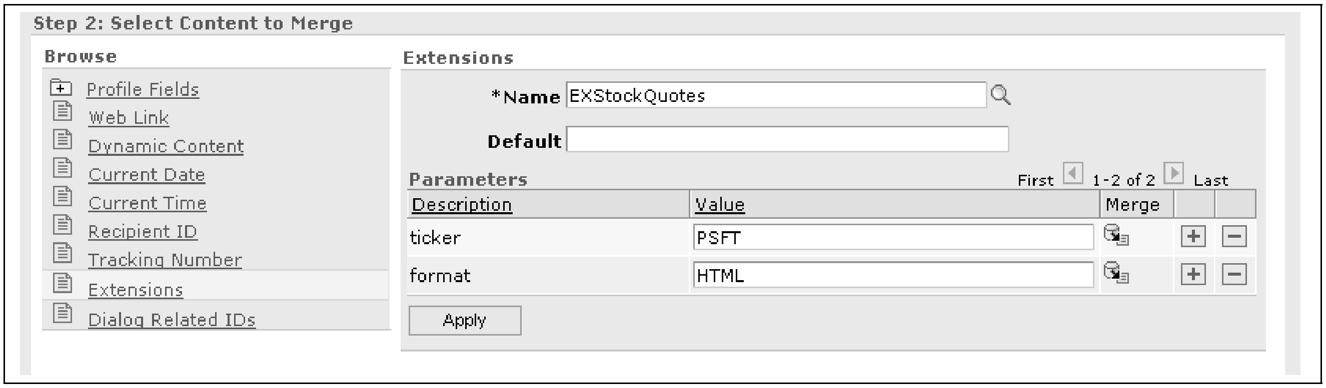
See Chapter 5, “Designing Email Documents,” Adding Dynamic Content to an Email Document, page 67.

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.



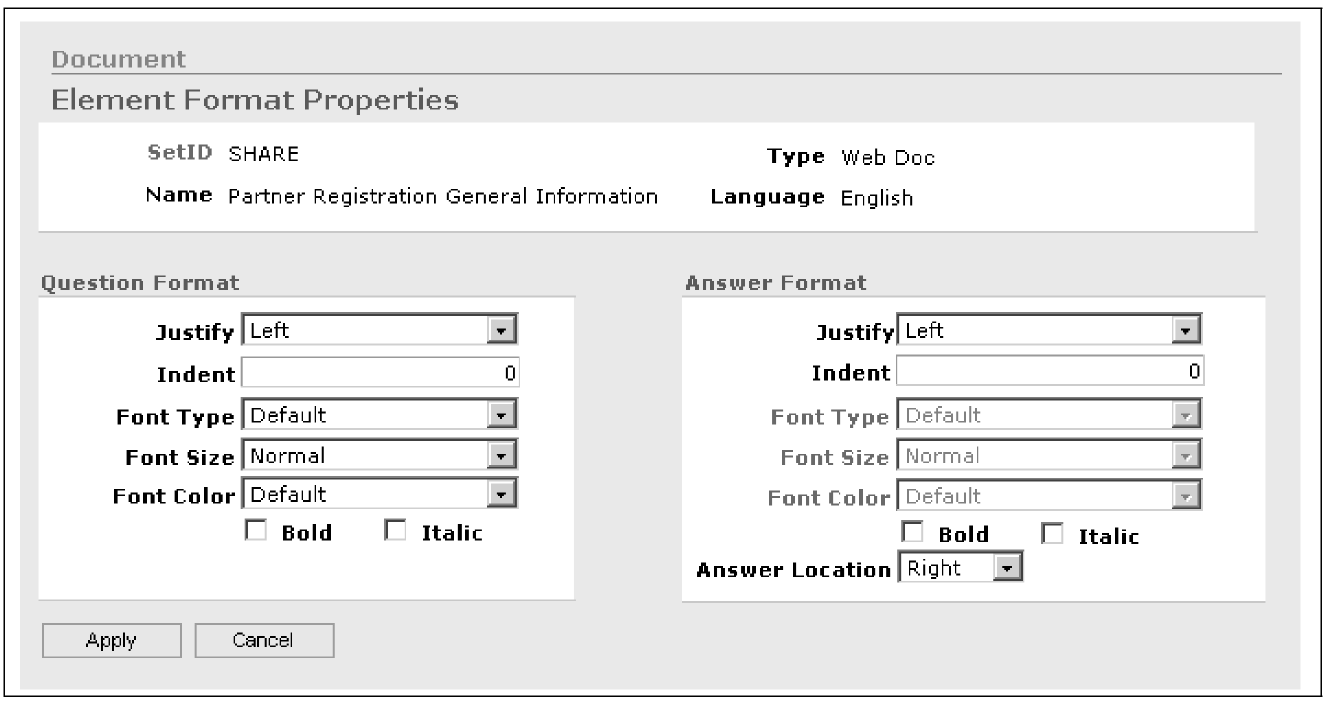
Merge content - Extensions

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.

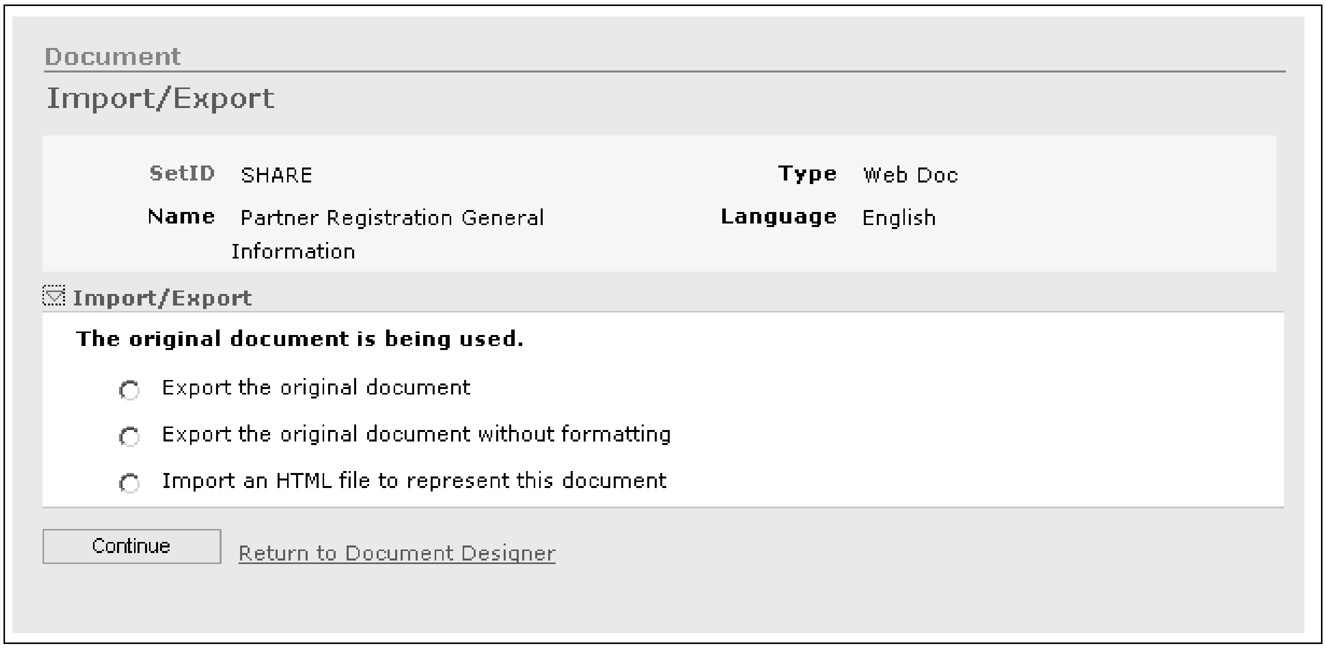
Note. Importing a file will override any previously imported file. Therefore, discarding the second imported file will not revert to the first import file, but rather to the last saved document prior to any imports.

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

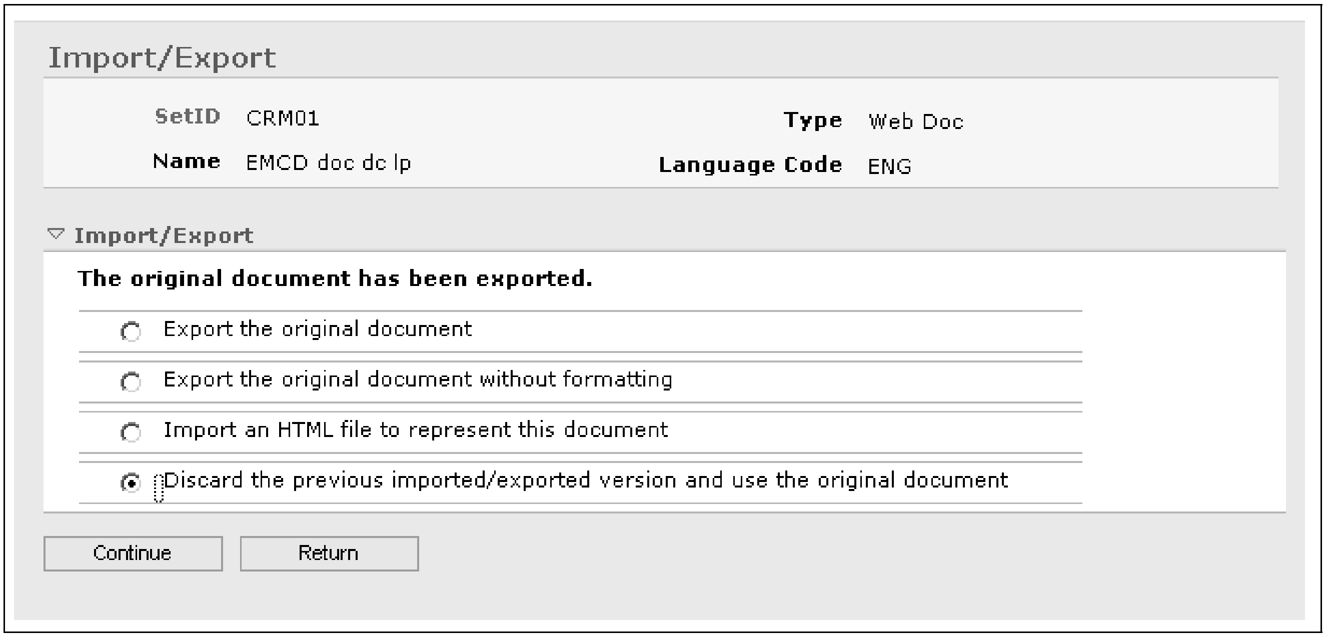
You can export the current web document to a file, allowing you to make cosmetic changes using a third-party tool. After making the changes, you can import the document back into the system, retaining any inserted document fields and profile fields intact in addition to adding the cosmetic HTML. When 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.



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.

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 21

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 or Web Link Promo.

- 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 the external system can reach the dialog (either by a Landing Page or a Web Link Promo).

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 CRM Analytics.

See *PeopleSoft Enterprise CRM 8.9 Application Fundamentals PeopleBook*.

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 27.

Repeating Date/Time Trigger

You can define repeating version of a 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 Chapter 11, "Using the Control Center," page 159.

External Event Trigger

An External Event Trigger is another way to start a process. It can lead to a Web Link Promo or a Landing Page. When it connects to a Web Link Promo, it serves as a placeholder for the Web Link Promo action. When it connects to a Landing Page, the Dialog Link Report generates a URL for it. External systems can access the External Event Trigger through this URL. Individual ID and Organization ID can be passed as addition parameter *p2*. For security reasons, parameter *p2* is encoded in the same format as the magic number. Java and PeopleCode APIs are available to encode Individual ID and Organization. Both Individual ID and Organization ID are encoded together in the same parameter. Only known individuals in the Basic profile should be passed in. The Organization ID passed in should be the Organization ID linked to the individual. If the individual's organization is different from the organization passed in, the passed-in Organization ID is ignored. When the External Event Trigger is executed, the Landing Page is served for the individual.

See Also

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

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.

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.

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

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 Chapter 17, “Using Extensions,” page 221.

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 Chapter 6, “Designing Web Documents,” page 73.

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. If another Final Page exists, only the last Final Page action Online Marketing encounters in the flow without additional input from the respondent is then shown. The flow then continues with the subsequent steps in the flow.

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).

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. 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 three basic uses:

- Conditional Update. It allows you to conditionally update a value in the database. When you use a profile attribute 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.

- 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

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.

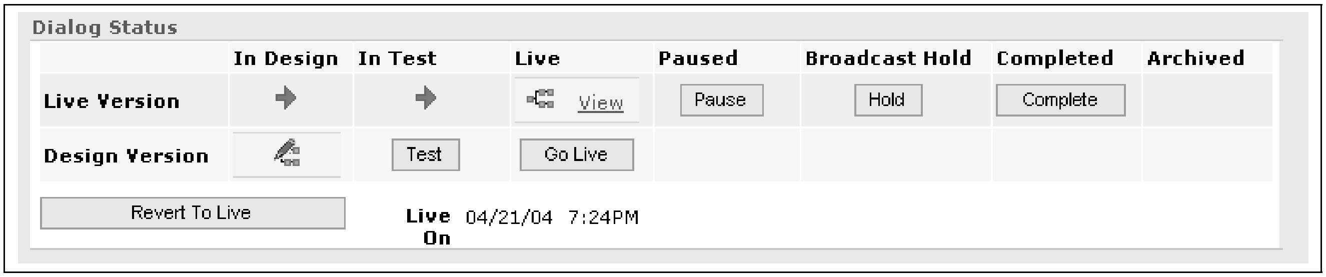
Online Marketing uses the following dialog statuses:

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 8.9 Marketing Applications PeopleBook

Chapter 3, “Designing Online Dialogs,” Selecting Target Audiences for a Dialog, page 44

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.

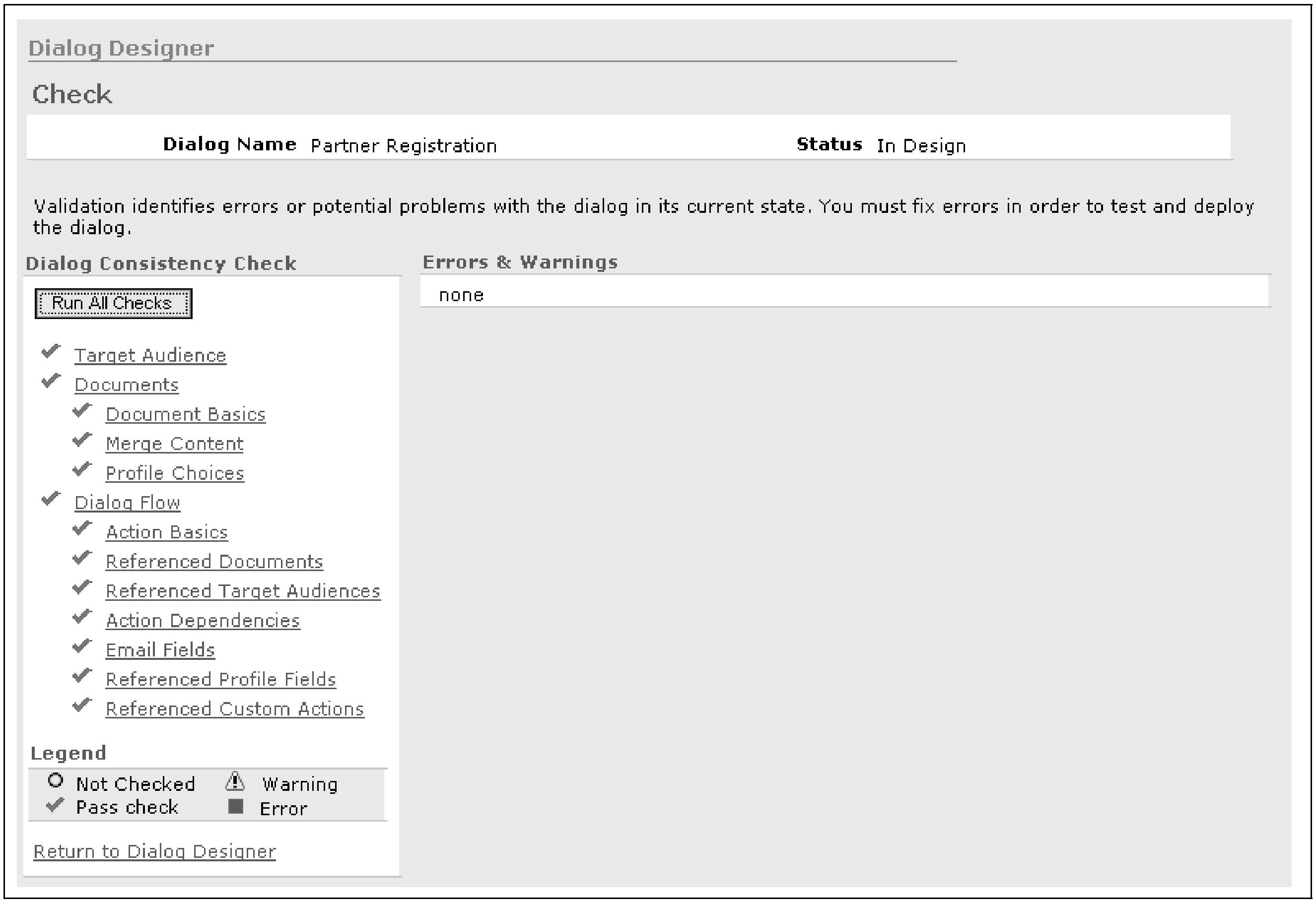
After you have performed these tasks, you can activate the dialog, which simply involves changing the state of your dialog to Live.

See Chapter 8, “Deploying and Managing Online Dialogs,” Checking Online Dialogs, page 116.

See Chapter 8, “Deploying and Managing Online Dialogs,” Going Live with an Online Dialog, page 121.

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 Check page

The results of the tests are indicated by three colors: green, yellow, and red. Green indicates pass, Yellow indicates a warning, and Red indicates an error that will prevent your dialog from being activated.

When the tool indicates any warnings 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.

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.

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.

   If any warnings 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.

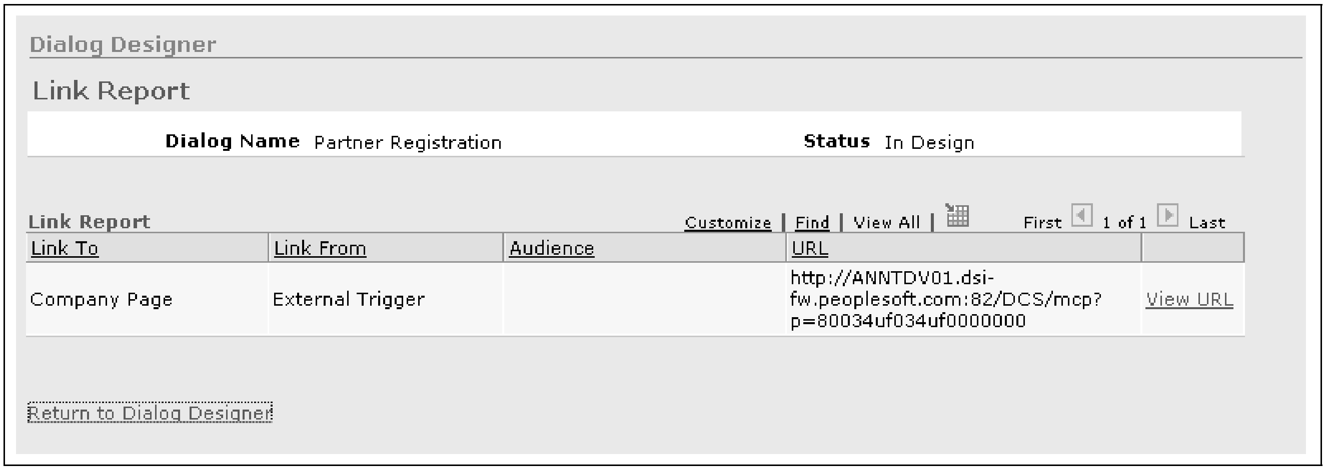
Since a dialog uses different audiences while being tested, the URLs generated from the Testing state will not access the web pages of a live dialog. The URLs to be used with a live dialog can be generated either before or after testing the dialog, from one of the following states: In Design, Broadcast 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.

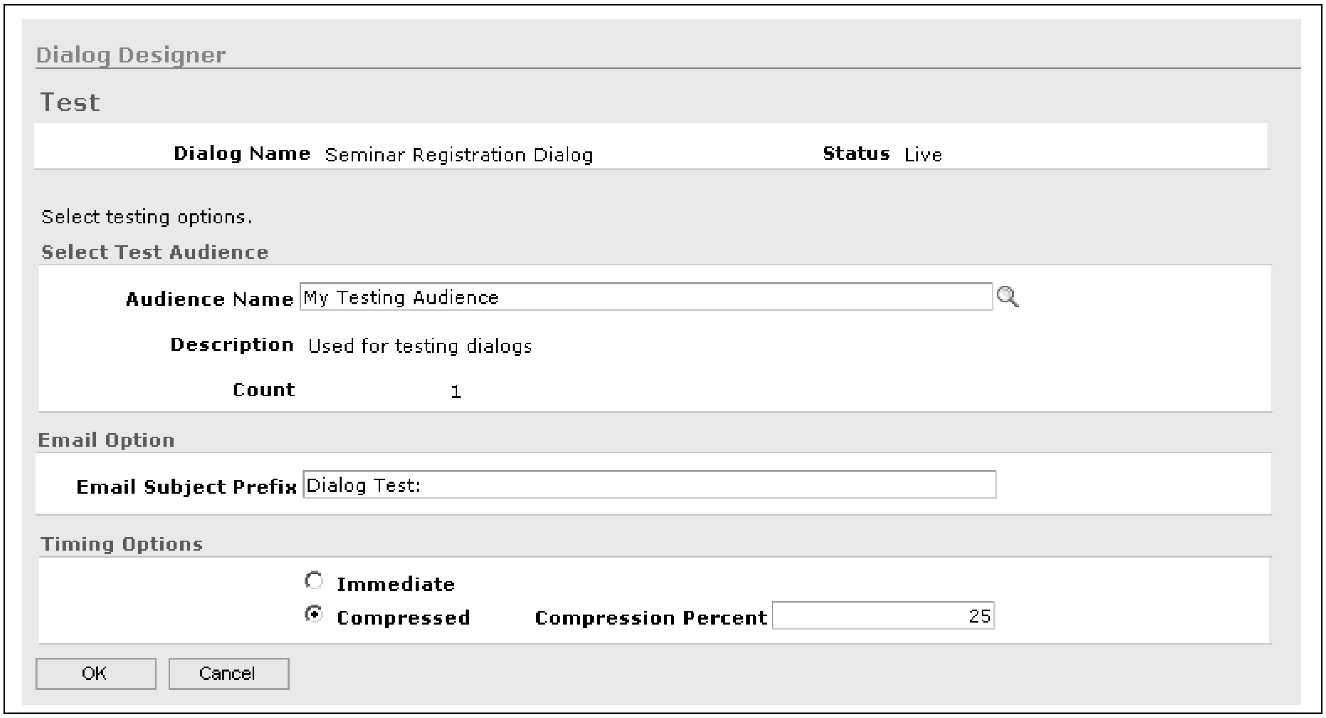
URL — The URL link generated for the document. Each of the URLs specified must be provided to the person handling the placement of that web link promo or External Event Trigger.

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

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   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.

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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 immediately 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.

See Chapter 8, "Deploying and Managing Online Dialogs," Going Live with an Online Dialog, page 121.

See Chapter 8, "Deploying and Managing Online Dialogs," Generating URLs for Web Link Promos and External Event Triggers, page 118.

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

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. 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

Chapter 2, "Setting Up PeopleSoft Online Marketing," Setting Up Mailboxes, page 15

Chapter 13, "Email Response Processor," page 183

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
- Re-activating 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.
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 re-activated, the milestone is triggered immediately after the dialog is re-activated. • 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 re-activated, 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 complete 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 re-activated, 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 re-activated.

To re-activate 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.

CHAPTER 9

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 an overview of how Event Wire works, and includes the following sections:

- Understanding Event Wire
- How Event Wire Works
- Sample Event Wire Implementation
- Creating Dialogs that use Event Wire
- Deploying Dialogs

Understanding Event Wire

Online Marketing Event Wire allows Online Marketing to receive data from external systems in real time to measure the effectiveness of dialogs, to trigger a dialog, or to update profiles 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 just as if a user entered information on a web page and clicked a Submit button on the page.

To use Event Wire, a dialog designer and a technical implementor 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 implementor, who programs the external system to make the appropriate calls to Event Wire.

Event Wire provides the following capabilities to Online Marketing:

- Event Wire “closes the loop” with external systems, allowing you to automatically receive data obtained or generated by the external system.
  - Track purchases that result from click-throughs from a dialog.
  - 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. Profile information saved can be used in other dialogs.
- Event Wire can trigger dialogs in real time, allowing you to design dialogs that perform specific actions as a result of the input from an external system.
  - Send follow-up email offers to customers as a result of their external system activity.

- Present 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. But because the external system must be able to submit data to the dialog, certain information about the dialog must be provided to the external system, such as the URL of the entry point, the names of the fields on the Landing Page, and default field values, if any.

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. These in turn must point to a Landing Page or Standalone Page for a specific dialog. A Landing Page allows Event Wire to trigger specific actions in a dialog and/or to submit new profile data to be stored in the CRM database. 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 be displayed to the customer. Whether a dialog page is displayed to the customer is determined by how the technical implementor calls Event Wire.

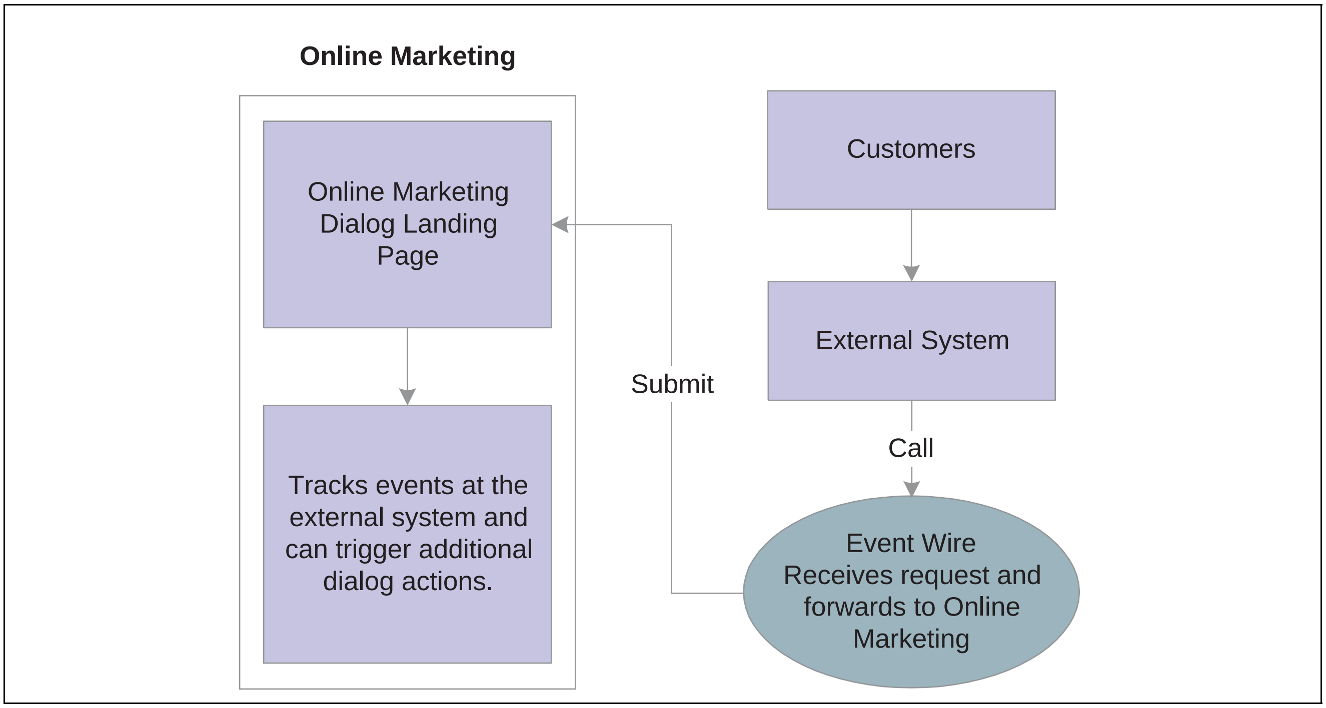
How Event Wire Works

There are 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 can 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 goes to an e-commerce site, makes a purchase, and that purchase information along with customer information is passed to Event Wire and Online Marketing to track the purchase and make a subsequent offer to the customer.



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.)

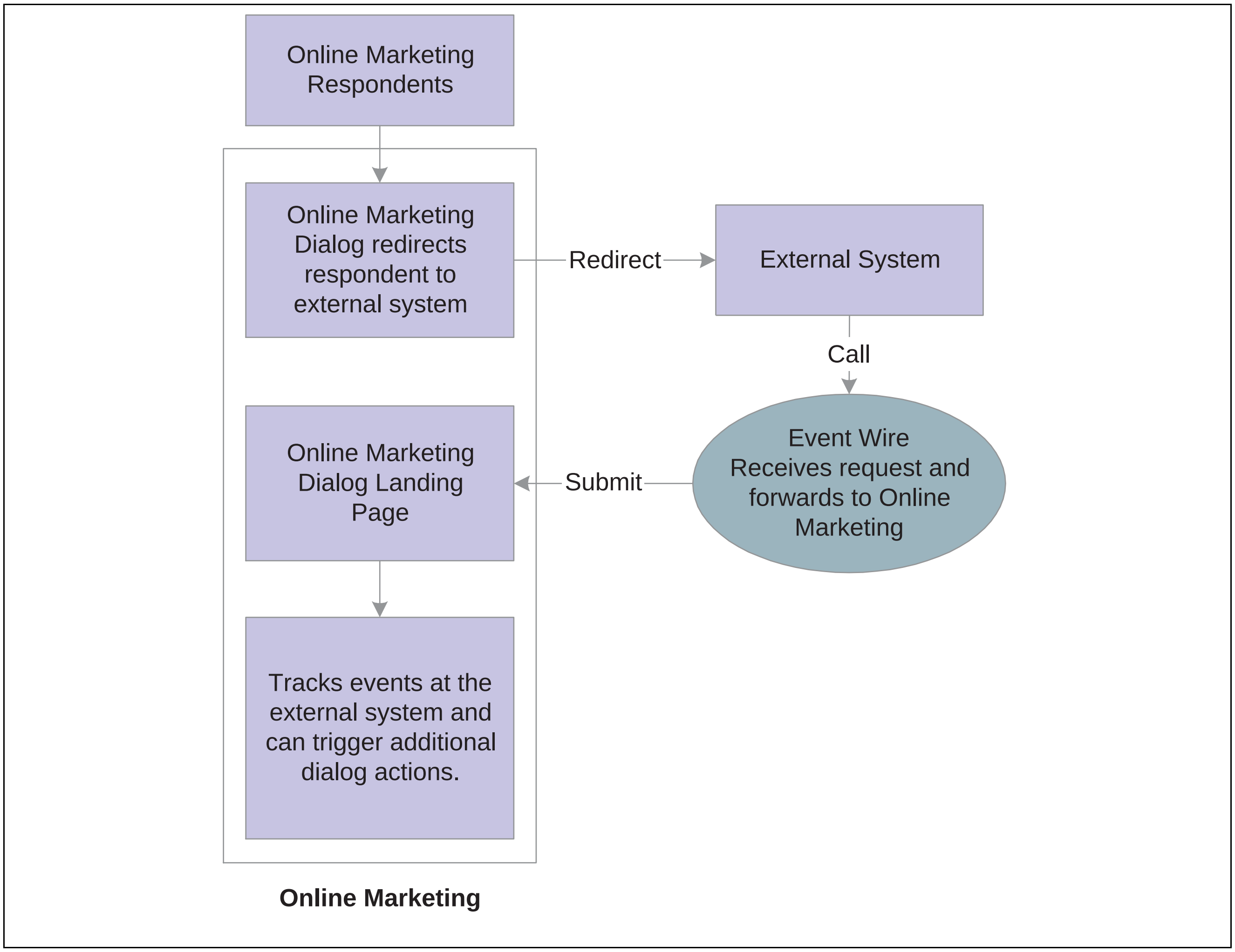
Event Wire fills in the fields on the Landing Page with the information provided, and submits the page. Online Marketing receives the information and stores it in the database.

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 is not displayed 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.



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:

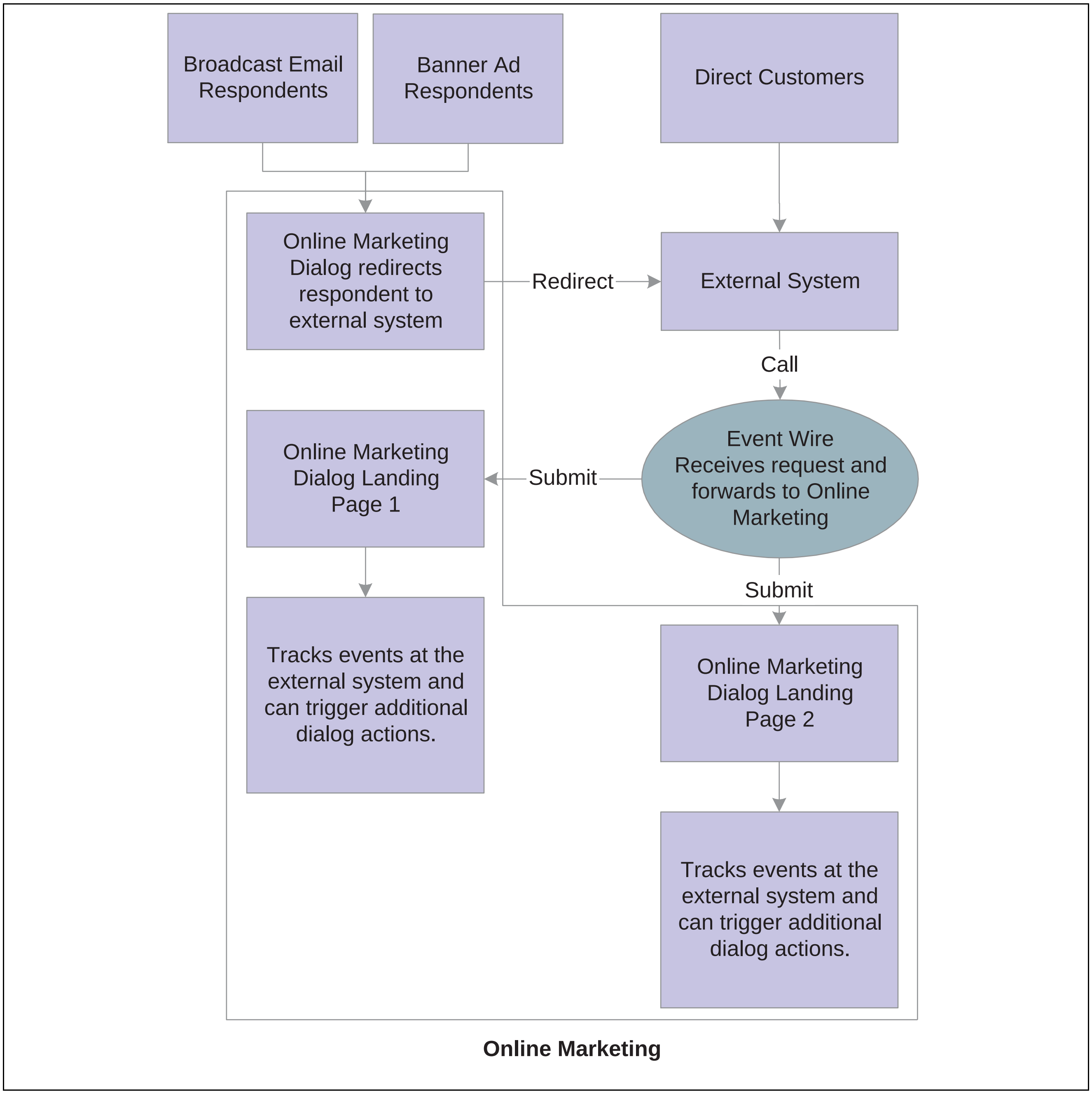
- You must create a Broadcast Email with an offer to attract respondents to the external system or place a banner ad.
- You must create a Standalone Page to redirect the respondents to the external system.
- Respondents to the Broadcast Email are automatically redirected to the external system.
- The dialog can pass information to the external system via the redirect command, such as the specific Landing Page to use in the call to Event Wire, and any information in the CRM profiles about the respondent (to be used by the external system).

Customers can Originate at Both Sources (Scenario 3)

This scenario combines scenarios 1 and 2. Customers can originate at a dialog or at the external system. The following figure shows the various sources where customers can originate. It also shows that an external system can use multiple Landing Pages.

Note. This scenario uses two Landing Pages simply 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).



Event Wire - Scenario 3

Sample Event Wire Implementation

This section provides an example of how to create a dialog that sends respondents to an external system and then receives the results of the external activity at the external system.

In this example, a merchant wants to send a $5 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 coupon good for the 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 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 discount coupon.

Creating this dialog is just like creating any other dialog. The difference is how the web pages are used in the dialog (redirecting the respondent to an external system, and accepting data from the external system).

Creating the Web Documents

In our example, 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, which can be displayed to the customer.

See Chapter 6, "Designing Web Documents," Creating and Working with Web Documents, page 74.

See Chapter 9, "PeopleSoft Online Marketing Event Wire," How the External System Obtains the Landing Page URL, page 137.

Programming the External System

Before this dialog can be deployed, the technical implementor 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 can be displayed to the customer.

See Also

Part 3, "PeopleSoft Online Marketing Integration," page 195

Testing and Deploying the Dialog

After designing this dialog, you need to test it to ensure that it performs as intended. You (or the technical implementor) 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, “PeopleSoft Online Marketing Event Wire,” Deploying Dialogs, page 140

Chapter 8, “Deploying and Managing Online Dialogs,” page 113

Creating Dialogs that use Event Wire

This section provides the dialog designer with information about how to design dialogs to work with an external system.

Dialogs that work with Event Wire are created in the same manner as any other dialog. The only differences are that in some cases the Event Wire dialog will pass information to the external system (via a redirect page), and in all cases the external system will submit 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 which then in turn points to a Landing or Standalone Page.

Before designing a dialog that uses Event Wire, the specific needs of your dialog must be evaluated. In particular, you need to consider the following:

- How will customers enter the external system (directly or via the dialog)?

  If customers are to 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 will you pass the Landing Page URL to the external system (passed via Online Marketing redirect page or programmed into the external system)?

  If customers are entering the external system via a dialog, then you can include the URL in the redirect command to the external system. Your technical implementor can also pass the URL using a cookie or set the URL directly in the external system.

- What information about the respondent do you want to pass to the external system (tracking number, other profile information)?

  If customers are entering the external system via a dialog, then you can include any profile information about the respondent in the redirect command to the external system. But you will only want to do this if you need the profile information in the external system (this is not required by Event Wire).

- Will the same dialog be used to redirect to the external system and receive the data from Event Wire?

  This determines how many dialogs you must design, test, and launch.

- How will Online Marketing handle data passed to it from Event Wire (save in profiles or use only in results)?

  This determines the type of fields you want to include on your Landing Page, and the subsequent actions you want the dialog to perform.

- Do you want to set up default values in your Event Wire Landing Page? If you want to do this, you must inform your technical implementor.

These issues are discussed in more detail in the following sections.

After you have determined your needs, you can design the dialog (create profile attributes, target audiences, documents, and the flow), provide the necessary information to the technical implementor, who in turn can program your external system.

How Customers can Enter the External System

Will customers enter the external system directly, via a dialog, or both? If customers will enter via a dialog, then you will need to create a dialog that includes a Standalone Page containing a redirect command to the external system.

Entering the External System via 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 113.

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 implementor.

See Chapter 9, “PeopleSoft Online Marketing Event Wire,” Customers Originate at the External System (Scenario 1), page 130.

How the External System Obtains 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 implementor 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 redirects 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}">
```

where:

URL_of_external_ system	is the URL of the external system.
path_and_target	is the location of the application on the external system.
lpurl_param	is any parameter name you want to use to specify the Landing Page URL.
Merge_field_for_ link_to_landing_ page	is 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	is 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	is the value for each parameter. Typically this is the value of 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 something like:

```
<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, you choose 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 implementor may want to use another method of transferring information to the external system, such as a cookie. In this case, the implementor 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 is typically performed by your technical implementor.

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 118.

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.

See Also

Chapter 9, "PeopleSoft Online Marketing Event Wire," How the External System Obtains the Landing Page URL, page 137

How Online Marketing can Handle Passed Data

Online Marketing can store information it receives from the external system in the profile database, or simply 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 profile attributes to include on the Landing Page, which fields to make required, and which fields are included only for dialog analysis.

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 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 most necessary of required fields. This improves system performance.

Note. Be sure to leave necessary required fields marked 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 this can occur you must inform your technical implementor of the values, especially if any involve merge content.

Deploying Dialogs

After designing the dialog, you should perform the following tasks:

1. Test the dialog to ensure that it works properly.
2. Collaborate with your technical implementor to perform a manual test with Event Wire (entering specific commands in a web browser to ensure proper operation).
3. Collaborate with your technical implementor to test the dialog using your external system.
4. Go live with the dialog.

After designing an Online Marketing dialog, you need to check it to ensure that it performs as intended. You (or the technical implementor) should then check that the external system is placing the calls to Event Wire correctly.

You test your dialog by placing it in Testing state. While in Testing, you (or your technical implementor) 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. Event Wire calls are described in the PeopleSoft Online Marketing Integration Guide.

After you have verified 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 everything is still performing as expected.

Making Changes to a Live Dialog

After your Online Marketing dialog has been 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 implementor may need to modify the call from the external system, to use the correct fields.

PART 2

PeopleSoft Online Marketing Administration

Chapter 10
Mail Service Operation

Chapter 11
Using the Control Center

Chapter 12
Using WatchDog

Chapter 13
Email Response Processor

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

See Also

PeopleSoft Online Marketing Installation Guide

Chapter 11, "Using the Control Center," page 159

Appendix C, "Mailcaster States," page 255

Understanding Mailcasters

Three types of Mailcasters can be configured to work with Online Marketing:

- Small Job Only Mailcaster
- Small Job Priority Mailcaster
- Large Job Priority 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 P_QUEUED state. If the job is restarted it will revert to the P_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.

See Appendix C, “Mailcaster States,” page 255.

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.

See Chapter 11, "Using the Control Center," page 159.

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.

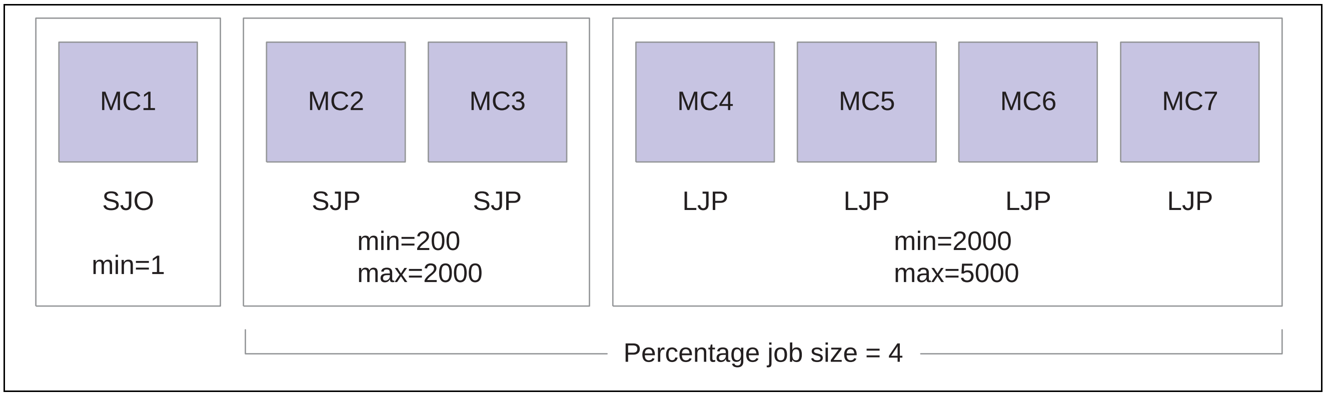
To specify a recovery expiration, set the jobRecoveryExpireInHours configuration parameter to the number of hours after which you no longer want mail jobs recovered.

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:

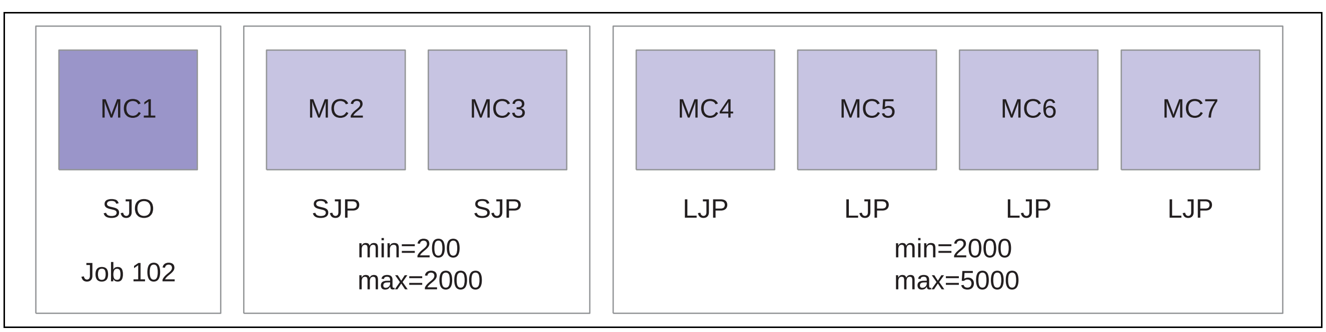
- Job 101 contains 11,000 emails, is_small_job is n, status is P_QUEUED.
- Job 102 contains 135 emails, is_small_job is y, status is QUEUED.
- Job 103 contains 200,000 emails, is_small_job is n, status is P_QUEUED.

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.

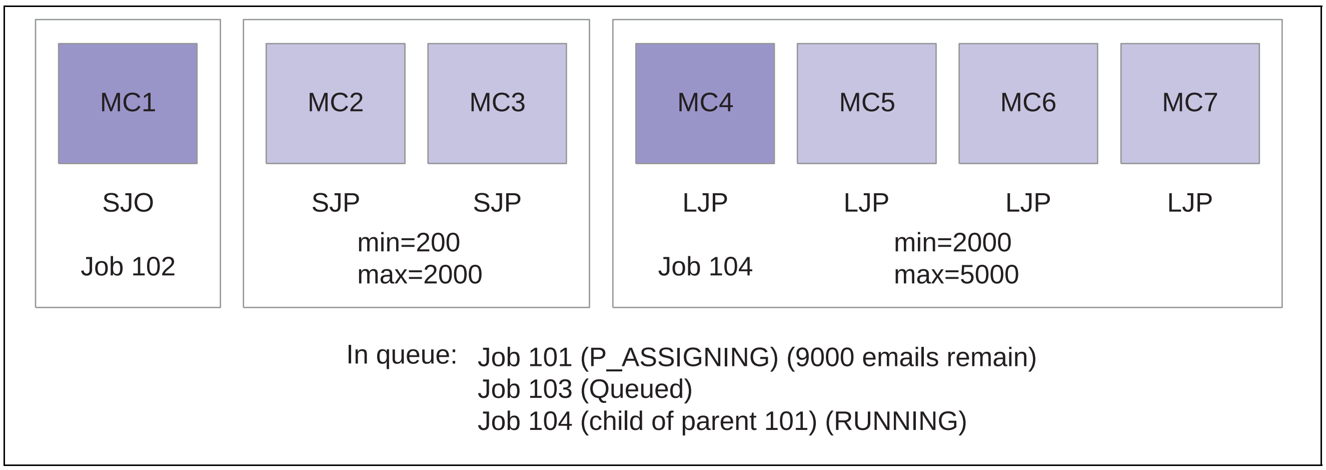
The queue now looks like this:

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.

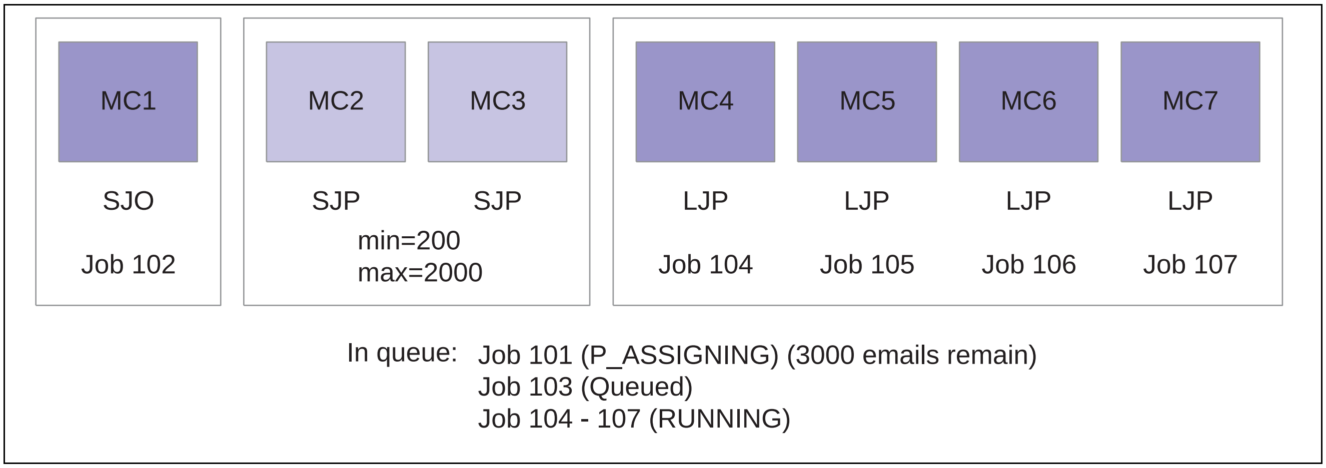
Mailcaster 6 creates child job 106 with 2000 emails.

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.

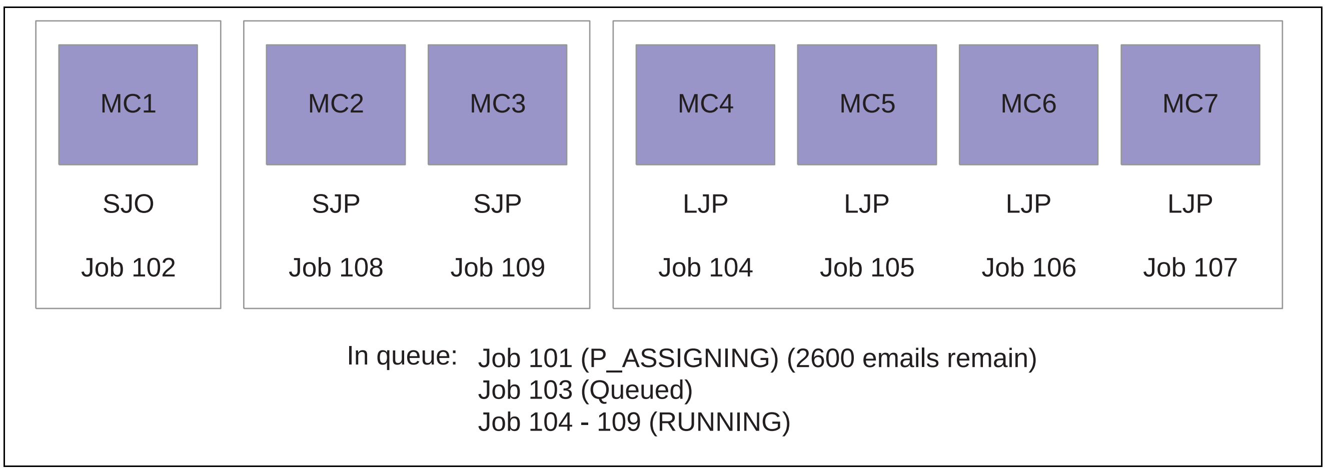


Mailcaster diagram 4

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.

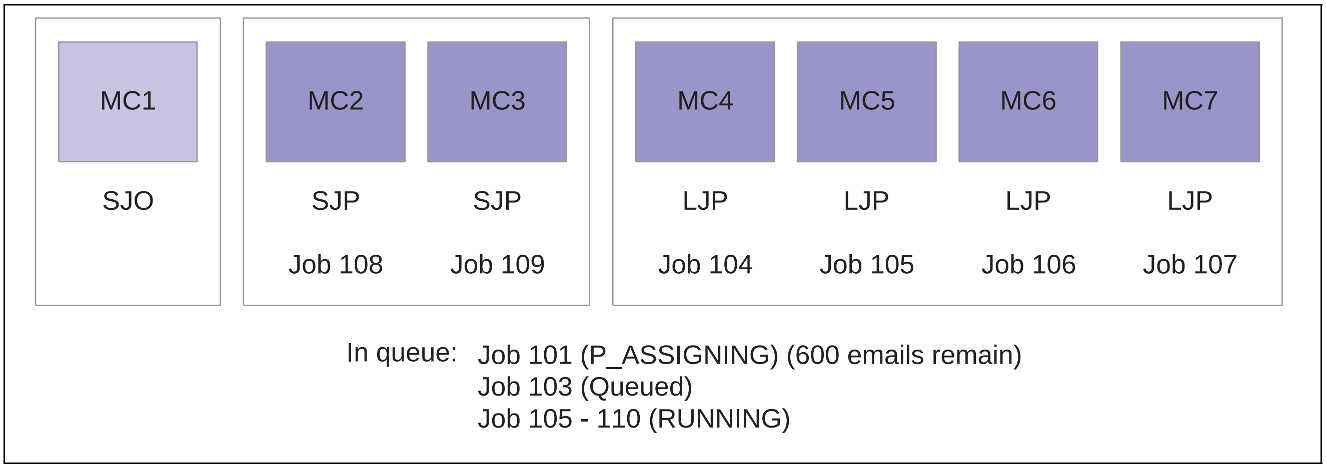


Mailcaster diagram 5

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.

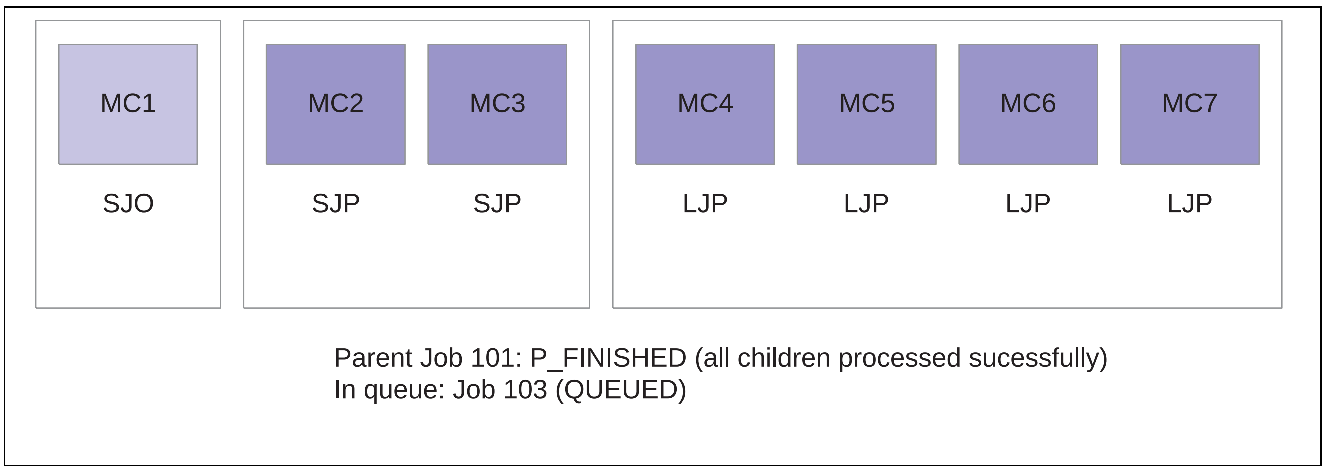
600 emails remain in Job 101.



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

Chapter 11, “Using the Control Center,” Administering the Single Email Queue, page 172

Chapter 11, “Using the Control Center,” Administering Single Email Failure and Recovery, page 171

CHAPTER 11

Using the Control Center

This chapter describes how to use the PeopleSoft Online Marketing Control Center.

This chapter includes the following sections:

- Understanding Control Center
- Determining DES Status
- Administering Scheduler Events
- Administering Email Job Reports
- Viewing the Dedup Email Job Report
- Administering Single Email Failure and Recovery
- Administering the Single Email Queue
- Maintaining Dialog Services

Understanding Control Center

The Control Center allows you to perform a number of administration tasks on the Online Marketing Dialog Execution Server. These tasks are generally used to correct a problem, or to assist PeopleSoft Customer Connection representatives in troubleshooting your system.

Determining DES Status

You use the Dialog Execution Server 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 and bulk mailers.

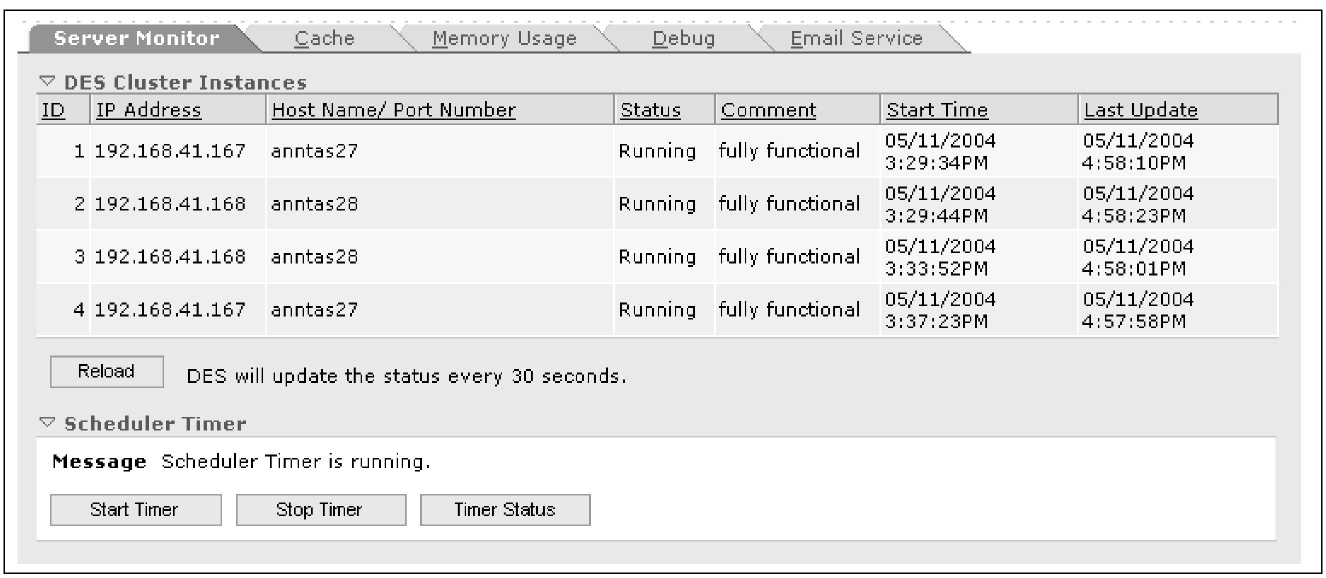
Pages Used to Determine DES Status

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.
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.

When this page is active, the current status of the Dialog Execution Server cluster instances is displayed.



Control Center - Server Monitor page

DES Cluster Instances Displays the running status of the DES cluster.

ID: The identifier for the individual 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.

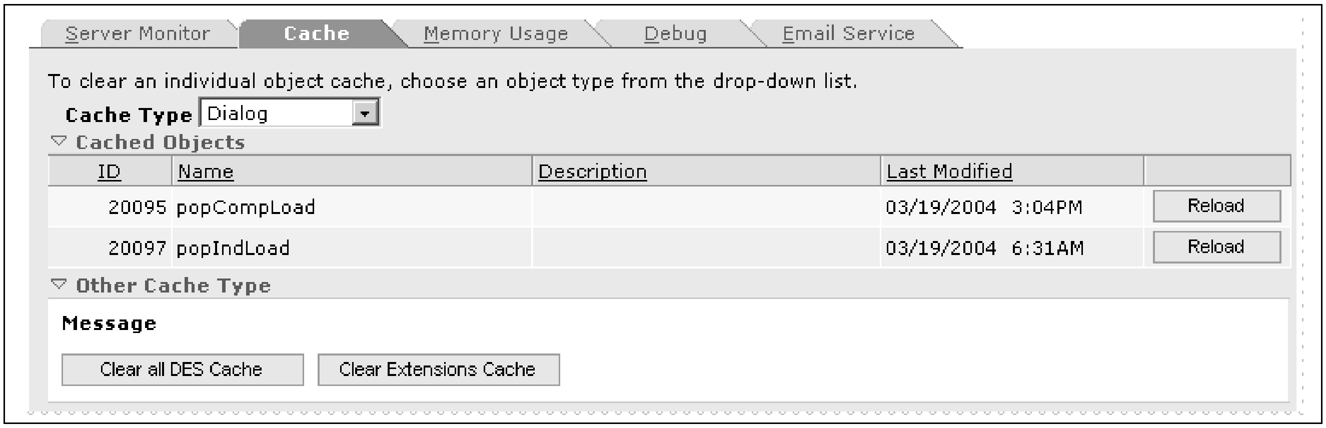
Click Timer Status to view the current Scheduler status.

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

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.

Access the Cache page.



Control Center - Cache page

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.

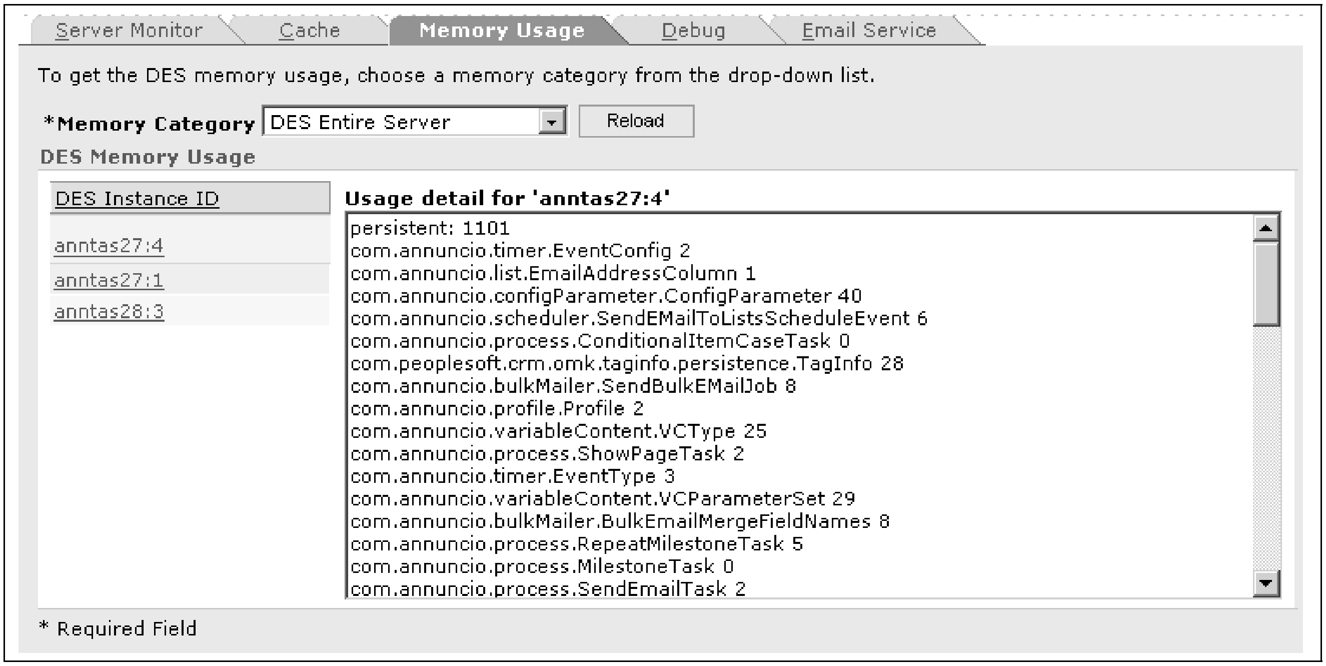
Clear Extensions Cache Click to clear the DES Extensions cache.

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

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.

Access the Memory Usage page.



Control Center - Memory Usage page

Memory Category Choose a memory category:

DES Document Contact displays document memory usage.

DES Entire Server displays memory usage for all of DES.

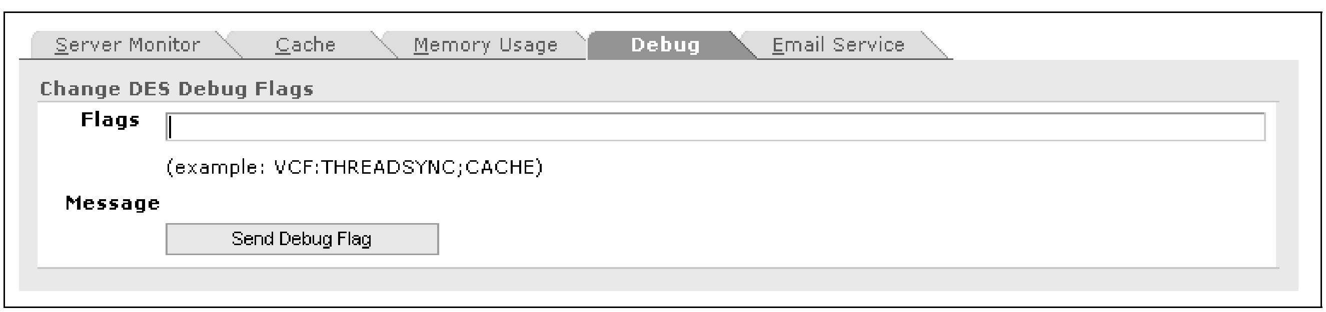
Reload Click to refresh the information displayed in the window.

DES Instance ID Click this link to display the DES memory usage data for the selected instance.

Changing DES Debug Flags

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.

Access the Debug page.



Control Center - Debug page

Flags Enter the debug flags you want to send to the DES.

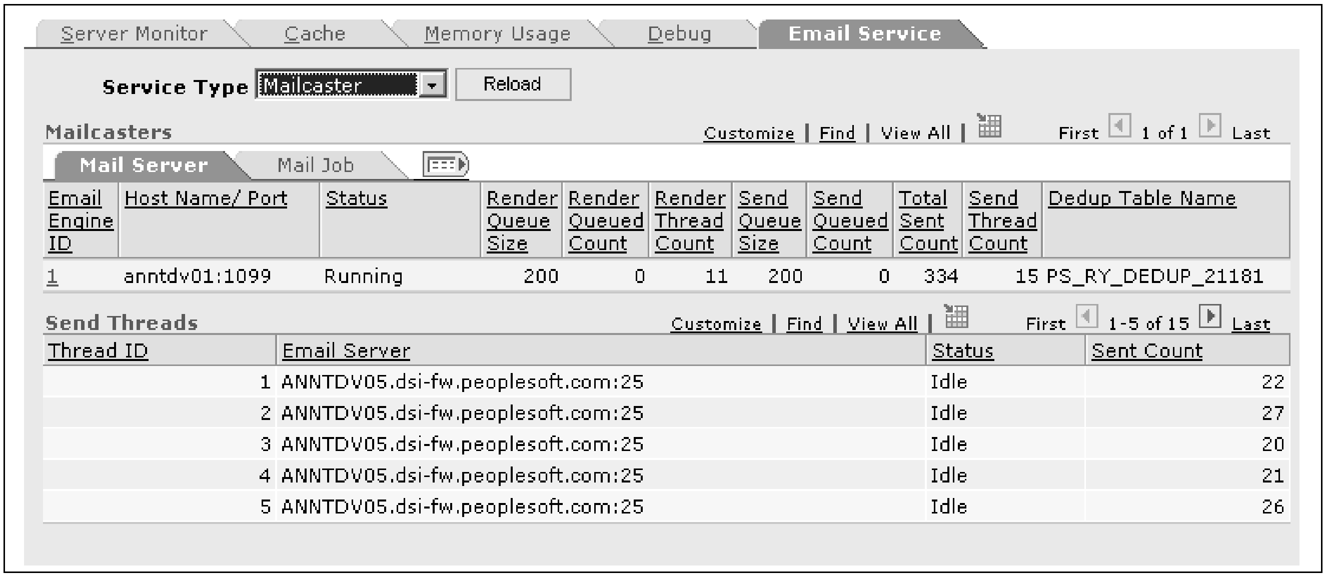
Send Debug Flag Click to send the specified debug flags to the DES.

Note. Debug flags apply to all DES instances.

Viewing Email Service Information

The Email Service page displays detailed information (via RMI) about Mailcaster and Single Mailer processes.

Access the Email Service page.



Email Service page

Service Type	Select Single Emailer or Mailcaster.
Reload	Click to reload information about the selected service type from the system.
Email Engine ID	The Instance ID of the Mailcaster and Single Mailer
Host Name/Port	The name and 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:

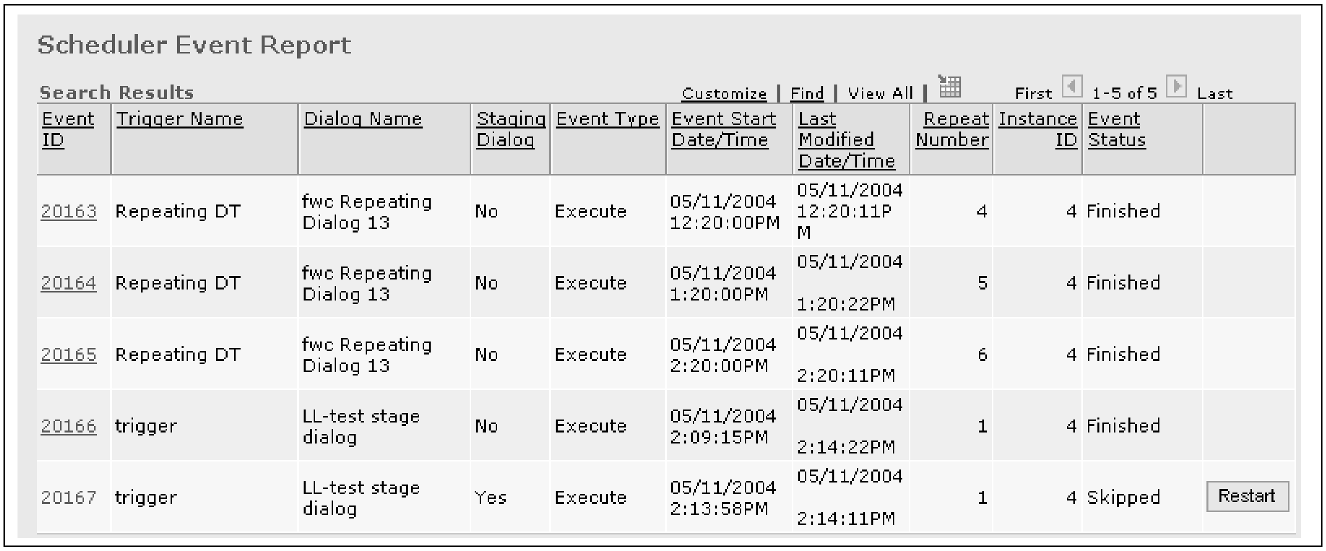
- Restarting a failed, skipped, or paused event.
- Stopping a queued event.
- Drilling down to an individual mail job report.

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.



Scheduler Event Report

Search Results — Customize | Find | View All | First 1-5 of 5 Last

Event ID	Trigger Name	Dialog Name	Staging Dialog	Event Type	Event Start Date/Time	Last Modified Date/Time	Repeat Number	Instance ID	Event Status	
20163	Repeating DT	fwc Repeating Dialog 13	No	Execute	05/11/2004 12:20:00PM	05/11/2004 12:20:11PM	4	4	Finished	
20164	Repeating DT	fwc Repeating Dialog 13	No	Execute	05/11/2004 1:20:00PM	05/11/2004 1:20:22PM	5	4	Finished	
20165	Repeating DT	fwc Repeating Dialog 13	No	Execute	05/11/2004 2:20:00PM	05/11/2004 2:20:11PM	6	4	Finished	
20166	trigger	LL-test stage dialog	No	Execute	05/11/2004 2:09:15PM	05/11/2004 2:14:22PM	1	4	Finished	
20167	trigger	LL-test stage dialog	Yes	Execute	05/11/2004 2:13:58PM	05/11/2004 2:14:11PM	1	4	Skipped	Restart

Control Center - Scheduler Event Report page

Event ID — The unique ID of the scheduled event. 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 ID number of the particular instance.

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

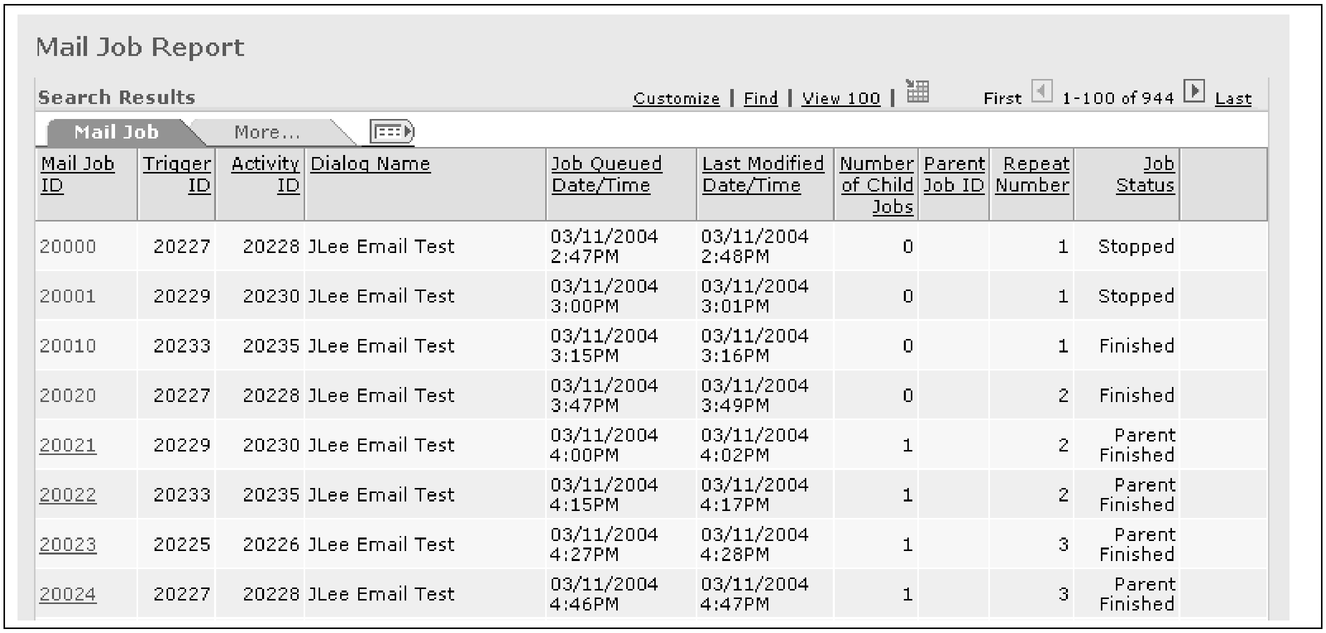
The Email Job Report shows the status of Mailcaster email jobs, and allows you to restart stopped or failed email jobs.

Pages 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	Use to view information about individual mail jobs, and to restart stopped or failed jobs.

Viewing the Mail Job Report

Access the Email Job Report page.



Mail Job Report

Search Results

Customize | Find | View 100 | First 1-100 of 944 Last

Mail Job | More...

Mail Job ID	Trigger ID	Activity ID	Dialog Name	Job Queued Date/Time	Last Modified Date/Time	Number of Child Jobs	Parent Job ID	Repeat Number	Job Status
20000	20227	20228	JLee Email Test	03/11/2004 2:47PM	03/11/2004 2:48PM	0		1	Stopped
20001	20229	20230	JLee Email Test	03/11/2004 3:00PM	03/11/2004 3:01PM	0		1	Stopped
20010	20233	20235	JLee Email Test	03/11/2004 3:15PM	03/11/2004 3:16PM	0		1	Finished
20020	20227	20228	JLee Email Test	03/11/2004 3:47PM	03/11/2004 3:49PM	0		2	Finished
20021	20229	20230	JLee Email Test	03/11/2004 4:00PM	03/11/2004 4:02PM	1		2	Parent Finished
20022	20233	20235	JLee Email Test	03/11/2004 4:15PM	03/11/2004 4:17PM	1		2	Parent Finished
20023	20225	20226	JLee Email Test	03/11/2004 4:27PM	03/11/2004 4:28PM	1		3	Parent Finished
20024	20227	20228	JLee Email Test	03/11/2004 4:46PM	03/11/2004 4:47PM	1		3	Parent Finished

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.

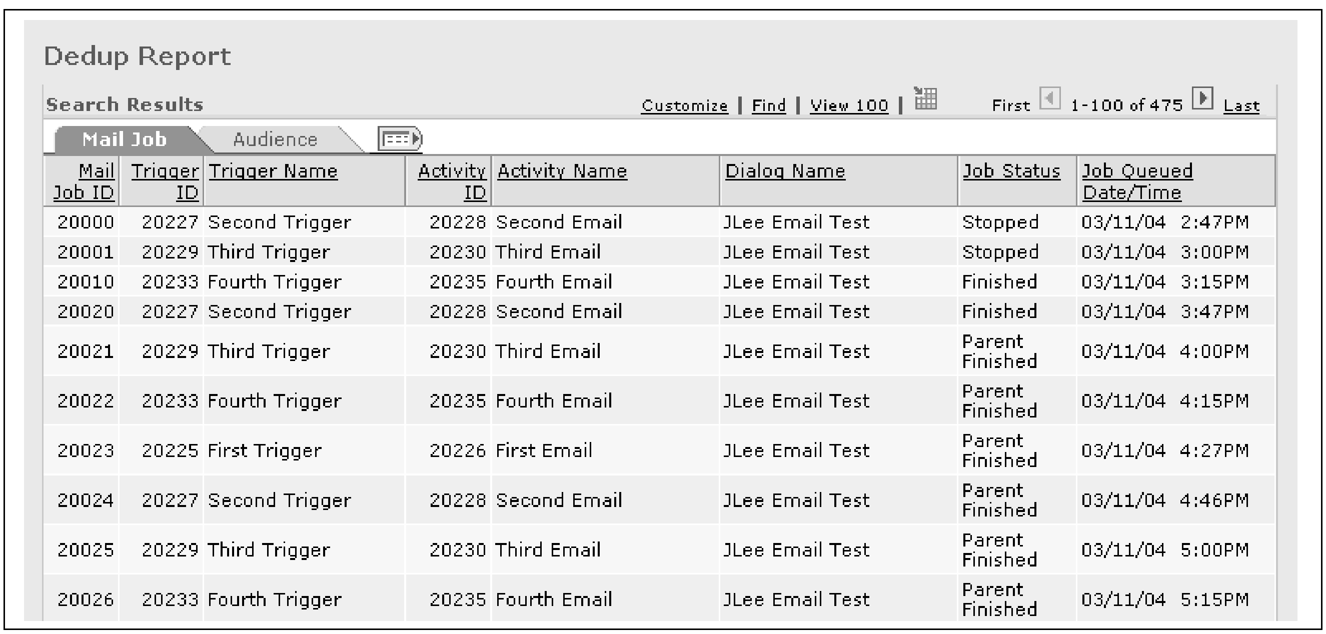
Note. When a large mail job is sent from Online Marketing, it is typically sent by multiple mailcasters. The Online Marketing Dialog Execution Server creates a parent mail job with a status of P_Queued. When mailcasters begin to send the mail they change the status of the parent job to P_Assigning and 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.

Pages Used to View Dedup Email Jobs

Page Name	Object Name	Navigation	Usage
Dedup Report	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.

Viewing the Dedup Report

Access the Dedup Report page.



Mail Job ID	Trigger ID	Trigger Name	Activity ID	Activity Name	Dialog Name	Job Status	Job Queued Date/Time
20000	20227	Second Trigger	20228	Second Email	JLee Email Test	Stopped	03/11/04 2:47PM
20001	20229	Third Trigger	20230	Third Email	JLee Email Test	Stopped	03/11/04 3:00PM
20010	20233	Fourth Trigger	20235	Fourth Email	JLee Email Test	Finished	03/11/04 3:15PM
20020	20227	Second Trigger	20228	Second Email	JLee Email Test	Finished	03/11/04 3:47PM
20021	20229	Third Trigger	20230	Third Email	JLee Email Test	Parent Finished	03/11/04 4:00PM
20022	20233	Fourth Trigger	20235	Fourth Email	JLee Email Test	Parent Finished	03/11/04 4:15PM
20023	20225	First Trigger	20226	First Email	JLee Email Test	Parent Finished	03/11/04 4:27PM
20024	20227	Second Trigger	20228	Second Email	JLee Email Test	Parent Finished	03/11/04 4:46PM
20025	20229	Third Trigger	20230	Third Email	JLee Email Test	Parent Finished	03/11/04 5:00PM
20026	20233	Fourth Trigger	20235	Fourth Email	JLee Email Test	Parent Finished	03/11/04 5:15PM

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.
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

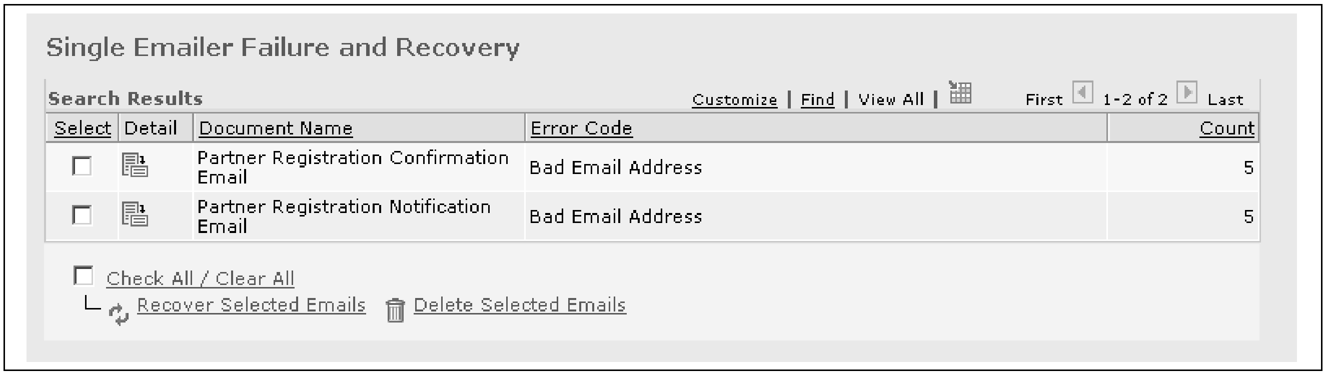
Single Email Failure and Recovery allows the administrator to search for and identify single emails that failed to send or were rejected. The administrator can then choose to re-send the emails or delete them.

Pages 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 Email Failure and Recovery page

Select Select the check boxes of 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
- Persistence Exception
- Failed to Load Campaign or Document
- VC Rendering Exception
- Fail Single Email
- IO Exception
- Tag Format Exception
- Sender Not Accepted

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

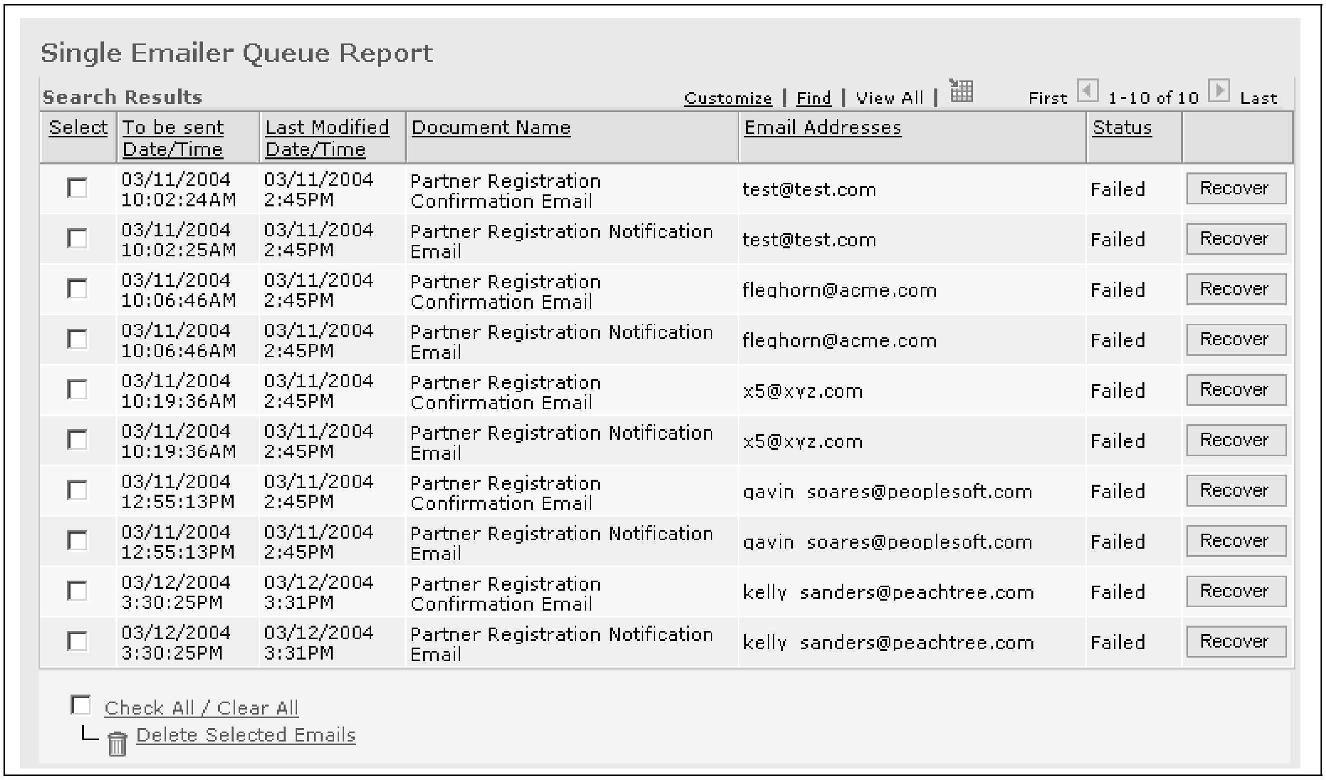
The Single Email Queue Report provides the capability to watch the status of an individual email in the queue. You can also delete or recover the queued single emails.

Pages 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 Emailer Queue Report

Search Results Customize | Find | View All | First 1-10 of 10 Last

Select	To be sent Date/Time	Last Modified Date/Time	Document Name	Email Addresses	Status	
	03/11/2004 10:02:24AM	03/11/2004 2:45PM	Partner Registration Confirmation Email	test@test.com	Failed	Recover
	03/11/2004 10:02:25AM	03/11/2004 2:45PM	Partner Registration Notification Email	test@test.com	Failed	Recover
	03/11/2004 10:06:46AM	03/11/2004 2:45PM	Partner Registration Confirmation Email	fleghorn@acme.com	Failed	Recover
	03/11/2004 10:06:46AM	03/11/2004 2:45PM	Partner Registration Notification Email	fleghorn@acme.com	Failed	Recover
	03/11/2004 10:19:36AM	03/11/2004 2:45PM	Partner Registration Confirmation Email	x5@xyz.com	Failed	Recover
	03/11/2004 10:19:36AM	03/11/2004 2:45PM	Partner Registration Notification Email	x5@xyz.com	Failed	Recover
	03/11/2004 12:55:13PM	03/11/2004 2:45PM	Partner Registration Confirmation Email	gavin soares@peoplesoft.com	Failed	Recover
	03/11/2004 12:55:13PM	03/11/2004 2:45PM	Partner Registration Notification Email	gavin soares@peoplesoft.com	Failed	Recover
	03/12/2004 3:30:25PM	03/12/2004 3:31PM	Partner Registration Confirmation Email	kelly sanders@peachtree.com	Failed	Recover
	03/12/2004 3:30:25PM	03/12/2004 3:31PM	Partner Registration Notification Email	kelly sanders@peachtree.com	Failed	Recover

Check All / Clear All
Delete Selected Emails

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.

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.

Maintaining Dialog Servers

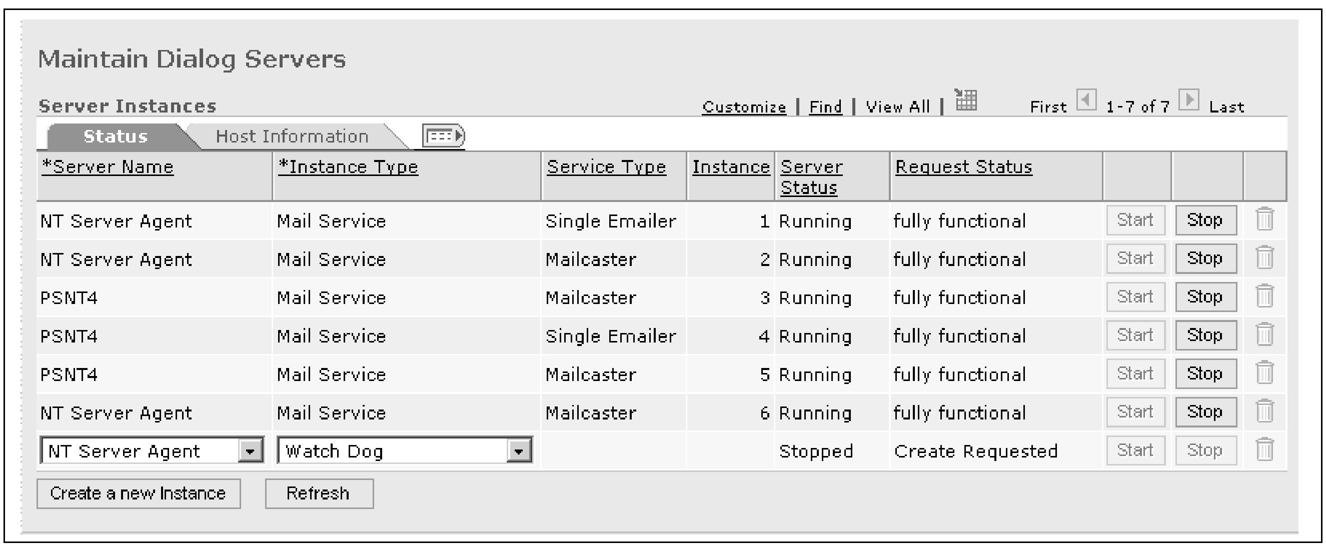
The Maintain Dialog Servers page allows you to install new instances of the Standalone Dialog Servers: Mailcaster, WatchDog, and Email Response Processor.

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 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 WatchDog

This chapter describes how to use the PeopleSoft Online Marketing WatchDog Utility. It contains the following sections:

- Understanding WatchDog
- Running WatchDog
- Parameter Descriptions

See Also

PeopleSoft Enterprise CRM 8.9 Supplemental Installation Guide

Chapter 11, "Using the Control Center," Maintaining Dialog Servers, page 174

Understanding WatchDog

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 whenever there is a change in the state of the components (from working to not working, or vice versa).

The WatchDog utility can be configured to check the following components:

- The 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.) Prior to 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 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 there is a problem 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 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 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 174.

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
```

The 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, but only for successful completion. Only one database can be monitored.

WatchDog performs the following 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 the following web server tests:

Web Server	Checks if the web server (reverse proxy server) is accepting connections.
MCP	Checks whether 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 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 the following Application Server tests:

Application Server	Checks whether the Application Server is running and can communicate with PeopleSoft Internet Architecture. It does this by sending a request to the Dialog Execution Server servlet, which makes a Jolt call to PeopleSoft Internet Architecture.

Mail Server Tests

WatchDog performs the following 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 SMTP dialog can be established with at least one mail server.

Mail Event Tests

WatchDog performs the following mail event tests:

Bulk Mailers	Connects to each Bulk Mailer via 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.

The 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.

The 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. The four parameters to set are:

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, and the “johnDrake” number for that page. 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 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...

---

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
```

Command-Line Parameters

WatchDog can be run from 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 there is no value 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 there is no value 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.
-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 there is no value 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.

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 174.

Email Response Processor Configuration Files

The Email Response Processor uses a configuration file named ERP.config. 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 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.
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.
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.

Parameter	Description
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 8.9 Supplemental Installation Guide

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/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.

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.

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.

Email Response Processor Keywords

The following keywords are used by the Email Response Processor:

- and
- contactNotFound
- debugMode
- delete
- else
- end
- false

- forward
- if
- ignore
- inAll
- inBody
- inHeader
- inRecipient
- inSender
- inSubject
- logFile
- maxMessagesPerHour
- no
- not
- off
- on
- onError
- or
- smtpServerNames
- then
- true
- try
- wakeupInterval
- yes

PART 3

PeopleSoft Online Marketing Integration

Chapter 14
Setting Up Online Marketing Event Wire

Chapter 15
Event Wire API Reference

Chapter 16
Event Wire Control Center

Chapter 17
Using Extensions

CHAPTER 14

Setting Up Online Marketing Event Wire

This chapter describes how to set up and start using Online Marketing Event Wire, and includes the following sections:

- Understanding Event Wire
- Setting Up Event Wire
- Event Wire and Your External System
- Retrying Transactions
- Event Wire Security

See Also

Part 1, "PeopleSoft Online Marketing User Guide," page 1

Understanding 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.

Setting up Event Wire

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. These tasks are discussed in the following sections.

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 16, "Event Wire Control Center," page 215.

Verifying your 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:

1. You must 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 is displayed.
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. First issue a getparams call to view the parameters used. Next issue a processtrxn call to submit values to the landing page, and ensure that you see the final page.

   When you issue the processtrxn call with returntype=2 you should see the final page displayed in your browser. This confirms that Event Wire and Online Marketing are operating properly. If you do not see the final page displayed, check your processtrxn call.

See Also

Chapter 16, "Event Wire Control Center," page 215

Chapter 15, "Event Wire API Reference," page 205

Event Wire and your External System

This section describes issues you should understand to properly use Event Wire. The following topics are discussed:

- Passing the Landing Page URL to the External System
- Programming Calls to 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.

There are several ways of making this call to Event Wire:

- Image tags
- Cookies
- Programmatically

You must decide how you will make the calls to Event Wire. This 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 15, "Event Wire API Reference," page 205.

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, then 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: simply 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:

Be aware that 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 is 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. Either:

   - Do not call Event Wire using IMAGE tags on pages that users might return to or access more than once, or
   - Programmatically check in your external system before calling Event Wire that this request has not already been submitted to Event Wire.

See Chapter 15, "Event Wire API Reference," page 205 and Chapter 15, "Event Wire API Reference," processtrxn, page 207.

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 Chapter 15, "Event Wire API Reference," page 205.

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, etc.
- Application server modules
- HTML documents through IMAGE tags, JavaScript, etc.

- 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 there is a network problem, 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.

See Chapter 15, "Event Wire API Reference," page 205.

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, then if an incorrect value is passed in the entire transaction is 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 8.9 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 will appear.

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. Also, 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.

See Chapter 15, "Event Wire API Reference," gettrxnstatus, page 209.

See Chapter 14, "Setting Up Online Marketing Event Wire," Retrying Transactions, page 204.

Making Changes to a Live Dialog

After your Online Marketing dialog has been 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 will want to check whether these changes affect the parameters being passed to Event Wire. If so, you will need to 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.

Retrying 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 is when the dialog is in Paused status.

When this 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

There are a variety of reasons why a valid call to Event Wire can fail, 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 processtrxn 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. This means establishing an SSL (Secure Sockets Layer) session, whereby all data is encrypted before being sent across the network.

CHAPTER 15

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.

See Chapter 15, “Event Wire API Reference,” getparams, page 205.

See Chapter 15, “Event Wire API Reference,” processtrxn, page 207.

See Chapter 15, “Event Wire API Reference,” gettrxnstatus, page 209.

getparams

getparams returns the list of profile 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.

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).

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 15, “Event Wire API Reference,” Status Codes and Messages, page 211.

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).

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). 3: Indicates that the WireStatusCode and WireStatusMsg values are to be returned as text inside the body. This can be useful in debugging.
useDefaultValue	(Optional) is used to preload the default values for Online Marketing Dialog documents or profile fields.
field_n	(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.
field_value	(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.
choice_field	(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.
choice_n	(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

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 Chapter 15, "Event Wire API Reference," getparams, page 205.

See Chapter 16, "Event Wire Control Center," page 215.

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 Chapter 15, "Event Wire API Reference," Status Codes and Messages, page 211.

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 16, “Event Wire Control Center,” page 215.

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 15, “Event Wire API Reference,” Status Codes and Messages, page 211.

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)

Status Code	Status Message	Description and Solution
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.
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).

Status Code	Status Message	Description and Solution
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 16

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 includes the following sections:

- Registering External Systems
- Using the Transactions Report
- Using the Retried Transactions Report

Registering External Systems

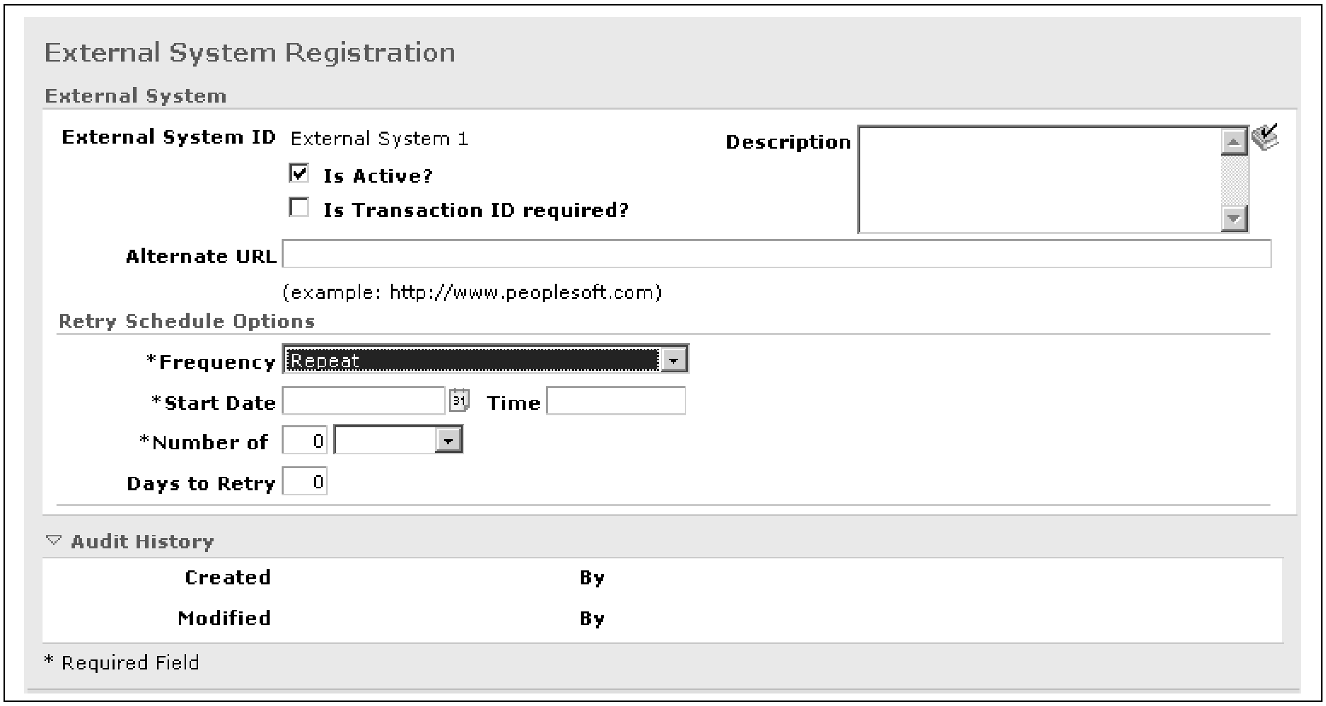
All external systems must be registered with Event Wire. Registering an external system identifies that system and allows Event Wire to process calls coming from that system. External systems span all business units.

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

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

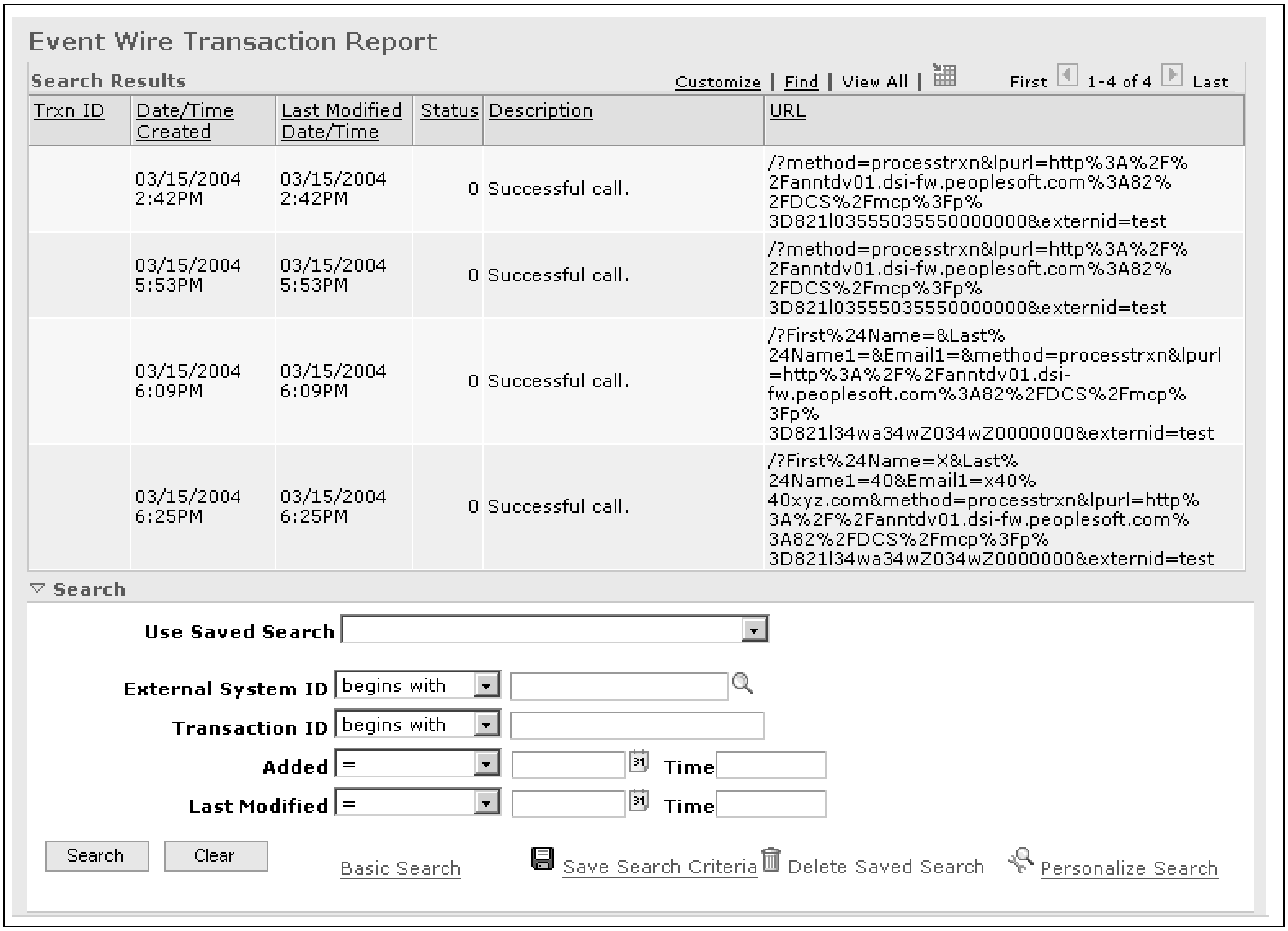
Event Wire displays a report containing transaction information for external systems

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

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 Chapter 15, “Event Wire API Reference,” Status Codes and Messages, page 211.

Viewing the Retried Transactions Report

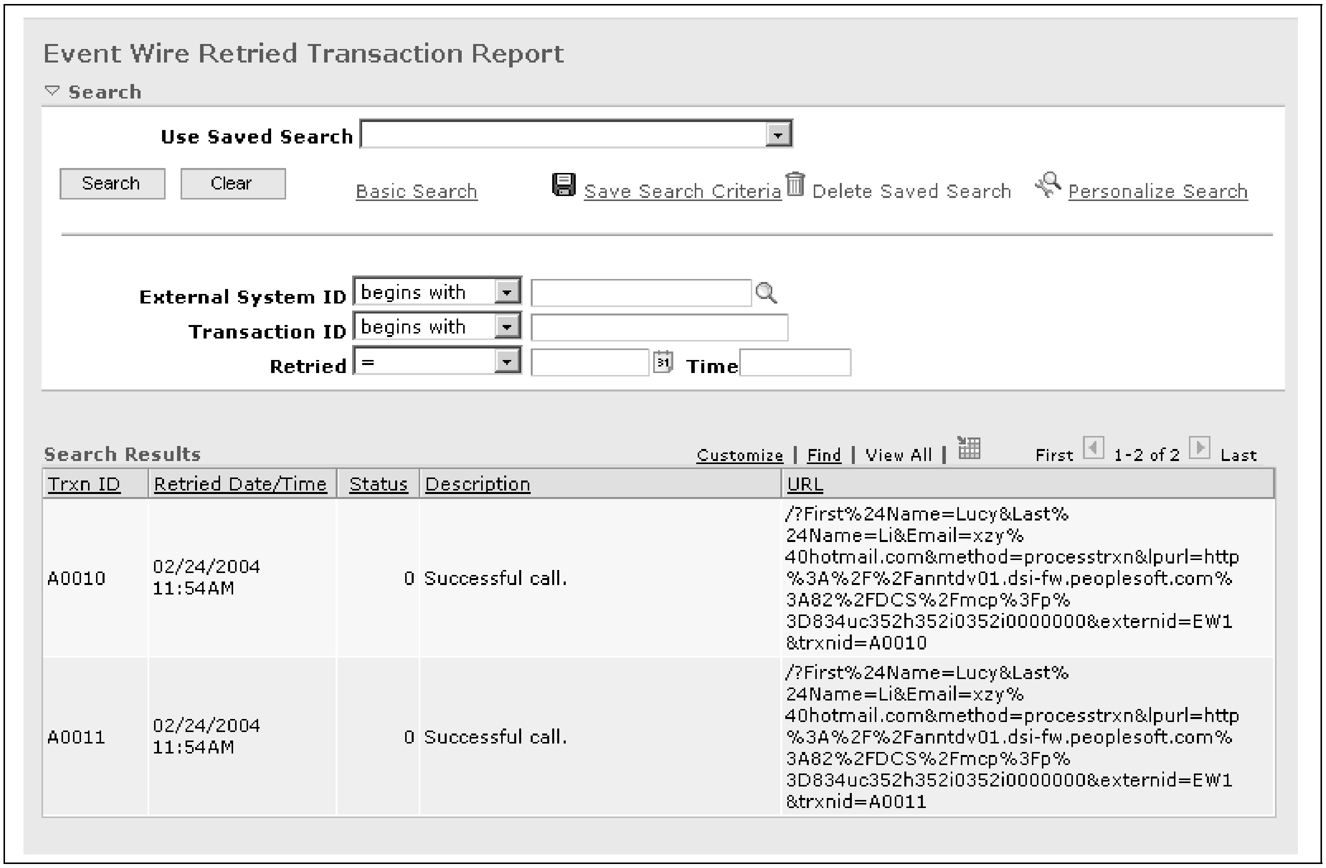
Event Wire displays a report containing the retried transactions for external systems

Pages Used to View the Retried Transactions Report

Page Name	Object Name	Navigation	Usage
Event Wire Retried Transactions Report	RY_WIRE_RETRY	Marketing, Dialog Monitoring, Event Wire, Retried Transactions Report	Displays a list of all retries attempted by Event Wire, along with their status.

Interpreting the Retried Transactions Report

Access the Event Wire Retried Transactions 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 Retried Transactions 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 15, "Event Wire API Reference," Status Codes and Messages, page 211.

CHAPTER 17

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 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 function).
3. Package your extension 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

Chapter 7, “Designing the Flow for an Online Dialog,” page 105

Chapter 6, “Designing Web Documents,” page 73

Chapter 5, “Designing Email Documents,” page 57

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 servlets (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 PeopleCode function 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 8.45 PeopleBook: PeopleCode Language Reference

Enterprise PeopleTools 8.45 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.

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:

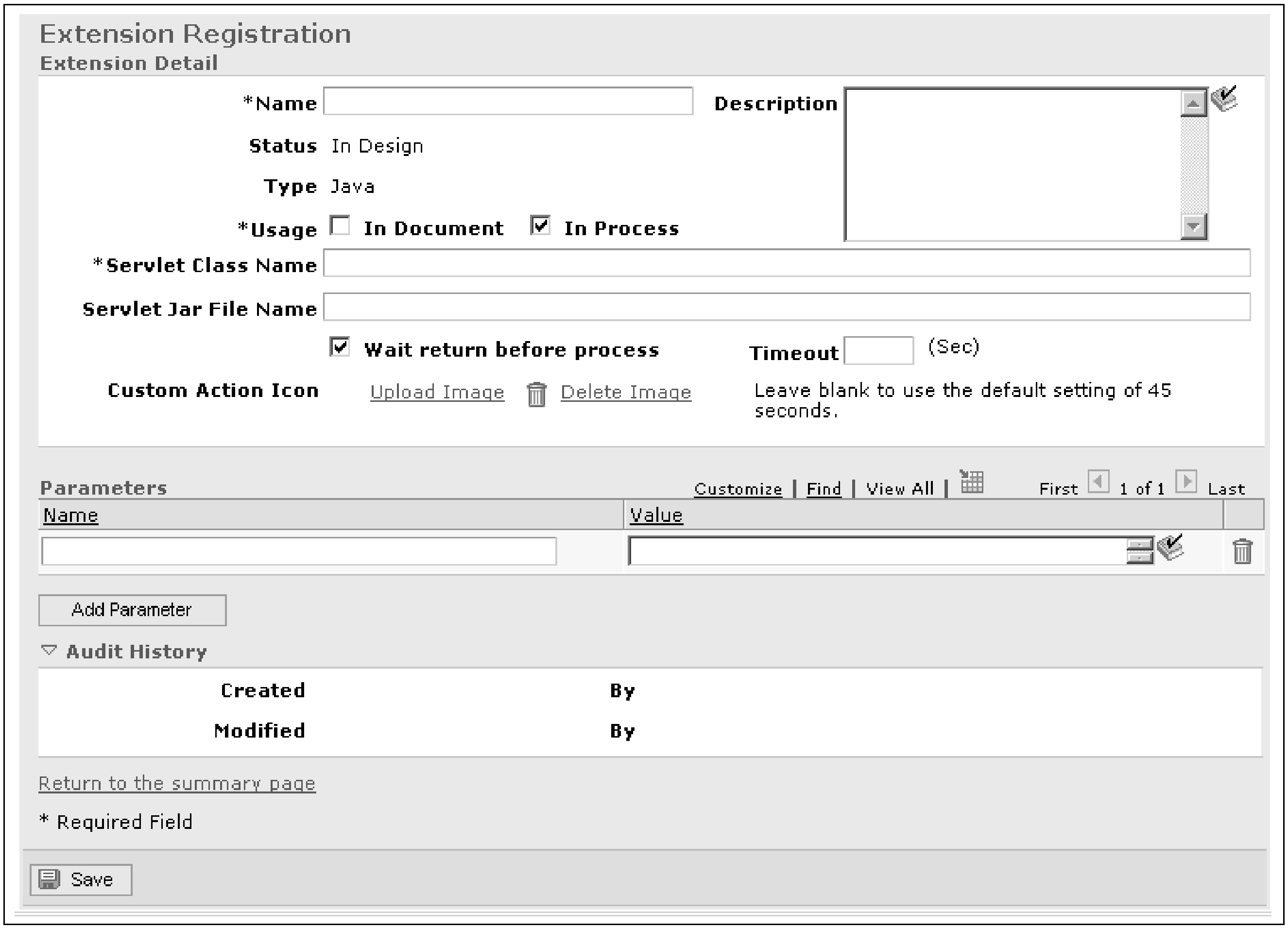
1. Navigate to Set Up CRM, Product Related, Online Marketing, Extension Summary.

   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 function.
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.

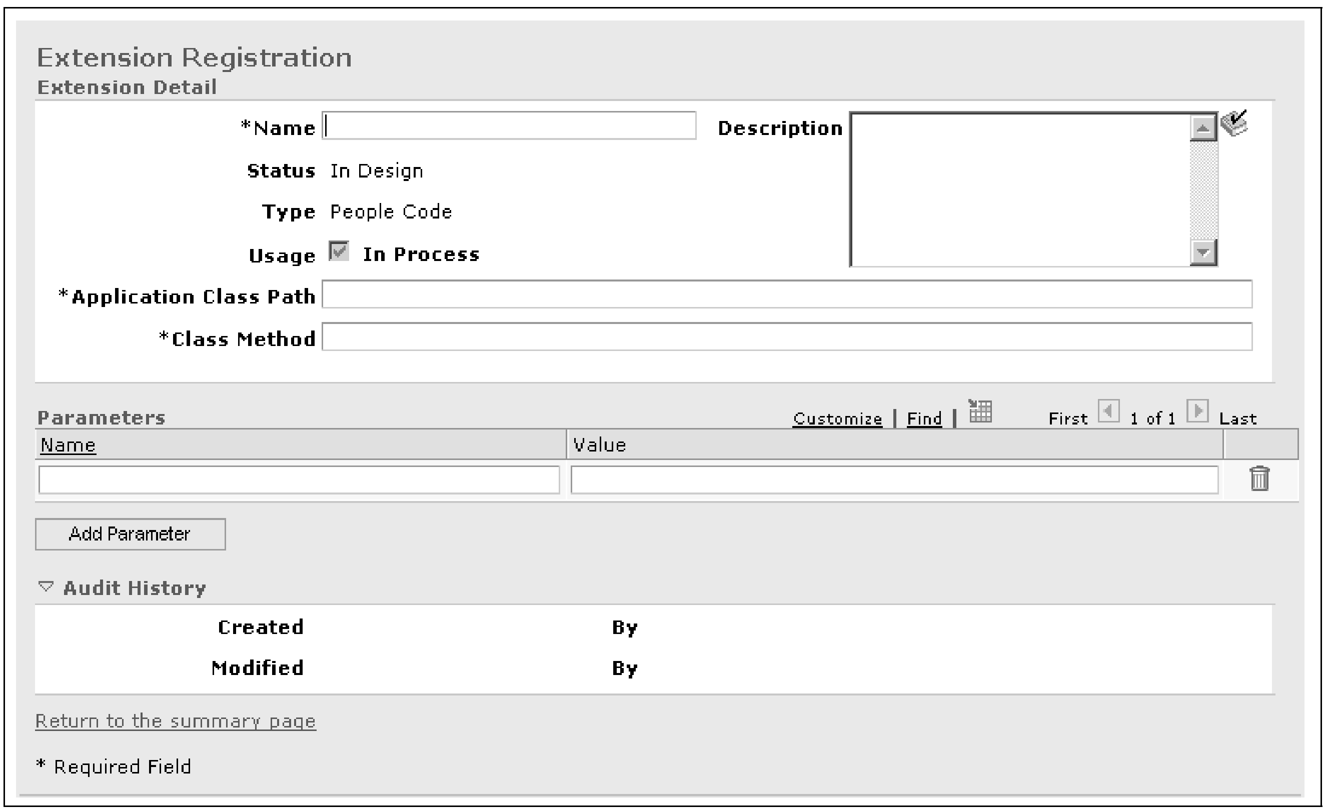
You cannot use merge content syntax in the parameter or value fields on the registration page.

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.



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 Chapter 17, "Using Extensions," Register the Extension in Online Marketing, page 229.

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.

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 17, “Using Extensions,” Create the Online Marketing Formatted Syntax, page 227.

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 245.

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 Chapter 17, “Using Extensions,” Register the Extension in Online Marketing, page 229.

See Part 1, “PeopleSoft Online Marketing User Guide,” page 1.

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 17, “Using Extensions,” The “SampleLiveExtension” Servlet, page 239

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 80

Chapter 5, “Designing Email Documents,” Defining Email Documents, page 58

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" 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

Chapter 6, “Designing Web Documents,” Exporting Web Documents, page 102

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 Chapter 6, “Designing Web Documents,” Adding Merged Content, page 95.

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 four predefined profiles: three system profiles and one user profile. These 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, and their field definitions cannot be modified. The predefined user profile is called Privacy Options.

This appendix provides the definitions of the fields in all four 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 the individual consumer, while the Companies profile is for companies.

People System Profile

The following table shows the fields in the People system profile:

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
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

Field Name	Description	Type	Length
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 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
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
Home Phone	Home phone number	Text Entry	24
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

Field Name	Description	Type	Length
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
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
Work Phone	Work phone number	Text Entry	24
Work Phone Country Code	Work phone country code	Text Entry	3

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

Field Name	Description	Type	Length
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
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	Organization role. In version 8.8 SP1, PeopleSoft Online Marketing only supports ‘Company’.	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

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
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
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.

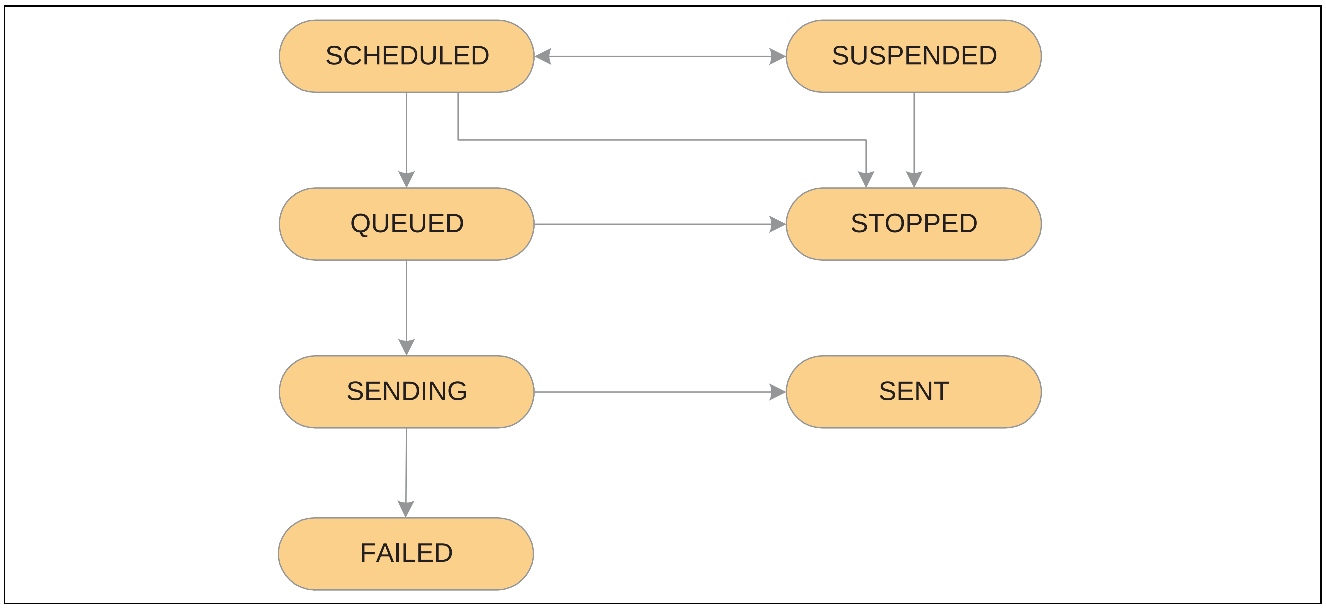
APPENDIX C

Mailcaster States

The following diagrams show the possible states for the scheduler, for parent mail jobs, and for child mail jobs.

Single Mailer State Flow Diagram

The following diagrams shows the Single Mailer state flow.

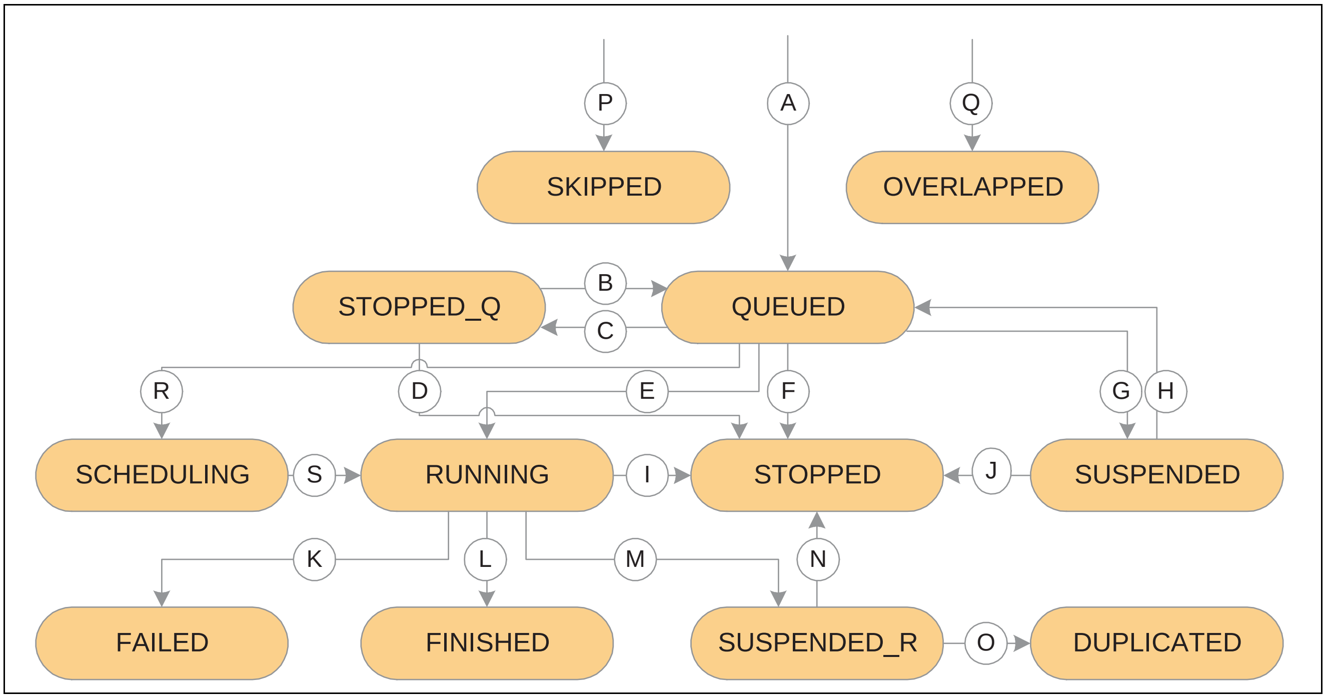


Single Mailer state flow

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.



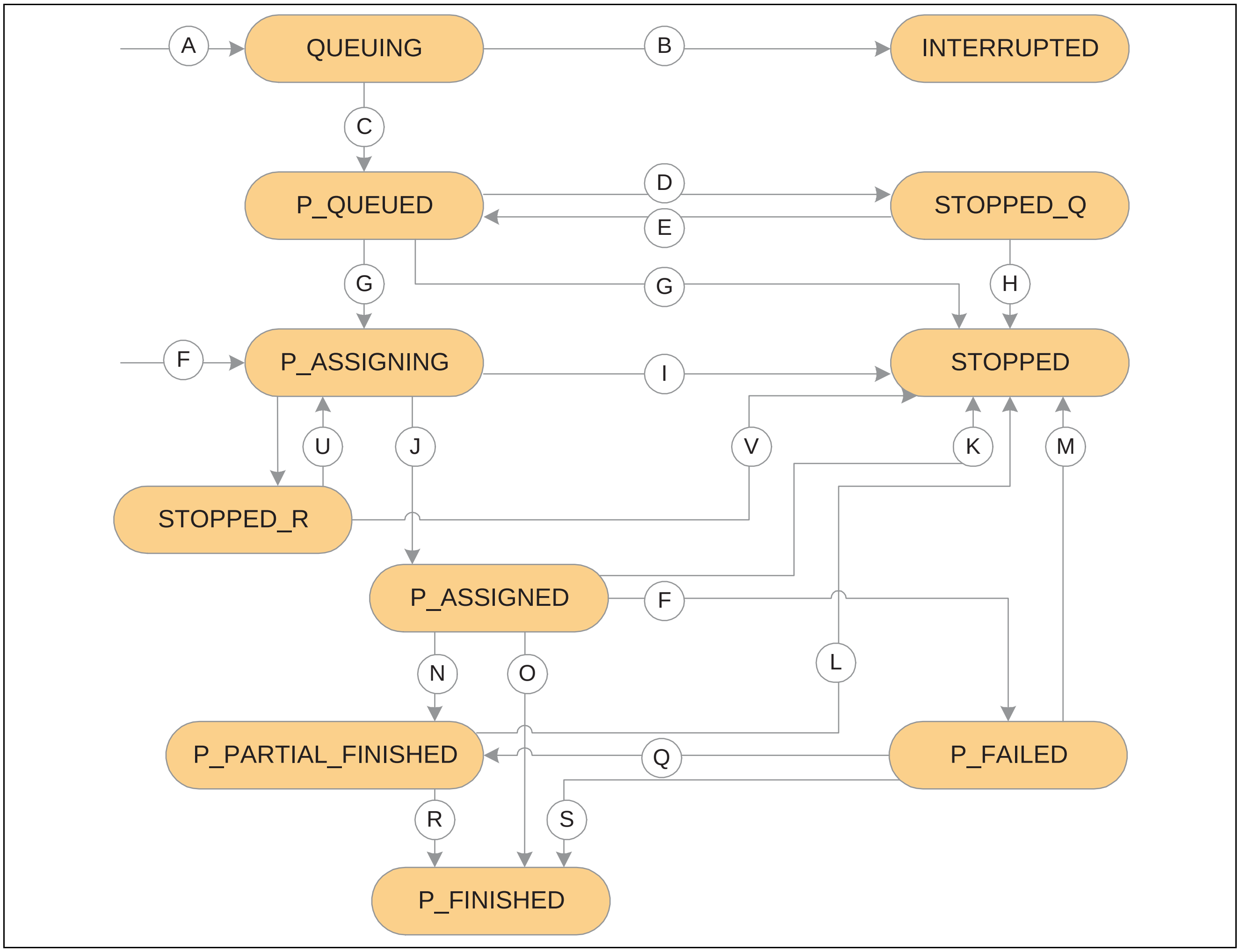
Scheduler State Tree diagram

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.



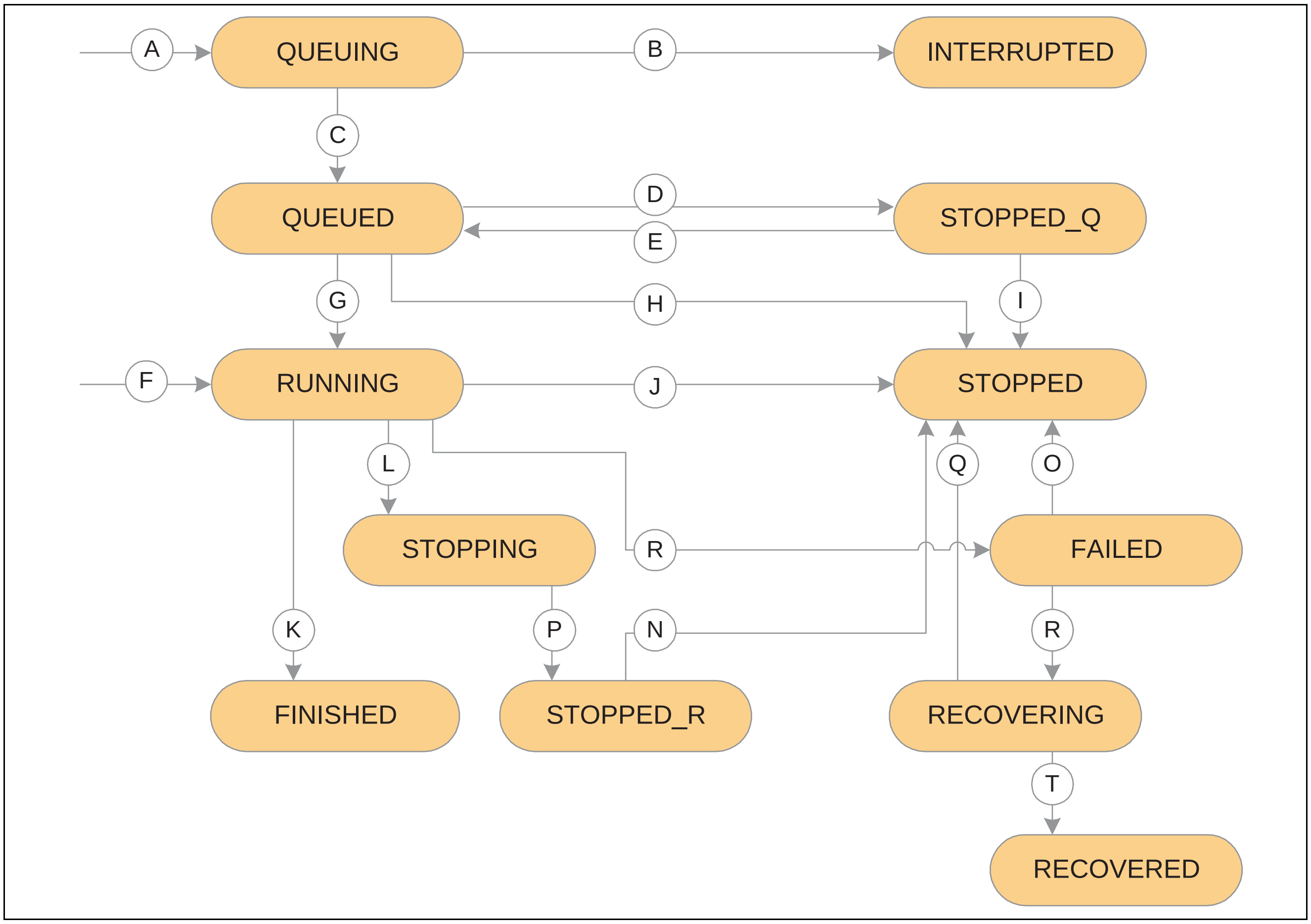
Parent Mail Job diagram

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.

APPENDIX D

ISO Country and Currency Codes

PeopleBooks use International Organization for Standardization (ISO) country and currency codes to identify country-specific information and monetary amounts.

This appendix discusses:

- ISO country codes.
- ISO currency codes.

See Also

"About This PeopleBook," Typographical Conventions and Visual Cues

ISO Country Codes

This table lists the ISO country codes that may appear as country identifiers in PeopleBooks:

ISO Country Code	Country Name
ABW	Aruba
AFG	Afghanistan
AGO	Angola
AIA	Anguilla
ALB	Albania
AND	Andorra
ANT	Netherlands Antilles
ARE	United Arab Emirates
ARG	Argentina
ARM	Armenia
ASM	American Samoa
ATA	Antarctica

ISO Country Code	Country Name
ATF	French Southern Territories
ATG	Antigua and Barbuda
AUS	Australia
AUT	Austria
AZE	Azerbaijan
BDI	Burundi
BEL	Belgium
BEN	Benin
BFA	Burkina Faso
BGD	Bangladesh
BGR	Bulgaria
BHR	Bahrain
BHS	Bahamas
BIH	Bosnia and Herzegovina
BLR	Belarus
BLZ	Belize
BMU	Bermuda
BOL	Bolivia
BRA	Brazil
BRB	Barbados
BRN	Brunei Darussalam
BTN	Bhutan
BVT	Bouvet Island
BWA	Botswana
CAF	Central African Republic
CAN	Canada
CCK	Cocos (Keeling) Islands

ISO Country Code	Country Name
CHE	Switzerland
CHL	Chile
CHN	China
CIV	Cote D'Ivoire
CMR	Cameroon
COD	Congo, The Democratic Republic
COG	Congo
COK	Cook Islands
COL	Colombia
COM	Comoros
CPV	Cape Verde
CRI	Costa Rica
CUB	Cuba
CXR	Christmas Island
CYM	Cayman Islands
CYP	Cyprus
CZE	Czech Republic
DEU	Germany
DJI	Djibouti
DMA	Dominica
DNK	Denmark
DOM	Dominican Republic
DZA	Algeria
ECU	Ecuador
EGY	Egypt
ERI	Eritrea
ESH	Western Sahara

ISO Country Code	Country Name
ESP	Spain
EST	Estonia
ETH	Ethiopia
FIN	Finland
FJI	Fiji
FLK	Falkland Islands (Malvinas)
FRA	France
FRO	Faroe Islands
FSM	Micronesia, Federated States
GAB	Gabon
GBR	United Kingdom
GEO	Georgia
GHA	Ghana
GIB	Gibraltar
GIN	Guinea
GLP	Guadeloupe
GMB	Gambia
GNB	Guinea-Bissau
GNQ	Equatorial Guinea
GRC	Greece
GRD	Grenada
GRL	Greenland
GTM	Guatemala
GUF	French Guiana
GUM	Guam
GUY	Guyana
GXA	GXA - GP Core Country

ISO Country Code	Country Name
GXB	GXB - GP Core Country
GXC	GXC - GP Core Country
GXD	GXD - GP Core Country
HKG	Hong Kong
HMD	Heard and McDonald Islands
HND	Honduras
HRV	Croatia
HTI	Haiti
HUN	Hungary
IDN	Indonesia
IND	India
IOT	British Indian Ocean Territory
IRL	Ireland
IRN	Iran (Islamic Republic Of)
IRQ	Iraq
ISL	Iceland
ISR	Israel
ITA	Italy
JAM	Jamaica
JOR	Jordan
JPN	Japan
KAZ	Kazakstan
KEN	Kenya
KGZ	Kyrgyzstan
KHM	Cambodia
KIR	Kiribati
KNA	Saint Kitts and Nevis

ISO Country Code	Country Name
KOR	Korea, Republic of
KWT	Kuwait
LAO	Lao People's Democratic Rep
LBN	Lebanon
LBR	Liberia
LBY	Libyan Arab Jamahiriya
LCA	Saint Lucia
LIE	Liechtenstein
LKA	Sri Lanka
LSO	Lesotho
LTU	Lithuania
LUX	Luxembourg
LVA	Latvia
MAC	Macao
MAR	Morocco
MCO	Monaco
MDA	Moldova, Republic of
MDG	Madagascar
MDV	Maldives
MEX	Mexico
MHL	Marshall Islands
MKD	Fmr Yugoslav Rep of Macedonia
MLI	Mali
MLT	Malta
MMR	Myanmar
MNG	Mongolia
MNP	Northern Mariana Islands

ISO Country Code	Country Name
MOZ	Mozambique
MRT	Mauritania
MSR	Montserrat
MTQ	Martinique
MUS	Mauritius
MWI	Malawi
MYS	Malaysia
MYT	Mayotte
NAM	Namibia
NCL	New Caledonia
NER	Niger
NFK	Norfolk Island
NGA	Nigeria
NIC	Nicaragua
NIU	Niue
NLD	Netherlands
NOR	Norway
NPL	Nepal
NRU	Nauru
NZL	New Zealand
OMN	Oman
PAK	Pakistan
PAN	Panama
PCN	Pitcairn
PER	Peru
PHL	Philippines
PLW	Palau

ISO Country Code	Country Name
PNG	Papua New Guinea
POL	Poland
PRI	Puerto Rico
PRK	Korea, Democratic People's Rep
PRT	Portugal
PRY	Paraguay
PSE	Palestinian Territory, Occupie
PYF	French Polynesia
QAT	Qatar
REU	Reunion
ROU	Romania
RUS	Russian Federation
RWA	Rwanda
SAU	Saudi Arabia
SDN	Sudan
SEN	Senegal
SGP	Singapore
SGS	Sth Georgia & Sth Sandwich Is
SHN	Saint Helena
SJM	Svalbard and Jan Mayen
SLB	Solomon Islands
SLE	Sierra Leone
SLV	El Salvador
SMR	San Marino
SOM	Somalia
SPM	Saint Pierre and Miquelon
STP	Sao Tome and Principe

ISO Country Code	Country Name
SUR	Suriname
SVK	Slovakia
SVN	Slovenia
SWE	Sweden
SWZ	Swaziland
SYC	Seychelles
SYR	Syrian Arab Republic
TCA	Turks and Caicos Islands
TCD	Chad
TGO	Togo
THA	Thailand
TJK	Tajikistan
TKL	Tokelau
TKM	Turkmenistan
TLS	East Timor
TON	Tonga
TTO	Trinidad and Tobago
TUN	Tunisia
TUR	Turkey
TUV	Tuvalu
TWN	Taiwan, Province of China
TZA	Tanzania, United Republic of
UGA	Uganda
UKR	Ukraine
UMI	US Minor Outlying Islands
URY	Uruguay
USA	United States

ISO Country Code	Country Name
UZB	Uzbekistan
VAT	Holy See (Vatican City State)
VCT	St Vincent and the Grenadines
VEN	Venezuela
VGB	Virgin Islands (British)
VIR	Virgin Islands (U.S.)
VNM	Viet Nam
VUT	Vanuatu
WLF	Wallis and Futuna Islands
WSM	Samoa
YEM	Yemen
YUG	Yugoslavia
ZAF	South Africa
ZMB	Zambia
ZWE	Zimbabwe

ISO Currency Codes

This table lists the ISO country codes that may appear as currency identifiers in PeopleBooks:

ISO Currency Code	Description
ADP	Andorran Peseta
AED	United Arab Emirates Dirham
AFA	Afghani
AFN	Afghani
ALK	Old Lek
ALL	Lek
AMD	Armenian Dram

ISO Currency Code	Description
ANG	Netherlands Antilles Guilder
AOA	Kwanza
AOK	Kwanza
AON	New Kwanza
AOR	Kwanza Reajustado
ARA	Austral
ARP	Peso Argentino
ARS	Argentine Peso
ARY	Peso
ATS	Schilling
AUD	Australian Dollar
AWG	Aruban Guilder
AZM	Azerbaijanian Manat
BAD	Dinar
BAM	Convertible Marks
BBD	Barbados Dollar
BDT	Taka
BEC	Convertible Franc
BEF	Belgian Franc
BEL	Financial Belgian Franc
BGJ	Lev A/52
BGK	Lev A/62
BGL	Lev
BGN	Bulgarian LEV
BHD	Bahraini Dinar
BIF	Burundi Franc
BMD	Bermudian Dollar

ISO Currency Code	Description
BND	Brunei Dollar
BOB	Boliviano
BOP	Peso
BOV	Mvdol
BRB	Cruzeiro
BRC	Cruzado
BRE	Cruzeiro
BRL	Brazilian Real
BRN	New Cruzado
BRR	Brazilian Real Dollar
BSD	Bahamian Dollar
BTN	Ngultrum
BUK	N/A
BWP	Pula
BYB	Belarussian Ruble
BYR	Belarussian Ruble
BZD	Belize Dollar
CAD	Canadian Dollar
CDF	Franc Congolais
CHF	Swiss Franc
CLF	Unidades de fomento
CLP	Chilean Peso
CNX	Peoples Bank Dollar
CNY	Yuan Renminbi
COP	Colombian Peso
CRC	Costa Rican Colon
CSD	Serbia Dinar

ISO Currency Code	Description
CSJ	Krona A/53
CSK	Koruna
CUP	Cuban Peso
CVE	Cape Verde Escudo
CYP	Cyprus Pound
CZK	Czech Koruna
DEM	Deutsche Mark
DJF	Djibouti Franc
DKK	Danish Krone
DOP	Dominican Peso
DZD	Algerian Dinar
ECS	Sucre
ECV	Unidad de Valor
EEK	Kroon
EGP	Egyptian Pound
EQE	Ekwele
ERN	Nakfa
ESA	Spanish Peseta
ESB	Convertible Peseta
ESP	Spanish Peseta
ETB	Ethiopian Birr
EUR	euro
FIM	Markka
FJD	Fiji Dollar
FKP	Falklands Isl. Pound
FRF	French Franc
GBP	Pound Sterling

ISO Currency Code	Description
GEK	Georgian Coupon
GEL	Lari
GHC	Cedi
GIP	Gibraltar Pound
GMD	Dalasi
GNE	Syli
GNF	Guinea Franc
GNS	Syli
GQE	Ekwele
GRD	Drachma
GTQ	Quetzal
GWE	Guinea Escudo
GWP	Guinea-Bissau Peso
GYD	Guyana Dollar
HKD	Hong Kong Dollar
HNL	Lempira
HRD	Dinar
HRK	Kuna
HTG	Gourde
HUF	Forint
IDR	Rupiah
IEP	Irish Pound
ILP	Pound
ILR	Old Shekel
ILS	New Israeli Sheqel
INR	Indian Rupee
IQD	Iraqi Dinar

ISO Currency Code	Description
IRR	Iranian Rial
ISJ	Old Krona
ISK	Iceland Krona
ITL	Italian Lira
JMD	Jamaican Dollar
JOD	Jordanian Dinar
JPY	Yen
KES	Kenyan Shilling
KGS	Som
KHR	Riel
KMF	Comoro Franc
KPW	North Korean Won
KRW	Won
KWD	Kuwaiti Dinar
KYD	Cayman Islands dollar
KZT	Tenge
LAJ	Kip Pot Pol
LAK	Kip
LBP	Lebanese Pound
LKR	Sri Lanka Rupee
LRD	Liberian Dollar
LSL	Loti
LSM	Maloti
LTL	Lithuanian Litas
LTT	Talonas
LUC	Convertib Francl
LUF	Luxembourg Franc

ISO Currency Code	Description
LUL	Financial Franc
LVL	Latvian Lats
LVR	Latvian Ruble
LYD	Libyan Dinar
MAD	Moroccan Dirham
MAF	Mali Franc
MDL	Moldovan Leu
MGF	Malagasy Franc
MKD	Denar
MLF	Mali Franc
MMK	Kyat
MNT	Tugrik
MOP	Pataca
MRO	Ouguiya
MTL	Maltese Lira
MTP	Maltese Pound
MUR	Mauritius Rupee
MVQ	Maldive Rupee
MVR	Rufiyaa
MWK	Malawian Kwacha
MXN	Mexican Peso
MXP	Mexican Peso
MXV	Mexican UDI
MYR	Malaysian Ringgit
MZE	Mozambique Escudo
MZM	Metical
NAD	Namibia Dollar

ISO Currency Code	Description
NGN	Naira
NIC	Cordoba
NIO	Cordoba Oro
NLG	Netherlands Guilder
NOK	Norwegian Krone
NPR	Nepalese Rupee
NZD	New Zealand Dollar
OMR	Rial Omani
PAB	Balboa
PEI	Inti
PEN	Nuevo Sol
PES	Sol
PGK	Kina
PHP	Philippine Peso
PKR	Pakistan Rupee
PLN	Zloty
PLZ	Zloty
PTE	Portuguese Escudo
PYG	Guarani
QAR	Qatari Rial
ROK	Leu A/52
ROL	Leu
RUB	Russian Ruble
RUR	Russian Federation Rouble
RWF	Rwanda Franc
SAR	Saudi Riyal
SBD	Solomon Islands

ISO Currency Code	Description
SCR	Seychelles Rupee
SDD	Sudanese Dinar
SDP	Sudanese Pound
SEK	Swedish Krona
SGD	Singapore Dollar
SHP	St Helena Pound
SIT	Tolar
SKK	Slovak Koruna
SLL	Leone
SOS	Somali Shilling
SRG	Surinam Guilder
STD	Dobra
SUR	Rouble
SVC	El Salvador Colon
SYP	Syrian Pound
SZL	Lilangeni
THB	Baht
TJR	Tajik Ruble
TJS	Somoni
TMM	Manat
TND	Tunisian Dinar
TOP	Pa’anga
TPE	Timor Escudo
TRL	Turkish Lira
TTD	Trinidad Dollar
TWD	New Taiwan Dollar
TZS	Tanzanian Shilling

ISO Currency Code	Description
UAH	Hryvnia
UAK	Karbovanet
UGS	Uganda Shilling
UGW	Old Shilling
UGX	Uganda Shilling
USD	US Dollar
USN	US Dollar (Next day)
USS	US Dollar (Same day)
UYN	Old Uruguay Peso
UYP	Uruguayan Peso
UYU	Peso Uruguayo
UZS	Uzbekistan Sum
VEB	Bolivar
VNC	Old Dong
VND	Dong
VUV	Vatu
WST	Tala
XAF	CFA Franc BEAC
XAG	Silver
XAU	GOLD
XBA	European Composite Unit
XBB	European Monetary Unit
XBC	European Unit of Account 9
XBD	European Unit of Account 17
XCD	East Caribbean Dollar
XDR	SDR
XEU	EU Currency (E.C.U)

ISO Currency Code	Description
XFO	Gold-Franc
XFU	UIC-Franc
XOF	CFA Franc BCEAO
XPD	Palladium
XPF	CFP Franc
XPT	Platinum
XTS	For Testing Purposes
XXX	Non Currency Transaction
YDD	Yemeni Din
YER	Yemeni Rial
YUD	New Yugoslavian Dinar
YUM	New Dinar
YUN	Yugoslavian Dinar
ZAL	Financial Rand
ZAR	Rand
ZMK	Zambian Kwacha
ZRN	New Zaire
ZRZ	Zaire
ZWC	Rhodesian Dollar
ZWD	Zimbabwe Dollar

Glossary of PeopleSoft 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.

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 Human Resources, PeopleSoft Benefits Administration, PeopleSoft Stock Administration, and the COBRA Administration feature of the Base Benefits business process.

action template In PeopleSoft 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 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.

agreement	In PeopleSoft 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 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.
AR specialist	Abbreviation for *receivables specialist.* In PeopleSoft 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 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 Directory Interface, relates the data that makes up an entry in the directory information tree.
authentication server	A server that is set up to verify users of the system.
base time period	In PeopleSoft Business Planning, the lowest level time period in a calendar.
benchmark job	In PeopleSoft Workforce Analytics, a benchmark job is a job code for which there is corresponding salary survey data from published, third-party sources.
book	In PeopleSoft 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 event	In PeopleSoft Receivables, defines the processing characteristics for the Receivable Update process for a draft activity.

In PeopleSoft 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 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 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.

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 Catalog Management, translates values from the catalog source data to the format of the company's catalog.

catalog partner In PeopleSoft 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.

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 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 Promotions Management, enables you to view financial data (such as planned, incurred, and actual amounts) that is related to funds and trade promotions.

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.*

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.

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, PeopleSoft maintains a set of collections (one per language code) for each search index object.

collection rule	In PeopleSoft 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.
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.
condition	In PeopleSoft 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. 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.
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 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 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.
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 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 Supply Chain Management, identifies the method by which goods are shipped to their destinations (such as truck, air, rail, and so on). 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.

directory information tree In PeopleSoft Directory Interface, the representation of a directory's hierarchical structure.

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 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 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 General Ledger, a related group of intercompany accounts that is processed during consolidations.

entry event In PeopleSoft 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 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.

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 Human Resources, also refers to an incident that affects benefits eligibility.

event propagation process In PeopleSoft 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.

Sales Incentive Management uses this mechanism to implement splits, roll-ups, and so on. Event propagation determines who receives the credit.

exception — In PeopleSoft Receivables, an item that either is a deduction or is in dispute.

exclusive pricing — In PeopleSoft 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 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.

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 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.

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.

group — In PeopleSoft Billing and Receivables, a posting entity that comprises one or more transactions (items, deposits, payments, transfers, matches, or write-offs).

In PeopleSoft 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 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, user interaction objects, and so on.

incentive rule — In PeopleSoft 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 Promotions Management, to become liable for a promotional payment. In other words, you owe that amount to a customer for promotional activities.

item — In PeopleSoft Inventory, a tangible commodity that is stored in a business unit (shipped from a warehouse).

In PeopleSoft 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 Receivables, an individual receivable. An item can be an invoice, a credit memo, a debit memo, a write-off, or an adjustment.

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 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.

load
In PeopleSoft Inventory, identifies a group of goods that are shipped together. Load management is a feature of PeopleSoft Inventory that is used to track the weight, the volume, and the destination of a shipment.

local functionality
In PeopleSoft 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 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.

match group
In PeopleSoft 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 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 Structured Query Language (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 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 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.

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 and non-PeopleSoft 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 Payables, a set of rules that define the criteria by which it should select scheduled payments for payment creation.

pending item
In PeopleSoft 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 application processor. PeopleCode generates results based upon existing data or user actions. By using business interlink objects, external services are available to all PeopleSoft applications wherever PeopleCode can be executed.
PeopleCode event	An action that a user takes upon an object, usually a record field, that is referenced within a PeopleSoft page.
PeopleSoft Internet Architecture	The fundamental architecture on which PeopleSoft 8 applications are constructed, 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 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.
plan	In PeopleSoft 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 Supply Planning, a set of data (business units, items, supplies, and demands) constituting the inputs and outputs of a supply plan.
portal registry	In PeopleSoft 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.

process category In PeopleSoft Process Scheduler, processes that are grouped for server load balancing and prioritization.

process group In PeopleSoft 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 category In PeopleSoft Enterprise Incentive Management, indicates an application in the Enterprise Incentive Management suite of products. Each transaction in the PeopleSoft Enterprise Incentive Management system is associated with a product category.

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 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 Project Costing, an individual transaction line that represents a cost, time, budget, or other transaction row.

promotion In PeopleSoft Promotions Management, a trade promotion, which is typically funded from trade dollars and used by consumer products manufacturers to increase sales volume.

publishing In PeopleSoft Enterprise Incentive Management, a stage in processing that makes incentive-related results available to participants.

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 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 Order Management, Billing, or Receivables, where it is assumed that you are always recording only output VAT, or in PeopleSoft 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.*

reference data
In PeopleSoft Sales Incentive Management, system objects that represent the sales organization, such as territories, participants, products, customers, channels, and so on.

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 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 eSettlements, an individual who requests goods or services and whose ID appears on the various procurement pages that reference purchase orders.

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.

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.

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 Manufacturing, the ability to track the composition of a specific, serial-controlled item.

serial in production In PeopleSoft Manufacturing, enables the tracing of serial information for manufactured items. This is maintained in the Item Master record.

session 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 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 application server, access a second PeopleSoft application server without entering a user ID or password.

source transaction In commitment control, any transaction generated in a PeopleSoft 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.

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.

statutory account	Account required by a regulatory authority for recording and reporting financial results. In PeopleSoft, this is equivalent to the Alternate Account (ALTACCT) ChartField.
step	In PeopleSoft Sales Incentive Management, a collection of sections in a plan. Each step corresponds to a step in the job run.
storage level	In PeopleSoft 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 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 Receivables, an activity that defines how the system generates accounting entries for the general ledger.
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.
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, you use templates to build a page by combining HTML from a number of sources. For a PeopleSoft portal, all templates must be registered in the portal registry, and each content reference must be assigned a template.
territory	In PeopleSoft Sales Incentive Management, hierarchical relationships of business objects, including regions, products, customers, industries, and participants.
TimeSpan	A relative period, such as year-to-date or current period, that can be used in various PeopleSoft 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 Projects.

trace usage In PeopleSoft 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 systems that displays the relationship between all accounting units (for example, corporate divisions, projects, reporting groups, account numbers) and determines roll-up hierarchies.

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 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.

user interaction object In PeopleSoft Sales Incentive Management, used to define the reporting components and reports that a participant can access in his or her context. All 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 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 data warehouse that consists of predefined ETL maps, data warehouse tools, and DataMart definitions.

work order	In PeopleSoft 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.
worksheet	A way of presenting data through a PeopleSoft 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 schema	An XML definition that standardizes the representation of application messages, component interfaces, or business interlinks.
yield by operation	In PeopleSoft 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

A

additional documentation xiv
application fundamentals xiii
application server tests
  WatchDog 178
Archived status
  online dialogs 127
audiences
  and dialog status 115
  creating in dialogs 45
  dialogs 22
  selecting for dialogs 44
automaticMailJobRecovery parameter 155

B

blank line
  adding to web document 92
Bounce Process
  Email Response Processor 184
bounced email 122
broadcast email
  dialog flow 37
business unit
  online marketing 8
buttons
  adding 90
  adding images 90

C

Cache page 160, 161
caches
  clearing 161
character set
  defining 13
character set options
  setting for dialogs 49
Character Set Setup page 8, 13
Check Dialog page 116
child mail job
  defined 147
child mail jobs
  states 149
choice questions
  building 86
choose many questions 88
choose one questions 86
choose one with rating questions 88
class files
  extensions 227
clear buttons 90
cloning
  dialogs 48
  items in web documents 79
command line parameters
  WatchDog 182
comments, submitting xvii
common elements xvii
Complete status
  online dialogs 127
compression
  online dialog 119
configuration files
  Email Response Processor 184
configuration parameters
  mailcaster 155
contact information xvii
Control Center
  administering email job reports 167
  administering scheduler events 165
  administering single email queue 172, 173
  changing DES debug flags 163
  clearing caches 161
  maintaining dialog servers 174
  single email failure and recovery 171
  understanding 159
  using 159
  viewing email service information 164
  viewing memory usage 162
  viewing Scheduler Event Report 165
  viewing the Dedup Report 170
  viewing the Mail Job Report 167
cookies
  using with Event Wire 201
costs
  defining in dialogs 47
cross-dialog links 66
cross-references xvi
current date

merge content 96
current time
merge content 96
custom action extensions 221
including in dialog flow 110
usage scenarios 222
custom content extensions 221
usage scenarios 222
custom element
dialog flow 43
custom HTML
adding to web document 92
Customer Connection website xiv

D

database tests
WatchDog 178
date entry questions 84
date/time trigger 107
dialog flow 31
debug flags
changing in DES 163
Debug page 160, 163
decimal entry questions 84
decision point
dialog flow 42
Decision Point 112
Dedup Report
viewing 170
Dedup Report page 170
deduplication
defined 170
deleting
items in web documents 79
demoCampaignMagicNumber parameter
WatchDog 181
DES
clearing caches 161
DES debug flags
changing 163
DES Status
determining 159
dialog
adding 24
character set options 49
cloning 48
costs 47
creating 24
defining documents 45
defining flow 27
Design version 114
designing flow with non-graphical interface 30
elements 46
field matching rules 139
graphical designer options 49
Live version 114
matching rules 49
program details 47
saving 48
selecting target audiences 44
setting options 49
statuses 23, 26
tasks 47
using graphical designer 29
Dialog
changing live 203
Dialog Designer - Audiences page 24, 44
Dialog Designer - Clone page 24
Dialog Designer - Dialog Options page 24
Dialog Designer - Dialog page 24
Dialog Designer - Documents page 24
Dialog Designer - Elements page 24, 46
Dialog Designer - Flow page 24
Dialog Designer - Link Report page 24
Dialog Designer - Options page 49
dialog execution server
settings 13
Dialog Execution Server
testing 180
Dialog Execution Server Settings page 8, 13
Dialog Execution Server status, *See* DES Status
dialog flow 106
actions 106
broadcast email 37, 109
custom action extensions 110
custom element 43
date/time trigger 31
decision point 42, 112
defining 27
external event trigger 32
final page 35, 111
intermediate page 34
landing page 32, 111
single email 39, 112
standalone page 36
standalone web page 110
understanding 105

update profile 41, 112
using final pages 111
web link promo 37, 110
dialog options
setting 49
dialog roles
enabling 17
dialog servers
maintaining 174
dialog status
viewing 114
dialog statuses
and audiences 115
understanding 113
dialogs 118
archiving 127
bounced email 122
building choice questions 86
change restrictions 122
changing live 122
checking 116
creating audiences 45
creating web documents 74
deploying 116
deploying with Event Wire 140
designing 21
designing web documents 73
Edit version 27
going live 121
Live version 27
Live vs. Edit versions 27
managing live 122
overview of design 22
pausing 126
placing in broadcast hold 126
re-activating 127
stopping 127
target audiences 22
types 21
understanding 21
Document Designer - Designer page 75
Document Designer - Document page 75
Document Designer - Email Document Designer page 60
Document Designer page 75
document elements
understanding 73
document types
setting up 9
Document Types page 9
documentation
printed xiv
related xiv
updates xiv
documents
creating for web 74
defining in dialogs 45
designing for web 73
using web templates with 54
using with web template 54
Documents page 45
dynamic content
adding to email documents 67
merge content 98
Dynamic Content page 60

E

Element Format Properties page 75
elements
dialog 46
email aliases
and mailboxes 17
email bounces
dialogs 122
email content
creating 59
Email Document Designer page 60
Email Document page 58
email documents
adding dynamic content 67
adding web links 64
addressing 60
copying merge content 63
creating email body 63
customizing the subject line 61
defining 58
designing 57
importing HTML text 70
merge content 61
personalizing 57
understanding 57
Email Job Report page 167
email job reports
administering 167
email messages
HTML 63
text 63
Email Response Processor 183
actions 190
Bounce Process 184

checking for multiple conditions 190
conditions 187
configuration files 184
database actions 190
error handling 192
functionality 184
keywords 192
performance issues 192
Reply Process 184
running 178, 184
script reference 187
understanding 183
Email Response Processor configuration file
Error Handling section 187
Parameter section 184
Rules section 186
email service information
viewing 164
Email Service page 160, 164
entry questions
building 81
Event Wire 129
API reference 205
calling 199
changing a live dialog 203
changing live dialogs 140
checking status 203
Control Center 215
creating dialogs for 134
creating dialogs for use with 136
creating web documents for use with 135
deploying dialog 136
deploying dialogs 140
dialog components 135
displaying web pages 203
entering external system 137
external system 198
failed calls 204
features 129
field matching rules in dialog 139
field matching rules in the dialog 202
functionality 130
getparams call 205
gettrxnstatus call 209
landing page URL and external system 137
messages 211
passint landing page URL to external system 199
processtrxn call 207
programming calls 201
programming external system 135
redirecting respondents to external system 137
registering external systems 215
required fields on landing pages 202
retrying transactions 204
sample implementation 134
sample Java code 213
security 204
setting landing page URL in external system 139
setting up 197
short call 211
specifying parameters 200
status codes 211
testing dialog 136
understanding 129, 197
using cookies 201
using default values 140
using IMAGE tags 200
using multiple dialogs with same external system 139
using required fields on landing pages 140
using standalone web page 139
verifying setup 198
viewing Retried Transactions Report 218
viewing Transaction Report 217
Event Wire Retried Transactions Report page 219
Event Wire Transaction Report page 217
expectedResponseAfterGet parameter
WatchDog 181
expectedResponseAfterPost parameter
WatchDog 181
EXStockQuotes sample servlet
extensions 243
extension
installing class files 227
merge content 98
Extension page 19
Extension Summary page 8
extensions 110
calling external jar files 225
CGI environment values 236

creating 223
custom action 221
custom content 221
defining 19
defining requirements 223
design notes 228
EXStockQuotes sample servlet 243
global parameters 227
Hello World sample servlet 238
Java servlets 224
managing 232
merge content as parameters 248
merge content syntax 233, 247
Netscape Enterprise Server-specific request headers 238
Online Marketing 221
PeopleCode 231
PeopleCode functions 226
programming references 232
registering 229
reserved words 233
RFC 2616 request headers 236
sample servlets 238
SampleLiveExtension sample servlet 239
syntax 227
testing 232
understanding 221
usage scenarios 222
external action trigger 109
external event trigger
dialog flow 32
external event triggers
generating URLs 118
external system
passing landing page URL 199
redirecting respondents to 137
setting landing page URL 139
using multiple dialogs 139
External System Registration 215
external systems
Event Wire 197
receiving data from 129

F

failure
single email 171
final page
dialog flow 35
Final Page 111
flow
online dialog 105
fonts
supported 100

G

generating URLs for external event triggers 118
generating URLs for web link promos 118
global options
setting up 10
Global Options page 7, 10
glossary 283
graphical dialog designer 27
buttons and controls 29
using 29
graphical dialog designer options
setting 49

H

HelloWorld servlet
extensions 238
horizontal line
adding to web document 91
HTML
custom 92
importing into email documents 70

I

images
adding to buttons 90
Import/Export page 75
importing
HTML text in email documents 70
intermediate page
dialog flow 34

J

Java servlets
extensions 224
jobRecoveryExpireInHours parameter 155

L

landing page
dialog flow 32
Landing Page 111
landing pages
using required fields 202

Large Job Only mailcaster 146
Large Job Priority mailcaster 146
large mail jobs 146
Link Report page 118

M

mail event tests
  WatchDog 178
Mail Job Report
  viewing 167
Mail Job Report page 167
mail job size
  determining 147
mail jobs
  assignment priority 148
  recovering 150
  resending 150
  states 149
  types 147
mail queue
  described 147
mail server tests
  WatchDog 178
Mail Service operation 145
Mailbox Setup page 8, 15
mailboxes
  and email aliases 17
  and SetIDs 16
  merge content 17
  setting up 15
mailcaster
  automatic recovery 151
  configuration parameters 155
  functionality 146
  large job only 146
  large job priority 146
  manual recovery 151
  operation 145
  operation example 151
  recovery 150
  recovery expiration 151
  small job only 145
  small job priority 146
mailcasters
  understanding 145
Maintain Dialog Servers page 174
Marketing/Dialog Role Enablement page 8, 17
Matching Attributes page 8
matching rules
  defining 11
  setting for dialogs 49
Matching Rules page 7, 11
maxJobSize parameter 155
maxRenderMailQueueSize parameter 155
maxSendMailQueueSize parameter 155
memory usage
  viewing 162
Memory Usage page 160, 162
merge content
  adding to web document 95
  current date 96
  current time 96
  dynamic content 98
  extension 98
  in mailboxes 17
  merge content syntax 245
  profile field 96
  recipient ID 96
  tracking number 96
  web link 97
Merge Content page 60
merge content syntax 245
  extensions 233, 247
  merge content 245
minJobSize parameter 155
MMA Partners xiv
moving
  items in web documents 79

N

notes xvi
number entry questions 83
numberRenderingThreads parameter 155

O

online dialog
  compression 119
  creating 24
  dialog flow 105
  flow 105
  testing 119
online dialogs 21
  See Also dialogs
  archiving 127
  changing live 122
  checking 116
  deploying 113, 116

deploying with Event Wire 140
flow 106
flow actions 106
going live 121
managing 113
managing live 122
pausing 126
placing in broadcast hold 126
re-activating 127
stopping 127
online marketing
character sets 13
defining business units 8
defining extensions 19
dialog execution server settings 13
document types 9
enabling dialog roles 17
global options 10
matching rules 11
setting up 7
setting up mailboxes 15
web templates 14
Online Marketing
database monitoring 177
defining email documents 58
extensions 221
server monitoring 177
Online Marketing Definition page 7

P

paragraphs
building 80
parameters
WatchDog 182
parent mail job
defined 147
parent mail jobs
states 149
PeopleBooks
ordering xiv
PeopleCode functions
extensions 226
PeopleCode, typographical conventions xv
PeopleSoft application fundamentals xiii
percentageJobSize parameter 155
personalization
email documents 57
prerequisites xiii
previewing
web documents 100
printed documentation xiv
profile field
adding to web document 93
merge content 96
profile fields
matching 11
profiles
updating in dialog flow 112
program details
defining in dialogs 47

Q

queryToSubmit parameter
WatchDog 181

R

recipient ID
merge content 96
recovery
single email 171
recoveryStringUpdateFrequency parameter 155
related documentation xiv
renaming
items in web documents 79
repeating date/time trigger 107
repeating date/time triggers
scheduling 107
Reply Process
Email Response Processor 184
Required Attributes page 8
Retried Transactions Report
Event Wire 218

S

SampleLiveExtension servlet
extensions 239
saving
dialogs 48
Scheduler Event Report
viewing 165
Scheduler Event Report page 165
scheduler events
administering 165
scheduler tests
WatchDog 178
Server Monitor
viewing details 160

Server Monitor page 160
Service Monitor page 160
SetIDs
  and mailboxes 16
single email
  dialog flow 39
Single Email 112
single email failure and recovery 171
Single Email Failure and Recovery page 171
single email queue
  administering 172, 173
Single Emailer Queue Report page 173
single mailer
  operation 145
  understanding 156
Small Job Only mailcaster 145
Small Job Priority mailcaster 146
small mail job 145
small mail jobs
  states 149
smallAudienceThreshold parameter 155
smallJobOnly parameter 155
standalone page
  dialog flow 36
Standalone Web Page 110
status
  dialog 113
  viewing for dialog 114
statuses
  dialog 23, 26
submit buttons 90
suggestions, submitting xvii
syntax
  extensions 233
  merge content 245

T

tasks
  defining in dialogs 47
Template Settings page 8
Template Setup page 14, 52
terms 283
testing
  Dialog Execution Server 180
  online dialog 119
text
  importing into email documents 70
text entry questions 81
time entry questions 85
tracking number
  merge content 96
Transaction Report
  Event Wire 217
triggers
  date/time 107
  external action 109
  repeating 107
typographical conventions xv

U

update profile
  dialog flow 41

V

visual cues xvi

W

warnings xvi
WatchDog
  accessing 178
  application server tests 179
  cluster tests 180
  command line parameters 182
  database tests 179
  functionality 177
  mail event tests 180
  mail server tests 179
  server group tests 180
  testing parameters 181
  tests 178
  understanding 177
  using 177
  web server tests 179
Web Document Profile Insert page 75
web documents
  adding buttons 90
  adding items 78
  blank line 92
  choose many questions 88
  choose one questions 86
  choose one with rating questions 88
  cloning items 79
  creating 74, 75
  custom HTML 92
  date entry questions 84
  decimal entry questions 84
  deleting items 79
  designing 73

editing items 80
elements 73
entry questions 81
exporting 101
formatting items 99
horizontal line 91
importing 101
merge content 95
moving items 79
number entry questions 83
paragraphs 80
previewing 100
profile field 93
renaming items 79
supported fonts 100
text entry questions 81
time entry questions 85
understanding 73
yes/no questions 89
web link
adding to email documents 64
merge content 97
web link promo
dialog flow 37
web link promos
generating URLs 118
web link promotion, *See* web link promo
web server tests
WatchDog 178
web templates
changing 55
changing documents to use 54
creating documents 51
designing 51
live rendering 54
previewing 54
setting up 14, 52
using 53
using with documents 54

Y

yes/no questions 89