
PeopleSoft Enterprise CRM 9 Multichannel Applications PeopleBook

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About This PeopleBook

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

This preface discusses:

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

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

PeopleSoft Enterprise Application Prerequisites

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

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

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

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

Application Fundamentals

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

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

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

Documentation Updates and Printed Documentation

This section discusses how to:

- Obtain documentation updates.
- Download and order printed documentation.

Obtaining Documentation Updates

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

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

See Also

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

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Ordering Printed, Bound Volumes

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

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

Additional Resources

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

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

Typographical Conventions and Visual Cues

This section discusses:

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

Typographical Conventions

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

Typographical Convention or Visual Cue	Description
Bold	Indicates PeopleCode function names, business function names, event names, system function names, method names, language constructs, and PeopleCode reserved words that must be included literally in the function call.
<i>Italics</i>	Indicates field values, emphasis, and PeopleSoft Enterprise or other book-length publication titles. In PeopleCode syntax, italic items are placeholders for arguments that your program must supply. We also use italics when we refer to words as words or letters as letters, as in the following: Enter the letter <i>O</i> .
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)	<p>When placed before a parameter in PeopleCode syntax, an ampersand indicates that the parameter is an already instantiated object.</p> <p>Ampersands also precede all PeopleCode variables.</p>

Visual Cues

PeopleBooks contain the following visual cues.

Notes

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

Note. Example of a note.

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

Important! Example of an important note.

Warnings

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

Warning! Example of a warning.

Cross-References

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

Country, Region, and Industry Identifiers

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

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

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

Country Identifiers

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

Region Identifiers

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

- Asia Pacific
- Europe
- Latin America
- North America

Industry Identifiers

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

- USF (U.S. Federal)
- E&G (Education and Government)

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Monetary amounts are identified by the ISO currency code.

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

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Common Elements Used in PeopleBooks

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

Once, Always, and Don't Run	<p>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.</p> <p>Select Always to run the request every time the batch process runs.</p> <p>Select Don't Run to ignore the request when the batch process runs.</p>
Process Monitor	Click to access the Process List page, where you can view the status of submitted process requests.
Report Manager	Click to access the Report List page, where you can view report content, check the status of a report, and see content detail messages (which show you a description of the report and the distribution list).
Request ID	An ID that represents a set of selection criteria for a report or process.
Run	Click to access the Process Scheduler request page, where you can specify the location where a process or job runs and the process output format.
SetID	<p>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.</p>
Short Description	Enter up to 15 characters of text.
User ID	An ID that represents the person who generates a transaction.

Oracle's PeopleSoft CRM Multichannel Applications Preface

This preface discusses:

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

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

PeopleSoft Enterprise CRM Application Fundamentals

The *PeopleSoft Enterprise CRM 9 Application Fundamentals PeopleBook* contains essential information describing the setup and design of the PeopleSoft CRM system. This book contains important topics that apply to many or all PeopleSoft applications across the PeopleSoft CRM product line. The *PeopleSoft Enterprise CRM 9 Application Fundamentals PeopleBook* contains these parts:

- CRM multi-product foundation.

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

- Workforce management.

This part discusses how to administer workers who perform tasks such as support or field service in PeopleSoft CRM. It includes information on competency management and assigning workers to tasks.

- Interactions and 360-degree views.

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

- Self-Service for customers.

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

- Relationship management.

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

- Entitlement management.

This part discusses setting up agreements and warranties.

- SmartViews.

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

See Also

PeopleSoft Enterprise CRM 9 Application Fundamentals PeopleBook

PeopleSoft Enterprise CRM Automation and Configuration Tools

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

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

- Correspondence management.

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

- Automation tools.

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

- Configuration tools.

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

- Knowledge management.

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

- Business process management.

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

- The setup of the BPEL infrastructure to initiate and manage BPEL process instances.
- The setup of Business Process Monitor to view the status information of initiated BPEL process instances.
- The setup of BPEL worklist integration to send CRM worklist entries (both notifications and action items) from BPEL processes.
- The setup and execution of business projects.

See Also

PeopleSoft Enterprise CRM 9 Automation and Configuration Tools PeopleBook

PeopleSoft Enterprise CRM Business Object Management

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

- Business object management basics.

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

- Data management for organization business objects.

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

- Data management for individual business objects.

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

- Business object management.

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

- Customer and worker data integrations.

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

See Also

PeopleSoft Enterprise CRM 9 Business Object Management PeopleBook

PeopleSoft Enterprise CRM Product and Item Management

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

See Also

PeopleSoft Enterprise CRM 9 Product and Item Management PeopleBook, "PeopleSoft Enterprise CRM Product and Item Management Preface"

PeopleTools PeopleBooks

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

PART 1

Getting Started

Chapter 1

Getting Started with PeopleSoft Enterprise CRM Multichannel Applications

Chapter 2

Navigating in PeopleSoft Multichannel Communications

Chapter 3

Understanding Multichannel Applications

Chapter 4

Understanding ERMS

CHAPTER 1

Getting Started with PeopleSoft Enterprise CRM Multichannel Applications

This chapter provides an overview of PeopleSoft Enterprise Customer Relationship Management (CRM) Multichannel applications and discusses:

- PeopleSoft CRM Multichannel applications business processes.
- PeopleSoft CRM Multichannel applications integrations.
- PeopleSoft CRM Multichannel applications implementation.

PeopleSoft CRM Multichannel Applications Overview

This book discusses how the PeopleSoft system manages communication through various channels. Two PeopleSoft CRM applications, in conjunction with the PeopleTools MultiChannel Framework, provide support for three channels: telephone, email, and chat.

The two applications are:

- PeopleSoft CTI Integration.

This application supports integration with computer telephony integration (CTI) systems.

- PeopleSoft Multichannel Communications.

This application includes an email response management system (ERMS) and chat functionality.

Note. PeopleSoft CRM Multichannel applications work in conjunction with other PeopleSoft applications, and you must license at least one core application to use them. For example, using PeopleSoft CTI Integration and PeopleSoft Multichannel Communications in conjunction with PeopleSoft Support enables support agents to leverage CTI, email, and chat technologies.

PeopleSoft CRM Multichannel Applications Business Processes

This section summarizes the business processes associated with PeopleSoft CRM Multichannel applications. We discuss these business processes in the business process chapters in this PeopleBook.

CTI Integration

CTI integration enables the system to open application pages based on information that a caller enters into an interactive voice response (IVR) system.

ERMS

The ERMS enables the system to analyze, route, and in some cases automatically respond to email that customers send. The system also manages response time deadlines and sends warning notifications and final notifications as necessary.

For email that requires agent attention, the ERMS enables users to:

- Accept ownership of email that they access from either a group worklist or through the Unified Agent Desktop.
- Review the email to become familiar with the content and the history of the message, and modify thread information or sender information as necessary.
- Relate the email to other CRM transactions, such as cases and leads.
- Reply to the sender from the context of either the inbound email or a related transaction.
- Close the email.

Chat

Chat functionality enables agents to communicate with customers through two-way text chat.

Customers request a live chat from the self-service Contact Us page and the system routes the request to an available agent. When the agent accepts the chat (using the Unified Agent Desktop), the agent's chat window automatically displays the 360-degree view of the customer.

Agents can access all chat features on the Unified Agent Desktop, such as managing multiple chat windows, chatting with other agents, bringing other agents into a customer chat, and transferring the customer chat to another agent. Additionally, the agent can push PeopleSoft CRM pages (for example, the self-service Solution page) to the customer's workstation.

PeopleSoft CRM Multichannel Applications Integrations

The multichannel applications integrate with other PeopleSoft CRM applications and with external systems. We discuss integration considerations in the implementation chapters in this PeopleBook.

Integration with External Systems

PeopleSoft CTI Integration and PeopleSoft Multichannel Communications are both built on top of the PeopleTools MultiChannel Framework. This framework manages integrations with the following external systems:

- CTI middleware.

The PeopleTools MultiChannel Framework supports integration with the Genesys CTI Framework (certified with PeopleTools 8.48 and prior) and the Cisco Intelligent Contact Manager (ICM) system.

- ERMS mail servers and mailboxes.

The PeopleTools MultiChannel Framework integrates with POP3 and IMAP4-compliant mail servers.

Integration with Other CRM Applications

The PeopleSoft CRM Multichannel applications are part of the PeopleSoft CRM suite. Because the multichannel applications reside in the same database as the other PeopleSoft CRM applications, process flows can move smoothly from application to application without the need for any integration-specific configuration.

For example, if you license both PeopleSoft Multichannel Communications and PeopleSoft Support, you can relate cases to inbound email without any special configuration.

The use of component interfaces for this type of cross-component flow ensures that all appropriate data validation and automated processes are triggered.

See Also

Enterprise PeopleTools PeopleBook: PeopleSoft MultiChannel Framework

PeopleSoft CRM Multichannel Applications Implementation

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

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

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

Component	Component Interface	Reference
RB_ERMS_INSTAL	RB_ERMS_INSTAL_SCI	See Chapter 5, "Setting Up ERMS System," Defining System Settings for Email Processing, page 52.
RB_ERMS_SETUP	RB_ERMS_SETUP_SCI	See Chapter 5, "Setting Up ERMS System," Defining Mail Filters, page 61.
RB_MAILBOX_DEFN	RB_MAILBOX_DEFN_SCI	See Chapter 5, "Setting Up ERMS System," Defining Mailboxes, page 65.
RB_APPSRV_DEFN	RB_APPSRV_DEFN_SCI	See Chapter 7, "Setting Up Structured Email Handling," Defining Application Services, page 99.
RB_WEBFORM_DEFN	RB_WEBFORM_DEFN_SCI	See Chapter 7, "Setting Up Structured Email Handling," Defining Webform Templates, page 105.
RB_QUERY	RB_QUERY_SCI	See Chapter 8, "Setting Up Unstructured Email Handling," Defining Queries, page 118.
RB_QUERY_GROUP	RB_QUERY_GROUP_SCI	See Chapter 8, "Setting Up Unstructured Email Handling," Defining Query Groups, page 120.

Component	Component Interface	Reference
RB_WL_ROUTING	RB_WL_ROUTING_SCI	See Chapter 8, "Setting Up Unstructured Email Handling," Associating Query Groups with a Worklist, page 122 .
RB_CHAT_ADMIN	RB_CHAT_ADMIN_SCI	See Chapter 9, "Setting Up Chat," Defining General Options for Chat-Enabled Pages, page 138 .
RB_CHAT_MAP	RB_CHAT_MAP_SCI	See Chapter 9, "Setting Up Chat," Specifying Pages to be Pushed to Customers, page 139 .
CTI_CONFIG	CTI_CONFIG_SCI	See Chapter 10, "Configuring CTI Application Pages," Identifying Transactions for Each Content Provider, page 154 .
CTI_MAPPING	CTI_MAPPING_SCI	See Chapter 10, "Configuring CTI Application Pages," Mapping Transaction IDs to Application Pages, page 152 .

Other Sources of Information

In the implementation planning phase, 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 is in the preface of the *PeopleSoft Enterprise CRM 9 Application Fundamentals PeopleBook*, *PeopleSoft Enterprise CRM 9 Automation and Configuration Tools PeopleBook*, *PeopleSoft Enterprise CRM 9 Business Object Management PeopleBook* and *PeopleSoft Enterprise CRM 9 Product and Item Management PeopleBook* with information on where to find the most up-to-date version of each.

See Also

Enterprise PeopleTools PeopleBook: Security Administration

PeopleSoft Enterprise Setup Manager for CRM 9 PeopleBook

CHAPTER 2

Navigating in PeopleSoft Multichannel Communications

This chapter discusses how to navigate in PeopleSoft CRM Multichannel Communications.

Navigating in PeopleSoft Multichannel Communications

PeopleSoft CRM Multichannel Communications provides custom navigation pages that contain groupings of folders that support a specific business process, task, or user role.

Note. In addition to the PeopleSoft CRM Multichannel Communications custom navigation pages, this PeopleSoft system provides menu navigation, standard navigation pages, and PeopleSoft Navigator.

See Also

Using PeopleSoft Applications

Pages Used to Navigate in PeopleSoft CRM Multichannel Communications

This table lists the custom navigation pages that are used to navigate in PeopleSoft CRM Multichannel Communications.

Access to these custom navigation pages is based on role.

Supervisor Administration

Page Name	Navigation	Usage
Supervisor Administration	Set Up CRM, Multi-Channel Setup Center, Supervisor Administration	Access primary Supervisor Administration menu options and activities.
Overflow Admin	Click the Overflow Admin link on the Supervisor Administration page.	View a list of overflow events.
Escalation Admin	Click the Escalation Admin link on the Supervisor Administration page.	View a list of escalated events.

Page Name	Navigation	Usage
Search Inbound Emails	Click the Search Inbound Emails link on the Supervisor Administration page.	Look for inbound emails and perform operations, such as taking ownership and work on them, reassign them, requeue them and so on.
Search Outbound Emails	Click the Search Outbound Emails link on the Supervisor Administration page.	Look for outbound emails and perform operations, such as reviewing them or approving them (if applicable).
Search Undelivered Emails	Click the Search Undelivered Emails link on the Supervisor Administration page.	Look for undelivered emails and view email details.
Worklists	Click the Worklists link on the Supervisor Administration page.	Review, open, and reassign entries that have been sent to you, to other workers that you supervise, or to groups to which you belong.
ERMS Batch Monitor	Click the ERMS Batch Monitor link on the Supervisor Administration page.	Review, and optionally modify, the status and polling frequency of all mailboxes.
Chat Detail	Click the Chat Detail link on the Supervisor Administration page.	View the chat dialog and chat session details.
CTI Event Log	Click the CTI Event Log link on the Supervisor Administration page.	View the computer telephony integration (CTI) events that are logged by the MCF logger, which include accept and hangup events.
SD Administration	Click the SD Administration link on the Supervisor Administration page.	Define setup settings for Supervisor Desktop.
Supervisor Desktop	Click the Supervisor Desktop link on the Supervisor Administration page.	View and manage queue statistics on ERMS. Run ERMS reports.

System Settings

Page Name	Navigation	Usage
System Settings	Set Up CRM, Multi-Channel Setup Center, System Settings	Access primary System Settings menu options and activities.
CTI System Definition	Click the CTI System Definition link on the System Settings page.	Map transaction IDs to target pages for specific databases.
CTI Page Mapping	Click the CTI Page Mapping link on the System Settings page.	Map transaction IDs to specific applications page.
ERMS Installation	Click the ERMS Installation link on the System Settings page.	Set up ERMS system installation.

Page Name	Navigation	Usage
ERMS Mailbox Definitions	Click the ERMS Mailbox Definitions link on the System Settings page.	Set up and configure the mailbox behavior.
ERMS Webform Definitions	Click the ERMS Webform Definitions link on the System Settings page.	Create and edit webform structures for structured emails.
Chat Page Setup	Click the Chat Page Setup link on the System Settings page.	Set up chat.
Chat Page Mapping	Click the Chat Page Mapping link on the System Settings page.	Access full-function pages that map to self-service pages.

Agent Definitions

Agent Definitions	Set Up CRM, Multi-Channel Setup Center, Agent Definitions	Access primary Agent Definitions menu options and activities.
Configure Agent	Click the Configure Agent link on the Agent Definitions page.	Configure agents to process email, chat and voice tasks.
CTI Agent Config	Click the CTI Agent Config link on the Agent Definitions page.	Configure CTI agents.
Chat Agent Config	Click the Chat Agent Config link on the Agent Definitions page.	Configure chat agents.
Correspondence Agent Setup	Click the Correspondence Agent Setup link on the Agent Definitions page.	Specify agent's process settings and the reply to address.

Queue/Worklist Configuration

Page Name	Navigation	Usage
Queue/Worklist Configuration	Set Up CRM, Multi-Channel Setup Center, Queue/Worklist Configuration	Access primary Queue/Worklist Configuration menu options and activities.
Define Worklists	Click the Define Worklists link on the Queue/Worklist Configuration page.	Create group worklists.
Define Queues	Click the Define Queues link on the Queue/Worklist Configuration page.	Add or search for existing queues.
Define Tasks	Click the Define Tasks link on the Queue/Worklist Configuration page.	View, add, and edit tasks.

ERMS Routing

Page Name	Navigation	Usage
ERMS Routing	Set Up CRM, Multi-Channel Setup Center, ERMS Routing	Access primary ERMS Routing menu options and activities.
Define Keyword Queries	Click the Define Keyword Queries link on the ERMS Routing page.	Define queries composed of keywords and phrases for basic email routing.
Define Query Groups	Click the Define Query Groups link on the ERMS Routing page.	Define and maintain logical groups of queries for basic ERMS routing.
Associate Worklists	Click the Associate Worklists link on the ERMS Routing page.	Define which query groups should be used to route emails for each worklist or queue.

ERMS Advanced Definitions

Page Name	Navigation	Usage
ERMS Advanced Definitions	Set Up CRM, Multi-Channel Setup Center, ERMS Advanced Definitions	Access primary ERMS Advanced Definitions menu options and activities.
Define AMP Rule	Click the Define AMP Rule link on the ERMS Advanced Definitions page.	Define the behavior for the automated mail processor for each mailbox.
Define Actions	Click the Define Actions link on the ERMS Advanced Definitions page.	Register action behavior and action trigger points.

Correspondence Management Administration

Page Name	Navigation	Usage
Correspondence Mgmt Admin	Set Up CRM, Multi-Channel Setup Center, Correspondence Mgmt Admin	Access primary Correspondence Mgmt Admin menu options and activities.
Define Templates	Click the Define Templates link on the Correspondence Mgmt Admin page.	Define correspondence templates.
Define Template Packages	Click the Define Template Packages link on the Correspondence Mgmt Admin page.	Group one or more templates or static files together into template packages.
Define Template Usage	Click the Define Template Usage link on the Correspondence Mgmt Admin page.	Define the components that can use templates.
General Administration	Click the General Administration link on the Correspondence Mgmt Admin page.	Access the General Administration options and activities.

Page Name	Navigation	Usage
Manage Correspondence	Click the Manage Correspondence link on the General Administration page.	View correspondence requests that are created in the system and create new requests based on existing requests.
Search Inbound Emails	Click the Search Inbound Emails link on the General Administration page.	Search for emails that have been received.
Search Outbound Emails	Click the Search Outbound Emails link on the General Administration page.	Search for emails that have been sent.
Search Undelivered Emails	Click the Search Undelivered Emails link on the General Administration page.	Look for undelivered emails and view email details.
Chat Detail	Click the Chat Detail link on the General Administration page.	Access CRM chat details.
Chat Mini Navigation	Click the Chat Mini Navigation link on the General Administration page.	Access chat mini navigation page.

Unified Agent Desktop

Page Name	Navigation	Usage
Unified Agent Desktop	Set Up CRM, Multi-Channel Setup Center, Unified Agent Desktop	Access primary Unified Agent Desktop menu options and activities.
Agent Configuration	Click the Agent Configuration link on the Unified Agent Desktop page.	Configure Agent's setup data for the Unified Agent Desktop.
Console Definition	Click the Console Definition link on the Unified Agent Desktop page.	Set the default button and code settings for Unified Agent Desktop.

CHAPTER 3

Understanding Multichannel Applications

This chapter provides an overview of multichannel applications supported by PeopleSoft Customer Relationship Management (PeopleSoft CRM) and discusses how to set up the universal queuing infrastructure.

Understanding Multichannel Applications Supported by PeopleSoft CRM

This section discusses:

- Multichannel applications.
- Desktop tools.
- Universal queuing and Multichannel Toolbar.

Multichannel Applications

PeopleSoft multichannel applications facilitate interaction between you and your customers over multiple communication channels. *Channels* are specific communication technologies such as voice (telephone), email, and web collaboration (chat).

PeopleSoft MultiChannel Framework (PeopleSoft MCF) provides the infrastructure on which PeopleSoft CRM multichannel applications are built. They use a number of services and elements in the framework, such as universal queue, real-time event notification (REN) server, centralized event logging (MCF log), JavaScript MultiChannel Application Programming Interface (JSMCAPI), and so on.

See *Enterprise PeopleTools PeopleBook: PeopleSoft MultiChannel Framework*, “Understanding PeopleSoft MultiChannel Framework.”

PeopleSoft CRM supports these communication channels:

- Voice.
- Email.
- Chat.
- Generic tasks.

To support these channels, PeopleSoft CRM offers the following products:

- PeopleSoft CTI Integration.

This product enables you to integrate PeopleSoft CRM with a third-party computer telephony integration (CTI) solution implemented in your call center environment. It uses JSMCAPI to enable the CTI functionality on PeopleSoft CRM pages. You can map data that is provided by the interactive voice response (IVR) system to PeopleSoft CRM pages and key fields. The system uses this mapping to automatically display the appropriate page and data to the agent who accepts the incoming call.

- **PeopleSoft Multichannel Communications.**

Multichannel Communications includes two modules: Email Response Management System (ERMS) and Chat.

- The email module provides a full-featured email management solution that collects emails from mail servers, analyzes email contents, performs automated actions on emails if applicable, and routes them to appropriate worklists or agents. ERMS leverages the PeopleSoft MultiChannel Framework to manage the integration with external mail servers and mailboxes.
- The chat module offers customer to agent chatting capabilities on self-service PeopleSoft CRM pages. The browser-based agent chat window enables agents to transfer chat sessions and consult other agents on their buddy lists while the sessions are in progress. Agents can also push web pages (for example, sending PeopleSoft CRM transaction pages) to customers and perform common chat actions, such as sending chat logs or passwords.

Desktop Tools

PeopleSoft multichannel applications provide desktop tools that are targeted for agents and supervisors. These tools have a consistent interface and are equipped with features and functionality that are specific to each user group. They help users perform common tasks more effectively, thus improving productivity.

Unified Agent Desktop

Unified agent desktop provides an enhanced toolbar construct that is built into PeopleSoft CRM pages. From the desktop, agents receive and process voice, email, chat, and generic tasks that are assigned to them. It provides various button actions that agents use when handling voice calls. For email or chat tasks, the desktop brings up the corresponding email or chat workspace interface so that agents have access to the right set of tools to do their jobs.

Agents can be working on multiple tasks simultaneously. Unified agent desktop provides a task management tool for agents to switch among tasks easily.

See [Chapter 16, "Working with Unified Agent Desktop," page 281](#).

Supervisor Desktop

Supervisor desktop provides a centralized environment for supervisors to evaluate and monitor agent and queue performance in a call center. Supervisors can view real-time information on multichannel and voice queues, as well as the status and workload of agents who are logged on to these queues. The desktop enables supervisors to perform common tasks efficiently from a single component, such as managing timeout entries, approving emails, running reports, configuring agents, initiating chat sessions with agents, and so on.

See [Chapter 15, "Working with Supervisor Desktop," page 249](#).

Universal Queuing and Multichannel Toolbar

Universal queuing helps to make a customer's interaction experience efficient, consistent, and satisfactory. PeopleSoft MCF manages a universal queue that accepts, evaluates, and distributes incoming task requests from these communication channels: email, chat, and generic notifications. Tasks are delivered to agents through the PeopleSoft CRM Multichannel Toolbar, an integrated interface built for agents to manage voice, email, chat, and generic tasks.

The universal queue distributes work based on the priority of the task and the availability of agents possessing the required skill level. Availability is based on agent presence and the cost of the new task against the current workload of each agent. If an item that has been pushed to an agent is not accepted by the agent within the specified time, the queuing engine transfers the item to another agent in that queue.

Though agents receive voice tasks from the Multichannel Toolbar like all other tasks, voice tasks are not queued or routed by the universal queue, but by voice queues. Voice tasks take precedence over other tasks. When an agent accepts a call, the queue server adds the call's cost to the agent workload calculations that it uses to queue and assign other incoming tasks.

The PeopleSoft CRM Multichannel Toolbar is the exclusive interface for voice and chat communications. Email communications, however, can be managed through PeopleSoft CRM group worklists in addition to the Multichannel Toolbar. When using group worklists, agents are presented with a list of potential work items. Agents can select to work on emails that they can accept, and the system does not control the order in which the agent works on those emails. When using the Multichannel Toolbar, agents can work on only those emails that the system routes to them; the queuing engine controls the agent's work assignments.

Note. Only email that is sent to ERMS mailboxes can be queued and accessed through the Multichannel Toolbar.

See Also

[Chapter 16, "Working with Unified Agent Desktop," Using Multichannel Toolbar, page 282](#)

Setting Up Universal Queuing

This section lists prerequisites and discusses how to:

- Define queue defaults.
- Use PeopleSoft CRM group worklists to create queues and agents.

Note. Although queues and agents are part of PeopleSoft MCF, administrators can create these objects on the PeopleSoft CRM system as well. The PeopleSoft CRM group worklist definition acts as a front end for queue and agent creation: the worklist becomes a queue, and the worklist members become agents. From Supervisor Desktop, administrators can configure agents to work on voice tasks (voice configuration), and email, chat, and generic ones (multichannel configuration).

Prerequisites

Before setting up queues and agents, you must define these PeopleSoft MCF objects:

- Universal queue server.

This object accepts, evaluates, and distributes incoming task requests from multiple communication channels, including telephone (CTI), email, and chat.

- REN server.

This object pushes event notifications to the agent consoles, manages chat sessions, and notifies the queue server of newly enqueued contacts.

- MCF log server.

This object subscribes to all REN server events, logging chat conversations, agent presence changes, contact transfers and closures, and so on, based on configurable logging parameters.

- Queue clusters.

These objects are groups of redundant servers that provide failover protection in the event of a hardware failure.

See *Enterprise PeopleTools PeopleBook: PeopleSoft MultiChannel Framework*.

Pages Used to Set Up the Universal Queuing Infrastructure

Page Name	Definition Name	Navigation	Usage
System Installations	RB_ERMS_SYSDEFN	Set Up CRM, Product Related, Multichannel Definitions, Email, System Installation, System Installations	Define default values for queues that are created through PeopleSoft CRM group worklists.
Group Worklist	RB_WF_WL_GRP	Set Up CRM, Common Definitions, Workflow, Group Worklist, Group Worklist	Define a group worklist and its members so that the system will create corresponding queue and agent definitions.

Defining Queue Defaults

Access the System Installations page.

System Installations	Process Notifications	System Activities	Mapping Fields
System Settings			
*Commit Frequency For Emails		10	
*ERMS Process Scheduler		PSNT	
Unknown User for ERMS		Anonymous User	
Mailbox And Queue Defaults			
*Warning Notification	1	*Unit of Time	Day(s)
*Final Notification	2	*Unit of Time	Day(s)
*Polling Frequency	2	*Unit of Time	Minute(s)
*Routing Rule Type	Highest Query Group Score		
REN Server Cluster ID	RENCLSTR_0001		
*Maximum Workload	100	*Skill level	10
<input checked="" type="checkbox"/> Auto Acknowledgement			
<input checked="" type="checkbox"/> Automatic Routing			
Content Analysis And Time Out Scheduler Sleep Time			
*Mail Processor Sleep Time	2	*Unit of Time	Minute(s)
*Time Out Scheduler Sleep Time	2	*Unit of Time	Day(s)
Reply With History, No Subject, Verity Run Control			
*RunControl To Build Collection	RB_CRM_ERMS1		
*Collection Directory	D:\verity\data\search\CR900DVL		
*Reply With History On	Bottom		
Spam Category	Spam		
Set Up History Template		Set Up Greeting Template	
Set Up No Subject Phrase		Set Up Closing Template	

System Installations page

REN Server Cluster ID Select a default queue cluster to associate with queues that the system creates when you set up queues and agents using PeopleSoft CRM group worklists.

Maximum Workload and Skill level Enter default values to associate with agent definitions that the system creates when you set up queues and agents using PeopleSoft CRM group worklists. The values in these fields determine an agent's capacity to accept additional work and thus determine the agent to whom a new email is routed.

Note. You don't use the other page elements on the System Installations page when defining queues and agents. Refer to the documentation for setting up ERMS and running ERMS processes for more information about other page elements.

See Also

Chapter 5, "Setting Up ERMS System," Understanding ERMS Setup, page 47

Enterprise PeopleTools PeopleBook: PeopleSoft MultiChannel Framework

Using PeopleSoft CRM Group Worklists to Create Queues and Agents

Access the Group Worklist page.

Group Worklist

Group Worklist Name ComputerOrder

***Description** ERMS Worklist - Computer Order

Email Response Setting

Warning Notification 2 ***Unit of Time** Day(s)

Final Notification 2 ***Unit of Time** Day(s)

☐ **Group Worklist is ERMS Queue** ☐ **Auto Accept**

Queue Name

Group Members Customize Find First 1 of 1 Last

*User ID	Group Owner	Description
ALEWIS	<input checked="" type="checkbox"/>	

[Queue Setup](#) [Agent Setup](#)

Group Worklist page

Note. Remember to run the DMS script after you upgrade PeopleTools to a newer version to ensure that all ERMS queues are saved properly to the Tool's table.

Group Worklist is ERMS Queue

Select to make the system create both queue and agent definitions when the group worklist definition is saved. The default REN server for all queues created from the Group Worklist page is established on the System Installations page. The queue can be used by either the ERMS or chat features of PeopleSoft Multichannel Communications.

If worklist entries for other types of transactions (which are not supported in queues) are sent to this worklist, the system treats the worklist as a true worklist. In particular, ERMS alert notifications that are sent to this worklist are delivered through My Worklist, rather than the Multichannel Toolbar.

Queue Name

Enter the name that is used for the PeopleSoft MCF queue that the system creates when you save the group worklist. The system populates this field with the group worklist name when you select the Group Worklist is ERMS Queue check box.

User ID

Enter user IDs of members who belong to this group worklist. When you save the worklist, the system creates PeopleSoft MCF agent definitions for each

user. The agents are automatically made members of the newly created queue. The agents' default maximum workload and skill level come from the default values that you enter on the System Installations page.

Subsequent saves create agents and remove agents from the queue as necessary to keep the queue definition synchronized with the worklist definition.

Queue Setup and Agent Setup

Click to access PeopleSoft MCF pages, where you can further define the queues and agents that are associated with the group worklist. When you create queue and agent definitions using PeopleSoft CRM group worklists, the system enters only basic, required information in those definitions.

For example, go to the PeopleSoft MCF Agents component to override the default maximum worklist and skill level for newly created agents and to set up personalizations such as a standard greeting for chat sessions.

Note. Administrators can configure agents from Supervisor Desktop. The unified agent desktop (UAD) role is automatically set up as a sample user for CTI, universal queueing, and voice configuration.

Note. This section discusses only those page elements that are used to create PeopleSoft MCF queues and agents. Refer to the PeopleSoft CRM worklists documentation for a complete description of this page. Refer to your PeopleTools PeopleBooks for detailed documentation on setting up queues, agents, and agent personalizations.

See Also

Enterprise PeopleTools PeopleBook: PeopleSoft MultiChannel Framework

PeopleSoft Enterprise CRM 9 Automation and Configuration Tools PeopleBook, "Setting Up and Using Worklists"

[Chapter 15, "Working with Supervisor Desktop," Configuring Agents, page 262](#)

CHAPTER 4

Understanding ERMS

This chapter discusses:

- Email handling.
- Unstructured and structured email.
- Email response interfaces.
- Email management response system (ERMS) processes.
- How to run and monitor processes.

Email Handling

ERMS helps you process and manage large volumes of inbound emails by:

- Moving emails from an external mail server into the PeopleSoft Customer Relationship Management (CRM) database tables.
- Identifying the sender for each email and creating an interaction so that the email is visible in the sender's 360-degree view.
- Routing each email to an agent, a worklist, or an automated process that can respond.
- Enabling agents to reroute or respond to emails that require manual handling.
- Enabling agents to associate email with other CRM objects, such as cases or leads.
- Notifying a designated person when an email has not been handled within standard response time.

Remember, email is a channel for communication; the email object in the PeopleSoft system does not duplicate CRM transactions such as cases and leads. For example, if a customer sends an email related to a product support issue, you need to associate the email with a case to access case-specific functionality such as troubleshooting scripts, solution searches, and case note tracking.

See Also

[Chapter 4, "Understanding ERMS," ERMS Processes, page 25](#)

[Chapter 13, "Managing Email," page 181](#)

Unstructured and Structured Email

This section discusses:

- Unstructured email.
- Structured email.

Unstructured Email

Unstructured emails are messages that customers send using their own email clients. The email is unstructured because the body of the email is completely free-form. Unstructured email handling consists of two phases:

1. An automated routing phase, during which an application engine process analyzes the email and performs automated actions on the email if applicable, or routes it to a group worklist.
2. An email management phase, during which agents who accept emails from their group worklists or the Multichannel Toolbar work on email response.

Automated Mail Processing and Routing

When an email arrives, the ERMS system performs some automated action on it or routes it to a proper group worklist depending on the information provided in the email and the availability of a third-party application that performs natural language processing.

Specifically, the system can route unstructured emails based on:

- A thread ID that is embedded in the email body.

If you license PeopleSoft Multichannel Communications, all emails sent from the PeopleSoft system include a thread ID, also known as a *context tag*. If a customer replies to such an email, and if the context ID appears in the reply, the system uses that ID to route the new email to the group worklist associated with the original email or its sender.

- The email address or domain from which the email was sent.

You can define system-wide settings to ensure that emails from specific addresses or domains are handled appropriately. For example, you might configure the system so that it routes all emails from the domain *ImportantCustomer.com* to a worklist for priority customers.

- The email content.

You can set up keywords, and the system scores each email based on occurrences of those keywords within the email subject and body. You associate different worklists with different sets of keywords so that the system can calculate a score for each of those worklists and route the email to the one with the highest score.

If you license a third-party product that enables natural language processing (NLP), you can set up the system to perform actions on emails automatically based on their intentions. Automated mail processing enables you to define rules that associate the course of actions for each email intention (represented as *categories*). When the system sends an email to the NLP server for content analysis, the server analyzes the email content and comes up with a suggested category to return to the ERMS system. The system finds the rule that is associated with the suggested category and triggers the action from that rule to process the email accordingly.

- The sender of the email.

The system attempts to associate each inbound email with a business object ID by comparing the sender's email address to email addresses of customers and workers in the system. If there is a match, the routing process calls your custom code, which performs the customer-based routing. PeopleSoft does not deliver any customer-based routing processing, only the infrastructure for plugging in the custom code.

Note. The system always routes the email to a group worklist rather than to an individual's worklist. This practice ensures that an individual's unavailability does not prevent the email from receiving prompt attention.

There is also a default worklist for each mailbox. The system sends email there when none of the other routing processes produce a valid worklist, when the email is oversized (and therefore cannot be analyzed), or when you configure the mailbox to bypass the other routing processes and always go directly to the default worklist.

Email Management and Worklist Integration

Only an agent who has accepted ownership of an email can modify or reply to the email. Email can be reassigned as many times as necessary. Emails are assigned to individuals only when the individual accepts ownership (either explicitly or because the system forces auto-acceptance of emails that agents view). All other assignment operations involve assignment to a group worklist.

ERMS is tightly integrated with PeopleSoft CRM worklists. When a group member accepts ownership of an email, the system moves the corresponding worklist entry from the group worklist to the individual's worklist. Similarly, if an email is sent to a group worklist (the original worklist or any other one), the system moves the corresponding worklist entry to that group worklist. Users cannot mark the worklist entries complete until the corresponding email has been closed.

Every inbound email has a status; you can track which emails require work and which are complete. Until an email is closed, an agent who accepts ownership of an email can:

- Review the email and access additional customer information by opening the 360-degree view directly from the email workspace.
- Modify email information, such as the email contact, the email's parent in a thread, the email subject, and the email status.
- Create and remove relationships between the email and other transactions.
- Write a reply, optionally using a predefined correspondence template as the basis for the email text.

See Also

[Chapter 8, "Setting Up Unstructured Email Handling," Understanding Unstructured Email Routing, page 109](#)

[Chapter 13, "Managing Email," page 181](#)

Structured Email

Structured emails are sent when a customer submits information through a web page by using a form called a *webform*. The body text of a structured email is formatted in XML then plain text, which enables the NLP system to analyze content and the rules engine to perform automated mail processing, including sending an automated response or creating a case.

Your organization is responsible for constructing webforms that gather the appropriate data. You must also ensure that the webform formats the resulting email appropriately and sends it to an ERMS mailbox. To process the structured email, the rules engine of automated mail processing (AMP) finds a rule for the email with matching category and trigger actions of this rule to process the email automatically.

These webforms are not part of the PeopleSoft environment, so you must deploy them separately (for example, by setting up web servers and so on).

Note. PeopleSoft self-service pages are *not* webforms; they provide a direct interface with CRM tables, and they do not use email to transmit information.

See Also

[Chapter 7, "Setting Up Structured Email Handling," Understanding Structured Email, page 95](#)

Email Response Interfaces

An email response is a reply to a customer's email. To send the reply, the system leverages correspondence management features that are common to all PeopleSoft CRM applications. This enables you to use correspondence templates to streamline the response process and standardize the text of responses.

Automated responses (those sent in response to structured email) are always based on correspondence templates that you define.

Manual responses (those that a user writes in response to unstructured email) can be either free-form or template-based. There are several interfaces for creating a manual response:

- If you initiate a reply from the context of a specific email in the email workspace, the Response page of the same email workspace component is used.
- If you initiate a reply from the context of a transaction (such as a case), one of the following occurs:
 - If you open a transaction and click the Email button (in some cases it is the Send Email button) on the toolbar, the Outbound Email page appears, and it displays information about the transaction on the left of the page.
 - If you open a transaction from an email and click the Email button on the toolbar of that transaction, the Outbound Email page appears if the user selects to create an email with no association with any email (start a new thread).
 - If you open a transaction from an email and click the Email button on the toolbar of that transaction, the Response page appears if the user selects to create an email in relation to an email (either the email that the transaction was navigated from, or any email that's associated with the transaction).
 - If you click the Notification button (in some cases it is the Notify button) on the toolbar, the Send Notification page appears.

The user can send worklist notification to internal recipients or email to both internal and external recipients.

The interfaces of the Outbound Email component and email workspace are similar. The Outbound Email page functions the same as the Response page in the email workspace, except that you cannot search for solutions or documents and therefore cannot attach them in the email reply. The Thread and Note pages in these two components are the same. The email workspace provides a complete solution to manage email, which ranges from reviewing the inbound email, doing research to resolve the issue, responding to the inbound email, as well as reassociating email to another email thread. The Outbound Email component focuses on the response aspect of email management. You use it to send emails that typically don't have relation with other emails. Access the component to review a list of emails that are sent from the system.

See Also

PeopleSoft Enterprise CRM 9 Automation and Configuration Tools PeopleBook, "Sending Manual Notifications"

PeopleSoft Enterprise CRM 9 Automation and Configuration Tools PeopleBook, "Understanding Correspondence and Notifications"

[Chapter 13, "Managing Email," Email Replies, page 196](#)

ERMS Processes

ERMS uses application engine processes to fetch, route, and monitor inbound email.

This section discusses:

- High-level process flow.
- The mail reader process.
- The mail route process.
- The scheduler process.
- The email alert process.
- Process instantiation.
- Email process states and incompletely processed email.
- Processing statuses for the unstructured email process.

High-Level Process Flow

The ERMS system comprises of these processes:

- The mail reader process.

The mail reader process (RB_MAIL_READ) does all of the basic email handling that is common to both structured and unstructured email. Among other things, it fetches emails from external mail servers, saves the data in the PeopleSoft system, identifies email senders, associates relevant mailbox data with emails, and classifies emails as structured or unstructured.

- The mail route process.

The mail route process (RB_MAILROUTE) is responsible for analyzing and routing emails. It checks emails' eligibility for address or domain-based routing, customer-based routing, and thread-based routing. It carries out necessary email processing based on the email type (structured or unstructured) and the availability of NLP (natural language processing). At the end, either some actions are performed on emails automatically or they are routed to appropriate group worklists to be processed by agents.

- The scheduler process.

The scheduler process (RB_CHECKUQ) determines whether any emails are awaiting further processing. If there are unstructured emails and NLP is unavailable, it schedules the unstructured content analysis job (PRCEMAIL), which includes the following two processes.

- The build collection process (RB_SRCH_BLD), which builds a Verity search collection that contains the unstructured emails awaiting processing. The collection is used for content-based routing that Verity uses.

This process also updates the email tables to identify the emails that it builds into the collection.

- The mail route process, which analyzes and routes emails.

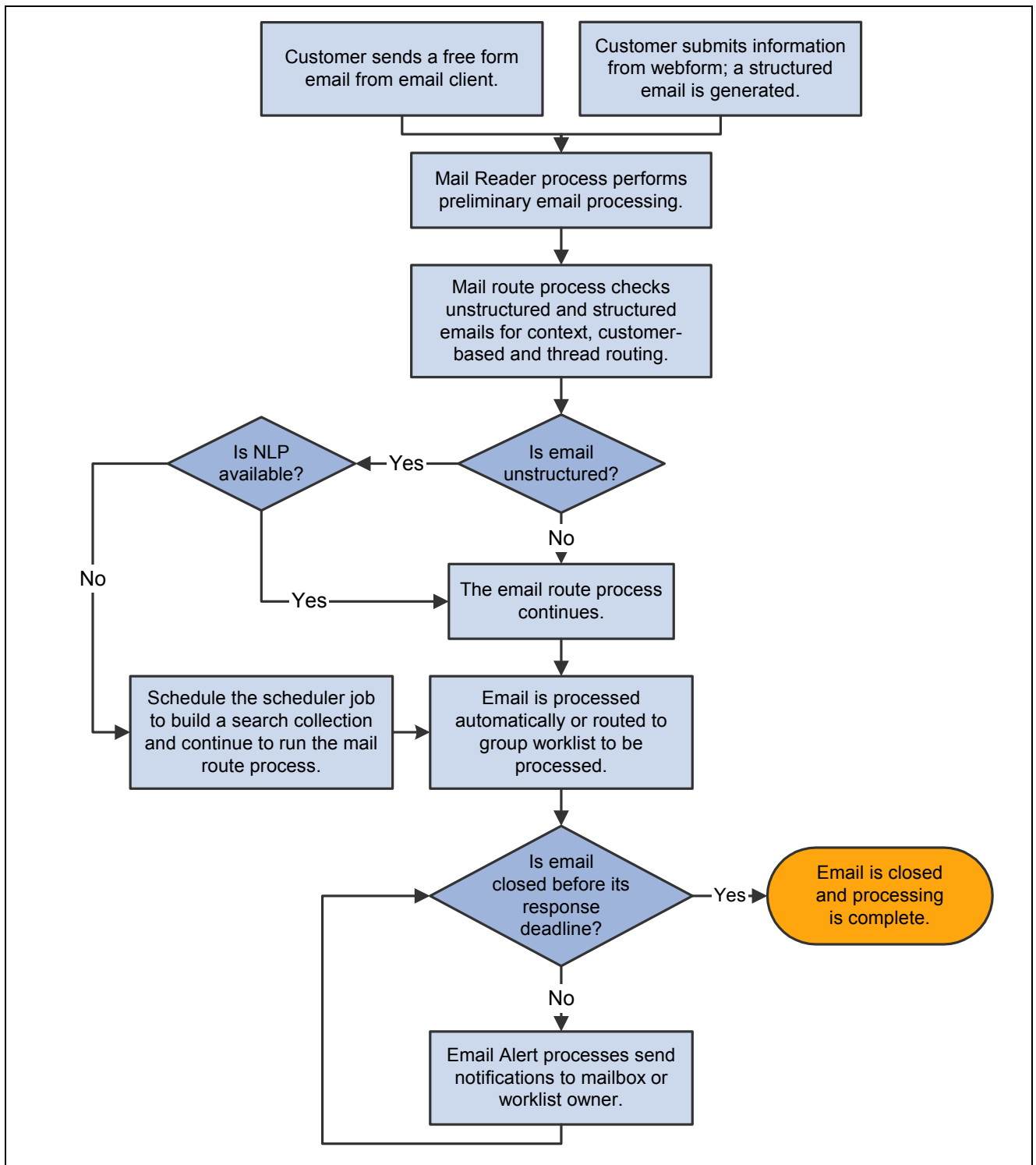
If there are structured emails waiting to be processed, only the mail route process is scheduled because these emails don't go through content-based routing using Verity.

- Email alert process.

Two application engine processes make up the email alert process. Together, these processes monitor email due dates and send notifications when emails are not closed in time. The two processes are:

- The time out process handler process (RB_SLA_SCHDR), which evaluates email due dates and statuses and schedules future notifications as necessary.
- The time out notification process (RB_SLA_NOTIFY), which confirms email due dates and statuses for each notification and sends immediate notifications.

The following process flow illustrates how these processes work together to handle email sent to an organization:



ERMS high-level process flow

See Also

[Chapter 4, "Understanding ERMS," ERMS Processes, page 25](#)

The Mail Reader Process

The mail reader process performs the following operations:

1. Schedules its own next instance.

Because this is the first operation performed, the next instance runs even if the current instance fails.

2. Determines whether the last instance of the mail scheduler process was able to schedule its own next instance, and if it wasn't, the mail reader process schedules an immediate instance for it.

Unlike all other ERMS processes, the scheduler process does not schedule its own next instance until the mail route process is complete. Therefore, a process failure could prevent future instances from being scheduled, if the mail reader process didn't check for this condition.

You can also use standard PeopleSoft Process Scheduler functionality to set up process-related notifications to alert an administrator of process failures.

3. Identifies the mailboxes to be polled.

4. Fetches emails from the external mail server.

The number of emails that the system fetches depends on the commit frequency that you set on the System Installations page.

5. Identifies exception emails and discards them.

Exception email is any email, structured or unstructured, that meets the mail-filtering criteria. When you set up ERMS, you can define addresses and domains to be automatically filtered. You can also create application classes to perform additional mail filtering.

Summary information about filtered email is stored in the exception email tables; your filter definitions determine whether the body text of the email is stored as well.

Note. Because no further processing is performed on exception emails, the following steps apply only to valid emails.

6. Saves data to PeopleTools email tables using PeopleTools ERMS application programming interfaces.

The PeopleSoft system deals with only two constructs—plain text and attachments. Any Multipurpose Internet Mail Extension (MIME) parts other than plain text, such as HTML areas and graphics, make emails no longer purely plain text and cause the part containing that construct to be stored as an attachment in the PeopleSoft system. The mail client of the sender determines the MIME format of an email.

See *Enterprise PeopleTools PeopleBook: PeopleSoft MultiChannel Framework*

7. Authorizes attachments in case emails have attachments.

PeopleTools secures all attachments. During this step, the mail reader process authorizes anyone with access to the Inbound Email component to view all of the email's attachments.

8. Classifies email as structured or unstructured, and saves a pointer to the email in either the unstructured email queue or the structured email queue.

The mail route process looks at these queues to determine which emails to process, and deletes the pointers when processing is complete.

Email is classified as structured if the `<?xml version="1.0"?>` and `<WEBFORM_TEMPL_ID>` XML tags appear in the email body. All other email is unstructured.

9. Analyzes the sender's email address to identify the sender.

If the sender cannot be identified as a known customer or worker, the mail reader process performs one of these actions based on the mailbox configuration:

- Associates the email with the unknown user business object that you choose in the System Installations page when you set up ERMS.
- Creates a new user based on the setting of the business unit that the mailbox associates with. The role type of the new user matches the type of the mailbox, which means that the user has the role of *consumer* if the mailbox type is external, and *worker* if the mailbox type is internal.

10. Saves data to the main CRM email table.

The CRM email table includes a pointer to the PeopleTools table and contains additional CRM-specific fields. The component interface that is used to store the data in the CRM table performs certain additional processing:

- Creates an interaction for the email.

See *PeopleSoft Enterprise CRM 9 Application Fundamentals PeopleBook*, "Working with Interactions".

- Calculates when the mailbox-level warning and final notifications should be sent and saves this information to the CRM email table.

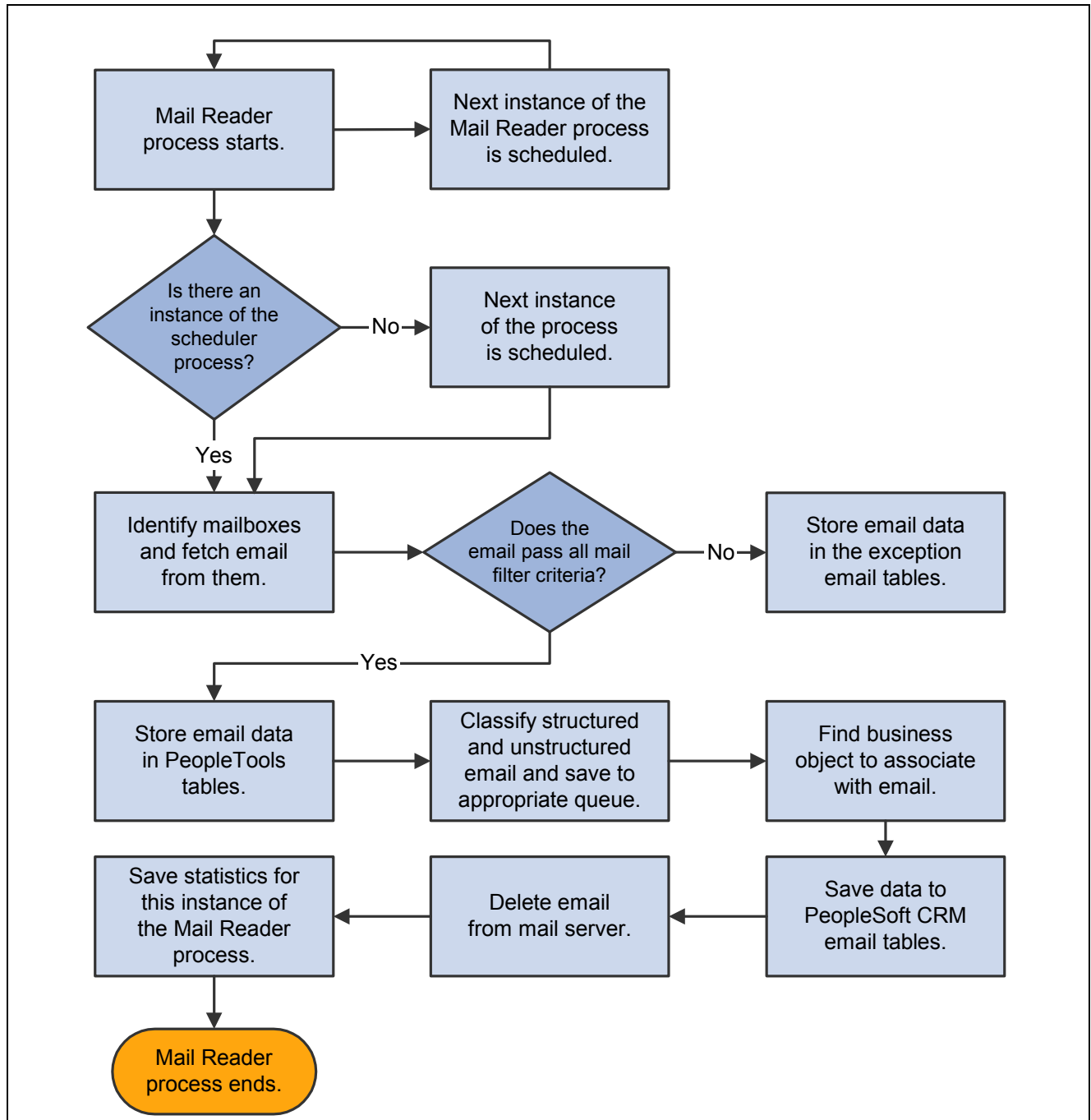
11. Deletes email from the external mailbox.

This does not happen until after the email is saved to the CRM database. This protects you from data loss in case of a process failure.

12. Updates processing statistics.

For each instance of the mail reader process, the system tracks the number of exception, structured, and unstructured emails processed overall and for each mailbox.

The following diagram illustrates this flow:



Process flow for the mail reader process

The Mail Route Process

The mail route process performs the following operations on structured and unstructured emails:

1. If the mailbox is not configured for automatic routing, all emails are routed to the default group worklist. If the mailbox is configured for automatic routing, this process routes the email based on an analysis of its individual characteristics. First, it checks to see if the address or domain based routing applies to emails and route them accordingly.

2. Then, it checks to see if the customer-based routing applies to emails and route them to the group worklist specified in the custom application class code.
3. It checks to see if emails are threaded. If yes, they are routed to the same group worklist to which the previous inbound email was sent.
4. It processes emails based on their classification, structured or unstructured.
 - If the email is structured, the process converts the email from XML to plain text and extracts the email subject and body based on the webform and email workspace field mapping.
 If the system is configured to always use the default category, the process looks up the category from the webform definition and finds the associated rule that is used to trigger automated actions for that email. If this option is not selected, the process next checks the availability of NLP.
 If the NLP server is present, the process sends the identified email subject and body for content analysis. The rules engine of AMP (automated mail processing) takes the NLP-suggested category and threshold values, finds a matching rule and trigger automated actions. If the NLP server is unable to return a suggested category, or it is unavailable, the default category is used.
 - If the email is unstructured and NLP is available, the email is processed the same as any structured email when NLP is present. If NLP does not return any category, the email is routed to the default group worklist.
 If NLP is unavailable, the email goes through content-based routing that is performed by Verity.
5. It performs the following post-routing operations:
 - Sends an auto-acknowledgement email to the sender, if the mailbox is so configured.
 - Deletes successfully processed emails from the email queue.
 - Establishes thread associations if the mailbox's automatic routing setting prevented the associations from being established during routing analysis.
6. The mail route process schedules the next instance of the scheduler process.

Please refer to the Setting Up Automated Mail Processing chapter for more information on AMP and the flow diagram of the mail route process.

See Also

[Chapter 8, "Setting Up Unstructured Email Handling," Understanding Unstructured Email Routing, page 109](#)

[Chapter 7, "Setting Up Structured Email Handling," Understanding Structured Email, page 95](#)

[Chapter 6, "Setting Up Automated Mail Processing," Understanding Automated Mail Processing, page 77](#)

The Scheduler Process

This section provides a high-level overview of the scheduler process. Additional details about the email analysis and routing steps are provided in the documentation for setting up unstructured email routing rules.

See [Chapter 8, "Setting Up Unstructured Email Handling," Understanding Unstructured Email Routing, page 109](#).

The scheduler process performs the following operations:

1. It reviews the data in the email queue.

Note. If there are no emails in the queue, the scheduler process schedules its own next instance, and the process ends. This ensures that the system does not attempt to build the Verity collection when there is no data to be added to the collection—a condition which would cause an error in the build collection process.

If there are emails in the queue, the scheduler process removes all emails with a status of *Successfully Processed*, and then it changes the status of any remaining emails to *Ready for Processing*. This ensures that emails that were partially processed (those with a status of *Verity Collection Built* or *Processing*) are ready to be reprocessed.

2. It schedules unstructured content analysis job that consists of the build collection process and the mail route process, if there are unstructured emails and NLP is not available.

Only the mail route process is scheduled if NLP is available in the system, or if there are only structured emails in the queue.

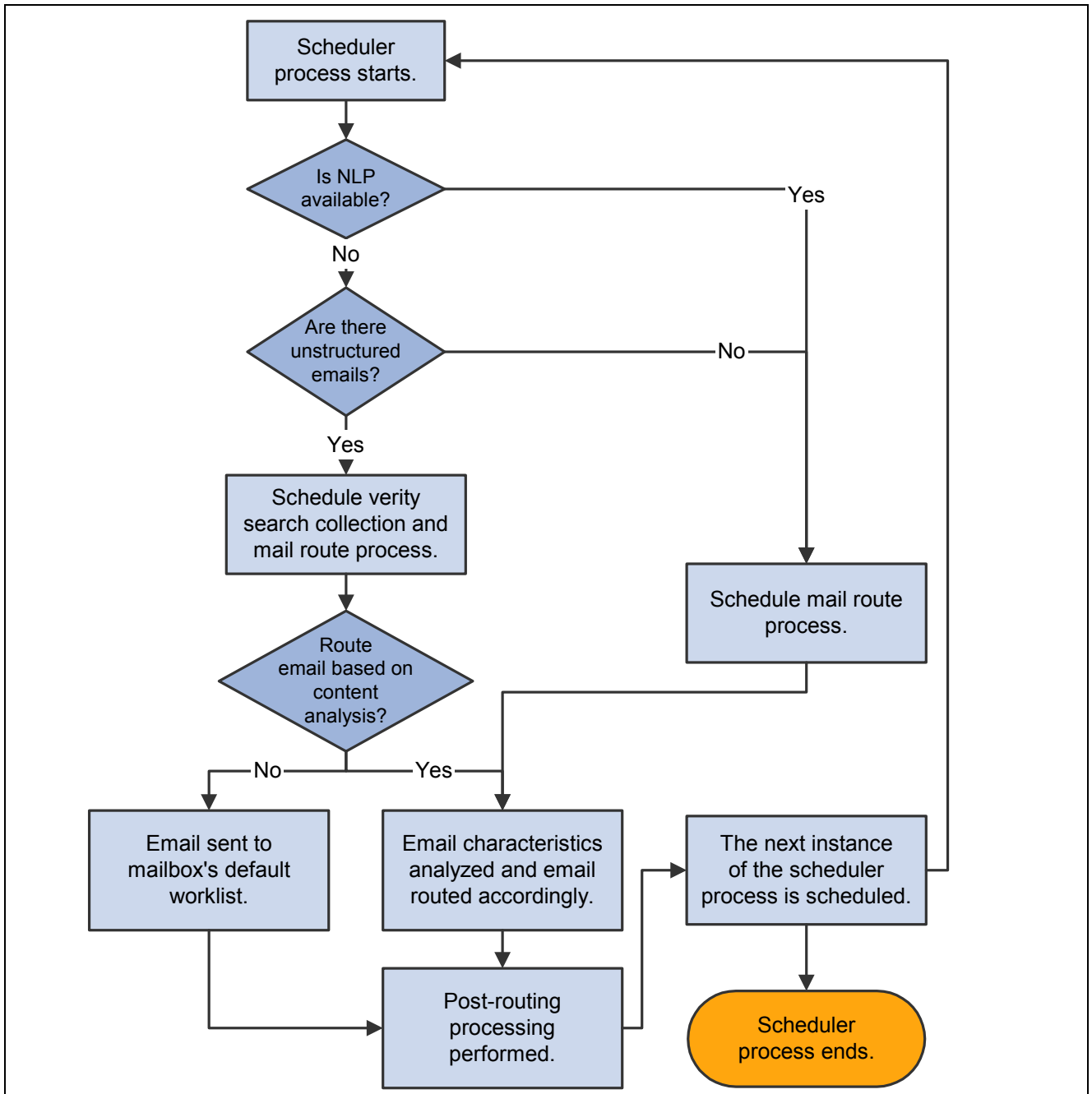
3. The build collection process creates a search collection containing data from all unstructured emails. Each instance of this process overwrites the previous search collection (unless it is still in use, in which case the new collection is not built until the previous one is released).

Note. This process applies to the Verity-based content analysis. If NLP is enabled, the system skips this build collection process.

4. The mail route process analyzes and routes the email based on its content. The process flow changes slightly with the availability of NLP. Refer to step 4 of the mail route process section above for more information.

If the process is unable to route an email based on its individual characteristics, the process routes the email to the default worklist for the mailbox.

The following diagram illustrates this flow:



High-level process flow for the scheduler process

The Email Alert Process

Every email has up to four associated notification times that the Email Alert processes monitor:

- Mailbox-level warning and final notification times are established when the email is saved to the PeopleSoft CRM email tables.

The system calculates these times from the time that the external mail server receives the email. The mailbox metrics change every time an email is reassigned to a different mailbox.

- Worklist-level warning and final notification times are established when an email is routed to a group worklist.

The system calculates these times from the time the email is routed to the group worklist. The group worklist metrics change every time an email is reassigned to a different group worklist, and that is why individual assignments must always be associated with a group worklist.

The Email Alert processes perform the following operations:

1. The Time Out Process Handler process schedules its own next instance.
2. The process identifies email that has one or more notifications scheduled to occur before the next instance of the process (the one that was just scheduled).
3. The process identifies emails with statuses other than *Cancelled* or *Completed*.

Emails that have been canceled or completed are ignored because alerts are intended to notify users of email that is still pending.

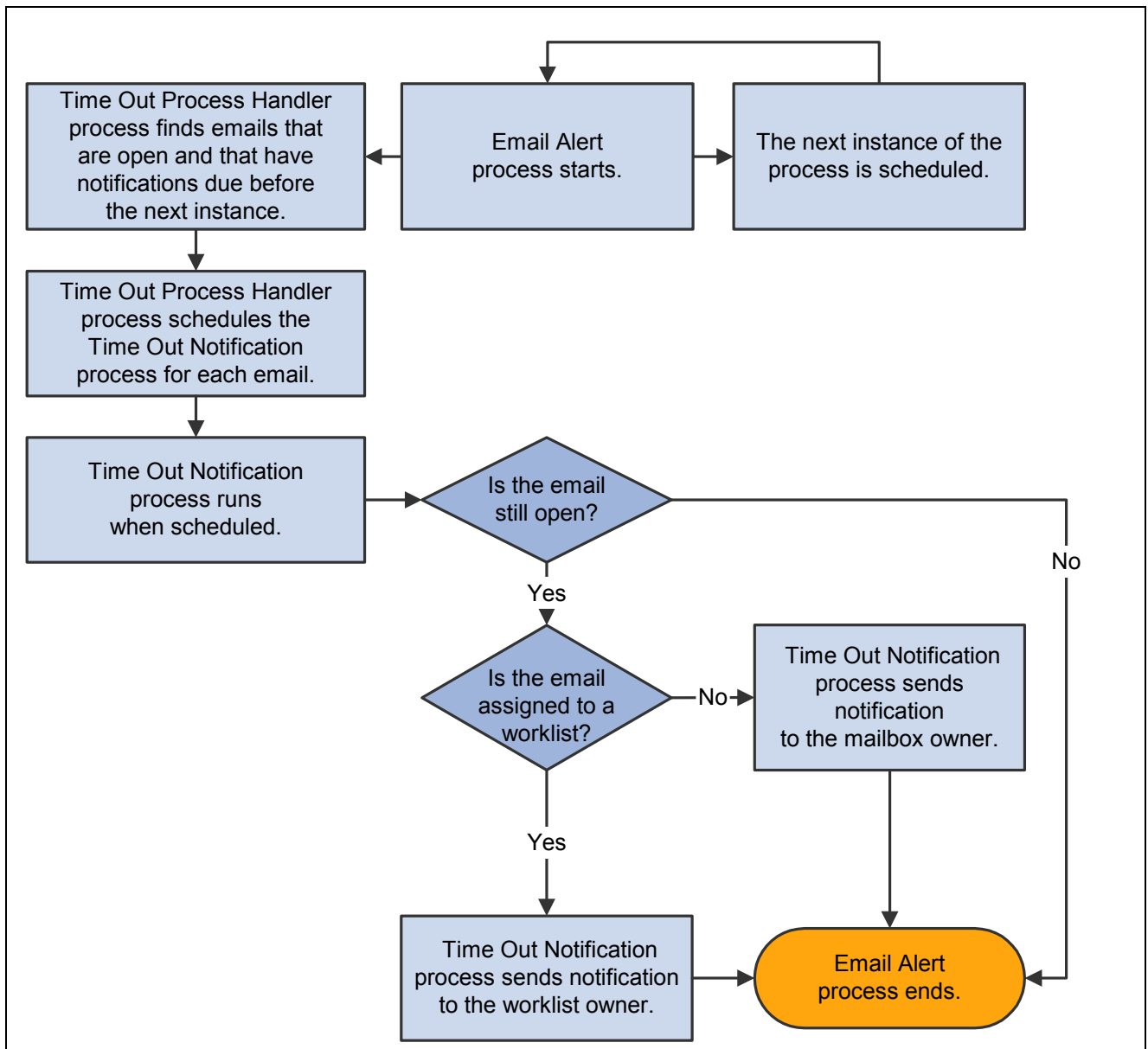
4. For email that is not canceled or completed, the process uses the notification time stored on the email record to schedule the Time Out Notification process.

The system schedules the notification process using a run control that includes the email ID.

5. When the Time Out Notification process runs (at the scheduled notification time), it does the following:
 - a. Verifies that the email is still not canceled or completed.
If the email is canceled or completed, the process ends without sending any notifications.
 - b. If the email is not canceled or completed, sends a notification.

First, the system determines whether the email is assigned to a group worklist. If it is, all notifications (mailbox-level and worklist-level) go to the group worklist owner. If the email is not assigned to a worklist, there are no worklist-level notifications, and any mailbox-level notifications go to the mailbox owner.

The following diagram illustrates this flow:



Process flow for email alerts

Process Instantiation

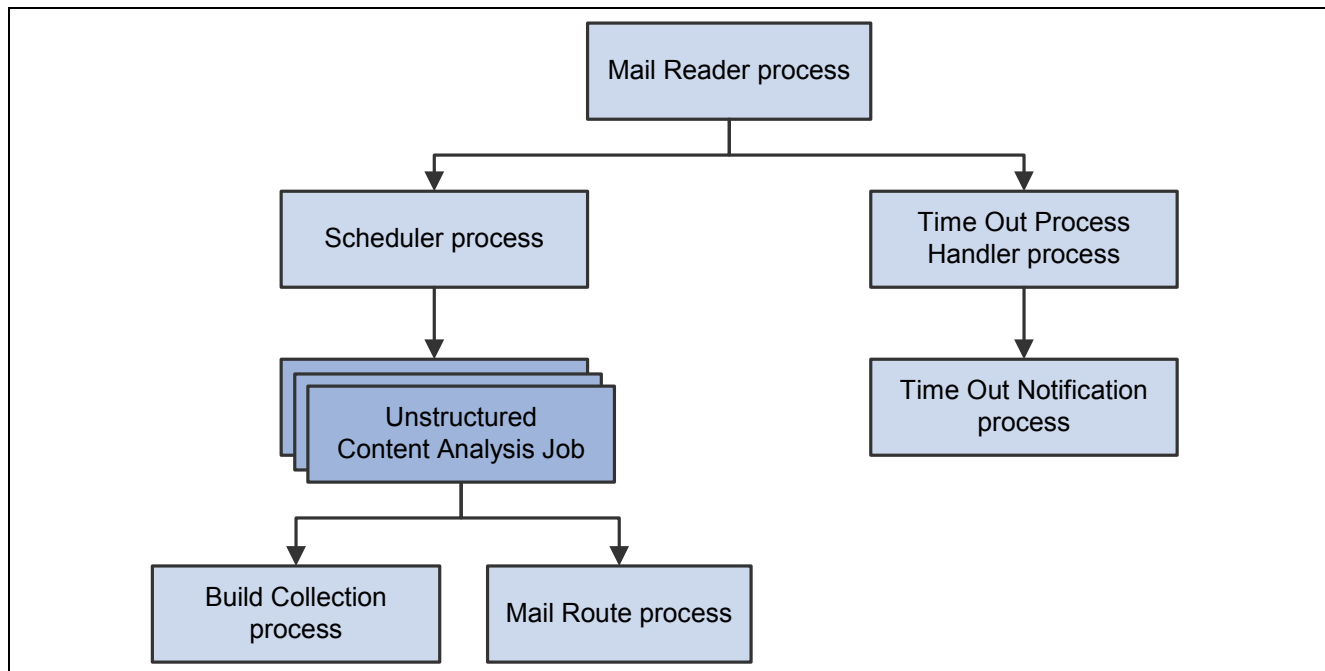
The mail reader process is the master controller for all ERMS processes. In addition to performing basic operations common to all emails, this process schedules the first occurrence of each of the other ERMS processes and also schedules its own recurrences.

The mail reader process recurrence frequency is based on the polling frequencies of all active mailboxes. The first time the mail reader process runs, it processes all mailboxes. It then calculates the next polling time for each mailbox and schedules future processing times accordingly. If an instance is already scheduled at the appropriate time, an additional instance is not scheduled.

For example, suppose that you have three active mailboxes. The polling frequencies are 10 minutes for mailbox A, 15 minutes for mailbox B, and 20 minutes for mailbox C. If you start the first instance of the mail reader process at 12:00, it reads mail from all three mailboxes and then schedules future instances for 12:10, 12:15, and 12:20. The 12:10 instance reads mail from mailbox A and then determines that the next time to check mailbox A is at 12:20. Because an instance of the process is already scheduled for 12:20, another instance is not scheduled. When the 12:20 instance of the process runs, it reads mail from both mailbox A and mailbox C.

The first instance of the mail reader process also schedules the first instance of the scheduler process and the email alert process. Each of these processes then schedules its own next occurrence based on intervals that you define.

The following diagram shows how certain ERMS processes trigger others:



Process instantiation flow

See Also

[Chapter 5, "Setting Up ERMS System," Understanding ERMS Setup, page 47](#)

Email Process States and Incompletely Processed Email

As the ERMS processes handle an email, they maintain *process state* information. The process state indicates how far along the automated processing is.

Before an email is completely processed, its process state can be:

- *Email Instance Created*: the initial state of an email after it is saved to the PeopleSoft CRM email tables and before any additional processing occurs.
- *Queued for Routing*: the Mail Reader process (RB_MAIL_READ) has finished with email, and the email is queued to be processed as an unstructured or structured email.
- *Mailbox Forwarding*: the mailbox reset operation is performed.

After an email is completely processed, its process state can be:

- *Auto Responded By System*: the email process sent an automatic response.

- *Email Routed*: the structured email process has routed the email to a group worklist.

The process state is visible on the Message Details page of the email workspace only if the email is not completely processed. Users might access incompletely processed emails under two conditions:

- A user accesses the email between the time the mail reader process saves it to the CRM email tables and the time the appropriate email handling process completes its processing.
- The email process fails.

In both situations, the email can be accessed only through the menu navigation to the Search Inbound Emails component: incompletely processed emails do not appear in worklists or the Multichannel Toolbar. Agents who interact with emails only through the Worklist or the Multichannel Toolbar will normally never even see incompletely processed emails.

Only the email's mailbox owner can work with incompletely processed emails. (Although the email's group worklist owner has the same privileges as the mailbox owner, incompletely processed emails do not have a group worklist owner because they have not yet been assigned to a group worklist.)

To handle an incompletely processed email, the mailbox owner:

1. Accesses the email in the email workspace.
2. Verifies the process state.
3. Enters sender information, if necessary.

Depending on which process failed, and when, the sender information may already be present.

4. Establishes a thread association.

Depending on which process failed, and when, the thread association may already be established.

5. Changes the process state to *Email Routed*.

This prevents the next instance of the email process from attempting to reprocess the email.

6. Clicks the Reassign button and send the email to the appropriate group worklist.

This saves changes to the email.

See Also

Chapter 13, "Managing Email," Email Status Tracking, page 197

Processing Statuses for the Unstructured Email Process

Email that is placed in the unstructured email queue has an additional status tracking field (different from the overall process state) that indicates how far along the unstructured email process is. Each email in the unstructured email queue has one of these statuses:

- 0: Ready for processing.
- 1: Verity collection built.
- 2: Processing.
- 3: Successfully processed.

When the mail reader process first creates an entry in the unstructured email queue, it assigns status 0 (ready for processing). When the unstructured email process runs, it updates the status.

Each instance of the unstructured email process picks up all emails with statuses other than 3 (successfully processed). This practice ensures that a future instance of the unstructured email process will attempt to reprocess any emails that are not successfully routed.

The unstructured email process status is not visible from the email workspace. To view this data, you must query the database.

Running and Monitoring Processes

This section discusses how to:








- Review process settings for mailboxes.
- Start and stop ERMS processes.
- Review Mail Reader processing details.

Pages Used to Run and Monitor Mail Reader Processes

Page Name	Definition Name	Navigation	Usage
Mailbox Viewer	RB_MAILBOX_VIEW	Set Up CRM, Product Related, Multichannel Definitions, Email, Define Servers and Security, Batch User Monitor Form, Mailbox Viewer	Review, and optionally modify, the status and polling frequency of all mailboxes.
Start/Stop ERMS Batch Process	RB_ERMS_BATCH_RUN	Set Up CRM, Product Related, Multichannel Definitions, Email, Define Servers and Security, Batch User Monitor Form, Start/Stop ERMS Batch Process	Start or stop ERMS processes.
Mailreader Process Monitor	RB_MCF_BTH_MONITOR	Set Up CRM, Product Related, Multichannel Definitions, Email, Define Servers and Security, Batch User Monitor Form, Mailreader Process Monitor	Review Mail Reader processing details, and research trouble reports (for example, if agents report that no new emails are arriving).

Reviewing Process Settings for Mailboxes

Access the Mailbox Viewer page.

Mailbox Definitions View						
Customize Find View All First 1-17 of 17 Last						
Mail Box Details	*Status	Mail Server Name	Email Account	*Polling Frequency	*Unit of Time	
 Cameras	Inactive	tl-mail01	cameras@psft.com	2	Hour(s)	
 Computers	Inactive	tl-mail01	computers@psft.com	1	Hour(s)	
 HelpDesk Survey	Inactive	127.0.0.1	HDSURVEY	2	Hour(s)	
 Orders	Inactive	tl-mail01	orders@psft.com	3	Hour(s)	
 OrdersNorthAmerica	Inactive	tl-mail01	orders.northamerica	5	Minute(s)	
 sales	Inactive	tl-mail01	sales	50	Minute(s)	
 Support Survey	Inactive	127.0.0.1	susurvey	2	Minute(s)	

Mailbox Viewer page

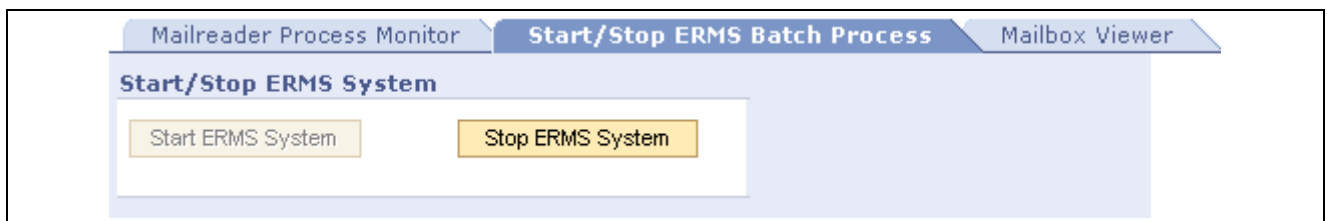
The Mailbox Definitions View grid lists all ERMS mailboxes. The grid columns correspond to the identically-named fields on the Mailbox Definitions page. You can edit only the fields that affect the Mail Reader process. Changes you make on this page also appear on the Mailbox Definition page.

See Also

Chapter 5, "Setting Up ERMS System," Defining Mailboxes, page 65

Starting and Stopping ERMS Processes

Access the Start/Stop ERMS Batch Process page.



Start/Stop ERMS Batch Process page

Start ERMS System

Click to schedule the Mail Reader process, which in turn schedules all other ERMS processes. Each ERMS process schedules its own next instance, so the ERMS processes continue to run at the intervals you've defined until you stop the ERMS system.

Note. When starting the ERMS System, you need to be logged in as the same user who set the Verity Run Control information at Set Up CRM, Product Related, Multichannel Definitions, Email, System Installation. You will receive an error message if trying to start the ERMS system while logged on as a different user.

Stop ERMS System

Click to cancel all current and future instances of ERMS processes. It is not necessary to stop the ERMS system when you make changes to a mailbox's status or polling frequency.

Reviewing Mail Reader Processing Details

Access the Mailreader Process Monitor page.

Mailreader Process Monitor page

Process Instance Selection

Use the fields in the View For Status and View Mail Reader Logs/Request Details For group boxes to specify the Mail Reader instances that you want to review.

Status	Select a status: <i>All</i> , <i>Scheduled</i> , <i>Processing</i> , <i>Completed</i> , <i>Canceled</i> , or <i>Failed</i> . When you refresh the page, only Mail Reader process instances with the selected status are included in the Mail Reader Process Details grid.
Last	To specify a time period for which you want to view process instances, enter the number of <i>Days</i> , <i>Hours</i> , or <i>Minutes</i> . The time period that you enter is measured back starting from the current date and time.
Mailbox ID	To specify a mailbox for which you want to view process instances, enter the mailbox ID.
Instance and To	To specify a range of process instance IDs to view, enter the first and last number in the range.
With Exception Emails	Select to limit the process instances to those where exception emails were processed. Exception emails are emails that were caught by your mail filter definitions and excluded from additional processing.
Refresh	Click to populate the Mail Reader Process Details grid with the process instances that meet your selection criteria.

Mail Reader Process Details

Instance	Displays the process instance ID.
Start Date/Time and End Date/Time	Displays the date and time when the process instance started and stopped.
Mail Reader Details	Click to access the Mail Reader Process Log page, which displays statistics for a Mail Reader process instance.
Process Message Logs	Click to access the Process Monitor - Message Log page, which displays detailed information about any errors that occurred during the process.
Process Request Parameters	Click to access the Process Monitor - Process Request Parameters page, which displays detailed information about any errors that occurred during the process.

See Also

[Chapter 5, "Setting Up ERMS System," Defining Mail Filters, page 61](#)

Enterprise PeopleTools PeopleBook: PeopleSoft Process Scheduler

Reviewing Detailed Process Information

This section discusses how to:

- Review mail reader statistics.
- Review exception email.

Pages Used to Review Detailed Process Information

Page Name	Definition Name	Navigation	Usage
Mail Reader Process Log	RB_MAILREAD_LOG	Click the Mail Reader Details link on the Mailreader Process Monitor page.	Review statistics for a specific instance of the Mail Reader process.
Exception Email Details	RB_EMAIL_VIEWER	Click the Details link in the Exception Details Captured by this Mail Reader Instance grid on the Mail Reader Process Log page.	Review information about a specific exception email.

Reviewing Mail Reader Statistics

Access the Mail Reader Process Log page.

Mail Reader Process Log

Mail Reader 1 Instance
Start Date/Time 03/31/2006 5:11:29PM

End Date/Time 03/31/2006 5:11:29PM

Mail Reader Statistics

Mailboxes
Unstructured Emails

Exception Emails
Structured Emails

Mail Box Details

Customize | Find |

First 1 of 1 Last

[Mail Box Details](#)

[Structured Emails](#)

[Unstructured Emails](#)

[Exception Emails](#)

Exception Emails

Customize | Find |

First 1 of 1 Last

[Email From](#)

[UID Of Inbound Email](#)

[Mail Filter ID](#)

[Details](#)

Mail Reader Process Log page

Mail Reader Statistics

Mailboxes	Displays the number of mailboxes that were processed by this Mail Reader instance. Mailbox statuses determine which mailboxes the Mail Reader process accesses; mailbox polling frequencies determine which mailboxes are accessed by any particular Mail Reader process instance.
Exception Emails	Displays the total number of exception emails that were processed by this Mail Reader instance. Exception emails are emails that were caught by your mail filter definitions and excluded from additional processing.
Unstructured Emails	Displays the total number of unstructured emails that were processed by this Mail Reader instance.
Structured Emails	Displays the total number of structured emails that were processed by this Mail Reader instance.

Mail Box Details

This grid lists the mailboxes that were processed and, for each mailbox, displays the number of structured, unstructured, and exception emails that were processed.

Exception Emails

This grid lists the exception emails that were processed by this Mail Reader instance.

Email From	Displays the sender's email address.
UID of Inbound Email (universal ID of inbound email)	Displays the unique email identifier that People Tools generates.
Mail Filter ID	Displays the ID of the mail filter that caused this email to be an exception email.
Details	Click to access the Exception Email Details page, where you can review detailed information about the email.

Reviewing Exception Email

Access the Exception Email Details page.

Exception Email Details

Mail Box Details

Mail Filter ID **Mail Box Details**

Email From **Email Size**

Email Message Id

Subject

Message Text

Exception Email Details page

Several of the fields on this page are the same as the identically-named fields on the Mail Reader Process Log page.

Mail Box Details	Displays the description of the mailbox to which this email was sent.
Email Message Id	Displays the email's unique identifier.
Subject and Message Text	Displays the content of the email.

PART 2

Configuring Multichannel Applications

Chapter 5
Setting Up ERMS System

Chapter 6
Setting Up Automated Mail Processing

Chapter 7
Setting Up Structured Email Handling

Chapter 8
Setting Up Unstructured Email Handling

Chapter 9
Setting Up Chat

Chapter 10
Configuring CTI Application Pages

Chapter 11
Setting Up Supervisor Desktop

Chapter 12
Setting Up Unified Agent Desktop

CHAPTER 5

Setting Up ERMS System

This chapter provides an overview of email response management system (ERMS) setup and discusses how to:

- Define correspondence management for ERMS.
- Define system settings for email processing.
- Define mail servers.
- Define mail filters.
- Define mailboxes.
- Define priorities and moods.
- Define email audit history tracking.

Understanding ERMS Setup

This section discusses:

- Mail servers and mailboxes.
- Email handling options.
- Email classification.
- ERMS application engine processes.

Note. This section does not discuss routing rules for structured or unstructured email.

See Also

[Chapter 7, "Setting Up Structured Email Handling," Understanding Structured Email, page 95](#)

[Chapter 8, "Setting Up Unstructured Email Handling," Understanding Unstructured Email Routing, page 109](#)

Mail Servers and Mailboxes

The ERMS system integrates with mail servers and mailboxes that you establish outside of the PeopleSoft system. You use PeopleSoft MultiChannel Framework and PeopleTools Integration Broker to manage the connection with these external systems.

You also establish mail server definitions and mailbox definitions within the ERMS system. The mail server definition is minimal: it is the name of the physical mail server. The mailbox definition is more extensive. It includes connection-related settings (such as the password that is used to access the mailbox and the frequency with which the ERMS system fetches email from the external mailbox), as well as email handling options such as:

- Default group worklists to which emails are routed if no suitable group worklist is found.
- Time limits after which the system sends notifications that an email has not yet been closed.
- Auto-acknowledgement processing.
- The from address that is to be used for automatic responses to email that comes to this mailbox.
- Whether the mailbox is used for email from external customers or internal customers, which in turn controls which types of business objects can be associated with email that is sent to this mailbox.
 - Email that is sent to external mailboxes can be associated with consumers.
 - Email that is sent to internal mailboxes can be associated with workers.

Use internal mailboxes in conjunction with PeopleSoft Enterprise HelpDesk or PeopleSoft Enterprise HelpDesk for Human Resources.

Note. Although you use pages in the Mailbox Definition component to set up the mailbox's routing rules for unstructured email, this chapter does not discuss those pages. Refer instead to the documentation for unstructured email routing rules.

See Also

[Chapter 7, "Setting Up Structured Email Handling," Understanding Structured Email, page 95](#)

[Chapter 8, "Setting Up Unstructured Email Handling," Understanding Unstructured Email Routing, page 109](#)

Enterprise PeopleTools PeopleBook: PeopleSoft MultiChannel Framework

Email Handling Options

In addition to the mailbox-level options, several system-wide options exist.

Business Object Associations

The mail reader process, which fetches each email from an external mailbox and saves it to PeopleSoft tables, analyzes the from address of the email and looks for a customer, partner, or worker (depending on the mailbox type: external, partner, or internal) to associate with the email.

Every inbound email must be associated with a PeopleSoft CRM business object. If the Mail Reader process cannot identify the sender, select in each mailbox definition whether it should create a user based on the email address, or associate the email with a specific person record that you've chosen to represent all unknown users. The same unknown user setting applies to all mailboxes.

Email Reply Settings

In the System Installation component, define the following settings for email replies:

- The correspondence template that formats the email history that the system automatically enters into the body text of an email reply.

The CRM system delivers a template called Email History - Model 1 that you can use. If you do not explicitly select a template, the following default text appears above the text of the original email:

<===== Received from <address@service.domain> on <date.time>=====>

- Whether the email history appears at the beginning or end of the reply.

Initially, the email history is the only body text in the reply. Agents can manually add text anywhere. But if they apply templates, the system inserts the template text before or after the existing text depending on this system setting. That is, if you configure the system to keep the reply at the end of the reply, then newly applied template text is added to the beginning of the existing body text instead of the end.

- The greeting text to use when replying to an email. PeopleSoft delivers a template called EmailGreeting that you can use.

- The closing text to use when replying to an email.

PeopleSoft delivers a template called EmailClosing that you can use.

- The subject text to use when replying to an email that has no subject.

Mail Filters

To boost the performance of the ERMS system and the productivity of the users who respond to email, PeopleSoft provides the ability to filter spam email and keep the spam from being analyzed and routed.

You can set up mail filtering based on the sender's email address—either a fully qualified email address or an entire domain. You can also use PeopleTools application classes to create your own email filters. The pages where you define mail filtering include an option to identify a custom application class to use.

You can choose whether to remove the spam entirely or whether to keep it in an exception area, where it remains available if you want to analyze filtering activity or if you want to look for email that was filtered out erroneously.

Email History Tracking

PeopleSoft provides two levels of email history tracking:

- An event history that is implemented in PeopleCode.

The system automatically creates an email history record when one or more of these conditions take place:

- An email is newly created.
- Change of email status to *canceled* or *complete* occurs.
- Change of group worklist name occurs, for example, when the email is reassigned.
- An agent accepts the email.

- An audit history.

The audit history displays field-level and record-level changes to email data. You set up audit processing using PeopleSoft Application Designer and the Audit - Setup page.

User Settings

The ERMS system leverages the user settings that you define for correspondence management, including:

- Approval processing.

If you designate an approver for a specific user, any email replies that the user sends are routed to the approver, who can either approve or reject the reply. Use this option to ensure the quality and consistency of your customer communications and to monitor the development of your workforce.

- Default routing for responses to ad hoc email.

If you use the ERMS system, each ad hoc email that is sent from the PeopleSoft CRM system includes a context tag. If the recipient replies to an ERMS mailbox, and if the reply contains the context tag, the system uses the context tag to identify the user who sent the original ad hoc email. The system then routes the reply to that user's default group workload.

- Default From addresses for email replies that are sent by the agent.

By sending replies from a system email address rather than a personal email address, agents can be sure that any response from the customer is handled by ERMS. Different defaults exist depending on whether the email is from an external mailbox, an internal mailbox, or an internal human resources mailbox.

Note. These user settings are available for setup on Supervisor Desktop.

System Activities

On the email workspace, agents can search for transactions that can be associated with the emails that they work on, or create new transactions that support the completion of the emails, such as creating a lead, order, or case. The ERMS system provides the infrastructure for you to reference the application class methods that are used to create those transactions for emails on the email workspace.

See Also

Chapter 5, "Setting Up ERMS System," Defining System Settings for Email Processing, page 52

PeopleSoft Enterprise CRM 9 Application Fundamentals PeopleBook, "Setting Up Auditing for Cases and Inbound Email," Understanding Audit Information

PeopleSoft Enterprise CRM 9 Automation and Configuration Tools PeopleBook, "Defining General Settings for Correspondence and Notifications," Defining User Settings

Email Classification

The ability to correctly identify the intent of an email enables more accurate suggestions to be given on solutions or actions to resolve customer issues or on templates when you are sending replies. In the ERMS system, an email can be classified using one or more of the following attributes:

- Category: high-level classification of an email (for example, *inquiry*, *problem*, or *spam*).
- Type: subdivision under a given category (for example, *hardware problem* or *software problem*).
- Product Group: high-level product grouping (for example, *air conditioner* or *refrigerator*).
- Product: specific products under a given product group (for example, *air conditioner with product ID A123* or *fridge with product ID F234*).
- Mood: email sender's general disposition (for example, *disappointed*, *neutral*, or *happy*).
- Priority: priority of the email.
- Language: language used in the email.

If natural language processing (NLP) is available, it returns and supplies email classification data on the email workspace automatically based on the content analysis of the email. Agents can manually adjust these classification values if needed or if NLP is not available to provide automated suggestion. ERMS uses these values as search criteria to find matching solutions and actions that may resolve customer issues raised in the email, and to find matching templates for the email response.

See Also

Chapter 13, "Managing Email," page 181

PeopleSoft Enterprise CRM 9 Automation and Configuration Tools PeopleBook, "Setting Up Correspondence Templates," Defining Template Categories and Types

PeopleSoft Enterprise CRM 9 Product and Item Management PeopleBook, "Setting Up Products"

PeopleSoft Enterprise CRM 9 Automation and Configuration Tools PeopleBook, "Setting Up Natural Language Processing," Understanding NLP

ERMS Application Engine Processes

ERMS relies on several PeopleSoft Application Engine (AE) processes to read emails from an external mailbox, analyze them, take proper email actions, and send alerts when they are not handled within the specified time period. The ERMS Processes section of the Understanding ERMS chapter describes what these processes do; this section discusses setup tasks for these processes.

See Chapter 4, "Understanding ERMS," ERMS Processes, page 25.

Process Parameters

To set up ERMS, you define:

- The number of emails that the mail reader process works with at a time.
- The process scheduler server where the ERMS processes run.

Note. The process scheduler server needs to be run on either a Windows NT or UNIX machine at all times, regardless of database, to support all ERMS processes.

- The run frequency for processes other than the mail reader process.

The mail reader process frequency is based on the polling frequencies that you define for your ERMS mailboxes.

- Run control information for the build collection process, which runs as part of the unstructured content analysis job.

The build collection process creates a Verity search collection that is used during email content-based routing.

Process Notifications

Because ERMS depends on its PeopleSoft AE processes, prompt notifications of process failures can be important.

PeopleSoft Process Scheduler enables you to set up notifications that are sent when a process or job finishes successfully or when an error occurs in the process or job.

When you set up your ERMS system settings, process-specific links navigate you directly to the PeopleTools pages where you set up these notifications.

Defining Correspondence Management for ERMS

Correspondence management functionality is common to all PeopleSoft CRM applications. ERMS leverages this functionality extensively. Correspondence management is documented in detail in the *PeopleSoft Enterprise CRM 9 Automation and Configuration Tools PeopleBook*.

These correspondence-management implementation steps are crucial to ERMS:

- Define worklists.

If you use the Group Worklist page to create queues (so that agents can use the Multichannel Toolbar to accept inbound email), define your ERMS system settings before creating worklists. ERMS system settings include certain defaults that are required when you are creating queues from the Group Worklist page.

See *PeopleSoft Enterprise CRM 9 Automation and Configuration Tools PeopleBook*, "Setting Up and Using Worklists," Defining Worklists.

See [Chapter 5, "Setting Up ERMS System," Defining System Settings for Email Processing, page 52](#).

- Define general settings for correspondence.

In particular, be sure to define agent settings such as approval requirements and default from addresses for outbound email.

See *PeopleSoft Enterprise CRM 9 Automation and Configuration Tools PeopleBook*, "Defining General Settings for Correspondence and Notifications".

See [Chapter 15, "Working with Supervisor Desktop," Defining Email Settings for Agents, page 273](#).

- Define settings for template-based correspondence.

See *PeopleSoft Enterprise CRM 9 Automation and Configuration Tools PeopleBook*, "Defining Settings for Template-Based Correspondence".

- Define correspondence templates.

See *PeopleSoft Enterprise CRM 9 Automation and Configuration Tools PeopleBook*, "Setting Up Correspondence Templates".

Defining System Settings for Email Processing

To define system settings for email processing, use the System Installation (RB_ERMS_INSTALL) component.

This section lists prerequisites and common elements and discusses how to:

- Define system settings for email processing.
- Define reply with history templates.
- Specify email greetings.
- Define subject text for replies to email with no subject.
- Specify email closing text.
- Define ERMS process notifications.
- Define system activities.

- Identify email workspace fields for mapping.

Prerequisites

Before you set up system settings for ERMS:

- Define the person who will represent all unknown senders.

Set up this person in the worker component, and enter the minimum required data. The person's name appears on all emails for which the sender is not identified, so enter a name such as *Unknown Sender*. This is, however, not necessary if you specify in the mailbox definition that you want the system to create a user automatically for unidentified email senders.

- Define correspondence templates that control the presentation of the email history that the system enters into the body text of the reply.

You can use the delivered template *Email History - Model 1* as a model for this. If you do not explicitly select a template, the following default text appears above the text of the original email:

`<===== Received from <address@service.domain> on <date.time>=====>`

- Define the default multichannel queue clusters for agents to use Multichannel Toolbar to receive inbound emails.

This enables you to create multichannel queues from the CRM Group Worklist page; the queues use the default queue cluster that you establish.

See Also

PeopleSoft Enterprise CRM 9 Automation and Configuration Tools PeopleBook, "Setting Up Correspondence Templates"

[Chapter 3, "Understanding Multichannel Applications," Setting Up Universal Queuing, page 15](#)

PeopleSoft Enterprise CRM 9 Business Object Management PeopleBook, "Defining Workers"

Common Element Used in This Section

Language Code

Select the language for which you are defining templates. The language that you select limits the prompt on the Template Name field so that you can select only templates of the appropriate language. At runtime, the preferred language of the user who is sending the email determines which settings are used.

Pages Used to Define System Settings for Email Processing

Page Name	Definition Name	Navigation	Usage
System Installations	RB_ERMS_SYSDEFN	Set Up CRM, Product Related, Multichannel Definitions, Email, System Installation, System Installations	Define settings for email processing, including: <ul style="list-style-type: none"> • General email handling options. • Mailbox and queue defaults. • Processing rules for the mail reader process and other ERMS processes.
History Templates, Greeting templates, No Subject Phrase, Closing Templates	RB_ERMS_TMPL_DEFN	<ul style="list-style-type: none"> • Click the Set Up History Template button on the System Installations page. • Click the Set Up Greeting Template button on the System Installations page. • Click the Set Up No Subject Phrase button on the System Installations page. • Click the Set Up Closing Template button on the System Installations page. 	<ul style="list-style-type: none"> • Define reply with history templates. • Specify email greetings. • Define the default subject text to use when replying to an email that has no subject. • Specify closing text for email.
Process Notifications	RB_PRCN_NOTIFY	Set Up CRM, Product Related, Multichannel Definitions, Email, System Installation, Process Notifications	Define notifications for the PeopleSoft AE processes that are used in ERMS.
Job Notification	PRCSJOBNOTIFY	On the Process Notifications page, click the Setup Process Notifications link next to an unstructured content analysis job.	Define the messages that are to be sent when a job finishes successfully or when an error occurs in the job. <i>See Enterprise PeopleTools PeopleBook: PeopleSoft Process Scheduler</i>
System Activities	RB_EM_ACTIVITY	Set Up CRM, Product Related, Multichannel Definitions, Email, System Installation, System Activities	Define system activities. CRM objects can be created from the email workspace. Specify corresponding application classes that are used to create them on this page.

Defining System Settings for Email Processing

Access the System Installations page.

System Installations		Process Notifications		System Activities		Mapping Fields	
System Settings							
*Commit Frequency For Emails		<input type="text" value="10"/>					
*ERMS Process Scheduler		<input type="text" value="PSNT"/>					
Unknown User for ERMS		<input type="text" value="Anonymous User"/>					
Mailbox And Queue Defaults							
*Warning Notification		<input type="text" value="1"/>	*Unit of Time		<input type="text" value="Day(s)"/>		
*Final Notification		<input type="text" value="2"/>	*Unit of Time		<input type="text" value="Day(s)"/>		
*Polling Frequency		<input type="text" value="2"/>	*Unit of Time		<input type="text" value="Minute(s)"/>		
*Routing Rule Type		<input type="text" value="Highest Query Group Score"/>					
REN Server Cluster ID		<input type="text" value="RENCLSTR_0001"/>					
*Maximum Workload		<input type="text" value="100"/>	*Skill level		<input type="text" value="10"/>		
<input checked="" type="checkbox"/> Auto Acknowledgement <input checked="" type="checkbox"/> Automatic Routing							

System Installations page (1 of 2)

Content Analysis And Time Out Scheduler Sleep Time			
*Mail Processor Sleep Time		<input type="text" value="2"/>	*Unit of Time <input type="text" value="Minute(s)"/>
*Time Out Scheduler Sleep Time		<input type="text" value="2"/>	*Unit of Time <input type="text" value="Day(s)"/>
Reply With History, No Subject, Verity Run Control			
*RunControl To Build Collection		<input type="text" value="RB_CRM_ERMS1"/>	
*Collection Directory		<input type="text" value="d:\data\search\CR900DVL"/>	
*Reply With History On		<input type="text" value="Bottom"/>	
Spam Category		<input type="text" value="Spam"/>	
<input type="button" value="Set Up History Template"/>		<input type="button" value="Set Up Greeting Template"/>	
<input type="button" value="Set Up No Subject Phrase"/>		<input type="button" value="Set Up Closing Template"/>	

System Installations page (2 of 2)

System Settings

Commit Frequency For Emails

Enter the number of emails that the mail reader process handles between commits. The mail reader process reads emails from an external mailbox and copies the data into the PeopleSoft CRM database. The data is saved only when the mail reader process issues a commit command.

Higher numbers improve performance. Lower numbers minimize the amount of reprocessing that must be done when a process failure occurs. (Because the mail reader process removes email from the external mailbox only after committing the data, mail reader process interruptions cause reprocessing, but do not result in lost data.) The default value is 10.

ERMS Process Scheduler	Enter the process scheduler server on which the ERMS processes run. Because ERMS is process-intensive, setting up a dedicated ERMS process scheduler server improves performance.
Unknown User For ERMS	Select the person (not a user, but a person whom you create in the Worker component) to whom emails are attached when the mail reader process cannot match the sender's email address with a known person. If, in a mailbox definition, you select to use system settings when the system cannot identify the sender of incoming email, the system uses the person whom you specify in this field to be the user of these emails.

Mailbox and Queue Defaults

Warning Notification, Final Notification, Polling Frequency, Routing Rule Type, Auto Acknowledgement, and Automatic Routing	Set default values for the identically named fields on the Mailbox Definition page. These fields control mailbox-level characteristics, such as email routing, response time alerts, automatic acknowledgements, and so on. See Chapter 5, "Setting Up ERMS System," Defining Mailboxes, page 65 .
REN Server Cluster ID (real-time event notification server cluster ID)	Set a default queue cluster to be associated with queues that the system creates when you set up queues and agents using PeopleSoft CRM group worklists.
Maximum Workload and Skill level	Set default values to be associated with agent definitions that the system creates when you set up queues and agents using PeopleSoft CRM group worklists. The values in these fields are used to determine an agent's capacity to accept additional work and thus to determine the agent to whom a new email is routed.

Content Analysis and Time Out Scheduler Sleep Time

Mail Processor Sleep Time	Enter the frequency with which to run the email process, which attempts to trigger proper email actions, including routing emails to worklists. This frequency determines how quickly new email is routed to agents for handling and thus can affect your agent's ability to meet email due dates.
Time Out Scheduler Sleep Time	Enter the frequency with which to run the Time Out Process Handler process, which schedules reminder notifications for emails that have not been closed within the mailbox-level or worklist-level response times.
Unit of Time	For each sleep time that you define, enter <i>Minutes</i> , <i>Hours</i> , or <i>Days</i> as the unit of time.

Reply With History, No Subject, Verity Run Control

RunControl To Build Collection	Enter the run control name to be used when running the Build Collection process. When you save the page, the system creates a run control for the Build Collection process using the run control name that you enter here. The run control that the system creates is for the search collection CRM_RB_ERMS. PeopleSoft delivers definitions for the collection and its search index templates. After saving this page, access the Build Search Collection page to complete the run control settings. In particular, be sure to set up the collection directory.
Collection Directory	Enter the directory path for the collection. The path is relative to the Process Scheduler server where the process runs, not to the computer where the request

is made. If Process Scheduler is running on the application server, the path that you enter here matches the Verity collection path on the application server.

Any mapped drive must be set as part of the PS_HOME environments variable.

Reply With History On

Select *Bottom* or *Top* to determine whether the text of an inbound email is kept at the beginning or end of a reply. For example, if you select *Bottom*, then applying a template to the outbound email inserts the template text before any existing body text.

Spam Category

Specify the category to be used for spam mail. The system-delivered category is called *Spam*.

Set Up History Template

Click to access the History Templates page, where you select language-specific templates to be applied when agents choose to include the original email text in an email reply.

If you do not explicitly set up history templates, the following default text appears above the text of the original email:

```
<===== Received from <address@service.domain> on
<date.time>=====>
```

Set Up Greeting Template

Click to access the Greeting Templates page, where you select language-specific greeting text phrases to be applied when agents respond to incoming email.

Set Up No Subject Phrase

Click to access the No Subject Phrase page, where you enter language-specific text phrases to be used as the subject of an email reply when the original email does not have a subject.

Set Up Closing Template

Click to access the Closing Templates page, where you select language-specific closing text phrases to be applied when agents respond to incoming email.

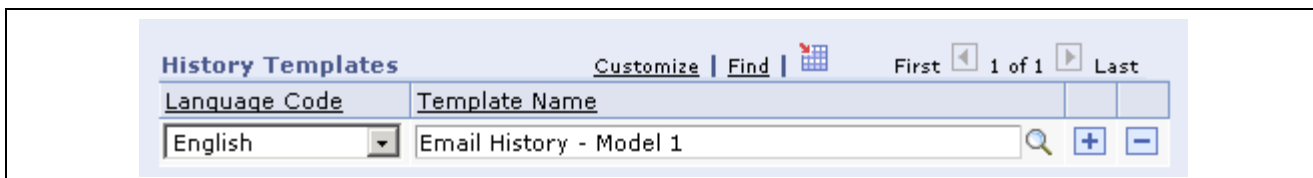
See Also

PeopleSoft Enterprise CRM 9 Automation and Configuration Tools PeopleBook, "Setting Up and Using Worklists"

PeopleSoft Enterprise CRM 9 Automation and Configuration Tools PeopleBook, "Setting Up Search Collections," Understanding PeopleSoft CRM Searching

Defining Reply With History Templates

Access the History Templates page.



History Templates page

Template Name

Select the template for the system to use when entering the text of the original inbound email to the body of the new outbound email. Select a template, not a template package.

At a minimum, the templates that you select must contain the text of the original email; use the delivered History Email Body term for this. Optionally, you can include front matter or end matter in the appropriate language.

See Also

PeopleSoft Enterprise CRM 9 Automation and Configuration Tools PeopleBook, "Setting Up Correspondence Templates"

Specifying Email Greetings

Access the Greeting Templates page.

Greeting Templates page

Template Name Select the template for the system to include a greeting in the new outbound email. Select a template, not a template package.

See Also

PeopleSoft Enterprise CRM 9 Automation and Configuration Tools PeopleBook, "Setting Up Correspondence Templates"

Defining Subject Text for Replies to Email with No Subject Text

Access the No Subject Phrase page.

No Subject Phrase page

No Subject Phrase Enter a default subject to use for replies to email with no subject text to avoid sending replies with insufficient identifying information in the subject.

Specifying Email Closing Text

Access the Closing Templates page.

Closing Templates page

Template Name Select the template for the system to include a closing message in the new outbound email (for example, a disclaimer from your company). Select a template, not a template package.

See Also

PeopleSoft Enterprise CRM 9 Automation and Configuration Tools PeopleBook, "Setting Up Correspondence Templates"

Defining ERMS Process Notifications

Access the Process Notifications page.

System Installations

Process Notifications

System Activities

Mapping Fields

ERMS Batch Process List

Customize

Find

View All

First

1-6 of 6

Last

Process Name	Process Type	Description	
RB_CHECKUQ	Application Engine	Unstructured Content Analysis Scheduler	Setup Process Notifications
RB_SLA_NOTFY	Application Engine	Time Out Notification Process	Setup Process Notifications
RB_SLA_SCHDR	Application Engine	Time Out Process Handler	Setup Process Notifications
RB_STR_EMAIL	Application Engine	Structured Content Analysis Process	Setup Process Notifications
PRCEMAIL	PSJob	Unstructured Content Analysis Job	Setup Process Notifications
RB_MAIL_READ	Application Engine	Mail Reader Process	Setup Process Notifications

Process Notifications page

The grid on this page lists all ERMS processes: five PeopleSoft Application Engine processes and one job, which consists of two other PeopleSoft Application Engine processes.

Setup Process Notifications Click to access the Processes - Notification page (for any of the PeopleSoft AE processes) or the Job Notification page (for the unstructured content analysis job). These are both PeopleSoft Process Scheduler pages. Use these pages to define messages to be sent when the process or job finishes successfully or when an error occurs in the process or job.

See Also




Enterprise PeopleTools PeopleBook: PeopleSoft Process Scheduler

















Defining System Activities

Access the System Activities page.

System Installations / Process Notifications / **System Activities** / Mapping Fields

System Activity List

Customize | Find |  First  1-19 of 19  Last

Enable	*Activity Type	*Application Class ID	*Application Class Path	
<input checked="" type="checkbox"/>	Support Case (COM)	CaseCOMTransaction	ERMS:Transaction	 
<input checked="" type="checkbox"/>	Support Case (ENE)	CaseENETransaction	ERMS:Transaction	 
<input checked="" type="checkbox"/>	Support Case	CaseGBLTransaction	ERMS:Transaction	 
<input checked="" type="checkbox"/>	Support Case (GOV)	CaseGOVTransaction	ERMS:Transaction	 
<input checked="" type="checkbox"/>	HelpDesk Case	CaseHDTransaction	ERMS:Transaction	 
<input checked="" type="checkbox"/>	HelpDesk Case (HR)	CaseHDHRTtransaction	ERMS:Transaction	 
<input checked="" type="checkbox"/>	Support Case (INS)	CaseINSTransaction	ERMS:Transaction	 
<input checked="" type="checkbox"/>	Issue	IssueTransaction	ERMS:Transaction	 

System Activities page

Enable Select the transactions that agents can search for or create within the email workspace and associate them with email.

Activity Type Select the CRM object that agents can create from the email workspace.

Application Class ID and Application Class Path Specify the path and ID of the application class program that is written to create transactions of the corresponding CRM object.

See Also

[Chapter 13, "Managing Email," Related Transactions, page 195](#)

Identifying Email Workspace Fields for Mapping

See [Chapter 6, "Setting Up Automated Mail Processing," Identifying Email Workspace Fields for Mapping, page 85.](#)

Defining Mail Servers

This section lists prerequisites and discusses how to register mail servers in the ERMS system.

Prerequisites

Before you define mail servers and mailboxes within the ERMS system, you must:

1. Set up the external mail servers and mailboxes that the ERMS system will monitor.
You set up physical mail servers and mailboxes outside of the PeopleSoft system. The PeopleSoft ERMS system supports both POP3 and IMAP4 email protocols.
2. Set up the integration between these external systems and your PeopleSoft system:
 - a. Configure the PeopleSoft Integration Broker gateway for the email channel.
 - b. Configure the GETMAILTARGET connector properties on the MCF_GETMAIL node.

Make sure that all of the transactions of MCF_GETMAIL node are set to *active* on the Service Operations: General page. For more information about nodes, refer to the “Configuring Nodes” chapter of the *Enterprise PeopleTools PeopleBook: Integration Broker*.

The PeopleSoft MultiChannel Framework documentation discusses these processes in the chapter on configuring the email channel.

See *Enterprise PeopleTools PeopleBook: PeopleSoft MultiChannel Framework*

Page Used to Define Mail Servers

Page Name	Definition Name	Navigation	Usage
Mail Server Definition	RB_MAILSERVER_DEFN	Set Up CRM, Product Related, Multichannel Definitions, Email, Define Servers and Security, System Parameters/Defaults, Mail Server Definition	Define mail servers in the ERMS system.

Registering Mail Servers in the ERMS System

Access the Mail Server Definition page.

Mail Server Definition page

Mail Server Name Enter a row of data for each mail server that the ERMS system will access. The name that you enter here must match the name of the physical mail server.

When you set up mailboxes, you will associate each mailbox with one of the mail servers that are listed here. This association gives the mail reader process the information that it needs to find the external mail server from which the mailbox’s emails are fetched.

Defining Mail Filters

To define mail filters, use the System Parameters/Defaults (RB_ERMS_SETUP) component.

This section discusses how to:

- Set up address-based and domain-based filters.
- Create application classes for custom mail filtering.
- Apply email filters.

Pages Used to Define Mail Filters

Page Name	Definition Name	Navigation	Usage
Spam List	RB_SPAM_LIST_DEFN	Set Up CRM, Product Related, Multichannel Definitions, Email, Define Servers and Security, System Parameters/Defaults, Spam List	Set up address-based and domain-based filters.
Mail Filters	RB_ERMS_SETUP	Set Up CRM, Product Related, Multichannel Definitions, Email, Define Servers and Security, System Parameters/Defaults, Mail Filters	Activate the filters that you set up on the Spam List page, and apply your own custom email filters.

Setting Up Address-Based and Domain-Based Filters

Access the Spam List page.

Spam List page

Email Address/Domain Name Enter a full email address or a domain name from which you want to block all email.

Type Select *Email* or *Domain* to indicate the type of address being blocked.

Note. To activate the filters that you set up on this page, access the Mail Filters page and ensure that the delivered SYS_SPAM_LIST filter is active.

Creating Application Classes for Custom Mail Filtering

To implement mail filtering other than by email address or domain, create an application class method that identifies the emails to be discarded.

PeopleSoft provides a base class called MailFilter that you extend when creating your own filters. The delivered base class is in the RB_MCF_SETUP package. PeopleSoft also delivers the SYS_SPAM_LIST class, which you can clone as a starting point.

Properties of the Base Class

This table explains the base class properties:

Property	Description
EmailRow	Identifies a row of data that is retrieved by the PeopleTools MCFGetMail application programming interface (API) using the Message Structure MCFEM_RES_READALL. This message is made up of the MCFEM_RES_MAIN record and its child record MCFEM_RES_PART.
DomainName	The domain from the sender's email address. The MailFilter constructor populates this property for the specified email.
FromEmailAddress	The sender's full email address. The MailFilter constructor populates this property for the specified email.

MailFilter(&Row1 As Row) Method

The MailFilter(&Row1 As Row) method uses the &Row1 parameter to populate the DomainName, FromEmailAddress, and EmailRow properties of the class. It accepts this parameter:

Input Parameter	Description
&Row1	A row type object for which the main record is MCFEM_RES_MAIN.

No return parameters are available.

IsFromEmailAddressValid() Method

IsFromEmailAddressValid() sets a Boolean value that indicates whether the email is valid. When you create your own mail filters, your custom logic goes here. The returned value is trapped by the mail reader process and is used in this way:

Return Value	Description
False	The email is considered to be an exception email and is discarded before any further processing takes place.
True	The email is valid.

Sample Code

This sample code filters out email from support@abc.com:

```
import RB_MCF_SETUP:*;

class CstmFilter1 extends MailFilter;
    method CstmFilter1(&Row1 As Row);
    method IsFromEmailAddressValid() Returns boolean;
end-class;
```

```

method CstmFilter1
    /+ &Row1 as Row +/
    %Super = create MailFilter(&Row1);

end-method;

method IsFromEmailAddressValid
    /+ Returns Bool +/
    If (%This.FromEmailAddress = "support@abc.com") Then
        Return False;
    Else
        Return True;
    End-If;

end-method;

```

See Also

Enterprise PeopleTools PeopleBook: PeopleCode Developer's Guide

Enterprise PeopleTools PeopleBook: PeopleCode Language Reference

Applying Email Filters

Access the Mail Filters page.

The screenshot shows the 'ERMS Mail Filters Setup' window. At the top, there are three tabs: 'Mail Server Definition', 'Spam List', and 'Mail Filters'. The 'Mail Filters' tab is active. Below the tabs, the form has the following fields and controls:

- *Mail Filter ID:
- *Status: (dropdown menu)
- *Application Class ID:
- *Application Class Path:
- Description:
- ☒ Retain Email Body As Exception
- [Package Tree Viewer](#) (link)

Mail Filters page

Mail Filter ID and Description

Enter a name and description for your custom mail filter.

PeopleSoft delivers a mail filter with the ID SYS_SPAM_LIST. This filter blocks email from the addresses and domains that you enter on the Spam List page. You cannot edit or delete the data for this filter.

Status

Select to activate the mail filter. The email addresses and domain filters that you set up on the Spam List page are active only if you activate the SYS_SPAM_LIST filter here.

Application Class ID, Package Tree Viewer, and Application Class Path

Enter the ID and path for an application class that performs custom mail filtering. Click the Package Tree Viewer link to access the Application Packages Lookup page, where you can browse for application classes and select one to use.

Retain Email Body As Exception

Select to have the ERMS mail reader process to save the text of any email that has been blocked by this filter. The blocked email is not routed for handling, but an administrator can review the blocked emails on the Exception Email Details page.

If this option is cleared, you can still review summary information about the email on the Mail Reader Process Log page, but you will not be able to view the email's body text.

See Also

PeopleSoft Enterprise CRM 9 Automation and Configuration Tools PeopleBook, "Using Application Classes" Chapter 4, "Understanding ERMS," Reviewing Exception Email, page 42

Defining Mailboxes

To define mailboxes, use the Mailbox Details (RB_MAILBOX_DEFN) component.

This section lists prerequisites and discusses how to:

- Define mailbox settings.
- Associate categories with recommended actions.
- Configure the activity list.
- Clone a mailbox.

Note. This section discusses only the general-purpose pages in the Mailbox Details component: the Mailbox Definition page and the Clone Mailbox page. Other pages in the component are used to set up email routing rules and are described in that context.

See Also

Chapter 8, "Setting Up Unstructured Email Handling," Understanding Unstructured Email Routing, page 109

Prerequisites

Before you begin defining mailboxes, define the mail server for the mailbox.

Also, define these users and group worklists that are associated with the mailbox:

- The worklist owner (a worker).
- The default group worklist for the mailbox.
- The group worklist to which emails that cannot be handled due to processor errors are sent.

These prerequisites are required if you want to implement the associated functionality:

- To define an auto-acknowledgement message for this mailbox, first create the template and a template package that contain the text of the auto-acknowledgement message.
- To define customer-based routing, first create the application class that is invoked during customer-based routing.

Pages Used to Define Mailboxes

Page Name	Definition Name	Navigation	Usage
Mailbox Definition	RB_MAILBOX_DEFN	Set Up CRM, Product Related, Multichannel Definitions, Email, Define Servers and Security, Mailbox Details, Mailbox Definition	Define a mailbox, its connection settings, and its email handling options.
Recommended Actions	RB_MB_RECMDACTIONS	Set Up CRM, Product Related, Multichannel Definitions, Email, Define Servers and Security, Mailbox Details, Recommended Actions	Associate categories with actions, which appear in email workspace as recommended actions.
Mailbox Activity List	RB_MBOX_ACTIVITY	Set Up CRM, Product Related, Multichannel Definitions, Email, Define Servers and Security, Mailbox Details, Mailbox Activity List	Specify the list of activities to be used in the email workspace for users to search for recent activities and create new ones.
Clone Mailbox	RB_MBOX_SAVEAS	Click the Clone Mailbox button on the Mailbox Definition page.	Clone an existing mailbox.
Default Solution Template	RB_EM_SOL_TMPL	Click the Set Default Solution Template button on the Mailbox Definition page.	Select a default solution template.

Defining Mailbox Settings

Access the Mailbox Definition page.

Mailbox Definition	Content Routing	Exception Routing	Associate Rules and Worklist
Mailbox ID Computers Description <input type="text"/> *Mailbox Type External *Status Active Clone Mailbox			
Email Address Information *Mail Server Name tl-mail01 *Email Account computers *Password ***** *Confirm Password *****			
Email Handling *Reply to Address computers@psft.com *Mailbox Owner Patrick Jose *Admin Group Worklist CameraWorklist *Default Group Worklist ComputersDefaultWL *Warning Notification 2 *Unit of Time Day(s) *Final Notification 3 *Unit of Time Day(s) *Polling Frequency 1 *Unit of Time Hour(s) *Language Code English *Business Unit US300 Set Default Solution Template			

Mailbox Definition page (1 of 2)

Auto Acknowledgement <input type="radio"/> Always Auto-Acknowledge <input type="radio"/> Only while not Auto-Responding <input type="radio"/> Determine from Rule <input checked="" type="radio"/> Never Auto-Acknowledge Template Package <input type="text"/>	
Create New Customer <input type="radio"/> Create new user based on Email <input checked="" type="radio"/> Use the System Setting	
Unstructured Email Processing Application Class ID <input type="text"/> Package Tree Viewer Application Class Path <input type="text"/> *Routing Rule Type Average Query Group Score Date Created 08/01/2002 3:20PM PDT CVP1 Last Modified 03/15/2004 6:02PM PST ERMSMGR	

Mailbox Definition page (2 of 2)

Mailbox ID and Description Displays the mailbox ID. The ID is used for internal purposes only and does not have to relate to the actual email address that is represented by this mailbox.

Be sure to enter a meaningful description for the mailbox because the description appears in several places throughout the system.

Status Select a status: *Active* or *Inactive*. The Mail Reader process fetches inbound email from active mailboxes only.

Clone Mailbox Click to access the Clone Mailbox page and create a new mailbox based on this mailbox definition.

Mailbox Type Select *External* if this mailbox receives email from external customers. For example, your sales and customer support email boxes are external.

Select *Internal* if you use this mailbox in conjunction with PeopleSoft HelpDesk, and select *Internal HR* if you use this mailbox in conjunction with PeopleSoft HelpDesk for Human Resources.

This setting controls which types of people (workers or customers) are associated with the email that this mailbox receives. Also, when agents reply to such email, this setting determines the default from address of the reply. Configure the default from addresses on the Agent Setup page for correspondence management or from the Supervisor Desktop.

Email Address Information

The mail reader process uses the information in these fields to fetch email from this mailbox. These fields are relevant to both structured and unstructured emails.

Mail Server Name	Enter the name of the mail server for this mailbox.
Email Account	Enter the name of the mailbox on the mail server. This is the name that your email system uses to identify the email account; it may not match the email address.
Password and Confirm Password	Enter a password that the ERMS mail reader process can use to access the mailbox. Passwords are case-sensitive. To keep your password secure, the system displays asterisks instead of the text that you enter. Because you cannot visually verify that you have entered the correct password, you must confirm your data entry by entering the password twice.

Email Handling

Reply to Address	<p>Enter the email address from which automatic replies are sent. The reply to address can be the same as the current mailbox, or it can be any other mailbox that you set up in the ERMS system.</p> <p>This is also the default from address for manual email responses that are sent by users who do not have a user-specific default from address.</p>
Mailbox Owner	Enter the name of the person in the CRM system who has the overall responsibility for the mailbox. The system sends this person notifications for each email that has not been closed (indicated with a <i>Complete</i> status) within the warning and final notification time frames. The mailbox owner can accept or take ownership of any email if he is also a member of the worklist to which the email is routed.
Admin Group Worklist (administrator group worklist)	Select the group worklist where emails are routed when processor or system-related errors occur. For example, if the automatic mail processing (AMP) rules engine fails and cannot process emails, they are sent to this worklist and reviewed by administrators. This is a required field.
Default Group Worklist	<p>Enter the default group worklist. Email that is sent to this mailbox is routed to the default group worklist in these situations:</p> <ul style="list-style-type: none"> • The automatic routing option is not selected for this mailbox. <p>If the Automatic Routing check box is clear, all incoming email messages are sent to the default worklist directly and they do not go through any mail processes.</p>

- The inbound email contains a context tag, but the thread-based routing routine is unable to identify a worklist.
- The mail process is unable to identify a worklist.
- The rules engine for AMP is unable to perform actions on the email.

Warning Notification, Final Notification, and Unit of Time

Enter the time period after which the system will send notifications to the mailbox owner if the email has not yet been closed. Select *Minutes*, *Hours*, or *Days* as the unit of time for these time periods.

The external mailbox records the time and date when the email arrives in the ERMS system; this is the starting point for the warning and final notification period deadline. The time period is calculated using a 24-hour clock, without regard to your organization's business hours.

The final notification time is the deadline for responding to and closing the email. The warning notification time alerts the mailbox owner that the organization is at risk for missing the deadline. Therefore, the warning notification time is shorter than the final notification time.

The system resets the external time that the email is forwarded to another mailbox.

Polling Frequency and Unit of Time

Enter the frequency with which the mail reader process pulls incoming email from the mail server into the PeopleSoft database. Select *Minutes*, *Hours*, or *Days* as the unit of time for the polling frequency.

To minimize connection-related overhead while still ensuring prompt receipt of incoming email, poll mailboxes that receive the heaviest traffic are polled more frequently than less-frequently used mailboxes.

Language Code

Select the language in which the mailbox is processing.

Business Unit

Enter a business unit for the mailbox definition to be used for the creation and search of transactions, as well as for business object search that is initiated from email. For example, if an agent creates a case from an email, the business unit that is specified in this email's mailbox becomes the business unit for the newly created case. If you perform a business object search on an email, the search is refined by the mailbox's business unit.

Set Default Solution Template

Click to specify a template that is used to apply to solutions that can be submitted along with emails.

To make a template available for solutions, add the *solution* usage to this template's package.

Templates are language-specific.

Auto Acknowledgement

Always Auto-Acknowledge

Select to make the system automatically send an acknowledgement response to every email that is sent to this mailbox. The automated acknowledgement is sent after the email is routed to a worklist.

Only while not Auto-Responding

Select to make the system automatically send an acknowledgement response only if it cannot provide an automated reply. This option works with the rule and action setup for AMP. If the action that the rules engine can trigger for an

email is an auto-response, no automated acknowledgement response is sent. Otherwise, an automated acknowledgement is sent to the email sender.

This option does not apply if NLP is unavailable.

Determine from Rule

Select to let the rules engine decide whether to send automated acknowledgement for email.

At runtime, the rules engine processes each email that arrives and triggers automated acknowledgement action if the conditions are satisfied. If the action cannot be performed, it will be recorded in the AMP log.

If you select this option, you may want to add the auto-acknowledgement action to all the rules that are associated with the mailbox, because the rules engine triggers the auto-acknowledgement action only if this option is selected. This action is bypassed if another option in this group box is selected.

This option does not apply if NLP is unavailable.

Never Auto-Acknowledge

Select to stop the system from sending any automatic acknowledgment response.

Template Package

Select the template package that defines the text of the acknowledgement email if you select *Always Auto-Acknowledge* or *Only while not Auto-Responding*. This package must include a template that can be used for the email channel. Because the system may not be able to identify the person to whom the acknowledgement is being sent, the template should not include any recipient-based terms.

PeopleSoft delivers a package called *Auto Acknowledgement* that you can use for this purpose.

Create New Customer

Use this group box to configure how the mailbox acts if the mail reader process cannot identify email senders from the database.

Create new user based on Email

Select to let the system create a new user based on the setting of the business unit that is associated with the mailbox. The ERMS system creates the user with a role type that is appropriate to the type of the mailbox (for example, the user is in a role type of *worker* if the mailbox is for *internal* use). The mail reader process derives the user name from the email address. For the email address *user@domain.com*, the first name of the user would be *user@* and the last name *domain.com*.

Using the System Setting

Select to let the system assign the email to the unknown user who is specified on the System Installations page. When you view the email from the email workspace, the role type of this unknown user is not provided and the representing information is unavailable.

Unstructured Email Processing

Application Class ID, Application Class Path, and Package Tree Viewer

Enter the ID and path for the application class to be used to activate customer-based routing rules that you have programmed using application classes. Click the Package Tree Viewer link to access the Application Packages Lookup page, where you can browse for application classes and select one to use.

PeopleSoft does not deliver any application classes for customer-based routing; you must create your own. For example, if you integrate with PeopleSoft Enterprise Performance Management, you could create an application class that routes email based on the customer value.

See [Chapter 8, "Setting Up Unstructured Email Handling," Defining Customer-Based Routing Rules, page 115](#).

Routing Rule Type

Select the method to be used when calculating worklist scores for this mailbox's email. Two ways to calculate worklist scores are available: *Average Query Group Score* and *Highest Query Group Score*. The system routes the email to the worklist with the highest worklist score.

Automatic Routing

Select to route all incoming email based on processing by Verity or NLP (if NLP is available).

Clear this check box to bypass any email process (such as the thread-based, customer-based, context-based, and content-based routing) and send all incoming email directly to the mailbox's default group worklist.

See Also

PeopleSoft Enterprise CRM 9 Automation and Configuration Tools PeopleBook, "Defining General Settings for Correspondence and Notifications," Defining User Settings

[Chapter 8, "Setting Up Unstructured Email Handling," Understanding Unstructured Email Routing, page 109](#)

[Chapter 6, "Setting Up Automated Mail Processing," Understanding Automated Mail Processing, page 77](#)

[Chapter 13, "Managing Email," Email Sender Identification, page 185](#)

PeopleSoft Enterprise CRM 9 Automation and Configuration Tools PeopleBook, "Using Application Classes"

Associating Categories with Recommended Actions

Access the Recommended Actions page.

Associate Rules and Worklist | **Recommended Actions** | Mailbox Activity List

Mail Box Details Computers

Recommended Actions Find First 1 of 1 Last

Category Problem

Sequence	Action Type Id
10	Respond To Sender
20	Compose Auto Acknowledgement

Add Action

Add Category

Recommended Actions page

For each selected category on this page, associate it with one or more ERMS-related actions. When an email is assigned a category (either manually by an agent or automatically by AMP) at runtime, the associated recommended actions appear on the Email page (under the Assistance section). The sequence number dictates the order in which the actions appear at runtime.

See Also

[Chapter 13, "Managing Email," Assistance, page 192](#)

Configuring the Activity List

Access the Mailbox Activity List page.

Enable	*Activity Type	Default	Create New	Quick Create	
<input checked="" type="checkbox"/>	Order	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
<input checked="" type="checkbox"/>	Support Case	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

Mailbox Activity List page

Recent Activity Default Rows

Enter the maximum number of activity rows that users see from the activity result grid on the Recent Activities tab on the Email page.

Activity Type

Select the types of transactions (activities) that can appear when the email workspace retrieves the default activity result list initially.

At runtime, all the transactions that are enabled, together with emails, appear in the Activity Type field on the Recent Activities tab on the Email page.

Create New

Select to enable users to create the corresponding transaction at runtime by clicking the Create New link that appears on the Recent Activities tab on the Email page. The link appears when the transaction that has this option enabled is selected in the Activity Type field. If users do not have the permission to create that transaction, they are notified with a system message.

Quick Create

Select to let the system display the Create New <CRM transaction> button for the corresponding transaction at runtime.

For example, if you select this check box for the support case transaction, the Create New Support Case button appears on the Email: Main page.

See Also

[Chapter 13, "Managing Email," Assistance, page 192](#)

Cloning a Mailbox

Access the Clone Mailbox page.

Clone Mailbox page

Save As Mailbox ID and Description Enter IDs and descriptions for the mailboxes that you want to create.

Click the OK button to create mailbox definitions using the IDs and descriptions that you entered. The new mailbox definitions are exact duplicates of the current mailbox definitions except for the ID and description fields.

Defining Priorities and Moods

This section discusses how to:

- Define priorities.
- Define moods.

Pages Used to Define Priorities and Moods

Page Name	Definition Name	Navigation	Usage
Priority Setup	RB_PRIORITY_SETUP	Set Up CRM, Product Related, Multichannel Definitions, Email, Priorities, Priority Setup	Define priorities to appear for email on the email workspace.
Mood Setup	RB_MOOD_SETUP	Set Up CRM, Product Related, Multichannel Definitions, Email, Moods, Mood Setup	Define mood attributes for email on the email workspace.






Defining Priorities

Access the Priority Setup page.

Priority Setup

Priority Setup

Priorities

<u>Priority Name</u>	<u>Description of Priority</u>	
1-Critical	Highest Priority	
2-Urgent	High Priority	
3-Normal	Standard Priority	
4-Low	Lowest Priority	
5-test	Testing	

Add

Modified 01/22/2004 12:12PM PST JEDGAR

Priority Setup page

Values in this grid are used to give priority to email after the content analysis. The priority appears for email in the email workspace.

Defining Moods

To define moods, use the Mood Setup (RB_MOOD_SETUP) component.

Access the Mood Setup page.

Moods

Mood Setup

Mood Name	Description of Mood	
1-Irate	The customer is extremely unhappy	
2-Upset	Customer is not happy	
3-Disappointed	Customer not satisfied	
4-Neutral	Customer is neutral	
5-Happy	Customer is happy	
6-Delighted	Customer is extremely happy	

Add

Modified 01/22/2004 12:28PM PST JEDGAR

Mood Setup page

Values in this grid are used to describe what the customer mood is in email after the content analysis. The mood appears for email in the email workspace.

Defining Email Audit History Tracking

This section discusses how to define email audit history tracking in the CRM system.

Page Used to Define Email Audit History Tracking

Page Name	Definition Name	Navigation	Usage
Audit - Setup	RC_COMP_AUDIT	Set Up CRM, Common Definitions, Audit Trail - Setup, Audit - Setup	Define auditing behavior for inbound email.

Defining Email Audit History Tracking in the CRM System

See *PeopleSoft Enterprise CRM 9 Application Fundamentals PeopleBook*, "Setting Up Auditing for Cases and Inbound Email".

CHAPTER 6

Setting Up Automated Mail Processing

This chapter provides an overview of automated mail processing (AMP) and discusses how to set up AMP.

Understanding Automated Mail Processing

This section discusses:

- AMP overview.
- Use of AMP in unstructured and structured email.
- Delivered behavioral rules.

AMP Overview

AMP performs automated actions on inbound emails based on the content analysis of emails and behavioral rules that are established in the system. The framework consists of these components and concepts:

- Categories.
- Actions.
- Rules, rules engine, and mailbox relationships.

Note. The functionality of AMP applies to both structured and unstructured emails. Topics discussed in this chapter are common to both email types. Please refer to subsequent chapters for additional AMP documentation that is specific to unstructured emails and structured emails.

Categories

Every email that AMP processes has a category, which is either recommended by natural language processing (NLP), if available, or, in the case of structured email where NLP is unavailable, it is the default value that comes from the email's associated webform definition.

Typically, AMP triggers email actions by matching the category and threshold of an email to a list of rules that you define in the system. You specify categories into which email can be classified in the NLP framework. When NLP receives an email, it analyzes the email content. It returns a suggested category and a category threshold score for that mail (for example, this email belongs to the *problem* category with a score of 80). AMP uses these two pieces of information to find a matching behavioral rule, and it invokes an action of the rule that can meet the email's threshold value.

PeopleSoft Customer Relationship Management delivers categories to be used for AMP. They are specified under a category set called *AMP Categories*, which includes *Problem*, *Inquiry*, *Spam*, *Complaint*, and *Unsubscribe*. To add custom categories to the AMP category set, create these categories under Set Up CRM, Common Definitions, Correspondence, Categories & Types. Subsequently, add them to the AMP Categories category set under Set Up CRM, Common Definitions, Knowledge Base, Category Set.

Actions

Through AMP, the email response management system (ERMS) can take immediate actions on the kinds of email that are relatively common and straightforward in terms of their purposes, such as making a complaint, filing a product problem, or requesting status information. The ERMS reduces agents' workload and helps them focus on resolving more complicated issues that are routed to them. You define email-specific actions that AMP can trigger using the action framework of the Active Analytics Framework. The action framework provides a flexible environment that enables you to implement custom actions by referencing your application class method in the runtime section of the action type definition. Specify an application class method in the design time section of the action type definition if you need to gather more details about the action from customers. The system triggers the design time code of an action when customers specify the action in a rule definition. Clicking the Configure link on the Define Automated Mail Processor Rule page enables customers to enter additional configuration details about that action for a particular rule.

System-delivered actions include *Auto response*, *Auto acknowledge*, *Auto route*, *Auto suggest*, *Create case*, *Spam*, and *Unsubscribe*.

Rules, Rules Engine, and Mailbox Relationships

A rule consists of a category, a threshold value, and a list of prioritized actions. Rules are subject to evaluation that is performed by the rules engine to determine which action to trigger for each email that it processes. In a rule definition, you specify the minimum confidence (threshold) score that an email with the same rule category has to meet for this rule to be applicable to this email. You can specify one or more actions in a rule and prioritize them.

When the rules engine obtains a category and threshold score for an email, it identifies the rule of that category that is specified in the mailbox definition to which the email is sent. The rules engine tries to take the action of the highest priority, one level at a time. If it cannot take the action for some reason (for example, the returned threshold score of the email is lower than the one specified at the action level), it moves to the next priority to see if it can trigger any action. If the rules engine cannot find any rule, or there is no action that can be triggered from the applicable rule due to low threshold score, the email is then routed to the default group worklist specified in the mailbox definition.

Note. AMP closes emails after auto responses are sent. If AMP cannot apply any rules to route emails that are in open status, they are routed to the default group worklist.

See Also

[Chapter 7, "Setting Up Structured Email Handling," Defining Webform Templates, page 105](#)

PeopleSoft Enterprise CRM 9 Automation and Configuration Tools PeopleBook, "Setting Up Natural Language Processing," Understanding NLP

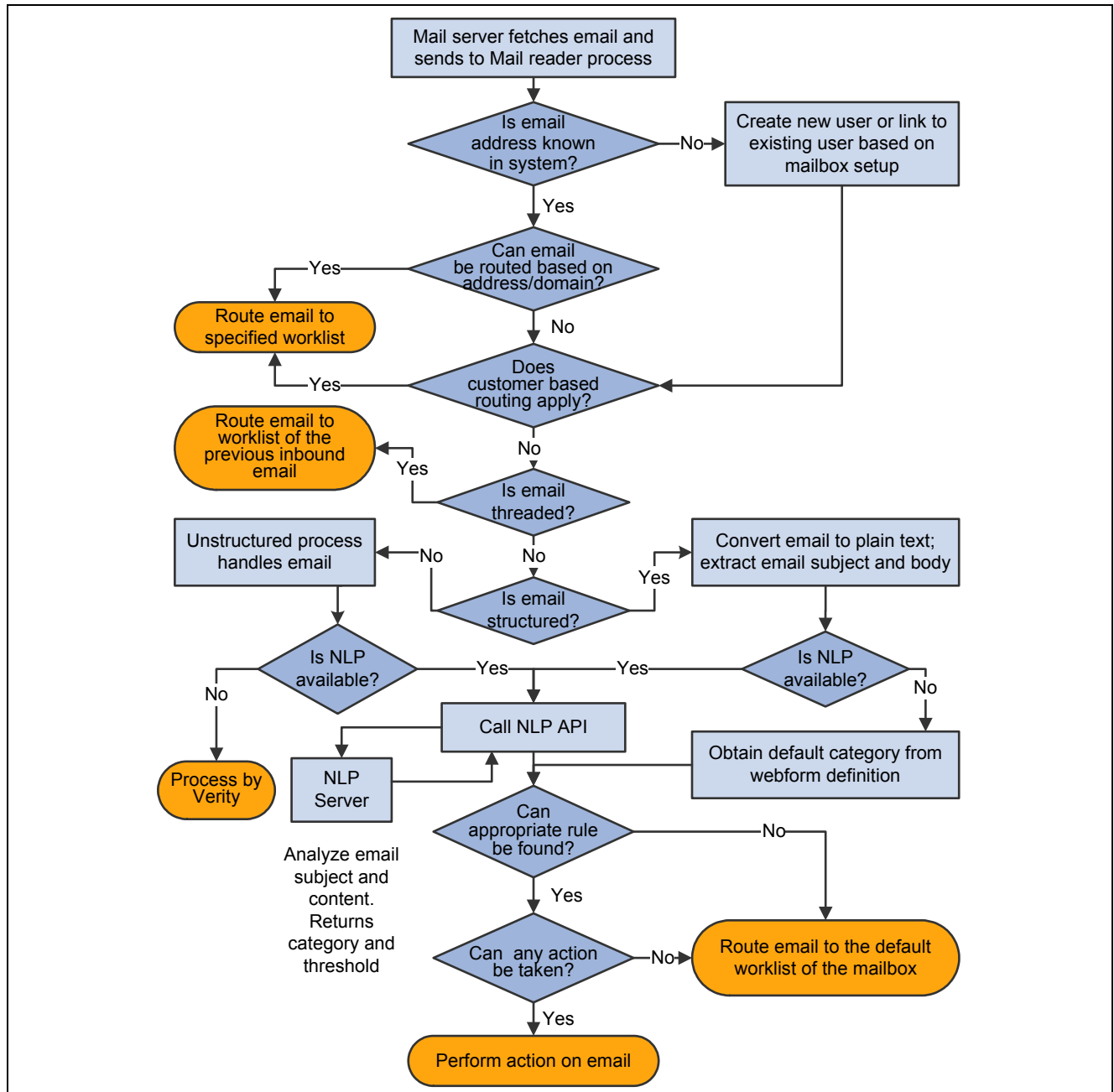
Use of AMP in Unstructured and Structured Email

AMP supports both unstructured and structured emails. The process behaves slightly different as a result of the availability of NLP:

- If NLP is available and the incoming email is either unstructured or structured, the AMP rules engine interacts with NLP to obtain the category that is suggested for the email, locates the relevant rule, and performs applicable actions automatically.
- If NLP is unavailable and the incoming email is structured, the AMP rules engine obtains the default category that is specified in the webform definition from which the email generates; the engine then locates the relevant rule and performs applicable actions automatically.
- If NLP is unavailable and the incoming email is unstructured, AMP doesn't apply and the email is routed to a worklist as a result of a keyword-based content analysis performed by Verity.

Process Flow

This diagram illustrates the AMP flow for unstructured and structured email:



AMP flow for structured and unstructured email

Analysis Steps

Here is a summary of how AMP works:

1. The mail reader process fetches an email from the email server and classifies it as unstructured or structured.
AMP applies to structured emails, as well as to unstructured emails if NLP is available.
 - A structured email is generated from a form that a user submits online (called a webform).
 - An unstructured email is written from an email client.
2. AMP interacts with NLP (if applicable).

AMP sends the email subject and body to the NLP server for content analysis. The NLP server returns a recommended category and threshold score for the email. The rules engine finds the rule for that suggested category from the mailbox definition to which the email belongs.

If NLP is unavailable and the email being processed is unstructured, it will be routed by a keyword-based mechanism using Verity.

3. The rules engine goes through the rule's actions and runs the ones with the highest possible priority whose threshold values are satisfied by the returned threshold value.

If the rules engine cannot find a matching rule or action, it routes the email to the default group worklist that is specified in the mailbox definition.

Delivered Behavioral Rules

PeopleSoft CRM delivers AMP rules for categories created in the system:

Category	Rule Name	Action
Complaint	Complaint Rule -1	First priority: <ul style="list-style-type: none"> • Auto respond to email with minimum threshold value of 90 and maximum return of 1 solution. • Auto route email.
Complaint	Complaint Rule -2	First priority: Auto route email.
Problem	Problem Rule 1	First priority: Auto respond to email with minimum threshold value of 90 and maximum return of 5 solutions. Second priority: <ul style="list-style-type: none"> • Create a case. • Auto route email.
Problem	Problem Rule 2	First priority: <ul style="list-style-type: none"> • Auto respond to email with minimum threshold value of 90 and a maximum return of 5 solutions. • Auto suggest solutions (maximum of 10) with minimum threshold value of 90. Auto suggest documents (maximum of 5) with minimum threshold percentage of 90. • Auto route email.
Problem	Problem Rule 3	First priority: Auto respond to email with minimum threshold value of 95 and maximum return of 5 solutions. Second priority: <ul style="list-style-type: none"> • Send auto acknowledge email. • Create a case.

Category	Rule Name	Action
Problem	Problem Rule 4	First priority: <ul style="list-style-type: none"> • Create a case. • Auto route email.
Problem	Problem - Create Case	First priority: Auto respond to email with minimum threshold value of 90 and a maximum return of 5 solutions. Second priority: Create a case. Third priority: Send auto acknowledge email.
Inquiry	Inquiry Rule 1	First priority: <ul style="list-style-type: none"> • Auto respond to email with minimum threshold value of 90 and maximum return of 5 solutions. • Auto suggest solutions (maximum of 5) with minimum threshold value of 90. Auto suggest documents (maximum of 5) with minimum threshold percentage of 90. • Auto route email.
Inquiry	Inquiry Rule 2	First priority: <ul style="list-style-type: none"> • Auto suggest solutions (maximum of 10) with minimum threshold value of 80. Auto suggest documents (maximum of 5) with minimum threshold percentage of 80. • Auto route email.
Inquiry	Case Status Inquiry	First priority: Send auto response with case status. Second priority: Send auto acknowledge email.
Inquiry	Service Order Status Inquiry	First priority: Send auto response with service order status. Second priority: Send auto acknowledge email.
Inquiry	Order Status Inquiry	First priority: Send auto response with sales order status. Second priority: Send auto acknowledge email.
Spam	Route spam to worklist	First priority: Mark the email as spam and route it to the specified group worklist.
Spam	Route spam to mailbox	First priority: Route email to the specified spam mailbox.
Spam	Delete spam	First priority: Delete email.

You specify a rule for each category in a mailbox definition. The rules engine references this information when it tries to find a rule that can apply to a categorized email belonging to a particular mailbox.

Setting Up Automated Mail Processing

To set up automated mail processing, use the Define AMP Rule (RB_DEFINE_AMPRULE) component.

This section discusses how to:

- Define webform templates (for structured email).
- Identify email workspace fields for mapping (for structured email).
- Specify webform and email workspace field mapping (for structured email).
- Set up NLP.
- Define actions.
- Define AMP categories.
- Define rules.
- Configure auto response actions.
- Configure auto acknowledge actions.
- Configure case creation actions.
- Configure auto suggest actions.
- Configure spam actions.
- Associate rules in mailboxes.
- Specify rules for categories.
- Configure rule actions.

Pages Used to Set Up Automated Mail Processing

Page Name	Definition Name	Navigation	Usage
Register Action Type	EOCF_ACTN_TYPE_REG	Enterprise Components, Active Analytics Framework, Action Framework, Register Action Type, Register Action Type	Define actions that can be invoked by the AMP rule engine for incoming emails.
Categories & Types	RBC_CATEGORY_SETUP	Set Up CRM, Common Definitions, Correspondence, Categories & Types, Categories & Types	Define categories in the category set for AMP.
Category Set	RBN_DFN_CATGSET	Set Up CRM, Common Definitions, Knowledge Base, Define, Category Set, Category Set	Add or remove categories in a set to be used by the AMP rule engine.

Page Name	Definition Name	Navigation	Usage
Define Automated Mail Processor Rule	RB_DEFINE_AMPRULE	Set Up CRM, Product Related, Multichannel Definitions, Email, Define Servers and Security, Define AMP Rule, Define Automated Mail Processor Rule	Define rules that associate a category with one or more actions.
Configure Auto-Response Action	RB_CFG_AUTOREPLY	Click the Configure link of the <i>Auto Response</i> action type.	Configure the threshold value required for solutions to be included in the auto response email and the maximum number of solutions that the email can have at one time. Specify the correspondence template package used to generate the email.
Configure Auto-Acknowledge	RB_CFG_AUTOACK	Click the Configure link of the <i>Auto Acknowledge</i> action type.	Specify the correspondence template package used for generating the acknowledgement email.
Configure Create Case	RB_CFG_CREATECASE	Click the Configure link of the <i>Create Case</i> action type.	Specify the display template ID used for creating the case.
Configure Auto-Suggest	RB_CFG_AUTOSUGGEST	Click the Configure link of the <i>Auto Suggest</i> action type.	Configure threshold values for solutions and documents to be suggested and the maximum number of entries that can return at any given time.
Configure SPAM	RB_CFG_SPAM	Click the Configure link of the <i>Spam</i> action type.	Specify the method to handle spam email.
Associate Rules and Worklist	RB_MB_WL_ASSOC	Set Up CRM, Product Related, Multichannel Definitions, Email, Define Servers and Security, Mailbox Details, Associate Rules and Worklist	Associate mailboxes with categories and rules.
Select Rule	RB_MB_RULE_SEC	Click the Modify Behavior link on the Associate Rules and Worklist page.	Specify a rule for the selected category.
Configure Actions on Mailbox	RB_MB_CFG_ACTIONS	Click the Configure link that becomes active after selecting a rule on the Select Rule page.	Configure rule actions.

Defining Webform Templates

See [Chapter 7, "Setting Up Structured Email Handling," Defining Webform Templates, page 105.](#)

Identifying Email Workspace Fields for Mapping

See [Chapter 7, "Setting Up Structured Email Handling," Identifying Email Workspace Fields for Mapping, page 107.](#)

Specifying Webform and Email Workspace Field Mapping

See [Chapter 7, "Setting Up Structured Email Handling," Specifying Webform and Email Workspace Field Mapping, page 107.](#)

Setting Up NLP

See [Chapter 9, "Setting Up Chat," Natural Language Processing, page 130.](#)

Defining Actions

Access the Register Action Type page.

Register Action Type		Action Type Triggers
Action Type		
Action Type Name	Auto Route	
Description	Auto Route Action	
Long Description	Auto Route Action for Automated Mail Processor	
DesignTime Action Behavior		
Design Time App Class ID	Package Tree Viewer	
DesignTime App Class Path		
Action Text App Class ID	Package Tree Viewer	
Action text App Class Path		
<input type="checkbox"/> Do Actions of this type need to be configured? <input type="checkbox"/> Commit before an action of this type is configured, in the Policy builder?		
RunTime Action Behavior		
Run Time App Class ID	AutoMails Package Tree Viewer	
Run Time App Class Path	RB_AUTO_MAILS	
<input type="checkbox"/> Will actions of this type terminate CLF processing? <input type="checkbox"/> Commit before a triggering of actions of this type? <input type="checkbox"/> Will Actions of this type be combinable?		
Triggering Environment		
<input type="checkbox"/> Can Actions of this type be triggered by Application Engine? <input type="checkbox"/> Can Actions of this type be triggered by Application Messages? <input checked="" type="checkbox"/> Can Actions of this type be triggered from PIA pages? <input checked="" type="checkbox"/> Can Actions of this type be triggered by Component Interfaces?		
Modify System Data		
This object is maintained by PeopleSoft.		
Date Created	01/27/04 12:38:48.000000PM	SALURI
Last Modified	01/27/04 12:38:48.000000PM	SALURI

Register Action Type page

AMP leverages the action framework of the Active Analytics Framework to define actions. Use these fields on the page to define actions that are triggered by the rule engine.

Action Type Name Enter a name that uniquely identifies the action type.

Design Time App Class ID (design time application class ID) and **Design Time App Class Path** (design time application class path) Select the ID and path of the application class method that enables you to enter additional configuration details about actions of this type when you associate this type of action to a rule. The method transfers you to a component, which contains a page relevant to the particular action that you must configure.

Do Actions of this type need to be configured

Select if actions of this type need further configuration. If you select this check box, the design time application class method runs.

Run Time App Class

ID (run time application class ID) and **Run Time App Class Path** (run time application class path)

Select the ID and path of the application class method that runs when the rules engine triggers an action of this type.

The system delivers actions that can be used by the rules engine to handle some of the common email scenarios. Customers can add custom actions by writing their own application class methods and reference those methods here.

See *PeopleSoft Enterprise Components for CRM 9 PeopleBook*, "Considerations for Enabling the Framework" Considerations When Creating a New Action Type.

Defining AMP Categories

Access the Category Set page.

PeopleSoft CRM delivers a set of categories that can be used by NLP to classify email after analyzing its content. To add custom categories to be used for AMP, define them first on the Categories & Types page.

See *PeopleSoft Enterprise CRM 9 Automation and Configuration Tools PeopleBook*, "Setting Up Natural Language Processing," Understanding NLP and *PeopleSoft Enterprise CRM 9 Automation and Configuration Tools PeopleBook*, "Setting Up Correspondence Templates," Defining Template Categories and Types.

Defining Rules

Access the Define Automated Mail Processor Rule page.

Define Automated Mail Processor Rule

Mail Processor Rule Name

***Behavior Name**

Description

Category

***Confidence Must Exceed**

Priority	Action Type		
<input type="text" value="1"/>	<input type="text" value="Auto Response"/>	Configure	<input type="button" value="Remove Action"/>
<input type="text" value="2"/>	<input type="text" value="Create Case"/>	Configure	<input type="button" value="Remove Action"/>
<input type="text" value="2"/>	<input type="text" value="Auto Route"/>	Configure	<input type="button" value="Remove Action"/>

Define Automated Mail Processor Rule page

Behavior Name and Description	Enter the name that uniquely identifies the rule, and enter descriptive text to explain the sequence of actions for this rule. The system uses the text in the Description field to display rules (for each category) in the mailbox definition.
Category	Select a category from the drop-down list box to associate with this rule. The list box lists all the categories that are available in the system-delivered category set called <i>AMP Categories</i> .
Confidence Must Exceed	Enter the minimum threshold value that an email needs to obtain for the specified category before this rule can apply. NLP processes email and returns one or more categories and their threshold values. The system uses the threshold value to determine which rule to apply to the email if NLP returns multiple categories. In other words, the system assigns the category that has the highest threshold value to the email. If more than one threshold value exceeds the confidence value specified in this field, the rules engine doesn't apply any rule to the email; instead, the email is routed to the default group worklist of the mailbox.
Priority	<p>Enter a number to prioritize actions. The smaller the number, the higher the priority. The rules engine triggers actions with the highest priority. If no actions from the first priority can be invoked, it attempts the actions with the next highest priority.</p> <p>For example, the AMP rule is associated with three actions, auto response (in priority 1), create case, and auto route (both in priority 2). If an email matching this rule's category exceeds this rule's confidence level, the auto response action is invoked. If this action cannot complete, the create case and auto route actions are triggered. If none of them can succeed, the system sends the email to the default group worklist of the associated mailbox. You can assign the same priority to multiple actions.</p>
Action Type Name	Select the type of action that the rules engine invokes. The drop-down list includes all action types that are established in the action framework.
Configure	Click to access the page to enter configuration details for the specified action type. A message appears if you click the link to configure an action type, but it doesn't require any configuration. Each delivered action type has its individual configuration page where you specify action-specific configuration information.

Configuring Auto Response Actions


Access the Configure Auto-Response Action page.

Configure Auto-Response Action

Auto-Response

Minimum Threshold Required

Maximum Number of Solutions

Package Name 

Configure Auto-Response Action page

Configuring Auto Acknowledgement Actions

Access the Configure Auto-Acknowledge page.



Configure Auto-Acknowledge page

Select a correspondence template package used to format the acknowledgement email.

Note. If you set up the auto acknowledge action, make sure to select *Determine from Rule* auto acknowledgement option on the Mailbox Definition page.

See Also

Chapter 8, "Setting Up Unstructured Email Handling," Applying Customer-Based Routing Rules to a Mailbox, page 116

Configuring Case Creation Actions

Access the Configure Create Case page.

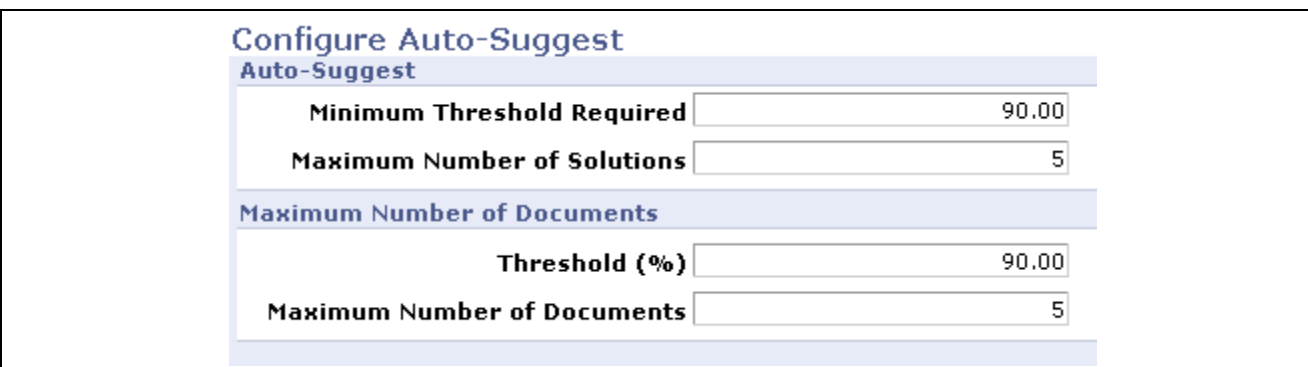


Configure Create Case page

Select the display template used to create the case.

Configuring Auto Suggest Actions

Access the Configure Auto-Suggest page.



Configure Auto-Suggest page

Auto-Suggest

Minimum Threshold Required

Specify the minimum threshold value that a solution has to meet for it to be considered and suggested for an email.

Maximum Number of Solutions Specify the maximum number of solutions to suggest for an email.

Maximum Number of Documents

Threshold Specify the minimum threshold value a document has to meet for it to be considered and suggested for an email.

Maximum Number of Documents Specify the maximum number of documents to suggest for an email.

Configuring Spam Actions

Access the Configure SPAM page.



Configure SPAM
Configure SPAM

☒ **Delete SPAM from System**

☐ **Mark as Spam and Route to WL**
Group Worklist Name

☐ **Route email to a Spam Mailbox**
Spam Mail Box ID

Configure SPAM page

Delete SPAM from System Select to remove spam email from the system.

Mark as Spam and Route to WL (mark as spam and route to worklist) Select to mark email as spam and route it to the worklist specified in the Group Worklist Name field.

Route email to a Spam Mailbox Select to route spam email to the mailbox specified in the Spam Mail Box ID field.

Associating Rules in Mailboxes

Access the Associate Rules and Worklist page.

Mailbox ID Cameras

Behavior Summary Customize | Find | First 1-5 of 5 Last

Status	Category	Selected Behavior Name	
<input checked="" type="checkbox"/>	COMPLAINT	AUTO ACK TEST	Modify Behavior
<input type="checkbox"/>	INQUIRY	<None Selected>	Modify Behavior
<input checked="" type="checkbox"/>	PROBLEM	PROBLEM RULE 1	Modify Behavior
<input type="checkbox"/>	SPAM	<None Selected>	Modify Behavior
<input type="checkbox"/>	UNSUBSCRIBE	<None Selected>	Modify Behavior

Associated Worklists Customize | Find | First 1-2 of 2 Last

Worklist Name	Queue	Priority	
CameraWorklist		1	Efficiency Remove Worklist
PhotoPrinter		2	Efficiency Remove Worklist

☐ **Confine Routing to selected WL**

[Add Worklists](#)

Associate Rules and Worklist page

Behavior Summary

This group box does not appear if NLP is unavailable.

Category

Displays the list of categories defined for AMP. Select the check box of categories to associate them with the mailbox.

Selected Behavior Name

Displays the link of the selected rule for that category. Click the rule link to access the Define Automated Mail Processor Rule page.

Modify Behavior

Click to access the Select Rule page that displays a list of rules defined for that category. Select a rule from the page.

Click the rule link to access the Define Automated Mail Processor Rule page.

Confine Routing to selected WL (confine routing to selected worklist)

Note. This field applies only if NLP is installed.

Select to route the email to a group worklist that NLP suggests, if *auto route* is the action that is triggered by AMP and the suggested group worklist is one of the worklists specified in the Associated Worklists group box. If the suggested group worklist is not on the list, the email is not routed to the suggested group worklist.

Clear this check box to allow the email to be routed to any worklist in the system as NLP suggests.

Associated Worklists

Use this group box to associate worklists with a mailbox and prioritize worklists for that mailbox.

See [Chapter 8, "Setting Up Unstructured Email Handling," Associating AMP Rules and Worklists with a Mailbox, page 123.](#)

Specifying Rules for Categories

Access the Select Rule page.

Rules	Find	First	1-5 of 5	Last
<input type="radio"/> PROBLEM RULE 1 Configure Try to Auto Reply. Else try to Create Case and Route it to an Agent				
<input type="radio"/> PROBLEM RULE 2 Configure Always try to Auto Respond, Auto Suggest and Route it to an Agent				
<input type="radio"/> PROBLEM RULE 3 Configure Try to Auto Reply. Else try to Auto Acknowledge and Create a Case				
<input type="radio"/> PROBLEM RULE 4 Configure Try Create Case and Route it to Agent				
<input type="radio"/> SEDAUTORESPONSE Configure Send Auto Response				

OK Cancel

Select Rule page

Select one rule for each active category that is associated with a mailbox. Click the rule link to access the Define Automated Mail Processor Rule page to view the rule definition and modify it as needed. After selecting a rule, the Configure link becomes active. The system takes you to the Associate Rules and Worklist page where the rule link appears. Click it to access the Define Automated Mail Processor Rule page on a new browser window.

When you select a rule on the Select Rule page, its Configure link becomes active. Click this link to access the Configure Actions on Mailbox page (RB_MB_CFG_ACTIONS) and configure the actions available in the rule.

Configuring Rule Actions

Access the Configure Actions on Mailbox page.

Configure Actions on Mailbox

Mail Box Details Cameras

PROBLEM_RULE_2 **Category** 20

Priority 1

Auto-Response

Threshold (%) 5.00

Maximum Number of Solutions 5

Package Name AMP Auto Response

Priority 1

Auto Suggest

Maximum Number of Solutions

Threshold (%) 90.00

Maximum Number of Solutions 10

Maximum Number of Documents

Threshold (%) 5.00

Maximum Number of Documents 90

OK

Cancel

Configure Actions on Mailbox page

This page contains the configuration parameters required for all the actions associated with the selected rule. If no actions of the rule require further configuration, they do not appear here. The fields for each type of actions are identical to those that appear on each individual action configuration page.

CHAPTER 7

Setting Up Structured Email Handling

This chapter provides an overview of structured email and discusses how to:

- Define application services.
- Define webform templates.

Understanding Structured Email

This section discusses:

- Webforms and structured email.
- Webform templates.
- Structured email processing.

Webforms and Structured Email

Structured email is generated from a web page where customers enter and submit information. The web page takes the information that customers enter, applies XML markup, inserts a webform ID, and sends the XML as an email to a mailbox that the PeopleSoft CRM email response management system monitors. When the mail reader process (RB_MAIL_READ) analyzes the email, the presence of an XML header causes the system to classify it as structured email and be processed by the mail route process accordingly.

Structured emails are checked for context-based, customer-based, and thread-based routing before automated mail processing (AMP). While the application of AMP is fairly similar to both structured and unstructured emails, for NLP to perform content analysis on structured emails, the AMP rules engine first needs to convert the email format from XML to plain text and extract the email subject and body based on the mapping in the webform definition. If NLP is unavailable, the rules engine obtains the default category from the webform definition of the email, finds the associated rule from the mailbox definition, and triggers actions of the highest priority. Threshold values do not apply. You can set up the system to always use the default category. In this case, NLP is not used.

The email is displayed in plain text on email workspace for agents to review or process further. On the email body, each piece of data has a corresponding text label that is defined in the webform definition for better readability.

Note. If NLP is available yet field mapping is unavailable for fields such as Template Type, Product Group, Product, Mood, and Priority, the rules engine populates these values with suggestions returning from NLP.

If the email process cannot identify the webform ID, it routes the email to the admin group worklist for the mailbox.

The web page where customers submit email exists outside the PeopleSoft system. To ensure proper handling of structured email, the email generated by the external webform must include a `WEBFORM_TEMPL_ID` tag with a webform ID that you set up within the PeopleSoft system. You define the ID on the Define Webform Templates page, where you also select the application message that represents the webform structure. The page has a preview option so that you can see the expected format of all emails that are generated from this webform. Validate the actual email that the external web page generates against the expected format that appears in the preview.

Because the webform where the structured email originates is external to the PeopleSoft system, its design is completely up to you. For example, you could use a webform exclusively for inquiries about the status of a service order, or you could use the same webform for several types of inquiries. Regardless of how you design the webform, it is your responsibility to ensure that the email it generates always contains a unique webform ID and a structure that matches the structure of the webform template within the PeopleSoft system.

Important! When you design webforms, always set the MIME (Multipurpose Internet Mail Extensions) part to *text/plain* to ensure the proper handling of generated structured emails in ERMS.

Webform Templates

Webform templates specify the XML format that is used to generate structured emails after customers enter information on corresponding webforms. A webform template consists of the following elements:

- Inbound application message.

The message sets the expected format of the XML in the email body. Fields that you include in the message definition must appear in the XML, and the names of the XML tags must match the field name or its alias (if you defined an alias).

- Application service input type.

This element tells the mail reader process how to pass the email body to the application class method (used in actions). If the input type is XMLDOC or Rowset, the system converts the email body text to the specified format. If the input type is Custom, the application class must perform any necessary conversion.

The easiest input format to work with is normally a rowset; the message definition determines the rowset structure.

- Default category.

The rules engine uses this category to locate the appropriate rule and action if NLP is unavailable. You can set up the rules engine to always use the default category even if NLP is available, which means that the default value overrides the category suggested by NLP. Use this option if the emails generated from a webform template have a very specific and clear goal, such as status inquiry.

- Mapping between webform fields and email workspace fields.

The rules engine uses this mapping to populate webform data to corresponding fields in the email workspace in a readable manner (in plain text without XML tags).

Inbound Application Message Definitions

The PeopleTools message definition defines the structure of the email. A message definition consists of at least two elements:

- One or more transaction-related records.

For example, to process a sales order status inquiry, you would include the order header record (`RO_HEADER`) in the message definition, and you would mark the order ID field (`CAPTURE_ID`) for inclusion.

- The standard Webform subrecord (RB_WEBFORM_SBR).

This includes two fields—the webform ID (WEBFORM_TEMPL_ID) and the customer’s email address (FROM_ADDRESS). Both of these fields are required; ensure that the webform provides this data.

The message definition for the sales order inquiry message that is described in the preceding examples looks like this:

```
<?xml version="1.0"?>
<Message>
  <MsgData>
    <Transaction>
      <RO_HEADER class="R">
        <CAPTURE_ID></CAPTURE_ID>
        <BILL_RECIPIENT_FLG></BILL_RECIPIENT_FLG>
        <BULK_ORDER_FLAG></BULK_ORDER_FLAG>
        <PROD_TERM_CODE></PROD_TERM_CODE>
        <DUE_DATE></DUE_DATE>
        <RESELL_FLAG></RESELL_FLAG>
        <RO_BILL_TO_TYPE></RO_BILL_TO_TYPE>
        <SCHEDULE></SCHEDULE>
        <SUBMIT_DTTM></SUBMIT_DTTM>
        <UID20F_PARTNER></UID20F_PARTNER>
        <UID20F_PARTNERC></UID20F_PARTNERC>
        <FIN_ACCOUNT_ID></FIN_ACCOUNT_ID>
        <RO_MULTILINE></RO_MULTILINE>
      </RO_HEADER>
      <RB_WEBFORM_SBR class="R">
        <WEBFORM_TEMPL_ID></WEBFORM_TEMPL_ID>
        <FROM_ADDRESS></FROM_ADDRESS>
      </RB_WEBFORM_SBR>
    </Transaction>
  </MsgData>
</Message>
```

Delivered Webform Templates

The following table lists the webform templates that the PeopleSoft system delivers, as well as the AMP rules and actions that process structured emails generated by these templates:

Webform Template	Rule	Action
ORDER STATUS INQUIRY	Order Status Inquiry	The system tries to send an auto response with the appropriate status. If the first action fails, it sends an auto acknowledgement stating that the status cannot be found.
CASE STATUS INQUIRY	Case Status Inquiry	
SERVICE ORDER STATUS INQUIRY	Service Order Status Inquiry	
PROBLEM - CREATE CASE	Create Case	The system tries to send an auto response with recommended solutions. If the first action fails, it creates a case for the customer. If the second action also fails, it sends an auto acknowledgement stating that the reported issue is being processed.

Processing for Structured Emails

Structured email processing follows this sequence:

1. A customer submits data using a webform.
2. The webform creates an XML-formatted email message containing transaction information, a webform ID, and the customer's email address.
3. The email arrives in a mailbox that is monitored by your ERMS system, and the presence of the XML header causes the mail reader process to classify it as a structured email.
4. The mail route process converts the email from XML to plain text using the webform and email workspace field mapping that is set up as part of the webform template definition.
5. The email is sent to the NLP system for content analysis.

A recommended category and threshold value return. The rules engine locates from the email's mailbox definition an AMP rule with a matching category. If the returned threshold value is the same or higher than the required value specified in the rule, the rules engine then tries to trigger the actions of the highest priority by comparing the returned and required threshold values. If the returned value is higher, actions are performed automatically; if not, the rules engine attempts the next action. If no rule can apply or none of the actions can be performed, the email is routed to the default group worklist.

If NLP is unavailable, the rules engine obtains the default category from the webform template definition. In this scenario, the threshold value is not used.

6. Processing for the structured email completes and the email is removed from the email queue.

You can access the email on the email workspace. Information about the email appears according to the field mapping of the webform template definition.

See Also

[Chapter 4, "Understanding ERMS," ERMS Processes, page 25](#)

Defining Application Services

This section discusses how to:

- Create the application service message definition.
- Create the application class that handles the structured email.

To define application services, use the Application Services (RB_APPSRV_DEFN) component.

Creating the Application Service Message Definition

Access PeopleSoft Application Designer to create the application service message definition that defines the structure for structured email.

1. Create a new message definition.

Create a new message definition.

2. Add transaction-specific records to the message.

The system uses these records to process the structured email. For example, the message used to process service order status inquiries includes the RF_SO_HDR record (the service order header record).

3. Select the Include check box for the fields that are to be included in the structured email.

The email that your webform generates must include XML tags for every included field. Content is not required for every included field, but the tags are.

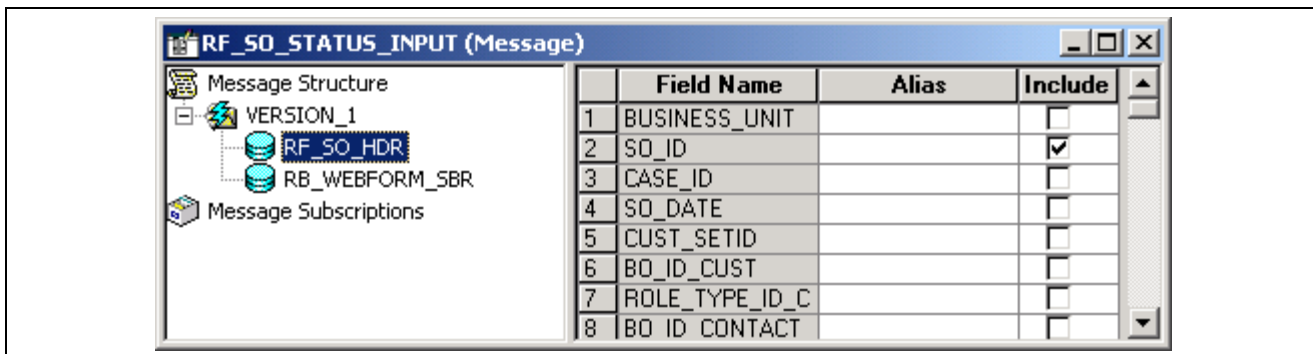
4. (Optional) Enter an alias for the included fields.

If you do not enter an alias, the field name is used in the XML tag name. If you do enter an alias, the alias is used.

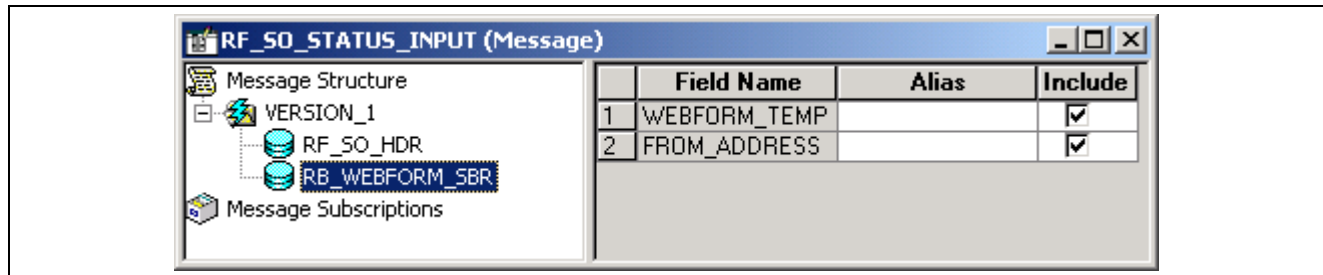
For example, if the field SO_ID is included but does not have an alias, then the email that the Webform generates must have <SO_ID> and </SO_ID>. If you give this field the alias *ServiceOrderID*, the tags are <ServiceOrderID> and </ServiceOrderID>.

5. Add the RB_WEBFORM_SBR record to the message.

The following pages illustrate a message definition for service order status inquiries:



Transaction-specific record in a message definition



RB_WEBFORM_SBR record in a message definition

Creating the Application Class That Handles the Structured Email

Access PeopleSoft Application Designer and create the application class by extending the delivered ApplicationServices base class.

The application class that an application service references performs the core processing to respond to the email. It accepts inputs from the Structured Email process and returns parameters that the Structured Email process uses to create an automatic reply.

The delivered ApplicationServices base class is in the RB_MCF_SETUP package under RB_APPS_API subpackage. This class has properties that are used to send input to your application class and to set the output of the application class.

Base Class Properties

The following table lists the relevant properties of the base class:

Property	Description
InputType	The input type specified on the Application Services Setup page. This input type is automatically passed to the application class at runtime by the Structured Email process.
InputMessage	The message definition specified on the Application Services Setup page. This definition is automatically passed to the application class at runtime by the Structured Email process.
EmailId	The ID of the email to be processed. This ID is populated at runtime by the Structured Email process.

Property	Description
Outcome	<p>An output property that each application class's ExecuteApi method must set. The value of the Outcome property determines which Webform default correspondence template is used to reply to the email if the CorrespondencePackageid property is not set.</p> <p>Possible outcome values are:</p> <ul style="list-style-type: none"> • <i>Success</i>: The email structure is valid and all required data is present. • <i>Failure</i>: The structure is valid, but not all required data is present. • <i>Error</i>: The structure is invalid. <p>This outcome causes the Structured Email process to route the email to the mailbox's default worklist so that it can be processed as an unstructured email.</p>
CorrespondencePackageid	<p>This is an output property that each application class's ExecuteApi method can optionally set.</p> <p>This is the ID of the correspondence template package to be used when responding to the sender. If no template package is specified, the Structured Email process uses one of the default template packages specified on the Define Webform Templates page. Different default template packages exist depending on the outcome.</p>
TransactionRecord	<p>This is an output property that each application class's ExecuteApi method sets.</p> <p>This is the PeopleTools record object (for example, RC_CASE for cases) for the transaction to which the email pertains. This value is used to pass record information and key values to correspondence management so that it can resolve transactional tokens in the correspondence template.</p>
SubInteractionRecord	<p>An output property that each application class's ExecuteApi method sets.</p> <p>This property is the PeopleTools record object that contains subinteraction information for the transaction to which the email pertains. It is passed to correspondence management so that it can create the appropriate subinteractions for the email.</p>
ReceipientBoId	<p>An output property that each application class's ExecuteApi method sets.</p> <p>This property is the business object ID of the person to whom the reply is sent. This value is passed to correspondence management so that it can resolve recipient tokens in the correspondence template.</p>
ReceipientRoleType	<p>An output property that each application class's ExecuteApi method sets.</p> <p>This property is the role of the person to whom the reply is sent. This value is passed to correspondence management so that it can resolve recipient tokens in the correspondence template.</p>

Constructor Method

The Constructor method is different for each application service; its name is the same as the name of the application class. For example, `CaseStatus` is the constructor method for the `CaseStatus` application class.

The Constructor method has the following parameters, which are used to invoke the base class Constructor method that populates the corresponding properties of the application class:

- `InputType`
- `InputMessage`
- `EmailId`

ConvertEmailBody Method

The `ConvertEmailBody` method converts the email body text from a string to either XMLDOC or ROWSET format, depending on the input type that you select on the Application Services Setup page. If you select *Custom* as the input type, you must override this method with code that performs the custom conversion.

ExecuteApi Method

Override the existing `ExecuteApi` method with your own application-specific code that sets some or all of the following properties:

Parameter	Comments
Outcome	Required.
CorrespondencePackageid	Optional. If this property is not set, the Structured Email process uses the Webform's default correspondence package for the outcome that you set.
TransactionRecord	Required if the correspondence template has transactional tokens (tokens that reference transaction data).
SubInteractionRecord	Required to create subinteractions, which associate the automated reply (an interaction) with its related CRM transactions.
ReceipientBoId and ReceipientRoleType	Required if the correspondence template has recipient-based tokens, such as the recipient's name.

Sample Code for the ExecuteApi Method

The following sample code does three things:

- If the case ID entered in the webform is not in the system, then it returns an outcome of F (failure).
- If the case ID entered in the webform is a valid issue in PeopleSoft CRM for Financial Services, the code returns a outcome of S (success).
- If the case ID entered in the webform is in the system, but is not a PeopleSoft CRM for Financial Services issue, then the code returns an outcome of E (error).

```
import RB_MCF_SETUP:RB_APPS_API:*
```



```

import RB_MCF_SETUP:RB_APPS_API:RB_ERMS_MESSAGE:*;

class IssueStatus extends ApplicationServices
    method IssueStatus(&Input_Type As string, &Msgname As string, &Email_Id As⇒
        number);
    method ExecuteApi();
end-class;

method IssueStatus
    /+ &Input_Type as String, +/
    /+ &Msgname as String, +/
    /+ &Email_Id as Number +/
    Rem*****⇒
*;
    Rem -- Invoke Base Class Constructor before invoking other methods -----⇒
-;
    Rem*****⇒
*;
    %Super = create ApplicationServices(&Input_Type, &Msgname, &Email_Id);
end-method;

method ExecuteApi
    Local Rowset &Case_Rs;
    Local number &Case_Id;
    Local string &Status, &Xml_String;
    Local string &Business_Unit, &Market;
    Local number &Bo_Cust, &Bo_Contact, &Role_Type_Cust, &Role_Type_Contact;
    Local Record &Rec1, &Rec2;

    Rem*****;
    Rem -- Get Case Id from the Rowset Passed in to this Class -----;
    Rem*****;

    &Rec1 = CreateRecord(Record.RC_CASE);
    &Case_Id = %This.InputRowset.GetRow(1).RC_CASE.CASE_ID.Value;

    %This.TransactionRecord = &Rec1;
    &Rec2 = CreateRecord(Record.RBC_SUBINT_WRK);
    %This.SubInteractionRecord = &Rec2;

    SQLExec("SELECT BUSINESS_UNIT,RC_STATUS,BO_ID_CUST,BO_ID_CONTACT,
        ROLE_TYPE_ID_CUST,ROLE_TYPE_ID_CNTCT,MARKET FROM PS_RC_CASE WHERE CASE_ID=:1",⇒
    &Case_Id, &Business_Unit, &Status, &Bo_Cust, &Bo_Contact, &Role_Type_Cust,⇒
    &Role_Type_Contact, &Market);

    %This.Outcome = "F";
    If All(&Business_Unit) Then

        Rem*****⇒

```

```

*;
    Rem ----- This indicates the Case_Id is valid -----=>
-;
    Rem*****=>
*;

    MsgBox(0, " ", 17834, 70333, "Bo Id Cust from Email is " | %This.BoId=>
Cust);
    MsgBox(0, " ", 17834, 70333, "Bo Id CONtACT from Email is " | %This.BoId=>
Contact);
    MsgBox(0, " ", 17834, 70333, "Bo Id Cust From Case is " | &Bo_Cust);
    MsgBox(0, " ", 17834, 70333, "Bo Id CONtACT from Case is " | &Bo_=>
Contact);

    If (&Market = "FIN") Then
        Rem*****=>
*;
        Rem ---- Valid Finacial Case, hence set the outcome to Success -----=>
-;
        Rem*****=>
*;

        %This.Outcome = "S";
    Else

        Rem*****=>
*;
        Rem ---- InValid Finacial Case, hence set the outcome to Error -----=>
-;
        Rem*****=>
*;

        %This.Outcome = "E";
    End-If;

    If (%This.Outcome = "S") Then
        &Rec1.CASE_ID.Value = &Case_Id;
        &Rec1.BUSINESS_UNIT.Value = &Business_Unit;

        &Rec1.SelectByKey();
        %This.TransactionRecord = &Rec1;

        Rem *****;
        Rem --- Populate the Receipt Details for Correspondence Management ----;
        Rem *****;
        %This.ReceipientBoId = &Rec1.BO_ID_CONTACT.Value;
        %This.ReceipientRoleType = &Rec1.ROLE_TYPE_ID_CNTCT.Value;

        /* Prepare RBC_SUBINT_WRK for Sub Interactions */

```

```

&Rec2 = CreateRecord(Record.RBC_SUBINT_WRK);
&Rec2.PNLGRPNAME.Value = "RB_WEBFORM_DEFN";
&Rec2.MARKET.Value = "GBL";
&Rec2.CREATE_SUBINT_IND.Value = "Y";
&Rec2.SUBINT_OBJ_TYPE.Value = "CASE";
&Rec2.BUSINESS_UNIT_RI.Value = &Business_Unit;
&Rec2.SETID_RI.Value = "";
&Rec2.OBJECT_ID.Value = String(&Case_Id);
&Rec2.BO_ID_CUST.Value = &Bo_Cust;
&Rec2.ROLE_TYPE_ID_CUST.Value = &Role_Type_Cust;
&Rec2.ROLE_TYPE_ID_CNTCT.Value = &Role_Type_Contact;
%This.SubInteractionRecord = &Rec2;
End-If;

End-If;
end-method;

```

Defining Webform Templates

This section discusses how to:

- Define webform templates.
- Identify email workspace fields for mapping.
- Specify webform and email workspace field mapping.

Perform these tasks to complete the setup of automated mail processing for structured emails.

Pages Used to Define Webform Templates

Page Name	Definition Name	Navigation	Usage
Define Webform Templates	RB_WEBFORM_DEFN	Set Up CRM, Product Related, Multichannel Definitions, Email, Define Servers and Security, Webforms, Define Webform Templates	Create webform IDs and associate them with default categories and application messages.
Identify E-mail Workspace Fields for Mapping	RB_ERMS_FLDS	Set Up CRM, Product Related, Multichannel Definitions, Email, System Installation, Identify E-mail Workspace Fields for Mapping	Specify email workspace fields that are used for mapping with webform fields.
Map Email Fields	RB_WEBFORM_FLDS	Set Up CRM, Product Related, Multichannel Definitions, Email, Webforms, Map Email Fields	Enter field labels for webform fields whose values are sent to NLP for content analysis, and map them to identified email workspace fields.

Defining Webform Templates

To define webform templates, use the Webforms (RB_WEBFORM_DEFN and RB_QA_WEBFORMS) components.

Access the Define Webform Templates page.

Webform Definitions | **Webform Fields**

Define Webform Templates

Webform Template CASESTATUSINQUIRY

Description Case Status Inquiry

Default Category Inquiry ☐ **Always use Default Category to apply Rules**

***Application Service Input type** Rowset **Inbound Application Message** CASE_INPUT

[Preview XML](#) [Clone Webform](#)

This object was delivered by PeopleSoft but updated by the customer.

Date Created 09/04/2002 12:11PM PDT CVP1

Last Modified 09/08/2004 12:52PM PDT SALURI

Define Webform Templates page

Webform Template

Displays the webform template you entered. The email process uses this ID to match an inbound email to the parameters that you enter on this page. When you set up your external webform, be sure the email it generates includes this ID in the WEBFORM_TEMPL_ID tags.

Default Category	Select the category whose associated rule is used to apply to structured emails that are generated from this webform. This category is used if NLP is not available, or if NLP is unable to return a suggested category.
Always use Default Category to apply Rules	<p>Select this option if you want the system to always use the default category regardless of the presence of NLP. The rules engine does not make any call to NLP when this option is selected.</p> <p>For example, you can use this option for structured emails that are intended for one expected category, such as inquiry for cases, service orders, or orders.</p>
Application Service Input Type	Select the format of the input that the email process passes to the application class. <i>Rowset</i> is normally the easiest format for application classes to work with. Other options are <i>Custom</i> and <i>XMLDoc</i>
Inbound Application Message	Select the message definition that controls the expected format of the XML in the email body and that is used when passing rowset data between the email process and the application class.
Preview XML	Click to view the inbound application message definition in XML.
Clone Webform	Click to access the Webform Saves page to create a new webform using the current webform definition.

Identifying Email Workspace Fields for Mapping

Access the Identify E-mail Workspace Fields for Mapping page.

Identify E-mail Workspace Fields for Mapping page

Use this page to specify fields on the email workspace that would be populated with data of structured emails.

Email Property	<p>Select an email workspace field to be mapped with a webform field on the Map Email Fields page.</p> <p>When you access an email on the email workspace, this field is populated automatically using the value of the webform field to which it is mapped.</p>
Email Field Reference	Enter the logical name of the corresponding email workspace field. This name is used while mapping a email workspace field to a webform field.

Specifying Webform and Email Workspace Field Mapping

Access the Map Email Fields page.

Map Email Fields

Email Subject

Webform Record RC_CASE **Webform Field** CASE_ID

Email Body Find First 1-27 of 27 Last

Webform Record	Webform Field	Webform Field Label	Email Attribute
RB_WEBFORM_SBR	FROM_ADDRESS	From Address	
RB_WEBFORM_SBR	WEBFORM_TEMPL_ID		
RC_CASE	BO_ID_PART_CONT		
RC_CASE	BO_ID_PARTNER		
RC_CASE	CASE_ID	Case ID	

Map Email Fields page

This page identifies the data (from XML) that can be used for NLP analysis. Email Workspace displays structured email in a readable form rather than showing the actual XML code. User can specify the label for each data item (of XML) on this page.

Email Subject

Webform Record and Webform Field

Select a record and a field in this record in which the value is used as the *subject* of the email for NLP content analysis and for display on the email workspace. These are required fields.

Email Body

The system populates this list of fields based on the associated webform message definition.

Webform Record and Webform Field

Displays a record, and a field in this record in which the value is used as the *email body* for NLP content analysis and for display on email workspace. These are required fields.

Webform Field Label

Enter a user friendly name for the webform field. When the structured email is formulated and ready for display on the email workspace, this field name is shown on the email.

Use for NLP Analysis

Select to use the value of the corresponding field as part of the email body, which is sent to the NLP server for content analysis.

This field does not appear if NLP is unavailable.

Email Attribute

Select an email workspace field to which the corresponding webform field is mapped. This field value is populated automatically by AMP using the corresponding webform field.

CHAPTER 8

Setting Up Unstructured Email Handling

This chapter provides an overview of unstructured email routing and discusses how to:

- Define customer-based routing rules.
- Define context-based routing rules.
- Define content-based routing rules.
- Apply content-based routing rules to a mailbox.

Note. Throughout this chapter, the term *worklist* refers to both ordinary group worklists and to PeopleSoft MultiChannel Framework queues. The term *customer* refers to external customers and, if you use the email response management system (ERMS) with help desk applications, to the employees that the help desk serves.

See Also

PeopleSoft Enterprise CRM 9 Automation and Configuration Tools PeopleBook, "Setting Up and Using Worklists," Defining Worklists

[Chapter 3, "Understanding Multichannel Applications," Understanding Multichannel Applications Supported by PeopleSoft CRM, page 13](#)

[Chapter 4, "Understanding ERMS," ERMS Processes, page 25](#)

Understanding Unstructured Email Routing

The system's ability to analyze an email and perform an appropriate action is crucial to an efficient email response process.

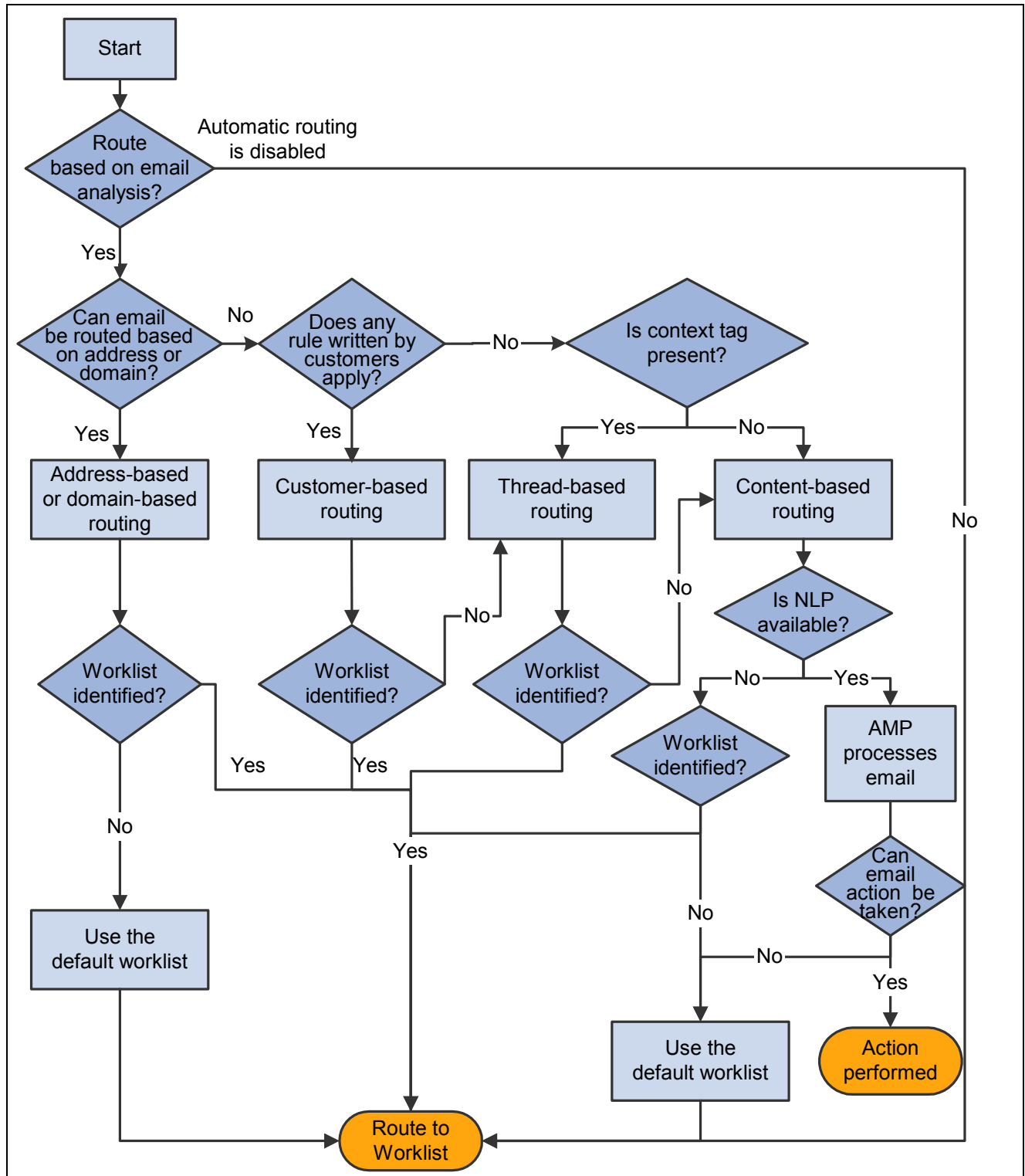
This section discusses:

- Routing methods.
- Content-based routing using Verity.

Note. This chapter applies only to mailboxes for which you have enabled routing, based on email analysis or automated mail processing (AMP). This chapter does not apply to mailboxes that route all emails to a default worklist.

Routing Methods

The unstructured email process analyzes emails to determine the worklist whose members are most qualified to reply. The process that determines the appropriate worklist has several routing methods, as shown in the following diagram:



Routing process for unstructured email

When the routing process starts, it loops through each email, attempting to route each one to the appropriate worklist.

Note. The order of thread based, customer-based, and thread-based routing is designed to be in sync with automated mail processing.

Context-Based Routing

Context-based routing enables you to route an email based on the sender's email address. You can set up routing based on both fully qualified email addresses and on email domains (the portion of the email address that follows the @ symbol).

For example, to route all email from company XYZ to the preferred customer worklist, set up domain-based routing rules so that all email from the domain *xyz.com* is routed there.

Customer-Based Routing

Customer-based routing enables you to route emails based on factors such as customer value. To do so, the system checks the email's business object ID (as determined by the mail reader process). If the business object ID is the one that you use for unknown senders, the customer-based routing option is not available. However, if the business object ID represents an actual customer, the system performs any customer-based processing that you include in the routing process. PeopleSoft CRM does not come with any customer-based routing rules, only an infrastructure that you can use to plug in your own rules.

The customer-based routing method is available only with emails for which the sender is a known customer. However, because your organization is responsible for designing and implementing this type of routing, you can route the email based on any criteria you like, not just the identity of the sender.

Note. Remember that the word *customer* can refer to employees as well as to external customers.

Thread-Based Routing

Outbound emails sent through the PeopleSoft Customer Relationship Management (CRM) correspondence management system (ad hoc email notifications and ERMS email response) include an identifier known as a *context tag*. If the recipient replies to the email and includes the context tag in the reply, the routing process uses the tag to identify the parent email (the email to which the sender replied).

If the parent email was sent through the ERMS system (that is, the parent was a reply to another inbound email), the system sends the new email to the last group worklist associated with the previous inbound email.

For example, suppose that a customer sends an email (email A) to report a printer problem. This email is routed to the Laser Printers group worklist, and then it is rerouted to the Color Ink Jet Printers group worklist. An ERMS user replies (email B) asking for more information. This reply contains a context tag. The customer then replies (email C) with the requested information. Email C contains the context tag that originated in email B. When the system processes email C, it recognizes the context tag, traverses the thread to determine that email A is the previous inbound email, and routes email C to the Color Ink Jet Printers group worklist. If the ERMS user sends another email back to the customer (email D), the email message will have the same context tag as the previous emails in the thread.

If the parent email was an ad hoc email notification, there is no worklist already associated with the thread. In this case, the system establishes the sender of the original ad hoc email and routes the email to that user's default group worklist as established from the Supervisor Desktop. If the user does not have a default group worklist, the system routes the email to the mailbox's default worklist.

Note. Thread-based routing works only when the context tag is present. To increase the probability that customers will include the context tag when they reply to an email, the outbound email should instruct customers to include the context tag in reply messages.

Content-Based Routing

Content-based routing involves analyzing the content of an email message and routing the email to a group worklist with competent members who can process it properly.

There are two types of content-based routing in ERMS: one with the presence of NLP and the other one with Verity.

Content-based routing uses NLP, a third-party categorization application, to perform content analysis on emails and return suggested categories and threshold scores. By matching the returned category and threshold of an email to a list of rules that you define in the mailbox, the system can invoke proper actions to handle preliminary and common email processing (for example, respond to transaction status inquiry) in an automated fashion, thus reducing agents' workload. The routing process includes a rules engine, which is a batch process that runs periodically behind the scenes to process email from different mailboxes in a sequential manner. It matches email categories and threshold scores with active category rules that are associated with the mailbox. If the rules engine finds a rule that applies to the email, it triggers the specified action(s) automatically.

See [Chapter 6, "Setting Up Automated Mail Processing," page 77](#).

If NLP is unavailable, content-based routing uses Verity, a third-party searching application, to search each email for keywords that you establish. You associate different worklists with different groups of keywords. By comparing the scores for each group of keywords, the system determines the worklist to which it routes the email.

The routing process runs as part of a job that also includes a process to build the Verity collection that the system uses for content analysis. The collection includes all emails in the unstructured email queue.

Each instance of the Build Collection process (RB_SRCH_BLD) overwrites the collection files that the previous instance of the process created. Because the system does not remove email from the unstructured email queue until it has been successfully routed, an email that is not routed because of a failure in the routing process remains in the queue and is included in the next iteration of the Verity collection.

The content-based routing process is described in more detail in the following sections.

Default Routing

If none of the previous routing methods identifies an appropriate worklist, the system routes the email to the default worklist for the mailbox. Every mailbox must have a default worklist.

See Also

PeopleSoft Enterprise CRM 9 Automation and Configuration Tools PeopleBook, "Setting Up Search Collections," Understanding PeopleSoft CRM Searching

[Chapter 5, "Setting Up ERMS System," Defining System Settings for Email Processing, page 52](#)

Content-Based Routing Using Verity

This section describes the content-based routing process using Verity and the elements (queries, query groups, and worklists) that the system uses during content-based routing.

Queries and Query Groups

Content-based routing of this kind is based on matching the text in an email to a list of keywords that you define, when NLP is unavailable. You define the keyword lists at two levels. *Queries* are lists of weighted keywords. You assemble the queries into *query groups*.

For each query group, the system builds a Verity Query Language (VQL) statement based on the keywords in all the associated queries. Executing the VQL statement yields a score that indicates how well the email matches the keywords in that query group.

Defining VQL at the query group level and keywords at the query level can significantly reduce your keyword data entry and maintenance. For example, if you use 10 worklists for handling printer-related issues, you can define one query with keywords that are common to all printers and additional queries with keywords for certain types of printer issues. You can then set up query groups for each type of issue, and each query group's VQL references the common keywords in addition to the more specific ones. You do not need to enter or maintain the set of common keywords in 10 different locations. The reusability of queries and query groups makes the configuration of content-based routing rules more efficient.

You can also create your own VQL statement (either from scratch or by modifying the system-generated VQL). Once you set the query group definition to use user-created VQL, any queries associated with the query group are no longer relevant. Changes to the query or the query group do not update your custom VQL unless you copy the updated system-generated VQL again.

Typically, you create queries and have the system create the VQL for you. If, however, you prefer to write your own VQL, you do not need to create queries. If you create queries and write your own VQL, remember that the system does not use the queries when the user-defined VQL is in use. Also, remember to validate your VQL; the routing process does not use custom VQL that has not been validated.

ERMS Worklists

Each mailbox definition includes a list of worklists that are possible targets for content-based routing. Not only does this list help to focus the routing process, it also improves performance. The system obtains scores for relevant query groups only, and you can easily limit the number of queries executed for each email.

Worklists are associated with one or more query groups so that the query group scores can be used to calculate worklist scores. Two methods exist for calculating worklist scores: average query group score and highest query group score. You set this option for each mailbox that you define. Once the routing process calculates the scores for all potential worklists associated with a mailbox, it routes the email to the worklist with the highest score.

During the content analysis, the system records worklist scores so that you can view them later in the email routing history from the email workspace. When rerouting an email, you can refer to this scoring history to evaluate other potential worklists.

If the score is based on the highest query group score, the system also records (but does not display) the query group that achieved the score. If a worklist has more than one query group with the highest score, the priority that's set in the query group and worklist association determines which query group is considered the one that achieved the highest score.

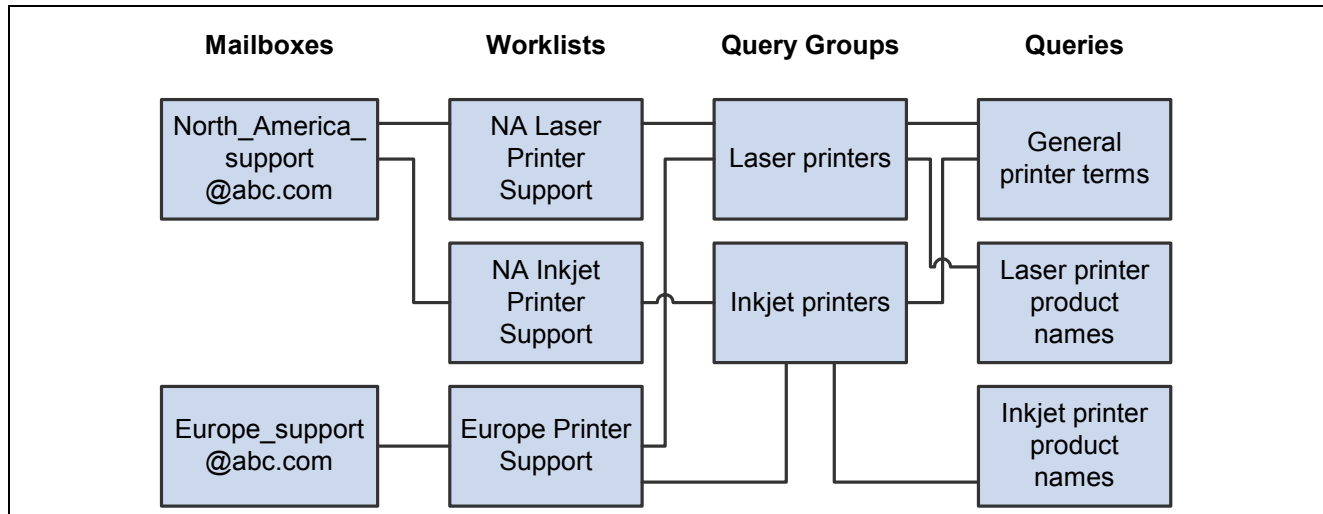
Query, Query Group, Worklist, and Mailbox Relationships

Content-based routing is based on the following object associations:

- Queries to query groups.
- Query groups to worklists.
- Worklists to mailboxes.

The system routes an email to the mailbox worklist with the highest score. The system calculates the worklist's score based on the scores for the associated query groups. The system determines the query group score based on a VQL statement that includes keywords from the queries that are associated with the query group.

The following diagram illustrates these relationships:



Relationships of content analysis objects

In this diagram, an organization is using separate mailboxes for its North American and European support operations. In North America, the organization has separate group worklists to support laser printers and inkjet printers; in Europe, there is one group worklist for all printer types.

Because the North American support operation needs to separate laser printer issues from inkjet printer issues, there are separate query groups for each printer type. The European worklist is associated with both query groups, each North American worklist is associated with one.

Both of the query groups reference a shared query with general printer keywords. Two other queries provide lists of laser printer keywords and inkjet printer keywords to the appropriate query group.

Note. Queries use the PeopleSoft related language architecture, so if a query definition contains keywords in several languages, the associated query group definition contains VQL for each language. During content analysis, the system applies the VQL that corresponds to the language code from the mailbox-specific run control for the Build Collection process.

Analysis Steps

Here is a summary of the process for content-based routing:

1. The system identifies the mailbox to which the email was sent.
2. Based on the mailbox definition, the system determines which worklists are valid targets.
3. The system determines which query groups are associated with those worklists.
4. The system executes the VQL for each query group and records each email's score for each query group.
5. The system determines the score for each worklist, using either the highest query group score or the average query group score.
6. If no worklist achieves the minimum threshold that you set, the email is routed to the mailbox's default worklist.
7. If at least one worklist achieves the minimum threshold, the system routes the email to the worklist with the highest score.

To break a tie, the system uses the worklist priorities that you set within the mailbox definition.

8. The system performs the following post-routing processing:
 - a. Sends an auto-acknowledgement email to the sender if the mailbox is configured for acknowledgements.

The system skips this step if the email has a context tag. Consequently, customers do not receive acknowledgements for every email in an ongoing conversation; they receive an acknowledgment for the initial email only.

- b. Sets the email's processing status to *Routed*.

The processing status is different from the email status that agents see on the email workspace.

See [Chapter 4, "Understanding ERMS," ERMS Processes, page 25](#).

- c. Removes the email from the unstructured email queue.

Note. Content analysis analyzes email body text that is stored in the PeopleSoft CRM tables. It does not analyze content that is stored as an attachment. When the size of an email causes the system to store its entire content as an attachment, content analysis is not possible and the unstructured email process routes the email to the mailbox's default worklist.

Defining Customer-Based Routing Rules

This section discusses how to:

- Define an application class with customer-based routing rules.
- Apply customer-based routing rules to a mailbox.

Page Used to Define Customer-Based Routing Rules

Page Name	Definition Name	Navigation	Usage
Mailbox Definition	RB_MAILBOX_DEFN	Set Up CRM, Product Related, Multichannel Definitions, Email, Define Servers and Security, Mailbox Details, Mailbox Definition	<p>Associate a mailbox with the application class that performs customer-based routing.</p> <p>You also use this page to define other routing-related settings such as the default worklist and the routing rule type (average query group score or highest query group score). We discuss these aspects of the page in the documentation for defining mailboxes.</p> <p>See Chapter 5, "Setting Up ERMS System," Defining Mailboxes, page 65.</p>

Defining an Application Class with Customer-Based Routing Rules

To implement customer-based routing rules, create an application class that performs the necessary analysis and identifies the target worklist.

PeopleSoft CRM provides a base class called CustomRouting that you extend when creating your own routing processing. The delivered base class is located in the RB_ERMS package.

Sample Code

The following sample code returns a worklist called *SpecialVIPService*. The worklist name is passed to the unstructured email process, which routes the email to that worklist.

```
class CustomRouting
  method TargetWL() Returns string
end-class;

method TargetWL
  /* Returns String */
  Local string &Target_Worklist;

  /* Custom-based routing here and determine the target worklist to route the⇒
  email to. In this example, the emails will be routed to the group worklist,⇒
  'SpecialVIPService'

  &Target_Worklist = "SpecialVIPService";

  */
  Return &Target_Worklist;
end-method;
```

Applying Customer-Based Routing Rules to a Mailbox

Access the Mailbox Definition page.

In the Unstructured Email Processing group box, enter the ID and path for the application class to be used.

See [Chapter 5, "Setting Up ERMS System," Defining Mailboxes, page 65](#).

Defining Context-Based Routing Rules

This section discusses how to define context-based routing rules.

Page Used to Define Context-Based Routing Rules

Page Name	Definition Name	Navigation	Usage
Exception Routing	RB_EXCP_ROUTE	Set Up CRM, Product Related, Multichannel Definitions, Email, Define Servers and Security, Mailbox Details, Exception Routing	Define routing rules based on the email address from which an email was sent.

Defining Context-Based Routing Rules

Access the Exception Routing page.

Exception Routing page

Reply To	Enter a fully qualified email address. Email received from this address is routed as specified on this page and does not go through content-based routing.
Domain	Enter an email address domain (the part of an email address that follows the @ symbol). Email received from any address in this domain is routed as specified on this page and does not go through content-based routing.
Worklist Name	Select the group worklist to which the system routes email from the specified address or domain.
Comment	Enter an optional comment that explains why email from the address or domain is routed to the specified worklist.

Defining Content-Based Routing Rules

This section discusses how to:

- Define queries.
- Define query groups.
- Associate query groups with worklists.

Note. This section only applies to content-based routing using Verity.

Prerequisites

Before you set up content-based routing rules, you must:

- Define the group worklists to which the content-based routing process routes email.
- Define the mailboxes that use the content-based routing rules.

See Also

PeopleSoft Enterprise CRM 9 Automation and Configuration Tools PeopleBook, "Setting Up and Using Worklists"

[Chapter 5, "Setting Up ERMS System," Defining Mailboxes, page 65](#)

Pages Used to Define Content-Based Routing Rules

Page Name	Definition Name	Navigation	Usage
Query/Keyword Details	RB_QUERY	Set Up CRM, Product Related, Multichannel Definitions, Email, Add Queries and Routings, Query/Keyword Details, Query/Keyword Details	Define queries and their keywords and phrases.
Query Groups	RB_QUERY_GROUP	Set Up CRM, Product Related, Multichannel Definitions, Email, Add Queries and Routings, Query Grp/System Associations, Query Groups	Define query groups and their associated queries.
Query Group/Worklist Associations	RB_WL_QG_ASSOC	Set Up CRM, Product Related, Multichannel Definitions, Email, Add Queries and Routings, Query Grp/Wrklist Associations, Query Group/Worklist Associations	Associate query groups with a worklist.

Defining Queries

To define queries, use the Query/Keyword Details (RB_QUERY) component.

Access the Query/Keyword Details page.

Query / Keyword Details

Query


Query ID CAMERA

***Query Name**

Description

***Active Flag** ☐ **Exact Match**

Query Keywords/Phrases

[Customize](#) | [Find](#) |  First Last

*Keyword or Phrase	Weight		
<input type="text" value="battery"/>	<input type="text" value="40"/>	<input type="button" value="+"/>	<input type="button" value="-"/>
<input type="text" value="camera"/>	<input type="text" value="50"/>	<input type="button" value="+"/>	<input type="button" value="-"/>
<input type="text" value="filter"/>	<input type="text" value="80"/>	<input type="button" value="+"/>	<input type="button" value="-"/>
<input type="text" value="lens"/>	<input type="text" value="60"/>	<input type="button" value="+"/>	<input type="button" value="-"/>
<input type="text" value="photo"/>	<input type="text" value="20"/>	<input type="button" value="+"/>	<input type="button" value="-"/>
<input type="text" value="roll"/>	<input type="text" value="70"/>	<input type="button" value="+"/>	<input type="button" value="-"/>
<input type="text" value="shutter"/>	<input type="text" value="70"/>	<input type="button" value="+"/>	<input type="button" value="-"/>
<input type="text" value="shutter speed"/>	<input type="text" value="80"/>	<input type="button" value="+"/>	<input type="button" value="-"/>
<input type="text" value="zoom"/>	<input type="text" value="60"/>	<input type="button" value="+"/>	<input type="button" value="-"/>

Date Created 08/01/2002 11:48AM PDT CVP1

Last Modified 08/01/2002 11:48AM PDT CVP1

Query/Keyword Details page

Active Flag

Select *Active* (the default) or *Inactive*. When the system creates the VQL for a query group, any inactive queries are ignored.

Exact Match

Select to search for an exact, case-sensitive, match. If you leave this check box clear, the system-generated VQL statement not only performs case-insensitive searches, it also searches for words based on the same stem. For example, if this check box is cleared and the query includes the word *process*, the system accepts the words *processes* and *processing* as matches.

Keyword or Phrase Description

List the words and phrases to include in the query. Entries that include more than one word are treated as phrases; the email matches the search criteria only if the entire phrase is present. Any punctuation that you include in the phrase is part of the phrase.

Weight

Assign a weight from 1 to 100 that corresponds to the relative importance of the word. When the system creates the VQL for a query group, this weight is applied to the keyword and is factored into the final query group score.

Note. Any change to a query's keywords, phrases, or weights automatically updates the system-generated VQL statements in all query groups that reference the modified query.

Defining Query Groups

To define query groups, use the Query Grp/System Associations (RB_QUERY_GROUP) component.

Access the Query Groups page.

Query Groups

Main Query Group Setup

Query Group ID: CAMERA *Query Group Name: Camera

*Threshold: 50 *Active Flag: Active

Description: Camera issues (digital/video not included)

Verify Query Language String

☒ **System Default VQL** [20]PHOTO, [40]BATTERY, [50]CAMERA, [60]ZOOM, [60]LENS, [70]ROLL, [70]SHUTTER, [80]"SHUTTER SPEED", [80]FILTER, [15]Ribbon, [15]"Power Cords", [30]Printer, [45]"Hewlett Packard", [50]HP, [70]"Inkjet, Cartridge"

☐ **User VQL** [20]PHOTO, [40]BATTERY, [50]CAMERA, [60]ZOOM, [60]LENS, [70]ROLL, [70]SHUTTER, [80]"SHUTTER SPEED", [80]FILTER

☒ **VQL Validated** Copy System VQL Check VQL Syntax

Queries Customize | Find | First 1-2 of 2 Last

Query ID	Query Name		
CAMERA	Camera	+	-
HPIJ	HP Inkjet Query	+	-

[Return to Worklist Association](#)

Date Created 08/01/2002 12:58PM PDT CVP1

Last Modified 08/14/2002 3:39PM PDT CVP1

Query Groups page

Main Query Group Setup

Threshold

Enter the minimum acceptable score for using the query group. The system does not use scores that fall below the threshold when calculating worklist scores. Setting a threshold enables you to disregard scores so low that the keyword matches are considered insignificant. The default threshold is 20.

If all of a worklist's query group scores fall below their individual thresholds, the worklist is not a valid routing target for the email. All of an email's possible worklists may be disqualified this way. In that case, content-based routing is not possible, and the routing process sends the email to the mailbox's default worklist.

Active Flag

Select *Active* (the default) or *Inactive*. When the system determines the query group scores for an email, it does not determine scores for inactive query groups.

Note. If a query group that is already associated with a worklist is set to *Inactive*, the system does not use that query group when calculating the worklist's score during content analysis.

Verity Query Language String

System Default VQL	<p>Select to use the VQL query that the system generates based on the queries that you associate with the query group. The text of the VQL query appears in the corresponding edit box. The system-generated VQL is not editable. It is refreshed when you save the component.</p> <p>If the same keyword or phrase appears in more than one query in the same query group, the keyword or phrase is used only once. It retains the highest weight among the duplicates. An exact match is required only if all duplicate keywords are configured for exact matching.</p> <p>Within the VQL, keywords or phrases that do not have Exact Match selected are automatically set in uppercase. Phrases are enclosed in quotation marks.</p>
User VQL	<p>Select to write your own VQL query instead of using the system-generated VQL. The text of the custom query appears in the corresponding edit box. The user VQL query text is editable only if this option is selected.</p>
Copy System VQL	<p>If you select User VQL, click this button to copy the system-generated VQL query into the user VQL edit box, where you can modify it to create custom VQL.</p>
Check VQL Syntax and VQL Validated	<p>If you select User VQL, click this button to validate the VQL syntax. If the user VQL passes the syntax validation, the system selects the read-only VQL Validated check box. If you change the user VQL after it has been validated, the system clears the VQL Validated check box and you must validate the VQL syntax again.</p> <p>If the user VQL doesn't pass the syntax validation, the system displays a message that describes all syntax errors.</p> <p>System-generated VQL does not require syntax validation.</p> <p>If a query group uses custom VQL and the VQL is not validated, the system does not use the query group during the content analysis process.</p>

Queries

Query ID	<p>Select the queries to associate with the query group. These are used to build the system VQL and are not required if you write your own user VQL. You can select only active queries. Queries can be associated with multiple query groups.</p>
Query Name	<p>Displays the name of the query as defined on the Query/Keyword Details page. Click the query name to access the Query/Keyword Details page, where you can review and modify the query definition. If you modify the query definition, the system automatically updates the system-generated VQL for all query groups that reference the query.</p>

Associating Query Groups with a Worklist

To associate query groups with a worklist, use the Query Grp/Wrklist Associations (RB_WL_ROUTING) component.

Access the Query Group/Worklist Associations page.

Query Group / Worklist Associations

Query Group Association

Worklist Name CameraWorklist ☒ **Queue**

Query Groups Customize | Find | First 1-2 of 2 Last

Query Group ID	Query Group Name	Query Group Description	Priority	
CAMERA	Camera	Camera issues (digital/video not included)	1	+ -
DIGVIDCAM	Digital/VideoCamera	Issues with digital and video camera	2	+ -

Date Created 08/01/2002 3:03PM PDT CVP1

Last Modified 08/01/2002 3:03PM PDT CVP1

Query Group/Worklist Associations page

Worklist Name and Queue Displays the worklist whose query group associations you are defining. The read-only Queue check box is selected if the worklist that you are configuring is defined as a queue on the Group Worklist page.

Query Group ID Select the query groups to associate with this worklist. Only active query groups are available for selection. If you inactivate a query group after associating it with a worklist, the query group is not used to determine the worklist's score.

Query groups can be associated with multiple worklists.

Query Group Name Displays the name of the query group as defined on the Query Groups page. Click the query group name to access the Query Groups page, where you can review the query definition.

Priority When worklist scores are based on the highest query group score, the system records (but does not display) the query group that achieved the score. If a worklist has more than one query group with the highest score, the priority that you set here determines which query group is considered the one that achieved the highest score.

Enter a priority from 1 to 999. Highest priority is given to the query group with the lowest value: priority 1 is higher priority than priority 2.

This priority does not affect the routing, only the statistics that the system keeps.

When worklist scores are based on average query group scores, this field is not used.

Applying Content-Based Routing Rules to a Mailbox

This section discusses how to:

- Associate AMP rules and worklists with a mailbox.
- Review worklist statistics for a mailbox.
- Review the content-based routing rules for a mailbox.

Pages Used to Apply Content-Based Routing Rules to a Mailbox

Page Name	Definition Name	Navigation	Usage
Associate Rules and Worklist	RB_MB_WL_ASSOC	Set Up CRM, Product Related, Multichannel Definitions, Email, Define Servers and Security, Mailbox Details, Associate Rules and Worklist	Associate worklists with a mailbox and prioritize worklists for that mailbox.
Worklist Routing Efficiency	RB_WL_EFFICIENCY	Click the Efficiency link on the Associate Rules and Worklist page.	Review worklist statistics for a mailbox.
Content Routing	RB_ROUTING_MAPPING	Set Up CRM, Product Related, Multichannel Definitions, Email, Define Servers and Security, Mailbox Details, Content Routing	Review worklists, query groups, and queries used for a mailbox's content-based routing.

Associating AMP Rules and Worklists with a Mailbox

Access the Associate Rules and Worklist page.

Mailbox ID Cameras

Behavior Summary [Customize](#) [Find](#) First 1-5 of 5 Last

Status	Category	Selected Behavior Name	
<input checked="" type="checkbox"/>	COMPLAINT	AUTO ACK TEST	Modify Behavior
<input type="checkbox"/>	INQUIRY	<None Selected>	Modify Behavior
<input checked="" type="checkbox"/>	PROBLEM	PROBLEM RULE 1	Modify Behavior
<input type="checkbox"/>	SPAM	<None Selected>	Modify Behavior
<input type="checkbox"/>	UNSUBSCRIBE	<None Selected>	Modify Behavior

Associated Worklists [Customize](#) [Find](#) First 1-2 of 2 Last

Worklist Name		Queue	Priority		
CameraWorklist		<input type="checkbox"/>	1	Efficiency	Remove Worklist
PhotoPrinter		<input type="checkbox"/>	2	Efficiency	Remove Worklist

☐ **Confine Routing to selected WL**

[Add Worklists](#)

Associate Rules and Worklist page

Behavior Summary

Use this group box to associate categories and category rules with the mailbox. The rules engine triggers actions to process incoming email automatically based on the email category and threshold value that return from NLP and the predefined rule that is set up for that category. This group box does not appear if NLP is not licensed.

See [Chapter 6, "Setting Up Automated Mail Processing," Understanding Automated Mail Processing, page 77.](#)

Associated Worklists

- Work List Name** Select the worklists that are possible targets for email sent to the mailbox that you are setting up.
- Queue** This read-only check box is selected if the worklist is defined as a queue on the Group Worklist page.
- Priority** Enter a number representing the worklist's priority. During content-based routing, if there is a tie between worklists, the priority that you enter here determines the worklist to which the email is sent.
- Enter a priority from 1 to 999. Highest priority is given to the query group with the lowest value: priority 1 is higher priority than priority 2.
- Efficiency** Click to access the Worklist Routing Efficiency page, where you can view statistics related to email that has been previously routed to the worklist.

Reviewing Worklist Statistics for a Mailbox

Access the Worklist Routing Efficiency page.

Worklist Routing Efficiency	
Mailbox ID	Cameras
Worklist/Queue Name	PhotoPrinter
Email Routing Statistics	
Routing Efficiency (%)	0.0
# of Emails Routed	0
# of Emails Completed	0
Emails Reassigned and Completed in Other Worklists (Top 3)	
Worklist / Queue	# Closed Distribution (%)

Worklist Routing Efficiency page

Email Routing Statistics

Mailbox ID and Worklist/Queue Name

Displays the mailbox-worklist combination for which statistics are shown.

Routing Efficiency (%) (routing efficiency percentage)

The routing efficiency indicates the percentage of the emails sent to this worklist (from this mailbox) that were closed from this worklist. An email that was manually reassigned to a different worklist and then reassigned to the original worklist is considered closed from the original worklist. (As users work with an email, the system assigns the email to individual worklists, but that action does not affect the efficiency rating.)

of Emails Routed (number of emails routed)

Displays the total number of emails that were sent to the specified worklist (from this mailbox) by the content-based routing process. This is the denominator of the routing efficiency fraction.

of Emails Completed (number of emails completed)

Displays the number of emails that were sent to the specified worklist and were closed from this worklist. This is the numerator of the routing efficiency fraction.

Emails Reassigned and Completed in Other Worklists (Top 3)

As elsewhere on this page, the statistics in this group box relate only to email sent to the current mailbox and originally routed to the worklist whose efficiency information you're viewing.

Worklist/Queue

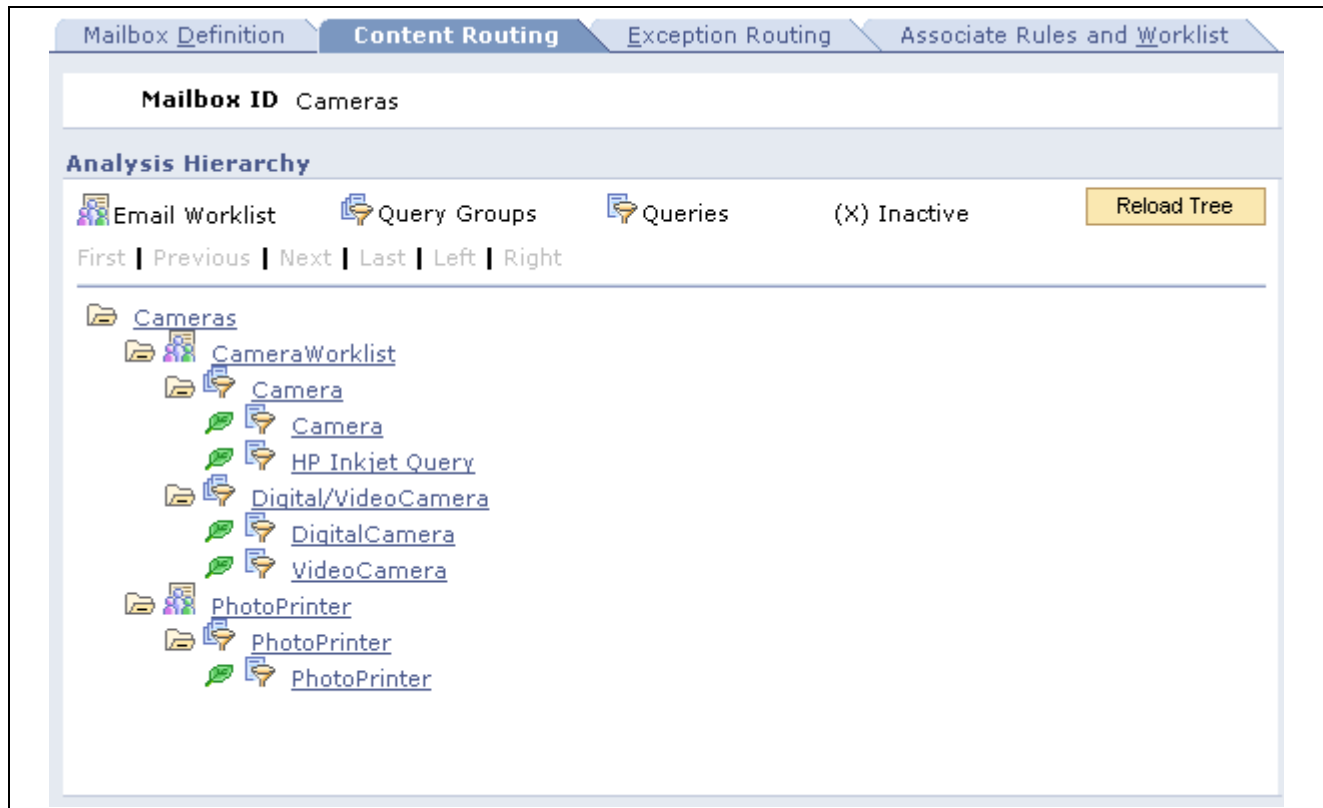
Displays the top three worklists to which email is most often manually rerouted from the current worklist.

Closed (number closed) and Distribution (%) (distribution percentage)

Displays the number of rerouted emails that were closed in the new worklist, and the percentage of the original worklist's emails that the number represents. For example, if the unstructured email process routed 100 emails to the original worklist, and seven of them were closed from the new worklist, the distribution percentage for the new worklist is 7.

Reviewing the Content-Based Routing Rules for a Mailbox

Access the Content Routing page.



Content Routing page

Reload Tree

Click to update the information in the analysis hierarchy tree based on the most current content-based routing definitions.

Analysis Hierarchy

The tree in this group box provides an overview of the content-based routing rules associated with the current mailbox. Each node on the tree is a link that you can click to view the definition of the underlying object.

The tree includes the following elements:

- The root node of the tree represents the current mailbox.
Click the link to display the Mailbox Definition page.
- Second-level nodes represent the worklists that have been associated with the mailbox on the Associate Rules and Worklist page.
Click the link to display the Query Group/Worklist Associations page.
- Third-level nodes represent the query groups that have been associated with the worklists on the Query Group/Worklist page.
Click the link to display the Query Groups page.
- Fourth-level nodes represent the queries (keyword lists) that have been associated with the query group on the Query Groups page.
Click the link to display the Query/Keyword Details page.

Note. If the query group uses custom VQL, the associated queries are not a reliable indicator of the query group content.

Key to Icons

Except for the root node, representing the mailbox, every node in the analysis hierarchy tree includes an icon that visually indicates the type of object represented.



The Email Worklist icon appears next to each worklist in the analysis hierarchy.



The Query Group icon appears next to each query group in the analysis hierarchy.



The Query icon appears next to each query in the analysis hierarchy.



This notation appears next to a mailbox, query, or query group whose status is *Inactive*.

CHAPTER 9

Setting Up Chat

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

- Set up the chat framework.
- Set up chat options.

Understanding Chat

This section discusses:

- Chat and PeopleSoft MultiChannel Framework.
- Natural language processing.
- Application data in the chat workspace.
- Chat profiles.
- Chat and interactions.
- Chat logs and reports.

Chat and PeopleSoft MultiChannel Framework

PeopleSoft CRM provides the chat feature that enables agents to communicate with customers through two-way text chat. The feature leverages the MultiChannel Framework (MCF) functionality and setup components and is tightly integrated with the Multichannel Toolbar to provide a consistent user experience for agents who process tasks from different media channels through the toolbar.

From a self-service page, customers can request a live chat. This request opens the customer chat window, a browser-based window that does not require a client install or applet download.

Chat requests are routed by the universal queue to the first available agent with the skills to handle that request. Agents receive the request through the Multichannel Toolbar, which enables them to manage multiple simultaneous chat sessions. Accepting a chat request opens the chat workspace, which contains an agent chat window and a CRM transactional page where agents can look up customer information or transactions that relate to the incoming chat sessions. Agents can conference peers and supervisors into the chat, and transfer chat sessions to other agents or queues. Agents can also initiate chats with other agents on their buddy lists.

For information about the technical architecture that supports chat, refer to the PeopleSoft MultiChannel Framework documentation in your PeopleTools PeopleBooks.

Natural Language Processing

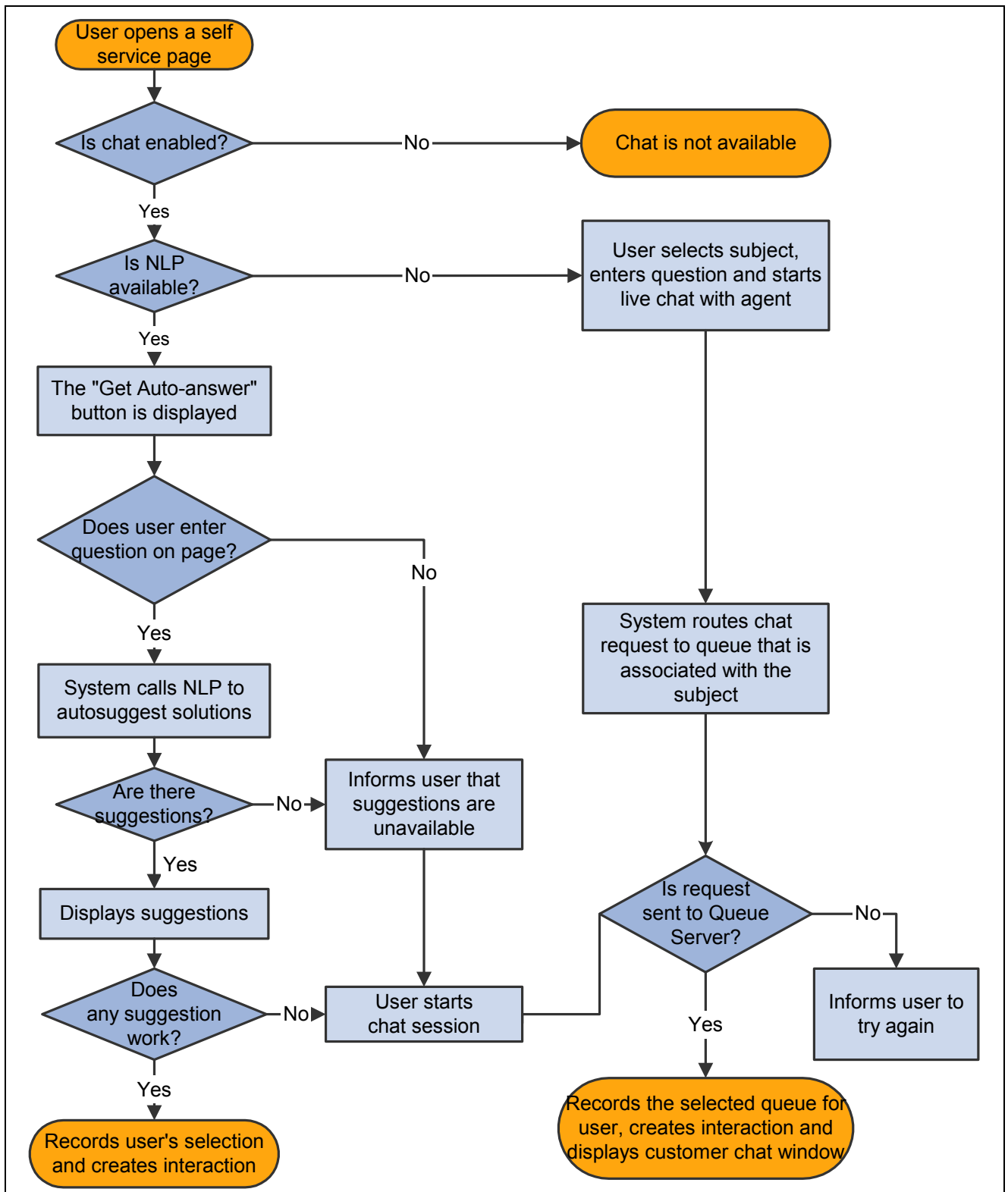
The chat feature uses natural language processing (NLP) to automatically provide suggested solutions to try resolve customers' issues before connecting to agents. The autosuggestion option is made possible with integration between PeopleSoft CRM and the third-party NLP system. In a CRM system in where NLP is available, when customers click the Get Auto-answer button on self-service pages to request chat sessions, the CRM system sends customer questions to the NLP system through application programming interfaces (APIs) provided by NLP. The NLP system searches for best matched answers for customers' questions in a knowledge base that is predefined for autosuggestion. It returns answers that have a relevance score higher than the preset threshold value to the CRM system, which displays the result to customers. You define the maximum number of auto-suggested answers that can display on the customer chat window in the Chat Setup Profile page.

If autosuggestion is unavailable (for example, when the feature is disabled, NLP is unavailable, or there are no matching solutions), chat requests are routed directly to predefined queues based on the subject that customers select on the self-service page.

PeopleSoft CRM delivers NLP setup for the chat autosuggestion functionality.

Refer to the NLP documentation for information on how to set it up and define knowledge bases.

This diagram illustrates the process that chat requests go through before they are accepted by agents:



See Also

PeopleSoft Enterprise CRM 9 Automation and Configuration Tools PeopleBook, "Setting Up Natural Language Processing"

Application Data in the Chat Workspace

PeopleSoft CRM enables the chat feature on all self-service pages. For each self-service page where customers can submit chat requests, you specify a CRM transactional page that will be displayed on the chat workspace for agents to review customer or transactional information pertaining to the requests.

System-delivered agent pop-up pages include:

- The 360-Degree View page.
- The mini navigation page for CRM applications.

This page is a simplified version of the 360-Degree View page. It captures high-level customer or worker information and provides search capabilities for each CRM object for which you have a self-service application. For example, case search is available if you have installed the self-service application of PeopleSoft Enterprise Support, or HelpDesk, or HelpDesk for Human Resources. The same is true for order search if you have licensed PeopleSoft Order Capture Self Service.

- Case pages for Support, HelpDesk, and HelpDesk for Human Resources.
- The Order detail page.
- The Product detail page.
- The Solution detail page.

See Also

Chapter 9, "Setting Up Chat," Defining General Options for Chat-Enabled Pages, page 138

Chapter 9, "Setting Up Chat," Defining Agent Pop-up Pages, page 137

Chat Profiles

A chat profile specifies options and values that are used to process chat requests, which include autosuggestion (if NLP is available), chat routing, subject and queue mapping and so on. Associate each chat-enabled self-service page with a chat profile to determine how chat requests initiated from that page should be handled. You can set up multiple chat profiles, each of them applies to a subset of pages that process chat requests similarly.

A self-service page is ready to accept chat requests after you have enabled chat on it and associated it with a chat profile and an agent pop-up page in the Chat Enabled Self-Service Page Setup page.

Chat and Interactions

When identified customers submit chat requests to the queue server successfully, PeopleSoft CRM creates interactions of the type *chat*. The creation of these interactions ensures that the chat requests are captured even if customers abandon the sessions before agents can respond. If a chat session is linked to a specific transaction, for example, then if a customer initiates a chat session from the self-service page about a particular order, the order transaction becomes a sub-interaction of the chat interaction that the system creates. The chat interaction history is visible from the order transaction, on the 360-Degree View of the customer under the interaction node, and the Chat Detail page (with a related transaction of order in this case).

The system creates sub-interactions for two types of transactions: case and order.

Note. PeopleSoft CRM does not create interactions for guest self-service users.

Chat Logs and Reports

The system provides the option of logging information about chat sessions, which includes the actual dialog between customers and agents, related transactions, the agent and queue for the sessions, as well as the list of solutions that the system suggested before the chat session started (if NLP is installed). You can access this log by accessing an interaction node in the 360-Degree View or navigating to the Chat Detail component.

Agents can email customers the chat dialog on the chat workspace as requested.

As delivered, chat logging is disabled. You turn on this option on the Cluster Tuning page in PeopleTools.

PeopleSoft CRM offers reporting functionality on chat. You can run reports to view chat volume by agent or queue within a date range.

See Also

[Chapter 14, "Working with Chat in PeopleSoft Enterprise CRM," Emailing Chat Logs, page 243](#)

[Appendix A, "PeopleSoft Multichannel Communications Reports," page 293](#)

Enterprise PeopleTools PeopleBook: PeopleSoft MultiChannel Framework

Setting Up the Chat Framework

The chat framework that you need to set up includes these items whose definitions are maintained in PeopleTools:

- Real-time event notification (REN) servers.
- Universal queue servers.
- MCF log servers.
- Queue clusters.
- Queues.
- Agents.

Note. You can use PeopleSoft CRM group worklist definitions to create queues and agents.

This framework is not unique to chat; it is also used by the email response management system (ERMS). You can find more detailed information about setting up this framework in this PeopleBook's discussion of multichannel architecture.

Here is the high-level guideline for setting up chat in the PeopleSoft CRM system:

1. Define a REN server.
2. Define a REN server cluster.

After configuration is complete, restart the REN server. Ensure that the server is up and running by performing a ping test.

3. Define a cluster.
4. Define a queue.

Define a queue in one of two ways: through PeopleTools (the Queue component) or through CRM (the Group Worklist page). Ensure that the queue server is running.

5. Define an MCF agent.

Define and configure an agent using the Agent Configuration component. After the agent setup is complete and is associated with a queue, ensure that the agent can log on to the Multichannel Toolbar and the queue.

6. Set up a chat profile.
7. Set up the agent pop-up page setting.
8. Set up chat-enabled self-service pages.
9. Specify self-service pages that can be pushed to a customer's workstation.
10. If the chat feature provides auto-suggested answers with the help of NLP, ensure that the corresponding knowledge base is set up to recommend solutions.

See Also

[Chapter 12, "Setting Up Unified Agent Desktop," Configuring Agents for Unified Agent Desktop, page 170](#)

[Chapter 3, "Understanding Multichannel Applications," Setting Up Universal Queuing, page 15](#)

PeopleSoft Enterprise CRM 9 Automation and Configuration Tools PeopleBook, "Setting Up Natural Language Processing"

Enterprise PeopleTools PeopleBook: PeopleSoft MultiChannel Framework

Setting Up Chat Options

This section discusses how to:

- Define chat profiles.
- Define agent pop-up pages.
- Define general options for chat-enabled pages.
- Define pages to be pushed to customers.

Pages Used to Set Up Chat Options

Page Name	Definition Name	Navigation	Usage
Chat Profile Setup	RB_CHAT_PROFILE	Set Up CRM, Product Related, Multichannel Definitions, Chat, Chat Profile Setup, Chat Profile Setup	Define general options, routing rules and automation setup (if NLP is available) for chat profiles. You specify a chat profile for each self-service page used for chat.
Agent Popup Page Definition	RB_CHAT_POPUP	Set Up CRM, Product Related, Multichannel Definitions, Chat, Agent Popup, Agent Popup Page Definition	Define the mapping between self-service pages and full-functional page setup. You can associate an agent pop-up page (a full-functional page) with multiple self-service pages on the Agent Popup Page Definition page, the system uses the one mapping that's specified on the Chat Enabled Page Setup page at runtime.
Chat Enabled Page Setup	RB_CHAT_ADMIN	Set Up CRM, Product Related, Multichannel Definitions, Chat, Chat Page Setup, Chat Enabled Page Setup	Specify the chat profile and agent pop-up page for each self-service page to support the chat feature.
Self-Service Page Mapping	RB_CHAT_MAP	Set Up CRM, Product Related, Multichannel Definitions, Chat, Page Mapping, Self-Service Page Mapping	Specify self-service pages that can be pushed to customers.

Defining Chat Profiles

Access the Chat Profile Setup page.

Chat Profile Setup

Chat Profile CHAT_DEMO

Description A demo profile for chat

***Status** Active

Chat General

☐ **Require user to enter question**

☒ **Allow guest user to enter name**

Chat Automation

☒ **Enable Chat Automation**

Application ID CHAT_DEMO

Knowledge Base ID CHAT_DEMO

Threshold (%) 80.00

Maximum Returns 5

Chat Routing

***Agent Portal Name** EMPLOYEE

***Node Name** CRM

***Agent Skill Level** 10 - Low

***Chat Priority** 10 - Low

Routing Queues

*Subject	*Queue Name	
Inquiry	ERMSQ	

Add Subject

Chat Profile Setup page

Chat General

Require user to enter question

Select to require users to enter their questions before submitting chat requests.

Allow guest user to enter name

Select to allow guest users to enter their names in self-service pages before submitting chat sessions to the queue server.

Chat Automation

This grid appears only if NLP is available.

Enable Chat Automation

Select to enable the CRM system to provide auto-suggested solutions to customers to try resolve their issues before connecting to live agents.

Application ID and Knowledge Base ID

Select the ID of application that is defined for chat automation. The corresponding NLP knowledge base name appears.

Threshold (%)

Enter the relevance score (in percentage) that auto-suggested answers need to meet for them to be presented to customers. Suggested answers with relevance scores (analyzed by NLP) lower than this value are not returned.

Maximum Returns

Enter the maximum number of answers to be presented on the self-service page if multiple auto-suggested answers return.

Chat Routing

Agent Portal Name and Node Name

Enter the portal registry and portal node of CRM full-functional pages that agents access.

The full-function pages that you show the agent can be from any portal registry. For example, you might enter *EMPLOYEE* or *CUSTOMER*, just make sure that your agents have security access to the page. The node is always *CRM*.

Agent Skill Level

Enter the agent skill level that is assigned to all chat requests. Only agents with at least the specified skill level can see and accept the request.

Chat Priority

Enter the priority that is assigned to all chat requests.

Subject

Enter the default subject that is to be used for chat requests where the customer does not enter a subject. When chat requests appear in an agent's queue, the subject gives the agent information about the request.

Select a subject as the default value to show on self-service pages.

Queue Name

Select the queue to which all chat requests for the corresponding subject are routed.

Defining Agent Pop-up Pages

To define agent pop-up pages, use the Agent Popup Page Definition (RB_CHAT_POPUP) component.

Access the Agent Popup Page Definition page.

Agent Popup Page Definition	
Page ID MiniNav	Page Name RB_CHAT_MINI_NAV
Component RB_CHAT_MINI_NAV	Menu RB_ERMS_CHAT
Template ID	App. Package RB_CHAT
App. Class AgentPopup	App. Method GenerateURL
Description Agent's CRM Application Mini-Navigation Page	
Chat Enabled Self-service Pages	
<u>Self Service Page</u>	
RB_CATALOG	
RB_PROD_DTL	
RBT_FAQ_SOL_HD_SS	
RBT_FAQ_SOL_SS	
RBT_TGUIDE_HD_SS	
RBT_TGUIDE_SS	
RC_CASE_HD_SS	
RC_CASE_HD_SS_NADD	
RC_CASE_HD_SS_NDTL	

Agent Popup Page Definition page (1 of 2)

RC_CASE_HD_SS_RPT
RC_CASE_HD_SS_SRCH
RC_CASE_SW_SS
RC_CASE_SW_SS_NADD
RC_CASE_SW_SS_NDTL
RC_CASE_SW_SS_RPT
RC_CASE_SW_SS_SRCH
RC_SOLN_SUMM_HD_SS
RC_SOLN_SUMM_SW_SS
RC_SOLNSRCH_HD_SS
RC_SOLNSRCH_SW_SS
RE_ORDER_SRCH
RE_QUOTE_SRCH
RE_STATUS
RX_PROD_SRCH
WC_CONTACT_US

Add Page

Modify System Data

This object is maintained by PeopleSoft.

Agent Popup Page Definition page (2 of 2)

Page ID	Displays the name that uniquely identifies the full-functional page. Some pages share the same page and component names (for example, support case, helpdesk case, and helpdesk case for human resources pages), the system uses the page ID to distinguish them.
Template ID	Displays the display template ID used by the full-functional page, if applicable.
App. Package (application package)	Displays the system delivered application package name that contains the application classes and methods used to define the mapping between self-service pages and full-functional pages.
App. Class (application class)	Displays the specific application class that contains all methods used to define the mapping between self-service pages and the full-functional page.
App. Method (application method)	Displays the PeopleCode application class method name that is used to populate all application keys needed to open the full-functional page. The system uses this method to populate all the information needed for creating chat interaction. The same method can be used by multiple self-service pages. You can create additional application classes and methods to perform the tasks.

Chat Enabled Self-service Pages

This grid lists the self-service pages that are associated with the selected agent pop-up page. The selected agent pop-up page is displayed in the agent chat window when agents accept chat requests that originate from any of the listed self-service pages.

Defining General Options for Chat-Enabled Pages

To define general options for chat-enabled pages, use the Chat Enabled Page Setup (RB_CHAT_ADMIN) component.

Access the Chat Enabled Page Setup page.

Chat Enabled Page Setup

Self Service Page WC_CONTACT_US

***Description** Customer Self-service Contact Us Page

List of Self-service Pages

Enable Chat Automation	Component	Market	Template ID	Chat Profile	Agent Popup Page
<input type="checkbox"/>	WC_CONTACT_US	GBL		CHAT_DEMO	Chat Profile MiniNav

Add Component

Chat Enabled Page Setup page

- Self Service Page** Displays the CRM self-service page that has implemented the chat feature.
- Enable Chat Automation** Select to activate the corresponding page from which users can receive automatic suggestion of solutions before requesting chat sessions.
- Component and Market** Select the component that is associated with the corresponding self-service page.
- Typically, you have one row in the grid for each self-service page. Or you can have multiple pages (multiple versions of the page) to the grid, with each one uniquely identified by a display template ID, for example. If display template ID is used, the market value is always set to *GBL*.
- When you add a new row to the grid, the system sets the value of the market *GBL* by default.
- Template ID** Select the display template ID that is used by the self-service page, if applicable.
- Chat Profile** Select a chat profile to apply to the self-service page. Click the Chat Profile link to view and edit the associated chat profile setup.
- Agent Popup Page ID** Select a CRM full-functional page from the drop-down list box. When users initiate chat sessions from a self-service page, the associated CRM page is displayed in the agent chat window. Click the Agent Popup link to view and edit the associated definition.

Specifying Pages to be Pushed to Customers

To define pages that can be pushed to customers, use the Self-Service Page Mapping (RB_CHAT_MAP) component.

Access the Self-Service Page Mapping page.

Self-Service Page Mapping

Agent Popup Page IDMiniNav

PageRB_CHAT_MINI_NAV

*DescriptionAgent CRM Mini-Navigation Page to Self-service Pages Mapping

List of Self-service Pages

*Page	*Description	*Component	*Menu	*Market	Template ID	*Portal	*Node	
RC_CASE_HD	HR HelpDesk Case Search	RC_CASE_F	RC_SELF_S	GBL	CRM_HHD	EMPLO	CRM	
RC_CASE_HD	HelpDesk Case Search	RC_CASE_F	RC_SELF_S	GBL	RC_HELPDE	EMPLO	CRM	
RC_CASE_SW	Customer Case Search	RC_CASE_S	RC_SELF_S	GBL	RC_SUPPOR	CUSTC	CRM	
RC_SOLNSRCH	HR HelpDesk Solution Search	RC_SOLNSF	RC_SELF_S	GBL	CRM_HHD	EMPLO	CRM	
RC_SOLNSRCH	HelpDesk Solution Search	RC_SOLNSF	RC_SELF_S	GBL	RC_HELPDE	EMPLO	CRM	
RC_SOLNSRCH	Customer Solution Search	RC_SOLNSF	RC_SELF_S	GBL	RC_SUPPOR	CUSTC	CRM	

Add Page

Self-Service Page Mapping page

Agent Popup Page ID and Page

Display the ID and name of the CRM full-functional page (an agent pop-up page) that appears when the agent clicks the Select button on the agent chat window.

List of Self-Service Pages

- Page Name

Enter the object name of the self-service page that maps to the given agent pop-up page and is available in the Push Web Page window to be pushed to customer’s machine. Enter a row of data for each self-service page.
- Component and Menu

Enter the component name, menu name for the page that you selected.
- Market and Template ID

Select the market for the corresponding self-service page, typically it is set to *GBL*. Select the display template ID for the page, if applicable. Use the *GBL* market if you reference a display template.
- Portal and Node

Enter the portal registry and portal node of the page that you selected.

CHAPTER 10

Configuring CTI Application Pages

This chapter provides an overview of computer telephony integration (CTI) and discusses how to map CTI transactions to application pages.

Note. Please refer to the PeopleTools documentation for more detailed information on the PeopleSoft CTI solution.

See Also

Enterprise PeopleTools PeopleBook: PeopleSoft MultiChannel Framework

Understanding CTI

This section discusses:

- The PeopleSoft CTI solution.
- CTI configuration.
- The Multichannel Toolbar.
- CTI transactions and page mapping.

The PeopleSoft CTI Solution

Oracle's PeopleSoft Enterprise CTI Integration for Oracle's PeopleSoft Customer Relationship Management (CRM) is an integration application to third-party middleware solutions. This solution provides full CTI functions for unified, screen-based telephony and population of PeopleSoft application pages, and works with leading contact center switching platforms.

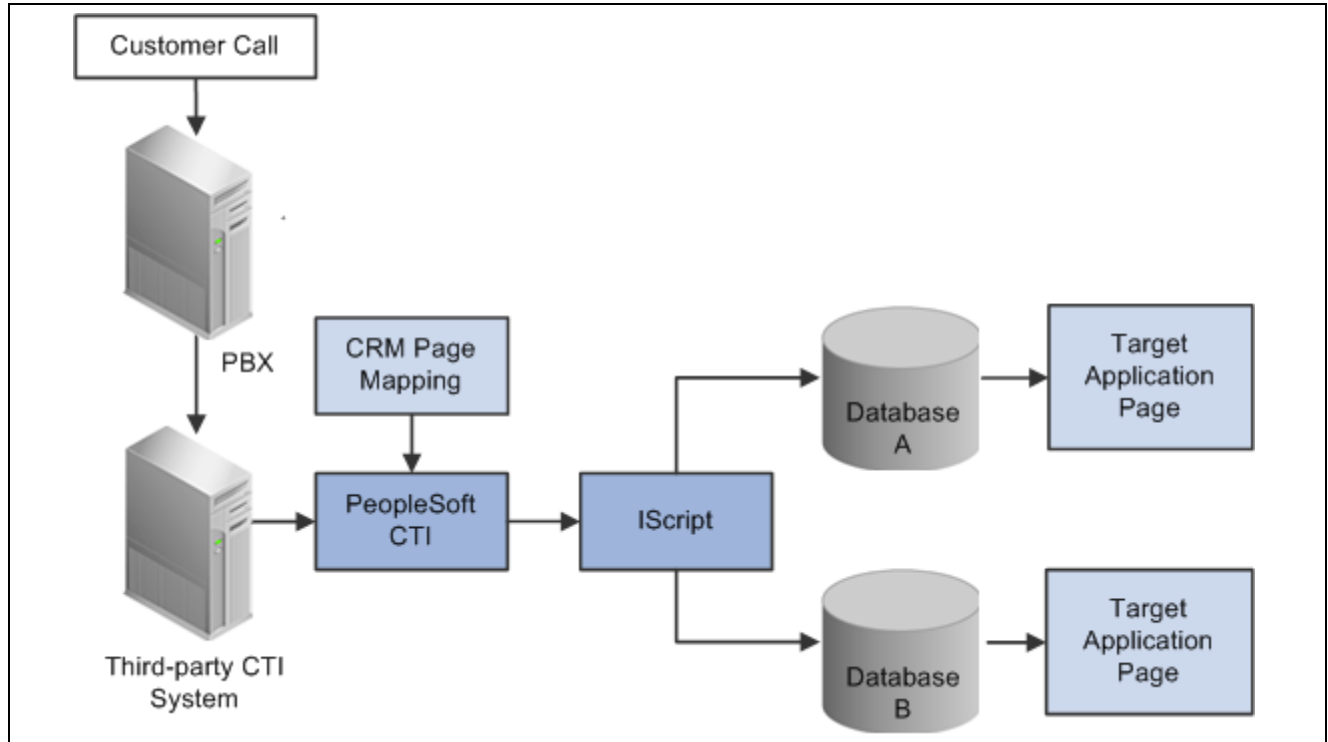
PeopleSoft Enterprise CTI Integration enables the system to open application pages based on information a caller enters into an interactive voice response (IVR) system. PeopleTools MultiChannel Framework integrates with third-party middleware to provide the CTI framework, and PeopleSoft CRM configuration pages enable you to map transaction IDs to specific CRM components. After you configure PeopleSoft PeopleTools, your middleware, and PeopleSoft CRM, the CTI workflow process is as follows:

1. A customer enters information using the IVR system.
2. The private branch exchange (PBX) system's automatic call distributor (ACD) routes the call to the third-party CTI middleware.
3. The middleware converts the customer's entries into key fields and passes them to the PeopleSoft CTI application.
4. An agent accepts the call from the Multichannel Toolbar.

5. The PeopleSoft CTI application looks at your CRM configuration to match the transaction ID to a target page, and then it uses an iScript to open that target page and pre-populate it with the caller's data.

Target pages can be in the PeopleSoft CRM database or another database.

The following diagram illustrates this process flow:



CTI process flow

For a list of partners that offer CTI middleware integrations, refer to the link in the See Also section.

Note. PeopleSoft Enterprise CTI Integration is a licensed product.

See Also

[Chapter 15, "Working with Supervisor Desktop," page 249](#)

[Chapter 16, "Working with Unified Agent Desktop," page 281](#)

“Oracle Validated Application Integrations-Find a Partner Solution,”
[url=http://www.oracle.com/partnerships/isv/integration/search.html](http://www.oracle.com/partnerships/isv/integration/search.html)

CTI Configuration

To set up CTI for your site, you must:

1. Set up your third-party middleware.
See Your third-party middleware documentation.
2. Configure PeopleSoft CTI.

See *Enterprise PeopleTools PeopleBook: PeopleSoft MultiChannel Framework*.

3. Program the IVR and your middleware to ensure that the transaction number and other required parameters are populated.

See The documentation for your IVR and middleware systems.

4. Map CTI transactions to application pages.

Identify the target page for each transaction, and determine the key fields that the IVR system will populate.

Note. The final step, mapping CTI transactions to application pages, is the only step detailed in this chapter. Refer to PeopleSoft PeopleTools documentation for additional information about all other aspects of CTI configuration.

See Also

Enterprise PeopleTools PeopleBook: PeopleSoft MultiChannel Framework

The Multichannel Toolbar

The Multichannel Toolbar console is the interface that agents use to perform all CTI-related actions. We discuss this toolbar in the documentation about using the Unified Agent Desktop.

See Also

Chapter 16, "Working with Unified Agent Desktop," page 281

Third Party CTI System Definition

PeopleSoft CRM supports the integration with third-party CTI vendor products through configuration that is performed on the CRM system. Administrators can create CTI vendor definitions on the CRM system, configure Javascript functions and parameters for them, and activate one to be used at any given time. All the configuration procedures can be done on the CRM system without the need to modify existing applications and PeopleCode.

See Also

Chapter 10, "Configuring CTI Application Pages," Setting Up CTI System Definitions, page 147

CTI Transactions and Page Mapping

The IVR assigns questions and their responses to a transaction number that is passed to the PeopleSoft CTI application. By mapping the transaction ID to a target page, you enable the system to route the call appropriately.

For example, if transaction 2 is mapped to the Case page for PeopleSoft Enterprise Support, the IVR system captures the transaction number and the case number, and the CTI system displays the Case page for the case that the caller entered.

Mapping transactions involves two tasks:

- Enter transaction-level information.

Associate each transaction ID to a page, and identify the field data that the system can expect to receive from the IVR for that transaction.

- Enter database-level information.

Each database you use (for example, the PeopleSoft CRM database and the PeopleSoft Financials and Supply Chain Management databases) is registered as a content provider in the PeopleSoft portal. For each content provider, even if you have only one, you must identify the associated transactions.

Delivered Transaction Mappings

This table lists the transaction number, target page, and required fields for each delivered PeopleSoft CRM transaction:

Transaction ID and Description	Target Page	Required Fields
1: Service Order Lookup	Service Order (RF_SERVICE_ORDER)	Service Order ID.
2: Support Case Lookup	Case page (RC_CASE)	Case ID.
3: Help Desk Case Lookup	Case page (RC_CASE)	Case ID.
4: Order Status (FDM)	Order Search (ORDER_TRACK_SRCH)	-
5: Bill Inquiry (FDM)	Bill Search (BI_HDR_INQ)	-
6: Financial Services: Case (Issue) Lookup	Case page (RC_CASE)	Case ID.
7: Financial Services: ATM Card Lookup	360-Degree View Search for Financial Services (RB_TD_AGT_SRCH_FSI)	ATM card number.
8: Financial Services: Financial Account Lookup	360-Degree View Search for Financial Services (RB_TD_AGT_SRCH_FSI)	Account number.
9: Customer Lookup	360-Degree View Search (RB_TD_AGT_SRCH_GBL)	Customer ID.
10: Financial Services: Social Security Lookup	360-Degree View Search for Financial Services (RB_TD_AGT_SRCH_FSI)	National ID.
11: Quote or Order Lookup	Quote or Order (RO_FORM)	External Order ID.

Transaction ID and Description	Target Page	Required Fields
12: Communications: Service Account Lookup	360-Degree View Search for Communications (RB_TD_AGT_SRCH_COM)	Account number.
13: Communications: Phone Number Lookup	360-Degree View Search for Communications (RB_TD_AGT_SRCH_COM)	Account number and phone number.
14: Government: Phone Number Lookup	360-Degree View Search for Government (RB_TD_AGT_SRCH_GOV)	Phone number.
15: Government: Case Lookup	Case page (RC_CASE)	Case ID.
16: Communications: Case Lookup	Case page (RC_CASE)	Case ID.
17: Help Desk Employee ID Lookup	360-Degree View for Employees (RC_HD360_SRH)	Employee ID.
18: Energy: Service Account Lookup	360-Degree View Search for Energy (RB_TD_AGT_SRCH_ENG)	Account number.
20: Human Resources Help Desk Employee ID Lookup	360-Degree View for Employee Human Resources Information (RC_HRHD360_SRH)	Employee ID.
21: Human Resources Help Desk National ID Lookup	360-Degree View for Employee Human Resources Information (RC_HRHD360_SRH)	National ID.
22: Human Resources Help Desk Case Lookup	Case page (RC_CASE)	Case ID.
25: Insurance: Financial Account Lookup	360-Degree View Search for Insurance (RB_TD_AGT_SRCH_INS)	Account number.
26: Insurance: Social Security Lookup	360-Degree View Search for Insurance (RB_TD_AGT_SRCH_INS)	National ID.
27: Phone Number Lookup	360-Degree View Search (RB_TD_AGT_SRCH_GBL)	Phone number.

Transaction ID and Description	Target Page	Required Fields
28: Energy: Phone Number	360-Degree View Search for Energy (RB_TD_AGT_SRCH_ENG)	Phone number.
29: Communications: Phone Number	360-Degree View Search for Communications (RB_TD_AGT_SRCH_COM)	Phone number.
30: Partner Customer ID	360-Degree View Search for Partner (RB_TD_AGT_SRCH_PRT)	Customer ID.
31: Partner Phone Number	360-Degree View Search for Partner (RB_TD_AGT_SRCH_PRT)	Phone number.
32: Financial Services: Billing Account Lookup	360-Degree View Search for Financial Services (RB_TD_AGT_SRCH_FSI)	Account number.
33: Insurance: Billing Account Lookup	360-Degree View Search for Insurance (RB_TD_AGT_SRCH_INS)	Account number.
34: Communications: Customer ID	360-Degree View Search for Communications (RB_TD_AGT_SRCH_COM)	Customer ID.
35: Energy: Customer ID	360-Degree View Search for Energy (RB_TD_AGT_SRCH_ENG)	Customer ID.
36: Financial Services: Customer ID	360-Degree View Search for Financial Services (RB_TD_AGT_SRCH_FSI)	Customer ID.
37: Insurance: Customer ID	360-Degree View Search for Insurance (RB_TD_AGT_SRCH_INS)	Customer ID.
38: Government: Customer ID	360-Degree View Search for Government (RB_TD_AGT_SRCH_GOV)	Customer ID.
39: Insurance Case Lookup	Case page (RC_CASE)	Case ID.
40: Energy Case Lookup	Case page (RC_CASE)	Case ID.

Transaction ID and Description	Target Page	Required Fields
88: New Customer (FDM)	Customer Search (QUICK_CUST_SRCH)	-
89: Customer Inquiry (FDM)	Customer Search (QUICK_CUST_SRCH)	-
99: CTI Test	CTI Test (CTI_TEST)	Customer ID.

In addition to the required fields shown, all transactions require that the IVR system pass a CTI transaction number and the caller's phone number.

When the transaction description includes industry information, the transaction is specific to a PeopleSoft CRM industry-specific application. For example, a transaction description that begins with *Communications* applies only to PeopleSoft Enterprise Bill Presentment and Account Management.

Oracle also delivers mappings for certain PeopleSoft Supply Chain Management transactions. You can review all delivered transactions on the CTI Mapping page.

If you are using the transactions that are delivered with PeopleSoft CRM, you do not need to use the CTI Mapping page to create your transactions and mappings; it has been done for you. You will need to program the key fields and the transaction numbers for the delivered transactions into the IVR system.

Autonumbering Considerations

PeopleSoft CTI requires that all user inputs be either all numbers or all letters, but not a mix. Certain autonumbered fields that CTI users are asked to enter (for example, IDs for orders, service orders, and customers) can normally contain a mix of numbers and letters, but if you use CTI, define these fields using only one or the other.

Many of the objects accessed through CTI are keyed by a combination of business unit and ID. CTI users are never asked to enter a business unit, so to ensure that an ID entered by a CTI user uniquely identifies an object, you must configure IDs to be unique across all business units. In the case of the customer ID that is used to display a customer's 360-degree view, the customer ID has to be unique within the database. IDs that come from the last number table (for example, case IDs) are inherently unique across business units. Only IDs that come from the Auto Numbering page can be non-unique.

See Also

[Chapter 10, "Configuring CTI Application Pages," Mapping CTI Transactions to Application Pages, page 151](#)

PeopleSoft Enterprise CRM 9 Application Fundamentals PeopleBook, "Setting Up General Options," Setting Up Automatic Numbering

Setting Up CTI System Definitions

This section discusses how to:

- Set up CTI definitions.

- View system functions for CTI definitions.
- Register system functions for CTI definitions.
- Specify CTI function parameters.

Pages Used to Set Up CTI System Definitions

Page Name	Definition Name	Navigation	Usage
CTI System Definition	RB_CTI_SYS_DEFN	Set Up CRM, Common Definitions, Integration Rules, CTI, CTI Definitions, CTI System Definition	Set up definitions for CTI vendor products.
CTI System Function (RB_CTI_DEF_FUNC)	RB_CTI_DEF_FUNC	<ul style="list-style-type: none"> • Set Up CRM, Common Definitions, Integration Rules, CTI, CTI Functions, CTI System Function • Click the Configure link on the CTI System Definition page. 	View system functions for CTI definitions.
CTI System Function (RB_CTI_SYS_FUNC)	RB_CTI_SYS_FUNC	Set Up CRM, Common Definitions, Integration Rules, CTI, System Function, CTI System Function	Register system functions for CTI definitions.
CTI Function Parameters	RB_CTIDEF_JFUNC	<ul style="list-style-type: none"> • Set Up CRM, Common Definitions, Integration Rules, CTI, CTI Parameters, CTI Function Parameters • Click the Configure link on the CTI System Function page (RB_CTI_DEF_FUNC). 	Specify parameters for use in CTI system functions.

Setting Up CTI Definitions

Access the CTI System Definition page.

CTI System Definition

Please enter CTI System Definitions

Note: Only one definition can be active.

CTI Definitions

	CTI Definition ID	Description	Configure	Delete
<input type="radio"/>	ASPT	Aspect CTI Definition	Configure	
<input checked="" type="radio"/>	PSFT	Peoplesoft Multichannel Communications Deaault Definitions	Configure	

[Add Definition](#)

CTI System Definition page

The CRM system delivers two CTI definitions, *ASPT* and *PSFT*. Customers can add new definitions for their own CTI vendor products.

Configure

Click to access the CTI System Function page (RB_CTI_DEF_FUNC) and confirm the script path and functions that are used by the CTI vendor product.

Viewing System Functions for CTI Definitions

Access the CTI System Function page (RB_CTI_DEF_FUNC).

CTI System Function

Definition Details

CTI Definition ID

CTI Definition Description

CTI Script Path

Available Functions

Confirmed	Function Name	Configure
<input checked="" type="checkbox"/>	OutboundDial	Configure
<input checked="" type="checkbox"/>	TransferCall	Configure

CTI System Function page (RB_CTI_DEF_FUNC)

This page lists all registered system functions that are associated with the specified CTI definition.

Confirmed

Select to verify that the system function is configured properly so that it can be executed in the CRM system.

Configure

Click to access the CTI Function Parameters page to view function details and modify them as needed.

Registering System Functions for CTI Definitions

Access the CTI System Function page (RB_CTI_SYS_FUNC).

CTI System Function

Function Details

System Function Name ☒ **Active**

Description

Application Class ID

Application Class Path [Package Tree Viewer](#)

Method Name

Function Parameters

Required	Sequence	Parameter Name	Parameter Type	Length	Delete
<input checked="" type="checkbox"/>	1	Number	Character	14	
<input type="checkbox"/>	2	Param1	Character	5	
<input type="checkbox"/>	3	Param2	Character	20	

CTI System Function page (RB_CTI_SYS_FUNC)

Use this page to register CTI functions that the CRM system invokes as system functions. This page associates a CTI system function with an application class method. Additionally, it captures the parameters that can be passed to this function.

System Function Name Enter the logical name of the function.

Application Class ID, Application Class Path and Method Name Enter the application class name, class path and the method that points to the PeopleCode, which builds the corresponding Javascript function at runtime.

Each function is associated with an application class method. Before registering a new function on this page, its method must be coded already.

The PeopleSoft system delivers the CTIFunctions application class in the RB_CTI application package. Two methods in this class are registered on this page: *OutboundDial* and *TransferCall*.

Function Parameter Enter the parameters to pass to the selected function.

For each listed parameter, specify the order in which it is passed to the function, the name of the parameter, the type (*character*, *date*, or *number*) of the parameter as well as its length. Select the Required check box if the parameter must be passed to the function.

Function parameters are defined on the CTI Function Parameters page.

Specifying CTI Function Parameters

Access the CTI Function Parameters page.

CTI Function Parameters

Function Details

CTI Definition ID Peoplesoft Multichannel Communications Deafult Definitions

Function Name

CTI Script Name

JavaScript Function

Function Parameters

Select	Sequence	Parameter Name	Parameter Type	Length
<input checked="" type="checkbox"/>	1	Number	Character	14
<input type="checkbox"/>	2	Param1	Character	5
<input type="checkbox"/>	3	Param2	Character	20

CTI Function Parameters page

This page associates a CTI function with a Javascript function for any given CTI definition.

CTI Script Name Enter the name of the script that contains the listed Javascript function.

Function Parameters Lists the parameters that the function expects.
 You can select optional parameters to be passed to the function. Clear the Select check box to not pass a parameter to the function.

Mapping CTI Transactions to Application Pages

This section discusses how to:

- Map transaction IDs to application pages.
- Identify transactions for each content provider.
- Test your CTI connection.

Pages Used to Map to Application Pages

Page Name	Definition Name	Navigation	Usage
CTI Mapping	CTI_PS_MAPPING	Set Up CRM, Common Definitions, Integration Rules, CTI, CTI Mapping, CTI Mapping	Map transaction IDs to target application pages.
CTI Configuration	CTI_CONFIG	Set Up CRM, Common Definitions, Integration Rules, CTI, CTI Configuration, CTI Configuration	Identify the transactions associated with each content provider.
CTI Transaction	DERIVED_CTI	This page appears when a caller enters an invalid transaction ID.	The system uses this page to route calls to target pages based on the transaction ID. Normally it does not appear, but if it cannot identify the transaction ID, it displays an invalid transaction ID error message.
CTI Test	CTI_TEST	Set Up CRM, Common Definitions, Integration Rules, CTI, CTI Test, CTI Test	Test your CTI application.

Mapping Transaction IDs to Application Pages

To map transaction IDs to PeopleSoft CRM application pages, use the CTI Mapping (CTI_MAPPING) component.

Access the CTI Mapping page.

CTI Mapping

Mapping Details

Transaction ID 2

☐ Foreign Transaction

*Description

Support Case Look-up

*Menu Name

CALLCENTER

*Menu Bar Name

USE

*Component ID

RC_CASE

*Page Name

RC_CASE

Display Template Family Code

RC_SUPPORT

*Edit Table

RC_ADD_CASE_

RC_ADD_CASE_VW

Mode

☐ Add

☒ Update/Inquiry

Primary Keys

Search Record Field	URL Parameter
CASE_ID	<input checked="" type="checkbox"/>
DISP_TMPL_FAM_CD	<input type="checkbox"/>

CTI Mapping page

- Transaction ID** Enter the numeric identifier for the CTI transaction whose target page you are defining.
- Foreign Transaction** Select if you are setting up a transaction whose target page belongs to a content provider other than PeopleSoft CRM.
- Menu Name, Menu Bar Name, Component ID, and Page Name** Enter the complete navigation for the target page. Enter the PeopleSoft PeopleTools object names for the menu, the menu bar, the menu item (the component), and the page.
- Display Template Family Code** Specify the display template that the system uses to present the target component.
- For example, the Case component uses display templates to control its appearance and behavior. The CRM system pre-populates the appropriate display template ID for each case-related CTI transaction in the system.
- If customers enter an invalid case ID, the case search page for the template appears.
- Edit Table** Enter the search record for the target component.
- Mode** Select *Add* to create a new record in the target page to access the page in Add mode.
- Select *Update/Inquiry* to access data in the target page to access the page in Update mode.

Primary Keys

The Primary Keys group box displays the search keys for the target page. Select the URL Parameters check box for the fields that the IVR system will populate.

Identifying Transactions for Each Content Provider

To identify transactions for each content provider, use the CTI Configuration (CTI_CONFIG) component.

Access the CTI Configuration page.



CTI Configuration


Configuration Details


Content Provider Name CRM

CTI Description Portal Node - CRM

***Target Portal URL** http://<Host.Domain.com>/psc/<Site>_newwin/

***Menu Name** CTI_CONFIGURATION  **Menu Bar Name** SETUP 

***Component** DERIVED_CTI  ***Market** Global

***Page Name** DERIVED_CTI 

Unsigned Transactions

Find First 1-36 of 36 Last

Selected	Transaction ID	Description	CTI Action
<input checked="" type="checkbox"/>	1	Service Order Look-up	Update/Inquiry
<input checked="" type="checkbox"/>	10	Agt (FSI) Social Security	Update/Inquiry
<input checked="" type="checkbox"/>	11	Quote (or) Order Look-up	Update/Inquiry
<input checked="" type="checkbox"/>	12	Agt (Telco)-Service Act Lookup	Update/Inquiry
<input checked="" type="checkbox"/>	13	Agt (Telco)-Srv Phn Num Lookup	Update/Inquiry
<input checked="" type="checkbox"/>	14	Agt (GOV) Phone Number	Update/Inquiry
<input checked="" type="checkbox"/>	15	Government Case Look-up	Update/Inquiry
<input checked="" type="checkbox"/>	16	Telco Case Look-up	Update/Inquiry

CTI Configuration page

Content Provider Name Complete this field for each content provider that has pages that are accessed through CTI. At a minimum, define information for the CRM content provider (the PeopleSoft CRM database).

CTI Description Enter a description of the content provider.

Target Portal URL Enter the URL used to access this content provider in this format:
http://<Appservername>/psc/<AppServer Domain Name>_newwin/

Menu Name, Menu Bar Name, Component, Market, and Page Name Enter the complete navigation for the CTI transfer page in the target database. This page accepts the IVR parameters and transfers the call taker to the target page appropriate to the specific transaction.

If the content provider is PeopleSoft CRM, the CTI transfer page is DERIVED_CTI. This page uses the information that you entered on the CTI Mapping page to determine the appropriate target page.

CTI Transactions

Displays CTI transactions that are associated with the content provider that you are defining. Associate a transaction to the content provider by selecting the Selected check box. Clearing the check box disassociates the transaction from the content provider.

Reassigning a transaction requires two steps: first, disassociate the transaction from its original owner and second, associate it with the new owner. The first step is necessary to make the transaction appear in the new owner's list of CTI transactions.

Testing Your CTI Connection

Access the CTI Test Page page.

CTI Test Page

Function Details

CTI Definition ID ASPT Aspect CTI Definition
Function Name OutboundDial
JavaScript Function AspectDial

Parameter List

Sequence	Name	Value of Parameter
1	Number	<input type="text"/>

Dial

CTI Test Page page

Use this page to test the external Javascript calls used in this CRM and CTI integration. The parameter list is different based on the function selected for the test. Note that the data entered here is not validated.

CHAPTER 11

Setting Up Supervisor Desktop

This chapter provides an overview of Supervisor Desktop and discusses how to define system-level settings for Supervisor Desktop.

Understanding Supervisor Desktop

This section discusses:

- Supervisor Desktop functionality.
- Application dispatcher.
- Supervisor Desktop setup considerations.
- Programmatic Computer Telephony Integration (CTI) agent data retrieval.

Supervisor Desktop Functionality

Supervisor Desktop provides a single and consolidated environment where support center supervisors perform their daily tasks and maintenance activities, such as:

- Monitoring real-time information about agents and queues.
- Running performance reports and accessing the dashboard for additional report data.
- Reviewing outbound email that are pending approval.
- Reviewing and administering timeout entries.
- Configuring agents for voice, multichannel, and email tasks.
- Initiating agent-to-agent chat sessions with an agent being monitored.

See [Chapter 15, "Working with Supervisor Desktop," page 249](#).

Real-time Monitoring

Supervisor Desktop provides real-time statistical data on agents and the voice and multichannel queues on to which they logged. Information is pushed and refreshed on the desktop on a regular basis. Users can select the type of statistics they want to monitor (agent or queue) and the appropriate filter for the data to be presented. Typically, they define a team of agents, a list of queues, or both as filters for the real-time monitor.

Agent statistics provide information that pertains to individual agents who are being monitored, such as agent status on each logged on queue, the time duration in that status, the total time that the agent remains available and unavailable, the average time used to complete a task (email, chat, and generic), and so on. As for queue statistics, the data that appears focuses specifically on queues. Users see data such as the number of agents that are logged on currently (with or without assignment), the number of tasks that are abandoned and are queued, the average wait time before a task is assigned and finished, and so on. The data available while monitoring (either by agent or by queue) varies based on the channel (voice or multichannel) being monitored. In the case where data is not appropriate for the channel, the data will be presented by a hyphen (-).

Supervisor Desktop keeps information at two levels, summary and detailed. The summary view provides a high-level view of how the selected queues and group of agents are doing; users who prefer a closer look at some of the areas can drill down the agent or queue to access additional statistics. Chat capability is available on the desktop. Users can initiate chat sessions with online agents when necessary.

Reporting

From Supervisor Desktop, users can execute Multichannel Communications performance reports and access dashboards that are defined at the system level.

Email Approval

Supervisor Desktop supports the setup of email approval in the consolidated agent configuration feature. Users can specify the email approval frequency for agents and specify the approver to whom agents' outgoing email are routed for approval.

At runtime within Supervisor Desktop, users who are email approvers can see a list of email pending their approval. They can review and either approve or reject email on the list.

Timeout Entry Management

Supervisor Desktop displays a list of timeout tasks (email, chat, and generic) that are pending on the queue list. Through the list, users can review and take actions deemed appropriate, such as requeuing tasks to the same queue, reassigning tasks (email and generic) to a queue, a group, or an individual, closing tasks, and so on.

Important! It is strongly recommended that administrators leverage the Supervisor Desktop timeout administration feature so that proper ERMS operations are performed with email tasks.

Agent Configuration

PeopleSoft PeopleTools develops a set of component interfaces that enables Supervisor Desktop to provide a central, unified place to define voice, multichannel, and email configuration for agents.

Note. It is highly recommended that administrators leverage Supervisor Desktop to configure agents.

Application Dispatcher

PeopleSoft CRM builds the application dispatcher to interface with the PeopleSoft Multichannel Framework using the PeopleTools client-side API, JSMCAPI. In Supervisor Desktop, the application dispatcher is responsible for managing data in real-time monitoring and initiating internal agent-to-agent chat.

The Unified Agent Desktop (which implements the Multichannel Toolbar) also uses the application dispatcher to manage agent states and data consistency among Multichannel Toolbar browser instances.

See Also

Chapter 12, "Setting Up Unified Agent Desktop," Application Dispatcher, page 168

Supervisor Desktop Setup Considerations

Here is a list of considerations for setting up an operational Supervisor Desktop:

- Supervisors must be configured as agents for the type of queues (multichannel or voice) that they want to monitor on the desktop.
- You need to conform to the one-to-one mapping of logical to physical queues when configuring universal (multichannel) queues.
- The system only allows one active instance of Supervisor Desktop in a single user session.
- Application Dispatcher, which appears as a small browser window that supervisors must not be closed; it controls access to all real-time data through JSMCAPI (a PeopleTools client-side API).
- The PeopleTools user profiles of Supervisor Desktop users must be configured with the appropriate PeopleTools role in order to have access to Supervisor Desktop and its functionality.
- PeopleTools JSMCAPI restricts connections to only one CTI server, one multichannel cluster, or one of each at any given time.

Therefore, supervisors cannot monitor queues from any servers that they are not logged on to. To monitor a queue on a different server, the user must log on to that server through the Multichannel Toolbar to view real-time information of its queue. Supervisor Desktop does not pull away server connections from the Multichannel Toolbar.

Important! Before running Supervisor Desktop, be sure to set up respective systems for voice (CTI) tasks, multichannel tasks, or both that agents support. These systems should be configured in order for agents to have complete access to all of the Supervisor Desktop functionality. If systems are not set up or agents are not configured properly to support voice tasks, multichannel tasks, or both, Supervisor Desktop runs in restrictive mode, which means that agents have access to two features — email approval and the execution of performance reports and dashboards.

See Also

Enterprise PeopleTools PeopleBook: PeopleSoft MultiChannel Framework, “Configuring PeopleSoft CTI”

Enterprise PeopleTools PeopleBook: PeopleSoft MultiChannel Framework, “Configuring REN Servers”

Enterprise PeopleTools PeopleBook: PeopleSoft MultiChannel Framework, “Configuring PeopleSoft MCF Servers and Clusters”

Enterprise PeopleTools PeopleBook: PeopleSoft MultiChannel Framework, “Configuring PeopleSoft MCF Queues and Tasks”

[Chapter 10, "Configuring CTI Application Pages," page 141](#)

Programmatic CTI Agent Data Retrieval

PeopleSoft CRM delivers a component interface (CI) that allows third-party CTI systems to gather agent data. To retrieve agent information, the CTI system connects to the PeopleSoft system using the RB_CTIAGENTS_INFO CI and sends its CTI configuration ID to fetch the user ID, agent ID, password, and queue ID of all agents that are linked to that configuration ID. The data returned by the PeopleSoft system is in the form of CI properties. If an agent has multiple effective-dated voice configuration records, the third-party system gets the most recent one in relation to the date the information was requested.

Note. To fetch CTI agent details successfully, the PeopleSoft user ID that is used to access the CI must have the permission to perform the appropriate operations within the CI for data retrieval.

See Also

PeopleSoft Enterprise CRM 9 Application Fundamentals PeopleBook, "Managing PeopleSoft Customer Relationship Management Integration Points"

Defining System-Level Settings for Supervisor Desktop

This section discusses how to:

- Define general settings for Supervisor Desktop.
- Specify image and text display options.
- Specify performance reports and dashboards.
- Set up agent access to Supervisor Desktop.

Typically, a system administrator performs these tasks.

Pages Used to Define System-Level Settings for Supervisor Desktop

Page Name	Definition Name	Navigation	Usage
General	RB_SDADM_MAIN	Set Up CRM, Product Related, Multichannel Definitions, Supervisor Desktop, Administration, General	Define default monitoring type and filter to be used for the real-time monitor when Supervisor Desktop launches.
Images and Text	RB_SDADM_IMAGE	Set Up CRM, Product Related, Multichannel Definitions, Supervisor Desktop, Administration, Images and Text	Specify icons and texts to be used for displaying alerts, queue types, and agent states on Supervisor Desktop.
Reports	RB_SDADM_REPORT	Set Up CRM, Product Related, Multichannel Definitions, Supervisor Desktop, Administration, Reports	Specify multichannel reports and dashboards that administrators can execute from Supervisor Desktop.

Defining General Settings for Supervisor Desktop

Access the General page.

The screenshot shows the 'General Settings' section of the Supervisor Desktop configuration interface. It features two tabs: 'General' (active) and 'Reports'. Under the 'General' tab, there are two dropdown menus. The first, labeled '*Initial Monitor Type', is set to 'Queue Statistics'. The second, labeled '*Initial Monitor Filter By', is set to 'Assigned Queues'.

General page

These defaults control the initial monitor settings of Supervisor Desktop when the user has not overridden these values through Supervisor Desktop user preferences.

- | | |
|----------------------------------|---|
| Initial Monitor Type | Select the default statistics type by which real-time information appears on Supervisor Desktop. Options are <i>Queue Statistics</i> and <i>Agent Statistics</i> . |
| Initial Monitor Filter By | Select the option by which the real-time information is filtered.

At runtime, the values in the Filter By field change based on the agent's personalizations (such as queue lists and team definitions). Options are <i>Assigned Queues</i> , <i>Queue List</i> and <i>Team</i> . The <i>Assigned Queues</i> option is always available. |

See Also

[Chapter 15, "Working with Supervisor Desktop," Personalizing Supervisor Desktop, page 278](#)

Specifying Images and Text Display Options

Access the Images and Text page.

Alert Image, Text and Color

*Alert Image

*Alert Image Text

*Alert Color Example: 00:00:00

Queue Type Images and Text

*Voice Queue Image

*Voice Queue Text

*Multichannel Queue Image

*Multichannel Queue Text

Agent State Images and Text

*Available Image

*Available Text

*Unavailable Image

*Unavailable Text

*Busy Image

*Busy Text

*Wrap-up Image

*Wrap-up Text

Images and Text page

Note. The images displayed on Supervisor Desktop are 12x12 pixels in size. It is recommended that the images selected be no larger than 16x16 pixels in size due to scaling.

Alert Image, Text and Color

- Alert Image** Specify the image used to display service level warnings on Supervisor Desktop.
- Alert Image Text** Enter the alternate text to display when a user positions their mouse over the alert image.
- Alert Color** Select the color that highlights the service-level alert threshold crossing.
This value can be personalized by the Supervisor Desktop user as well. If there is no Supervisor Desktop personalization, this color value is used.

Queue Type Images and Text

- Voice Queue Image and Voice Queue Text** Specify the image and text label used to indicate voice queues on Supervisor Desktop.

Multichannel Queue Image and Multichannel Queue Text Specify the image and text label used to indicate multichannel queues on Supervisor Desktop.

Agent State Images and Text

Available Image, Unavailable Image, Busy Image and Wrap-up Image Specify the images used to represent different agent states, particularly when agents are available, unavailable, busy, and wrapping up tasks.

Available Text, Unavailable Text, Busy Text and Wrap-up Text Enter the alternate text for the available, unavailable, busy, and wrap-up agent states when users put the mouse over respective images.

Specifying Performance Reports and Dashboards

Access the Reports page.

Performance Report List					
Enabled	*Report Navigation	Description	Report Code	*Report Label	
<input type="checkbox"/>	RBP_AGNT_CHAT	Agent Chat Volume	ACHT	Agent Chat Volume	
<input type="checkbox"/>	RBP_AGNT_EFF	ERMS Agent Effectiveness	AEFF	Agent Effectiveness	
<input checked="" type="checkbox"/>	RBP_CATG_EFF	ERMS Category Effectiveness	CEFF	Category Effectiveness	
<input type="checkbox"/>	RBP_CATG_VOL	ERMS Category Volume	CVOL	Category Volume	
<input checked="" type="checkbox"/>	RBP_INTEGRATION	ERMS Integration	INTG	ERMS Integration	
<input type="checkbox"/>	RBP_MBOX_EFF	ERMS Mailbox Effectiveness	MEFF	Mailbox Effectiveness	
<input checked="" type="checkbox"/>	RBP_MBOX_VOL	ERMS Mailbox Volume	MVOL	Mailbox Volume	
<input type="checkbox"/>	RBP_QCHAT_VOL	Queue Chat Volume	QVOL	Queue Chat Volume	
<input checked="" type="checkbox"/>	RBP_TMPL_PKG_USG	Template Package Usage	TPPU	Template Package Usage	
<input type="checkbox"/>	RBP_WL_EFF	ERMS Worklist Effectiveness	WEFF	Worklist Effectiveness	
<input checked="" type="checkbox"/>	RBP_WL_VOL	ERMS Worklist Volume	WVOL	Worklist Volume	

Add Report

Reports page (1 of 2)

Link Settings

*Section Heading Label Dashboards

Links

Enabled	*URL	Description	*Order	* Label	
<input checked="" type="checkbox"/>	CO_COMMON_DASH_U	Common Dashboard	10	Common Dashboard	
<input checked="" type="checkbox"/>	OCD_ORDER_DASH_UF	Order Management Dashboard	30	Order Management Dashboard	
<input checked="" type="checkbox"/>	SDB_SERVICE_DASH_I	Service Dashboard	50	Service Dashboard	
<input checked="" type="checkbox"/>	SLD_SALES_DASH_URL	Sales Dashboard	40	Sales Dashboard	
<input checked="" type="checkbox"/>	SU_CONTACT_CENTER	Contact Center Dashboard	20	Contact Center DashBoard	

Add Link

Reports page (2 of 2)

Performance Report List

This grid lists all the reports that are built for ERMS and Chat.

Enabled	Select to allow this report to appear on Supervisor Desktop and to be executable by users.
Report Navigation	<p>Select the name of the report to be enabled. You cannot select the same report in more than one row.</p> <p>These reports names are actually component navigation transaction identifiers that point to a navigation pointer to a component. The component navigation transaction identifier must begin with the prefix <i>RBP_</i>. The component navigation can be configured by navigating to Set Up CRM, Common Definitions, Component Configuration, Component Navigation</p> <p>See <i>PeopleSoft Enterprise CRM 9 Business Object Management PeopleBook</i>, "Defining Control Values for Business Objects," Defining Component Transfer Navigation.</p>
Report Code	Enter the text code of the selected report. The system uses this code to generate a run control ID for the report automatically. The value becomes read-only after you save the page. Each report code must be unique.
Report Label	Enter the name of the report on Supervisor Desktop.

Note. It is important that Supervisor Desktop users have access to the report components that appear in the system list.

Link Settings

Section Heading Label	<p>Enter text to use as the heading of the links section within Supervisor Desktop. The default is <i>Dashboards</i>.</p> <p>While the default purpose of the link section is to provide access to dashboards, as long as a URL (uniform resource locator) can be defined using the PeopleTools URL Library, any URL can be specified to be accessible via Supervisor Desktop.</p>
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URL (uniform resource locator)

Select the URL of each dashboard that users can access.

It is a pointer to the PeopleTools URL library; it defines how to access the specified dashboard link and how to open it. Each URL selected in the grid must be unique. Customers must configure these URLs for their own environments.

Note. Define URLs that can be selected here on the URL Maintenance page under PeopleTools, Utilities, Administration, URLs.

See *Enterprise PeopleTools PeopleBook: System and Server Administration*

Order

Enter the sequence for rendering the enabled dashboard links. You cannot enter duplicate numbers.

Label

Enter the text to use as the hyperlink for the corresponding dashboard link within the link section of Supervisor Desktop. Label names must be unique.

Note. In order to access the dashboards, the delivered URL definitions for dashboards must be modified to point to your dashboard environment.

See Also

[Chapter 15, "Working with Supervisor Desktop," Running Performance Reports and Accessing Dashboards, page 256](#)

Setting Up Agent Access to Supervisor Desktop

Users can be configured with different levels of access to Supervisor Desktop. These different levels of access are based on the PeopleTools role associated with the user profile of the agent configured to access Supervisor Desktop.

Supervisor Desktop Roles

Any user profile for accessing Supervisor Desktop should be associated with one of these roles (via PeopleTools, Security, User Profiles, User Profiles):

- *SD_TEAMLEADER*

This role provides basic monitoring access to Supervisor Desktop. Users with this role can approve email and run performance reports as well.

Access to timeout administration and agent configuration is not granted at this level. This level of access is given to an agent that is not a decision maker but is responsible for monitoring performance.

- *SD_SUPERVISOR*

This role provides complete access to all Supervisor Desktop functionality.

This includes both the timeout administration and agent configuration functionality

- *SD_ADMINISTRATOR*

This role gives complete access to all Supervisor Desktop functionality (as with *SD_SUPERVISOR*) and also grants access to define the Supervisor Desktop system-level settings.

See Also

Enterprise PeopleTools PeopleBook: Security Administration

CHAPTER 12

Setting Up Unified Agent Desktop

This chapter provides an overview of Unified Agent Desktop (UAD) and discusses how to:

- Configure agents for Unified Agent Desktop.
- Define Multichannel Toolbar settings.

Understanding Unified Agent Desktop

The Unified Agent Desktop is a consolidated tool that provides agents easy access to tasks of different media (phone calls, email, chat, and generic tasks). This section discusses:

- Multichannel Toolbar.
- Application dispatcher.
- Channel-specific workspaces.
- Task management.

Multichannel Toolbar

Multichannel Toolbar, the focal point of the UAD, is where agents receive and process incoming tasks. From the toolbar, agents receive notifications about inbound tasks from queues (both voice and multichannel) to which they are logged on. Agents can also perform relevant actions on those tasks. When agents log on to either the voice queue or the multichannel queue, the toolbar starts automatically. Multichannel Toolbar provides a task navigation window for agents to switch among tasks that they work on concurrently. Agents can perform activities such as these from the toolbar:

- Receive inbound phone calls and perform CTI functions such as transfer, hold, conference call, release, and so on.
- Place outbound calls.
- Receive and process inbound email.
- Receive and process inbound chat requests, both customer to agent and agent to agent.
- Initiate outbound chat requests to other agents.
- Receive and process generic tasks, such as working on a support case.
- View statistics of queues that agents are currently logged on.

Multichannel Toolbar Appearance

When agents log on to PeopleSoft Pure Internet Architecture, the toolbar appears as a pagelet on the top or bottom of the home page. As they navigate to different components, the toolbar appears across the top of CRM component pages that use the DEFAULT_TEMPLATE portal template because Iscript makes use of this template to render the toolbar. Wherever an agent navigates, the application dispatcher passes the information about the toolbar state to make sure that the toolbar state remains consistent in different browser windows.

The pagelet for Multichannel Toolbar appears only after it is added to the Content link on the home page. If an agent adds the pagelet but is not yet configured as a voice or configured agent, a message shows in the toolbar notifying the agent and the toolbar will not start.

Agent Status Update

Agents can update their queue statuses on the Multichannel Toolbar using the two sets of status codes that are defined for the toolbar. From the status settings window, agents can perform these actions:

- Log on or log off from the corresponding multichannel queue server or the CTI system.
- Update the status for the corresponding queue, such as making themselves available for incoming tasks or unavailable with a reason.

Based on configuration, agents can be placed in certain statuses automatically. For example, their voice queue status changes to busy after they accept phone calls. They may also enter the wrap-up status after they finish or release calls.

- Log on to another multichannel queue to which agents are assigned.
- Resynchronize the voice queue.

Application Dispatcher

Application dispatcher is a small browser window that launches when agents log on to PeopleSoft Pure Internet Architecture. It is responsible for processing all events requested and received from the CTI queue and multichannel queue systems for the Multichannel Toolbar. Application dispatcher provides the Multichannel Toolbar a set of encapsulated APIs for executing and interpreting corresponding JSMCAPI events and messages.

Application Dispatcher Behavior When Different Agents Log On to PeopleSoft Pure Internet Architecture

When a user logs on to PeopleSoft Pure Internet Architecture and the application dispatcher is about to launch, it first checks if an instance of application dispatcher already exists because this user is the last user who logged on to the machine. If so, it will not be started because only one instance is allowed for any given session. If the application dispatcher window remains open after the last user logged off, the system closes it automatically when a different user logs on to PeopleSoft Pure Internet Architecture from the same machine at a later time. A system message appears and the new user must log on to PeopleSoft Pure Internet Architecture again to access the Multichannel Toolbar. Application dispatcher determines the appropriate channel access for agents on the Multichannel Toolbar.

The window attributes of the application dispatcher are predefined and cannot be updated by agents.

Important! Do not close the application dispatcher window while in session. All the current UAD sessions will be terminated if the application dispatcher window is closed. Close the window after logging off from the system.

Tracer Window

In addition to the application dispatcher window, agents may notice the launch of a tracer window when they log on to queues. The tracer window appears if the administrator enables tracing in the agent's voice, multichannel, or both configurations for debugging purposes. If the levels of tracing set up for both configurations are different, the deeper level is used.

Session Management

Sometimes agents work on multiple tasks simultaneously, and each task has its own browser window with the Multichannel Toolbar. The system uses the application dispatcher to manage browser instances. To make sure that content appears consistently in all toolbar instances, each of them needs to be registered with the application dispatcher. Therefore, when a change occurs on one instance, the application dispatcher can pass on the corresponding event and invoke the session-specific function in each instance. When the function receives that event, it can render the changed content and updates it on the Multichannel Toolbar accordingly. When a browser window is closed, that instance is unregistered from the application dispatcher. All browser instances are disabled if the application dispatcher window is closed by accident. If the task browser window is closed, a new browser window will be relaunched.

To summarize, the application dispatcher maintains:

- Content consistency in Multichannel Toolbar instances.
- A task navigation list.

The application dispatcher ensures that the list is updated when the agent receives or finishes a task.

- An internal chat list.

The application dispatcher is responsible for initiating agent-to-agent chat and ensures that the list is updated when the agent receives or finishes an agent-to-agent chat session.

The multichannel queue system processes external chat requests.

- Agent states.

In each toolbar instance, the application dispatcher maintains the agent's state in the queues to which they log on. The Multichannel Toolbar leverages this information to correctly render user action buttons.

- The 10 most recently dialed phone numbers in the phone directory for outbound calls.

This data is no longer available if the agent logs off from PeopleSoft Pure Internet Architecture and logs on again.

Channel-Specific Workspaces

After agents accept tasks from the Multichannel Toolbar, the system launches a work page where agents begin their work based on the media type of the tasks.

Voice Tasks

Depending on the caller information that the CTI middleware provides, the system launches the proper CRM transaction page, which can be the 360-Degree View of the caller or the Case page that populates with the caller's case information.

When an incoming call arrives, it's routed to a voice agent based on availability and workload. If the agent cannot accept the call within the preset timeout value, the system routes the call to the next available agent.

See [Chapter 10, "Configuring CTI Application Pages," Mapping CTI Transactions to Application Pages, page 151](#).

Email Tasks

The system launches the email workspace when agents accept inbound email.

See [Chapter 13, "Managing Email," page 181](#).

Chat Tasks

When agents accept chat requests, the chat workspace appears in a separate browser window. In addition to the chat window, agents can view a CRM page that is presented based on the self-service page that the chat request originated.

If the agent cannot accept a chat task from the toolbar within the preset timeout value, the system routes it to the next available agent (customer-to-agent chat tasks) or drops it (agent-to-agent chat tasks).

Generic Tasks

Generic tasks are specific to PeopleSoft PeopleTools. For testing purposes, if you want to see incoming generic tasks appear on the Multichannel Toolbar from another system, send the generic tasks from the other system through the PeopleTools sample pages.

Note. To accept sample generic tasks, use the delivered users SD_ADMIN or SD_SUPERVISOR to log on to the system on which you are testing the Multichannel Toolbar.

See Also

Enterprise PeopleTools PeopleBook: PeopleSoft MultiChannel Framework, "Understanding PeopleSoft MultiChannel Framework," PeopleSoft MultiChannel Framework

Enterprise PeopleTools PeopleBook: PeopleSoft MultiChannel Framework, "Configuring MCF Queues and Tasks," Configuring Tasks

Enterprise PeopleTools PeopleBook: PeopleSoft MultiChannel Framework, "Using PeopleSoft MCF Broadcast and Working with Sample Pages," Working with Sample Pages

Task Management

When agents accept calls, email, or chat requests or open other work items, these items are organized under the task navigation list. To work on an item, agents click it from that list and the window of that item appears as either a new browser window or within the work area of the same window that is currently open on the desktop.

All open and accepted items remain in the task list until they are dequeued from the corresponding system. The queue server monitors items that have been accepted to maintain adherence to service levels that are defined for items posted to the agent.

Agent-to-agent chat tasks appear in a separate agent chat navigation list.

Configuring Agents for Unified Agent Desktop

This section discusses how to:

- Define general settings.
- Define reason codes.

- Define presence codes.

Pages Used to Configure Agents for Unified Agent Desktop

Page Name	Definition Name	Navigation	Usage
Unified Agent Desktop Agent Configuration	RB_UAD_AGENT_CFG	Set Up CRM, Product Related, Multichannel Definitions, Unified Agent Desktop, Agent Configuration, Unified Agent Desktop Agent Configuration	Define general settings.
Presence Codes	RB_UAD_PRESENCE_CD	Set Up CRM, Product Related, Multichannel Definitions, Unified Agent Desktop, Agent Configuration, Presence Codes	Define presence states for agents.

Defining General Settings

To define general settings, use the Unified Agent Desktop Agent Configuration (RB_UAD_AGENT_CFG) component.

Access the Unified Agent Desktop Agent Configuration page.

Unified Agent Desktop Agent Configuration page

Warning and Expired

Minute and Second

Enter the time length after which incoming task durations are highlighted in the form of an alert on the Multichannel Toolbar if they remain unattended.

You can specify two levels of warning alerts; one to appear after 10 minutes have elapsed and another one after 20 minutes if the agent hasn't responded to the task.

Style and Display Image Select the style class (determining the highlight color) and icon used for the alerts. You can view a sample alert next to the Display Image field when you save.

CTI Parameters

Extension 1 and Extension 2 Enter the agent's phone extensions if they support voice tasks.

These phone extensions are automatically populated in a pop-up window and are used when you log on to the Multichannel Toolbar. This window appears if you log on from a computer for the first time. The system then stores the extension information in a cookie for future reference.

PeopleTools support two configuration options: 2 lines with one extension and 1 line with two extension. Based on the way the system is configured, either both extension fields appear, or only the Extension 1 field appears.

Number of Recently Dialed Numbers to Remember Specify the number of last dialed phone numbers that Multichannel Toolbar stores for the agent to retrieve quickly when making calls. By default, it stores the 10 most recently dialed numbers.

Default Agent Queue

Default Agent Queue Select the default multichannel queue to which the agent should be logged after a multichannel session is established successfully.

By default, this is the logical queue with auto-login enabled in the multichannel queue configuration for this agent.

Defining Reason Codes

Access the Reason Code page in PeopleTools CTI configuration (the CTI link) to define codes that are used to specify reasons for an agent's unavailability.

See *Enterprise PeopleTools PeopleBook: PeopleSoft MultiChannel Framework*

Defining Presence Codes

Access the Presence Codes page.

UAD Agent Configuration **UAD Presence Codes**

Presence Codes

User ID CCAG_CTI

System Defined Entries Customize | Find | First 1-7 of 7 Last

*Channel	*Presence State	*Presence Text	*Reason Code
Voice	Not Ready	Not Ready	UNAVAILABLE
Voice	Ready	Ready	
Voice	Work Not Ready	Work Not Ready	
Voice	Work Ready	Work Ready	
Multichannel Queue	Available	Available	
Multichannel Queue	Unavailable	Unavailable	
Multichannel Queue	Assumed Unavailable	Assumed Unavailable	

Add System Default

Agent Default Customize | Find | First 1-3 of 3 Last

*Channel	*Presence State	*Presence Text	*Reason Code
Voice	Not Ready	Lunch Break	UNAVAILABLE
Voice	Ready	Ready to Go	
Voice	Work Not Ready	Wrapping it Up	

Add Agent Default

Presence Codes page

Presence codes for voice and multichannel channels can be defined in three places, the Agent Default grid, the System Defined Entries grid, and on the Status Codes page. Each of these definitions takes precedence over the others.

For example, if no agent-specific codes are defined, the system-specific codes are used. If system defaults are unavailable, then status codes on the Status Codes page are used in the Queue Status window on the Multichannel Toolbar. The latter two sets of codes, when defined, apply to all agents in the system.

Note. Each channel and presence state combination can only be defined once in these grids. Error messages appear if the system detects duplicate rows.

The system asks for a reason code when you select the *Not Ready* presence state for voice.

Voice channel has these four presence states: *Ready*, *Not Ready*, *Work Ready*, and *Work Not Ready*. Three presence states are available for multichannel channel: *Available*, *Unavailable*, and *Assumed Unavailable*.

System Defined Entries

Site administrators use this group box to specify presence codes to be used by all agents.

Agent Default

Use this group box to specify presence texts for the available (ready for voice channel) and unavailable (not ready for voice channel) states to be used by the selected agent on the Queue Status window. If these states are not specified here, the system uses the system defined entries.

Additional statuses detailing the cause of unavailability, such as busy, at lunch, on break, do not disturb, and so on, are defined on the Status Codes page and shared with all agents.

Agents can only modify their own presence states and texts.

See Also

[Chapter 16, "Working with Unified Agent Desktop," Switching Agent Status, page 291](#)

Defining Multichannel Toolbar Settings

To define multichannel toolbar settings, use the Console Definition (RB_UAD_CODE_DEFN) component.

This section discusses how to:

- Specify action buttons.
- Define category codes.
- Define status codes.

Pages Used to Define Multichannel Toolbar Settings

Page Name	Definition Name	Navigation	Usage
Unified Agent Desktop Action Button Definition	RB_UAD_BTN_DEFN	Set Up CRM, Product Related, Multichannel Definitions, Unified Agent Desktop, Console Configuration, Unified Agent Desktop Action Button Definition	Specify button icons and labels that are used for voice tasks.
Category Codes	RB_UAD_CATEGORY	Set Up CRM, Product Related, Multichannel Definitions, Unified Agent Desktop, Console Configuration, Category Codes	Define categories that are used to group tasks when they are closed.
Status Codes	RB_UAD_CHANL_STAT	Set Up CRM, Product Related, Multichannel Definitions, Unified Agent Desktop, Console Configuration, Status Codes	Define sets of statuses for voice and multichannel queue tasks.

Specifying Action Buttons

Access the Unified Agent Desktop Action Button Definition page.

Button Definition

Category Codes

Status Codes

Unified Agent Desktop Action Button Definition

Display Option

Image

Call Action Buttons

Customize

Find

First

1-11 of 11

Last

Button Name	*Call Action	Disabled	Label	*Enabled Button Image	Disabled Button Image	
COMPLETE	Complete	<input type="checkbox"/>	CP	PS_UAD_CALL_COMPL		
CONFERENCE	Conference	<input type="checkbox"/>	CF	PS_UAD_CONFERENCE		
CONSULT	Consult	<input type="checkbox"/>	CS	PS_UAD_CONSULT_IC		
CONSULT TRANSFER	Consultative Transf	<input type="checkbox"/>	CT	PS_UAD_CONSULT_TR		
CTI AVAILABLE	Make CTI Available	<input type="checkbox"/>	A	PS_UAD_VOICE_AVAI		
DIAL OUT	Dial Out	<input type="checkbox"/>	D	PS_UAD_MAKE_CALL		
HOLD	Hold	<input type="checkbox"/>	H	PS_UAD_HOLD_ICN		
RECONNECT	Reconnect	<input type="checkbox"/>	RC	EOPP_LINK_NODE_ICI		
RELEASE	Release	<input type="checkbox"/>	X	PS_UAD_RELEASE_ICI		
RETRIEVE	Retrieve Hold	<input type="checkbox"/>	RH	PS_UAD_RETRIEVE_IC		
TRANSFER	Transfer	<input type="checkbox"/>	T	PS_UAD_TRANSFER_I		

Add Button

Date Created

06/30/2005 4:12PM

Last Modified

06/30/2005 4:12PM

Unified Agent Desktop Action Button Definition page

Display Option

Select the form to display call action buttons. Options are *text* and *image*.

Call Action

Select the JavaScript event to be executed when the corresponding button is clicked on the Multichannel Toolbar.

Disabled

Select to remove the button from the Multichannel Toolbar.

Label

Enter a short name for the button. The system uses it as the button name if the display option is text. The maximum length of the name is three characters.

Enabled Button Image

Select the icons that are used when the corresponding call actions are available.

Disabled Button Image

Select the icons that are used when the corresponding call actions are unavailable.

Only the Dial Out button has a disabled version button. For other actions that cannot be preformed at any given state, their buttons do not appear.

Defining Category Codes

Access the Category Codes page.

Category Codes

Customize | Find | First 1-4 of 4 Last

Order	Code	*Description	
4	CESC	Case Escalation	
5	COMP	Customer Complaint	
1	CINQ	Case Enquiry	
3	SUPP	Support Issues	

Add Category Code

Category Codes page

Define entries in the Category Codes group box to be used to categorize call, email, and customer to agent chat tasks. They appear in the Category drop-down list box of the Multichannel Toolbar in the order specified here. Generic tasks are not categorized.

Defining Status Codes

Access the Status Codes page.

Status Codes

Customize | Find | First 1-8 of 8 Last

*Order	*Status Label	*Event	*Image Name	Image	Reason Code	
1	Available	Available	PS_UAD_VOICE_AVAILAB			
2	Unavailable	Unavailable	PS_UAD_VOICE_UNAVAIL		Unavailable	
3	Do Not Disturb	Do Not Disturb	PS_UAD_VOICE_BUSY_IC		Unavailable	
4	At Dinner	At Lunch	PS_UAD_VOICE_UNAVAIL		Unavailable	
5	Busy	Busy	PS_UAD_VOICE_BUSY_IC		Unavailable	
6	On Break	On Break	PS_UAD_VOICE_UNAVAIL			
7	Away	Away	PS_UAD_VOICE_UNAVAIL		Unavailable	
8	In Wrap-Up Mode	In Wrap-Up Mode	PS_UAD_VOICE_UNAVAIL			

Add CTI Status Code

Status Codes page (1 of 2)

Multichannel Queue Status Codes					Customize	Find	First	1-6 of 6	Last
Order	Status Label	Event	Image Name						
1	Available	Available	PS_UAD_MC_AVAILABLE_ICN						
2	Unavailable	Unavailable	PS_UAD_MC_UNAVAILABLE_ICN						
3	Busy	Busy	PS_UAD_MC_BUSY_ICN						
4	At Lunch	At Lunch	PS_UAD_MC_UNAVAILABLE_ICN						
5	On Break	On Break	PS_UAD_MC_UNAVAILABLE_ICN						
6	Away	Away	PS_UAD_MC_UNAVAILABLE_ICN						

Add Multichannel Queue Code

Status Codes page (2 of 2)

Use this page to define status codes that are used to represent agent states in the Queue Status window for voice and multichannel queues.

- Order** Enter the sequence in which the status appears in the corresponding status pop-up window.
- Status Label and Event** Enter the name of the status to appear in the status pop-up window and the JavaScript event that executes when this status is selected.
- Image Name** Select the image used to represent the status. By default, each event is associated with an icon. You can preview the selected icon to the right of this field.
- Reason Code** Enter the reason code for unavailability statuses.

See Also

[Chapter 12, "Setting Up Unified Agent Desktop," Defining Reason Codes, page 172](#)

[Chapter 12, "Setting Up Unified Agent Desktop," Defining Presence Codes, page 172](#)

PART 3

Working with Multichannel Applications

Chapter 13
Managing Email

Chapter 14
Working with Chat in PeopleSoft Enterprise CRM

Chapter 15
Working with Supervisor Desktop

Chapter 16
Working with Unified Agent Desktop

CHAPTER 13

Managing Email

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

- Access inbound email.
- Work with inbound email.
- Reply to email.

Note. Throughout this chapter, the term *group worklist* refers to both regular group worklists and MultiChannel Framework (MCF) queues.

Understanding Email Management

This section discusses:

- Agent tasks.
- Editable information on the email workspace.
- Email sender identification.
- Email assignment and routing.
- Mailbox reset for email.
- Email classification.
- Assistance.
- Content sources.
- Solution and document search.
- Quick action buttons.
- Related transactions.
- Email replies.
- Email status tracking.
- Reply deadlines and notifications.
- System information for email messages.

Agent Tasks

Agents normally begin to work on emails after they are routed to the first group worklist.

Email Handling

When agents are ready to work on emails, they:

1. Access the email.

Typically, agents access email from either their worklists or from the Multichannel Toolbar. In addition, email is also accessible from the Search Inbound Emails component, from the 360-degree view of the associated customer, and on interactions lists that appear in various locations.

See [Chapter 13, "Managing Email," Accessing Inbound Email, page 200](#).

2. Accept ownership of the email.

Agents must be members of the group worklist to which emails are routed to accept those emails. Accepting ownership moves the email out of the group worklist and into the agent's individual worklist. The acceptance of an email is either automatic or agent-initiated. The method of acceptance depends on how the group worklist is defined and how the email is accessed:

- If the agent accesses the email from the Multichannel Toolbar, acceptance occurs automatically when the agent navigates to the email.
- If the agent accesses the email some other way (for example, through My Worklist or the email workspace) *and* the email is currently assigned to a group worklist that uses automatic acceptance, then acceptance occurs automatically when the agent navigates to the email.
- If the agent accesses the email *not* from the Multichannel Toolbar and the email is currently assigned to a group worklist that *does not* use automatic acceptance, the agent must explicitly accept the email by clicking the Accept button from the email workspace or My Worklist.
- If the email has been reassigned or rerouted to an agent's worklist directly, the acceptance happens automatically, which means the agent is now responsible for processing the email.

3. Review the email on the email workspace to become familiar with its content.

The email workspace recommends actions that agents can take based on the category of the email. The category value is either populated automatically if natural language processing (NLP) is available, or entered manually by the agent. Selecting a new category for the email on the Main tab of the Email page updates the recommended actions list immediately.

Agents can search for additional materials (such as solutions and documents) to help resolve the issue and include these materials in the email response. The system uses solutions that are added to the proposed list as the criterion to search for templates that can apply to the email response. For documents that are added to the list, they are readily available as templates that agents can select to send. Documents are defined as correspondence templates in the system.

4. Modify data as necessary.

Although most fields are not editable, agents can make these modifications:

- Change the email sender information if the mail reader process (RB_MAIL_READ) misidentified the sender or was not able to provide complete sender information.
- Change the categorization of the email, if NLP is unavailable or the automated mail processing (AMP) misidentified the values.

Categorization attributes include category, type, product group, product, mood, and priority.

- Modify the email subject text for greater clarity.
- Associate solutions to the email and maintain the solution status as it pertains to the email.
- Change the email's thread association.

- Add notes to the email.
 - Change to a different mailbox using the mailbox reset feature if the email was incorrectly sent to this mailbox.
5. Create transactions for the email.
- Agents can create new transactions or associate an existing transaction with the email if that is the most effective way to handle the issue.
- For example, if the email reports a product support issue, the agent can create a support case and associate it with the email.
- Agents can delete inherited transactions if they are not relevant to the current email.
- An email that the system identifies as part of a thread inherits the parent's related transactions.
- Agents can navigate directly to related transactions to work on the sender's issue.

6. Reply to the sender.

Agents can reply or forward the email directly from the email workspace. If there are related transactions, agents can reply from the corresponding component. Replies can be free-form text or template-based.

7. Close the email.

Agents can update the email status on the Email page (by explicitly selecting an applicable status). If the agent is the owner of the email, replying to the email in the email workspace automatically updates the editable email status to *Closed - Response* and the system email status to *completed*. The system also updates the status of the corresponding entry in the agent's worklist to *completed*. If the email was opened from the Multichannel Toolbar, it is removed automatically from the task list after the agent sends a response.

If an email is closed and NLP is available, the system submits the information about the email and its category to NLP for teaching and learning purposes.

Note. By default, the system asks agents if they want to enter a note after they have sent an email response. This feature can be disabled as part of the email user preferences.

If, after accepting an email, the agent is unable to complete the email handling process, the agent can requeue the email to its previous group worklist or reassign it to another one. If the agent determines that the email does not require handling (for example, if the email is spam), the agent can end the process at any time by setting the editable email status to *Closed - Canceled*.

See *PeopleSoft Enterprise CRM 9 Automation and Configuration Tools PeopleBook*, "Setting Up Natural Language Processing".

See [Chapter 6, "Setting Up Automated Mail Processing," Understanding Automated Mail Processing, page 77](#).

See [Chapter 13, "Managing Email," Personalizing Email Workspace, page 223](#).

Email Modes

The ability to update data and perform various actions in the email workspace depends on the user who accesses it. The description of the conditional logic for specific fields is available throughout this chapter. This table summarizes the actions that are available to different users depending on whether the email is currently assigned:

User	Actions If Email Is Unassigned	Actions If Email Is Assigned
User who is not associated with the email's group worklist.	No actions available.	No actions available.
Member of the email's group worklist.	Accept the email.	Take ownership or requeue email to group.
Group worklist owner.	Take ownership, reassign email, or requeue it to group. These users can also intervene if the email process is unable to route the email to a group.	Take ownership, reassign email, or requeue it to group.
User who is assigned to the email.	Not applicable.	Reply, reassign email, or requeue it to group.

Note. From the email workspace, users must accept an email before reassigning it. From My Worklist, however, users can reassign an email without first accepting it. In addition, any user can add notes to an email regardless of the state of the email or user permission.

Editable Information on the Email Workspace

After accepting ownership of an inbound email, an agent can modify certain data, including the email subject, status, sender information, and thread information.

See [Chapter 13, "Managing Email," Email Status Tracking, page 197](#).

Email Subject Text

Email subject lines help users to better identify emails. However, emails often have blank or nondescriptive subjects. Consequently, agents may want to replace an inbound email's original subject with more descriptive text. You can configure the system to add a default subject to emails with blank subject fields, but the default text should be generic. If you do not set up default subjects, the default subject is *<No Subject>*.

Agents can edit the subject text only after accepting ownership of the email. After the new subject text is saved, the agent cannot retrieve the original subject text. Although the original data still exists in the PeopleTools email table, it is not available to users through PeopleSoft Internet Architecture.

See [Chapter 5, "Setting Up ERMS System," Defining System Settings for Email Processing, page 52](#).

Email Threading

An email thread consists of a beginning email (which can be an inbound or outbound email) and all of its descendants—that is, replies, responses to replies, and so on. When you look at an email that belongs to a thread, viewing emails that are dated earlier in the thread provides a history of the discussion.

Both the email workspace and the Outbound Email component include a Thread page that shows email threads in the tree view. You can review summary information about the emails, look at the content of the selected email on the Email Message area, and navigate to an email for detailed information. By associating with another email on the Recent Activities tab on the Email page, an agent can change the thread association as well.

When an agent replies to an inbound email, the system threads the reply to the inbound email. If the agent sends the reply from the context of a specific inbound email, the threading association is automatic. If the agent sends the reply from the context of a transaction (for example, a case that is associated with the inbound email), the system provides a page in which the agent explicitly identifies the inbound email.

When an agent sends an outbound email (either an ad hoc notification or an email reply), the system appends an identifier known as a *context tag* to the body of the email. If the customer replies to the outbound email and includes the context tag in the reply, the context tag enables the system to establish the new email's thread association. An email automatically inherits its parent's related transactions.

When an agent associates the current email to another email thread, the items that are associated with it (for example, solutions, documents, and notes) are all moved to the new thread.

The ability of the email process to correctly add new emails to a thread depends on customer actions that agents cannot control. For that reason, the system also enables agents to add emails to a thread manually. Access the Recent Activities tab on the Email page and select *Emails* as the activity type. Agents can select the desired outbound email either from the search result list that appears (where both inbound and outbound emails of the sender appear), or look it up from the search by clicking the Search Outbound Emails link. When selecting a new parent email, the agent selects from outbound emails. The recipient of the outbound email must match the sender of the inbound email.

Note. Changing sender information for one email does not affect the sender information for other emails in the thread. If a threaded email's sender information is inaccurate, correct the data for each email in the thread.

Email Sender Identification

This section discusses the fields that identify an email's sender and explains how these are populated.

Sender Identification Fields

These three fields on the email workspace identify the sender. These fields are located on the More tab of the Email Details group box on the Email page:

Sender	Identifies the person who sent the email.
Representing	<p>Identifies the consumer, company, or partner company on whose behalf the email was sent. This information further quantifies the sender and appears under these conditions:</p> <ul style="list-style-type: none"> • If the sender's role is contact and the mailbox type is <i>external</i>, the representing value can be a consumer or company. • If the sender's role is contact and the mailbox type is <i>partner</i>, the representing value is a partner company. • If the sender's role is consumer, the Representing field is unavailable. This field, though blank, shows in the toolbar summary area. <p>This field does not apply to <i>internal</i> mailboxes.</p>
Role	<p>Select the sender's role if the sender has multiple roles and relationships and the system has not yet identified the appropriate one for the sender. Choose from values such as individual consumer or contact of XYZ, where XYZ can be a company or a consumer. This is similar to the Role drop-down list box that is available in the 360-Degree View, with the exception that only valid ERMS roles and relationships appear as values.</p>

This field applies to *external* mailboxes only. This field does not appear after the agent has identified the sender role and saved the email.

If a role is identified for the sender, you can access the sender's record by clicking the sender's link on the toolbar summary area. You can also access the company or consumer record that the sender represents if it's identified as well.

See [Chapter 13, "Managing Email," Managing Inbound Email, page 207](#).

Automatic Sender Identification

The mail reader process attempts to identify the email sender automatically. To do this, it attempts to match the email's from address with an email address in the Customer Relationship Management (CRM) database. The system's ability to populate the Sender and Representing fields depends on the available information. The mail reader process functions differently under the following conditions:

- The email address is not recognized.

Based on the mailbox-level setup, the mail reader process either associates the email with the unknown user that you select on the ERMS System Installations page or creates a new user based on the unidentified email address.

- The email address is associated with one person, and that person has one applicable role.

The mail reader process populates the Sender field. Additionally, if the sender role is *contact*, and the person is a contact for one entity (either a consumer or a company), the mail reader process populates the Representing field.

- The email address is associated with one person and that person has more than one applicable role.

The mail reader process populates only the Sender field, and the Email page (in the More tab) displays a Role drop-down list box that the agent uses to select a role for the sender.

This condition does not apply to internal mailboxes, which always set the sender's role to *worker*. For partner mailboxes, the sender role is always *contact*.

- The email address is associated with more than one person.

The mail reader process populates the Sender field with the first user that it finds and enables a multiple person indicator in the email record. The indicator displays a Mark Sender as Verified button on the Main tab of the Email page to alert the agent that the sender data needs to be verified (because it may need to be changed). The agent, when satisfied with the sender data, clicks the button to turn off the multiple person indicator. When the agent clicks the button, the button label changes to Verified until the agent saves and exits the email. After that, the button no longer appears on the page. This button does not appear when the agent has updated and saved the business object information of the mail.

Manual Sender Identification

The mail reader process does not always provide all of the sender information. Agents must sometimes verify and enter accurate sender information. Only the assigned agent can modify this data.

Identifying sender information for emails of an internal mailbox is straightforward. When agents click the prompt of the Sender field, the system performs the search against workers. The sender role is *worker* (this information does not appear), and the sender does not represent any entity (the Representing field does not apply).

The procedure of identifying sender information for emails that belong to an external mailbox varies depending on the information that the mail reader process provides:

- If the agent must manually identify the sender, either because the mail reader process didn't identify the sender or it identified the sender incorrectly:

When the agent enters data or clicks the prompt of the Sender field, the system performs the search that enables selection of contacts and consumers. When the agent locates a sender using the business object search, it automatically identifies the sender's role. If the role of the identified sender is *contact*, the search presents a list of companies and consumers that are associated with the sender so that the agent can further identify what the sender may represent. If the role is *consumer*, the system populates the Sender field with the selected consumer. The representing information does not apply to consumers.

Assume that both the sender and representing values are already populated. If the agent clicks the Representing field prompt, it displays a list of companies and consumers that the sender represents as a contact. In the case where the agent clicks the Sender field prompt, the system displays a list of senders, which means the agent is essentially searching for a new sender for the email.

Typically, agents search for the email sender, then find the entity that the sender represents if the sender role is contact. If the agent wants to change the representing value and click the prompt next to the field, the list of consumers and companies that the sender person may represent appears. In either prompt, if the agent selects a consumer from the list, this value is populated to the Sender field, and the Representing field no longer appears.

See *PeopleSoft Enterprise CRM 9 Business Object Management PeopleBook*, "Using Business Object Search and Quick Create Functionality," Understanding the Business Object Search and Quick Create Process.

See *PeopleSoft Enterprise CRM 9 Automation and Configuration Tools PeopleBook*, "Configuring Search Pages," BO Searches on Configurable Search Pages.

- If the mail reader process correctly identifies the sender, but the sender is associated with more than one role:

An agent uses the Role drop-down list box to select a role. When the role is set, this drop-down list box no longer appears.

Identifying sender information for a partner mailbox's emails involves searching for a sender (contacts only). The search then presents a list of partner companies that are associated with the sender so that the agent can further identify what the sender may represent.

Note. Agents must provide the sender and role information if the mail reader process is unable to do so. While the role remains unknown, users cannot create related transactions (for example, new cases or leads) from the email workspace.

Customer Quick Create

If the business object search cannot return a match from the database, agents can add new business objects using the quick create functionality, which include:

- Create consumer.
- Create consumer with contact.
- Create company with contact.

Important! Only external mailboxes support quick create. Creation of workers are *not* supported.

See *PeopleSoft Enterprise CRM 9 Business Object Management PeopleBook*, "Setting Up Business Object Search and Quick Create".

Business Unit Identification

The email workspace uses the business unit that is specified in the mailbox definition as the default value when performing these operations:

- Creating transactions: when the agent creates a transaction (for example, add an order) from an email, the system creates the transaction using the same business unit that is defined in the mailbox to where the email belongs.

Note. If the setID of the email's sender or representing entity and the setID that is associated with the mailbox's business unit are not the same, the system displays an error when the agent attempts to create a transaction. The operation cannot be completed.

- Searching for transactions: if the agent wants to associate the email with an existing transaction or outbound email within email workspace, the initial search is limited by the business unit.
- Creating business objects: when the agent creates a new contact or consumer through the quick create feature, the business object is created under the setID with which the mailbox's business unit is associated.
- Searching for business objects: if the agent wants to change the value of the Sender or Representing field, the search of business objects is applicable to all setIDs.

The business unit of the email is not editable. The value changes, however, when the mailbox reset operation takes place, which changes the business unit to match the business unit setting of the new mailbox that the email is routed.

Email Assignment and Routing

This section discusses how emails are sent to group worklists and individual worklists and discusses how emails can be rerouted to different mailboxes. The History page of the email workspace includes a link that you click to see the email's entire routing history, including a routing method and routing reason for each reassignment.

Group and Individual Worklists

An email begins its route through the system in a group worklist. Before an agent can work on the mail, however, the agent must accept it (either explicitly or automatically). When an agent accepts the email, the system assigns it to that agent and moves it to the agent's individual worklist.

The options that are available on the email workspace to process emails change after they are accepted. Before the acceptance, things that agents can perform on emails are minimal: accepting emails or adding email notes. After the acceptance, email owners can choose to reassign them, modify certain email data, work on them and search for solutions and documents to resolve email issues, manage relationships with other CRM transactions, and respond to them or forward them to other people. Agents who belong to the same group as the email owner can reassign, reply, and forward the assigned email. However, when the email is closed by a group member, it is neither closed automatically nor removed from the worklist. This functionality applies only when the email is closed by its owner.

After an email is assigned to an agent, the email appears in an individual worklist. The system still keeps the name of the previous group worklist and uses this information to:

- Set worklist-level response deadlines.
- Identify the group worklist owner and group worklist members.

The group worklist owner and the other group worklist members can take ownership of a email even after it is assigned to someone.

- Identify where to send an email that an agent queues.

Requeuing returns the email to the previous group worklist.

- Route subsequent emails in the same thread.

If the email process identifies a new inbound email as a continuation of an existing email thread, it routes that new email to the group worklist of the most recent inbound email in the thread. For example, suppose that an agent replies to inbound email A by sending outbound email B. If the customer sends inbound email C in reply to email B (and if email C contains the code that enables the unstructured email process to identify the thread), the process routes email C to the group worklist for email A.

See [Chapter 8, "Setting Up Unstructured Email Handling," Understanding Unstructured Email Routing, page 109](#).

Note. You may need to make the name of the process generic if the unstructured email process has been renamed or if it doesn't do thread based email.

Routing to a Group Worklist

The email process initially routes all emails to group worklists. After that initial routing, agents have two ways to route emails to a group worklist:

- Reassign an email to a different group worklist.

To do this, the agent clicks the Reassign button on the My Worklist page or the Reassignbutton on the email workspace toolbar. The system prompts the agent to select a routing reason code and to enter a comment explaining why the email is reassigned.

- Send an accepted email back to the previous group worklist and let it be assigned to another member in the group.

To do this, the agent clicks the Requeue toolbar button on the email workspace.

The system keeps statistics to show what percentage of email is routed to a group worklist other than the one selected by the unstructured email process. Use this information to assess and fine-tune the unstructured routing rules.

See [Chapter 8, "Setting Up Unstructured Email Handling," Reviewing Worklist Statistics for a Mailbox, page 124](#).

Assignment to an Individual Worklist

The system routes an email to an individual worklist when an agent accepts the email—that is, when the email is assigned.

Email is routed to an individual worklist when:

- The agent opens an email from the Multichannel toolbar.
- The email is routed directly to the agent's worklist.

An agent can reassign the email (owned by the agent) to another agent's worklist as appropriate. Prior to selecting an agent, you must select a group worklist so that the system can base the internal response time computation on the corresponding group worklist setup. In other words, the agent selection is refined by the group that you choose in the first place.

Emails that are routed to agents show up in their individual worklists only. Agents should access their own worklists for the complete list of emails that are assigned to them.

- The email's group worklist uses auto-acceptance, and an agent who belongs to the email's group worklist navigates to the email.

The agent can either requeue the email to the previous group worklist, reassign it to a different group worklist or a different mailbox, but the routing history still shows that the email was previously assigned to that agent.

Auto-acceptance of email occurs when all these conditions are met:

- The group worklist that the email routes to supports auto-acceptance.
- The email is not assigned to any agent and is not closed.
- The email is opened by an agent of the group worklist to which the email is routed.
- An agent explicitly accepts the assignment.

When the worklist does not use auto-acceptance, agents must explicitly accept email. They do this by clicking the Accept button on the toolbar of the email workspace or by clicking the Accept button on My Worklist.

- A group worklist member or the group worklist owner explicitly takes ownership of the email.

These users can accept email even if it is already assigned to someone else. To do so, they click the Take Ownership button on the toolbar of the email workspace. This button is not visible to other users.

Routing Reasons

The system uses routing reasons to provide additional details about an email's routing history.

When the email process routes an email, it sets one of these routing reasons:

- *Routed*: The email is routed to a group worklist successfully. None of the other routing reasons apply.
- *Bypassed*: The email is routed to the mailbox's default worklist because the mailbox's automatic routing option was not selected.
- *Oversized*: The email is routed to the mailbox's default worklist because the system could not perform thread-based routing or content analysis on an oversized email.

Because of the way that the system stores the content of an oversized email, the email's body text is not available for thread analysis or content analysis. The Unstructured Email routing process can still perform customer-based and context-based routing on an oversized email, but if neither of these subprocesses routes the email, the system does not perform the content analysis subprocess. It sends the email directly to the mailbox's default worklist.

- *Encoding*: The email is routed to the mailbox's default worklist because of errors reading the email.

When users perform certain routing actions, the system sets these routing reasons:

- *Accepted*: A user has accepted the email, either explicitly or because the email belongs to a worklist that uses auto-acceptance.
- *Queued*: A user who accepted the email sends it back to the previous group worklist.

When users manually reassign an email to a group worklist, the drop-down list box for routing reasons includes all of the preceding values, as well as the these additional values. The business rules of the organization determine how these values are used:

- *Escalated*.
- *Misrouted*.
- *Overridden*.
- *Reassigned*.
- *Other*.

When you use *other*, you must include a comment to describe this routing reason.

Mailbox Reset for Email

If the system assigns an email to a mailbox by mistake, agents can initiate the mailbox reset functionality to remove all the mailbox-related data from the email. The email is then reprocessed by the ERMS system. When the reset is completed, a routing history entry is logged. The email workspace resets some data (for example, existing categorization, recommended actions, suggested solutions, and assignments and statuses that are not *New*) of that email so that the mail reader process can process it as if it's newly fetched from the email server. This type of email has a special status, and the mail reader process doesn't get it from the mail server but from within CRM because this type of email is already stored in the database. The processing is the same for new emails and those that are reassigned to different mailboxes. As a result of a mailbox reset, email workspace recomputes the external response time for the email so that the alert notification doesn't get fired prematurely.

Important! Exercise caution before using the mailbox reset functionality. Resetting involves the removal of some email data to complete the process and the operation, when finished, cannot be reverted.

Email Classification

Classification of emails is crucial when it comes to providing accurate recommendation of solutions and materials to resolve emails, and suggestion of correspondence templates to use in the email response.

Types of Classification Data

An email can be classified by:

- **Category:** a high level classification of an email (for example, problem, inquiry, or complaint).
- **Type:** a sub-categorization within a category (for example, within the problem category, types can be printer, monitor, or processor).
- **Product Group:** a high level product categorization.
- **Product:** a sub-categorization within a product group.
- **Mood:** the email sender's general disposition (for example, upset, neutral, or happy).
- **Priority:** the urgency of an email.
- **Language.**

The language of the email is based on the mailbox setting. After the email is accepted, the owner can update the language.

The classification data that appears on the Response page is always editable. If NLP is available for email processing, it returns suggested values for these classification fields, which are populated in the email accordingly. The email owner can modify any classification data when responding to the email. If NLP is unavailable, the email owner can enter classification values manually. Classification data is not required, but it helps the system to perform more effective searches on correspondence templates or solutions.

See [Chapter 6, "Setting Up Automated Mail Processing," Understanding Automated Mail Processing, page 77](#).

Classification Data Usage

Classification data is used in these areas:

- Recommending actions on the Email page based on the category selected for the email.
You establish the relationship between categories and recommended actions to perform for categories at the mailbox level.
- Suggesting solutions and documents on the Email page and the Search Solutions/Documents page.

NLP must be available for automatic suggestions of solutions and documents to occur.

- Searching for correspondence templates on the Response page based on the available classification data.

If NLP is available to suggest classification data for the email, you can view the score of each returned classification type on the History page.

Assistance

The email workspace provides a central area where agents can find ideas to resolve email issues. Before an email becomes available to the agent, it goes through a process that can return recommendations on actions and suggestions on solutions and documents (available with NLP). Agents can take the advice that is available on the email workspace, or reclassify the email to get new recommendations and suggestions.

There are three types of assistance: action recommendations, solution and document suggestions, and recent activities.

Action Recommendations

Emails get action recommendations based on their categories, which are retrieved either automatically by NLP or entered manually by agents. The system displays the recommended actions that are associated with the email category, as specified in the mailbox definition. Changing the category in the email workspace updates the recommended action list.

Email workspace delivers three recommended actions:

- Respond to sender: transfers to the Response page to compose the email response.
- Compose auto acknowledgement: transfers to the Response page and applies the auto-acknowledgement correspondence template that is specified in mailbox definition.

Note. You must specify a correspondence template in the mailbox definition to enable this auto acknowledgement action.

- Close as duplicate: cancels the email setting and updates the status to *closed - duplicate*.

Solution and Document Suggestions

Available only with the presence of NLP, suggested solutions and documents appear as a result of content analysis. The agent can select items from the solution and document lists, which are then placed in the content source list ready to be used in the email response. In addition, the agent can reclassify the email to refresh the lists or search for additional solutions and documents that are not on the lists.

Documents are defined using the correspondence template component. To make a document available for suggestion, select the Document check box and the *ERMS Response* usage in the template package where the template is selected.

Recent Activities

When this tab appears for the first time, it lists recent activities that pertain to the email sender (for example, cases that have been created under the sender or associated email correspondence). On this tab, the agent can:

- Create, search for different types of transactions (that are enabled to interact with ERMS), and associate them to the email.
- Search for other emails that are related to the email and associate them with it.

You establish a list of activities (transactions) that can be performed at the mailbox level, which becomes values of the Activity Type drop-down list box on the Recent Activities tab. In addition, set up the list of default activities that are retrieved every time that the email is opened. Agents can personalize the default activity list in the User Preferences page and select the type of activities that they want to see in the results grid. The user-level preference overrides the mailbox-level definition of default activities if the former is available.

When the agent replies to the email with transactions or emails selected from the list, it causes the automatic association of the selected items to that email. Among the list of enabled activities that are specified in the mailbox definition, the actual values that are available in the Activity List drop-down list box are filtered by what the sign-on agent is authorized to access. For example, if internal helpdesk agents do not have the permission to access *support* cases that are external-facing, they cannot create or search for support cases from the email workspace even if the activity is specified in the mailbox definition.

Note. The ability to create new transactions is unavailable if users don't have the permission to create that transaction.

The agent can search for and relate other emails to the current email, which changes the thread association. When the association occurs, only one outbound email can be selected at a time. If the outbound email has other threaded emails, the system updates their relationship with the current email as well.

See Also

Chapter 6, "Setting Up Automated Mail Processing," Understanding Automated Mail Processing, page 77

Chapter 5, "Setting Up ERMS System," Defining Mailboxes, page 65

PeopleSoft Enterprise CRM 9 Automation and Configuration Tools PeopleBook, "Setting Up Natural Language Processing," Understanding NLP

Content Sources

The email workspace collects information from content sources to build an email response. There are implicit content sources that provide data to construct some portions of the response in a template format, such as the agent information for the closing part, the sender information for the greeting part, and the email information for the email history part. As for the content of the reply, it comes from these explicit content sources:

- Transactions that are enabled for ERMS.

The concept of related transaction ensures that subinteractions are represented properly in the CRM system.

- Solutions.

Solutions are thread-wide attributes, which means that when they are associated with the current email, they are actually linked to every email in the thread. So adding a solution to an email at any level associates this content with the entire thread.

When the agent works on the current email and selects solutions or related transactions on the email workspace, the system is essentially collecting content sources that can potentially be used in the email response. Collected items appear in the Template Search section of the Response page. Email workspace uses the selected content sources to refine the list of templates that are available in the Template drop-down list box for the agent to select. The selected items are also used as the content of the response to which one or multiple templates apply.

Similar to solutions, the agent can search for documents on the email workspace to be part of the email response. Documents are defined using the correspondence template package component, and the behavior of selecting a document is slightly different from selecting a solution. When the agent adds a document to the proposed list, the system automatically populates the document in the Template drop-down list box, which the agent can apply to the response if applicable.

Solution and Document Search

Solutions and documents are the two types of materials that an agent searches for to resolve email issues. They are kept in separate repositories, although the ways to search for them are similar. When an agent performs a search, only one repository is searched at a time. The agent can set up email workspace preference to the default repository and other search options.

Autosuggestion is available with NLP. The email workspace presents a list of suggested solutions or documents (depending on the selected repository) when the agent accesses the Search Solutions/Documents page for the first time. The same list also appears on the corresponding tab within the Assistance group box on the Email page. The agent can select items from the lists and add them to the collection of attempted solutions and documents. This collection includes the content sources to be associated with the email and its response. Regardless of the presence of NLP, the agent can always perform a keyword search that is run by Verity. Set up user preference, select the default search mode (basic, advanced, or advanced with options), and additional search options (for example, word variation and number of search results to display).

Note. The email workspace prevents solutions and documents that have already been attempted from being added to the content sources list again.

Solution Status Update

After the agent sends the email response that is associated with solutions, the agent can come back to the email and update the solution status based on customer's feedback. The system populates the Attempted Solutions grid of the More tab on the Email page with a list of selected solutions that were attached to the reply. If the customer contacts the agent later on about that email and confirms how effective those solutions were in resolving the issue, the agent can update the solution status accordingly. The feedback is then submitted to the NLP system knowledge base for teaching and learning purposes.

See Also

Chapter 13, "Managing Email," Managing Inbound Email, page 207

Quick Action Buttons

The email workspace provides action buttons that enable agents to perform common email actions quickly. These buttons are context-specific; they appear in pages and sections where their operations are appropriate. These buttons represent generic email actions, such as *reply*, *reply all*, and *forward*, as well as other common actions that agents perform to resolve email issues. These common actions are subcategorized into these types:

- System-wide actions.

Examples of system-wide actions are *mark as spam* and *mark as duplicate*. When the agent clicks any of these actions for an email, the email workspace updates the email's categorization information (spam or duplicate email), closes it, and removes its entry from the agent's worklist automatically.

- Transaction actions that are defined at the mailbox level.

You can set up quick create action buttons for these types of CRM transactions to be created for emails if so configured: all types of cases, issues, orders and quotes, leads, opportunities, service orders, and service management objects. To minimize scrolling, PeopleSoft recommends that only one quick action button is specified for a mailbox. Scrolling is necessary if there is more than one transaction action button.

Note. If the agent clicks an action button to create a transaction, the same operation takes place if the agent accesses the Recent Activities tab in the Assistance group box on the Email page and creates the same transaction.

Related Transactions

Certain types of emails can be handled through a direct response—much as you might respond directly to someone who calls you on the phone. Other types of emails can be handled more effectively through other CRM transactions, such as cases or leads that provide full-featured handling of customer support issues or product inquiries.

Related Transaction Types

You can associate emails with these types of CRM transactions:

- Cases.
 - Support cases.

These include standard cases and cases that are specific to industry solutions.
 - Both PeopleSoft Help Desk and Help Desk for Human Resources cases.

If you use ERMS with either of these applications, pay attention when associating emails with cases. Associate email from external customers with support cases; associate email from internal employees with help desk cases.
- All types of captures in PeopleSoft Order Capture.
 - Orders and quotes (both standard and specific to the insurance solution).
 - Service management, start service, stop service, and transfer service transactions.
 - Product application.
- Leads.
- Opportunities.
- Service orders.

You can relate an email to an existing transaction or create a new transaction. For example, if a customer sends an email with a support question, you can create a new case for that customer. If the customer later sends another email related to the question, you can relate the new email to the case that you already created. (If the new email is threaded with the original email, the system automatically carries over the case relationship to the new email.)

When you relate an email to an existing transaction, the system displays the appropriate search page for the transaction type that you select.

When you create a new transaction, the system saves the inbound email before transferring to the new transaction. You can create new transactions only if the email sender is fully identified; otherwise, the system gives an error and does not create the transaction. One way to verify this is by looking at the toolbar summary area. If the sender and the representing values appear as active links, that means the system has successfully identified the sender. If they are inactive, you must complete the identification manually before you can create transactions. For external mailboxes (in which case the email sender is a customer), the system gives an error and does not create transactions if the setID of the customer does not match the setID that is associated with the business unit of the mailbox.

When creating new leads, opportunities, and service orders, the system does not transfer data from the inbound email into the new transaction. Other types of transactions, however, include some default data that comes from the email (unless the default values are invalid for the user's default business unit). For example, the system populates the email sender information, subject, and body to new cases, and email sender to orders and quotes.

When possible, the system uses data from the email as the default data on the search page and in new transactions. In particular, the business object associated with the email is the default contact, whether you search for an existing transaction or create a new one.

Note. Access to secured cases in PeopleSoft Help Desk for Human Resources is available only to users who are members of the provider group to which the case is assigned. Users, who do not have this access, do not have secured cases available to them when they associate emails with cases. If a secured case is already associated with the email, users who do not have access to the case cannot see the case subject or access the case details.

Security for Related Transactions

The security profile of users controls their abilities to associate transactions with an email. For example, an agent who has security access to the support case component can also associate emails with support cases. In addition, the ability to relate or create transactions for an email comes from its mailbox. You specify at the mailbox level which CRM transactions agents can associate with and create for its emails in the Assistance group box on the Email page.

Because all types of captures use the same component, a user who has access to the component can create orders, quotes, and the various service-related transactions used in the industry solutions.

Email Replies

Agents reply to an inbound email through:

- The Response page of the email workspace.

This page is used when the agent reviews an inbound email from the email workspace and wants to reply to it. The agent can respond to an email by accessing the Response page within the *same* component. Or, when the agent works on a transaction and wants to reply to an email that is associated with the transaction, the Response page for the selected email appears.

- The Outbound Email component.

This page is used when the agent works on a transaction and wants to create an email from that transaction (not responding to any email).

The Outbound Email page is also used to view sent emails. Email approvers can access this page to approve emails from agents whose emails require approval before delivery.

These pages function in a similar fashion. They enable agents to:

- Compose a message using predefined correspondence templates or free-form text.
- Address the email and select the delivery channel (email or worklist) for each recipient.

Normally, one sends the reply to the same address from which the inbound email was received, but if the agent copies other agents on the reply, the copies can be sent to those agents' worklists.

- Send the reply immediately or schedule it for future delivery.

An agent who is associated with an approver (on the Agent Setup page) must, however, submit the reply for approval instead of sending it. The system sends the reply only after the approver approves it.

See Also

[Chapter 15, "Working with Supervisor Desktop," Approving Emails, page 258](#)

PeopleSoft Enterprise CRM 9 Automation and Configuration Tools PeopleBook, "Sending Manual Notifications"

[Chapter 13, "Managing Email," Replying to Inbound Email, page 226](#)

Email Status Tracking

After an email arrives in a group worklist, its status is shown in the Status field. The agent assigned to the email can manually change its status on the email workspace. The system automatically updates an email's status when certain actions occur.

Note. The agent-facing email status is different from the process status that ERMS processes use.

See [Chapter 4, "Understanding ERMS," Email Process States and Incompletely Processed Email, page 36](#).

Email Statuses

There are three types of email status sets:

- Editable email status.

This status set includes statuses that agents can update. This status set is available on the Email page under the Email Details section. Values are:

- Open.
- Closed - Response.
- Closed - Canceled.
- Closed - Duplicate.
- Closed - Auto Response.

- System email status.

This status set is maintained by the system and is not editable by agents. This status set is available on the toolbar summary area and the Message Detail page. The system email statuses are used in the interaction tree of 360-Degree View. This table lists the values:

Status	Description
New	The email process assigns this status after routing the email to a group worklist but before the email is assigned to an agent. It sets this status for the email automatically.
Processing	This status is used to indicate that the system has not finished processing this email and cannot be accepted until the system has completed its work.
Reassigned	The email is manually routed to a group worklist (either by requeuing or reassigning it), and it is not currently assigned to a specific user.
Assigned	The email has been assigned to a specific user, but no reply has been sent. The system sets this status when the email is assigned to an individual, regardless of whether the user explicitly accepts the email or the assignment occurs by auto-acceptance.

Status	Description
Completed	A user has handled the email and replied to it if necessary. The email workspace automatically closes the email after the user has submitted a reply on the Response page.
Canceled	No action was required, and no reply was sent. Users can cancel email from the email workspace.

- Process state.

Process states are statuses that the mail processor assigns to emails. The mail reader process refers to the process state of emails when resending them through the system. Process states are available on the Message Detail page. Values are:

- *Email Instance Created.*

- *Queue for Routing.*

The email is processed by the mail reader process but is not yet processed by either the mail route process (based on type of email).

- *Auto Responded by System.*

The mail process responded to the email automatically.

- *Email Routed.*

The email is routed to a group worklist and is ready for to be processed by the agent.

- *Mailbox Forwarding.*

The mailbox reset functionality is performed.

The system enables you to close an email (as completed or canceled) whether or not any replies are sent. Normally, however, an email is closed after a reply is sent. If you suspect that additional correspondence is necessary to resolve an issue, you can use the email to create an appropriate related transaction, such as a case. The same set of values are used in interactions to represent email statuses.

See [Chapter 13, "Managing Email," Reviewing Email Message Properties, page 218.](#)

Email Status and Worklists

When viewing only ERMS worklist entries (and not ERMS alerts or all transactions), the worklist grid displays the email status; this makes it easy to see which emails are closed and to remove them all from the worklist at the same time. Sort the worklist grid by status to see which worklist entries can be marked complete.

The system prevents you from marking an ERMS worklist entry complete if the underlying email is not closed. This ensures that every email remains on a worklist until it is closed. (However, if you reopen an email after removing its worklist entry, the worklist entry is still marked complete. Do not rely on the worklist when working with reopened email.)

Reply Deadlines and Notifications

ERMS mailboxes and ERMS group worklists have a warning notification time period and a final notification time period. These are optional for group worklists but required for mailboxes. The ERMS alert processes trigger notifications based on these time periods. The system sends notifications if an email is still open at the notification deadline.

Note. Replying to an email does not prevent the system from sending the alert notifications. Although an email is automatically closed when its owner performs a response, the agent can reopen the email. Notifications occur if the editable email status on the Email page is *open* at the scheduled notification time.

The system sends notifications to the group worklist owner if the email is associated with a group worklist; otherwise, the notifications are sent to the mailbox owner. Email alerts are always sent to worklists, never to queues.

When filtering a worklist by transaction type, the email notifications appear under the ERMS Alert type (unlike email assignments, which belong to the ERMS type).

Warning notifications alert the recipient that the organization may miss a deadline, and final notifications alert the recipient that the deadline has arrived. Worklist notifications are calculated from the date and time that the worklist receives the email. If the email is reassigned to a different group worklist and then back to the original group worklist, the notifications are based on the most recent arrival time. Assignment of an email to an individual worklist does not affect the deadlines—nor does requeuing an assigned email back to its group worklist.

Worklist-level deadlines change as an email is reassigned to different groups. The deadlines represent the service organization's internal standards for timely replies.

Mailbox notifications are calculated from the time that the email enters the system. If the PeopleTools email table has a record of the time that the mail server received the email, that time is used. When the mail server data is unavailable (for example, POP3 mail servers do not provide this data), the system uses the time that the email was first saved in the PeopleSoft database. The delay between the time the mail server receives the email and the time that the email is saved in the PeopleSoft database depends on how often the mail reader process polls the mailbox.

Mailbox-level deadlines do not change as the email is reassigned to different groups. The deadlines represent the organization's external commitments for timely replies. The mailbox reset operation, however, can affect the mailbox-level deadlines. The new deadlines are computed based on the time that the email entered the system, not when the mailbox reset operation was performed.

The mailbox-level final notification time represents the final deadline for replying to the email. This deadline is the only one of the four notifications times that is visible on the toolbar; it is considered the email's due date.

All time periods are calculated using a 24-hour clock, without regard to the organization's business hours. The warning dates and due dates (both internal and external) for these notification alerts are available on the Message Details page.

See Also

PeopleSoft Enterprise CRM 9 Automation and Configuration Tools PeopleBook, "Setting Up and Using Worklists," Worklists and Queues

[Chapter 4, "Understanding ERMS," The Email Alert Process, page 33](#)

PeopleSoft Enterprise CRM 9 Automation and Configuration Tools PeopleBook, "Setting Up and Using Worklists"

System Information for Email Messages

Email workspace provides information that helps administrators to diagnose issues with emails from a system perspective. Similar to viewing the *message source* or *message properties* in other email systems, administrators can view email data that comes from CRM and PeopleTools in the Message Details page. System information includes the email status, state for the corresponding application engine process, email routing and assignment information, internal and external warning deadlines, message header details, and various parts that constitute the email.

See Also

[Chapter 13, "Managing Email," Reviewing Email Message Properties, page 218](#)

Accessing Inbound Email

This section discusses how to:

- Access inbound emails from the Multichannel Toolbar.
- Access inbound emails from My Worklist.
- Access inbound emails from the main navigation.

Note. You can also access an inbound email by using an interaction list (for example, from the 360-Degree View or in a transactional component's interaction history page) and on the Thread page of another email that belongs to the same thread.

See Also

PeopleSoft Enterprise CRM 9 Application Fundamentals PeopleBook, "Working with Interactions"

Enterprise PeopleTools PeopleBook: PeopleSoft MultiChannel Framework

Pages Used to Access Inbound Email

Page Name	Definition Name	Navigation	Usage
My Worklist	RB_WF_WORKLISTS	My Worklist, Worklist	View emails that belong to either an individual worklist or a group worklist that is associated with the user.
Search Inbound Email	RB_EM_IB_SRCH	Correspondence, Search Inbound Emails, Search Inbound Email	Search for an inbound email and access detailed information about it.

Accessing Inbound Emails from the Multichannel Toolbar

Access the Multichannel Toolbar.

Users must be configured as multichannel agents to access the multichannel toolbar. After an agent logs onto a multichannel queue from the toolbar, any incoming email task that is routed to this queue becomes available for acceptance. The system brings up the email workspace when the agent accepts the email, either manually or automatically.

Accessing Inbound Emails from My Worklist

Access the My Worklist page.

Worklist entries are associated with a specific worklist. Inbound emails that you have accepted appear in your individual worklist. Emails that have not been accepted appear in group worklists. Notifications related to email deadlines appear in the individual worklist of the group worklist owner or, if the email was never assigned to a group worklist, in the individual worklist of the mailbox owner.

Worklist entries are also categorized by transaction type:

- Inbound email worklist entries are in type *Email*.

These entries represent email assignments; they are created when an email is assigned to a worklist.

- Notifications related to deadlines are in type *Email Alert*.

See Also

PeopleSoft Enterprise CRM 9 Automation and Configuration Tools PeopleBook, "Setting Up and Using Worklists"

Accessing Inbound Emails from the Main Navigation

To access inbound emails from the main navigation, use the Search Inbound Emails (RB_EM_IB and RB_EM_IB_SRCH) components.

Access the Search Inbound Email page.

Search Inbound Email

Use Saved Search

Sender

begins with

Representing

begins with

Alt Char Name

begins with

From Email Address

begins with

Mailbox ID

begins with

Date Received

=

31

Time

Date Due

=

31

Time

Subject

begins with

Assigned To

=

Group

=

Detail Status

=

Email Status

=

Closed Date

=

31

Time

Search

Clear

Advanced Search

Save Search Criteria

Delete Saved Search

Personalize Search

Search Inbound Email page (1 of 2)

Email Status = NEW

Search Results

Customize | Find | View All

First 1-41 of 41 Last

General	Email Addresses	Subject	Assignment	Status	Structure
Email ID	Date Received	Sender Name	Representing	Alt Char Name	Date Due
13	02/15/2006 5:11PM	Alice Anderson			02/17/2006 5:10:26PM
14	02/15/2006 5:12PM	Jim Jacobs	M.M.A.		02/17/2006 5:11:56PM
15	02/15/2006 5:12PM	James Jacobs	Media Mogules Associates		02/17/2006 5:12:01PM

Search Inbound Email page (2 of 2)

You can control the behavior and appearance of this page using the CRM search configuration utility. The search criteria fields and search results fields are the same as the identically named fields in the email workspace. Click each page within the search results grid to view corresponding values of the emails that return.

See Also

PeopleSoft Enterprise CRM 9 Automation and Configuration Tools PeopleBook, "Configuring Search Pages," Configuring Searches

Working with Inbound Email

This section provides an overview of the email workspace toolbar and discusses how to:

- Use the email workspace toolbar.
- Manage inbound email.

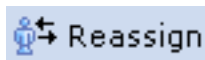
- Preview selected documents.
- Preview selected solutions.
- Find solutions and documents.
- Review email event history.
- Review email routing history.
- Review email audit history.
- Review email content analysis scores.
- Review email message properties.
- Review thread information.
- Reassign an email.
- Add email notes.
- Personalize email workspace.
- Submit email to another mailbox.

Understanding the Email Workspace Toolbar

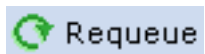
Toolbars are configurable and customizable. In addition, you can give end-users the ability to personalize their toolbars.

See *PeopleSoft Enterprise CRM 9 Automation and Configuration Tools PeopleBook*, "Configuring Toolbars".

PeopleSoft Enterprise CRM delivers these buttons for the email workspace:



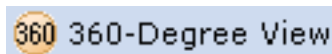
Click the Reassign button to access the Select Worklist page and select a group or individual worklist to which the email reassigns.



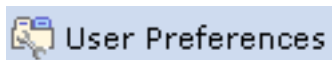
Click the Requeue button to cancel the email's current assignment and return the email to the group worklist. This action is not available to unassigned emails.



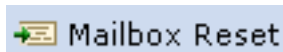
Click the Accept button to take ownership of an unassigned email. This action is available to any member of the email's group worklist. The system moves the corresponding worklist entry to that person's individual worklist, and several fields in this component become editable.



Click the Accept button to navigate to the sender's 360-degree view. The system determines which 360-degree view to display based on the type of mailbox that the email was sent to (external, internal, internal human resources, or partner) and the role of the person who accesses the 360-degree view.



Click the User Preferences button to access the Email Workspace User Preferences page to personalize the email workspace default behavior on sending responses, available activities to display and keyword search.

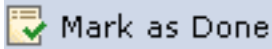


Click the Mailbox Reset button to send the email through ERMS for reprocessing, if the email was sent to the current mailbox by mistake. The system retrieves the email from within the CRM database, not from the mail server. Before the email is being reprocessed, the system removes any

mailbox-related information from it (for example, activities, language setting, business unit, business object searching, and content analysis information).

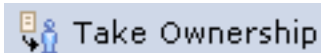


Click the Text Tray button to create personal quick keys or use available public quick keys.



Click the Mark as Done button to remove the completed email from the task list of the Multichannel Toolbar.

This button appears when an email that was sent to the agent through the Multichannel Toolbar was closed outside of the browser window that is controlled by the Multichannel Toolbar. In other words, the email was responded to or closed on some other page (for example, the Search for Inbound Emails page, My Worklist, the History page on a related transaction, the Thread page of an outbound email and so on). In this case, the email remains on the agent's Multichannel Toolbar task list. If the email is opened from Multichannel Toolbar and it was closed previously on another page, the Mark as Done button appears in the Toolbar to allow the email to be removed from the task list.



Click the Take Ownership button to accept the email, which is currently assigned to another member of the same group worklist.

Taking ownership is similar to the accepting an email. The difference is that an agent clicks the Take Ownership button to take over an email that has been assigned to someone else in the same group worklist (in this case, the Accept button is unavailable). The agent clicks the Accept button to take over a new email that has not been unassigned to anyone (in this case, the Take Ownership button does not appear).



Click to spell check the subject and message body of the email response.

Go To

Select *Actions Taken*, *Routing History*, *Audit History*, or *Content Analysis Scoring* to navigate to a view of the History page.

The area beneath the toolbar button displays summary information about the email, which includes the email sender, email status, and the computed email due date. This date is based on the mailbox-level final notification time period.

If the final notification time period for the email's mailbox is two days, then the due date is two days after the email was received.

The customer value comes from PeopleSoft Enterprise Performance Measurement. This customer value appears if the sender is a consumer or the representing value is either a company or consumer.

See *PeopleSoft Enterprise CRM 9 Automation and Configuration Tools PeopleBook*, "Configuring Toolbars," Delivered Common Toolbar Buttons.

See *PeopleSoft Enterprise CRM 9 Automation and Configuration Tools PeopleBook*, "Working with the Text Tray," Understanding the Text Tray.

Common Element Used in This Section

Select

Click to select one or more documents or solutions and click the Add Selection(s) to Proposed List button to add them to the Proposed Solutions/Documents group box on the Search Solutions/Documents page.

Add Selection(s) and Reply	<p>Click to access the Response page, where solutions or documents that are currently selected in a grid are appended to the message area automatically as part of the email response.</p> <p>However, if the email response has been modified before this button is clicked, the system will not add selected items automatically; agents need to do so manually if deemed necessary. In addition to appending selected solutions and documents to the email response, the system also applies the history setting, as well as the greeting and closing templates to the email message as configured in the mailbox definition.</p> <p>The system adds these solutions and documents to the list in the Proposed Solutions/Documents group box on the Search Solutions/Documents page. Added documents are also available in the Template field on the Response page.</p> <p>If no preselected documents or solutions are available, clicking this button transfers agents to the Response page.</p>
Add and Reply	<p>Click to transfer from a solution or document preview page to the Response page. The system appends the solution or document that is being viewed currently to the email response.</p> <p>The logic behind the Add and Reply and the Add Selection(s) and Reply buttons is identical. The difference is that the former handles a single selection whereas the latter can handle multiple selections simultaneously.</p>
Add Selection(s) to Proposed List	<p>Click to add the solutions or documents that are currently selected in a grid to the list in the Proposed Solutions/Documents group box on the Search Solutions/Documents page.</p>
Add to Proposed List	<p>Click to transfer to the page from where the solution or document link was clicked. The system adds the solution or document that is being viewed currently to the list in the Proposed Solutions/Documents group box on the Search Solutions/Documents page.</p> <p>The viewed item is not yet part of the email response.</p>
View Selection(s)	<p>Click to view selected solutions or documents on the corresponding preview page.</p> <p>If agents select multiple items to view, the preview page provides the Previous and Next buttons for them to navigate from one item to the next.</p>
Return to Email	<p>Click to close the solution or document preview page and transfer to the Email page.</p>

See Also

[Chapter 13, "Managing Email," Managing Inbound Email, page 207](#)

[Chapter 13, "Managing Email," Previewing Selected Documents, page 212](#)

[Chapter 13, "Managing Email," Previewing Selected Solutions, page 213](#)

[Chapter 13, "Managing Email," Finding Solutions and Documents, page 213](#)

Pages Used to Work with Inbound Email

Page Name	Definition Name	Navigation	Usage
Email	RB_EM_IB89	<ul style="list-style-type: none"> Correspondence, Search Inbound Emails, Email My Worklist, My Worklist <p>Click the email ID link for a worklist entry of type <i>Email Alert</i>.</p> <ul style="list-style-type: none"> Click the node for an inbound email interaction on any 360-Degree View or pages where interactions are listed. 	Manage an email that you have accepted. You can start working on the email, requeue it to its original group worklist, or reassign it to another group worklist.
Document Viewer	RB_EM_DOC_VIEWER	Click a document link on the Email page, the Response page, or the Search Solutions/Documents page.	Preview document content, add a document to the proposed list, and reply to the email with the document as an attachment.
Solution Viewer	RB_EM_SOL_VIEWER	Click a solution link on the Email page, the Response page, or the Search Solutions/Documents page.	View solutions, add a solution to the proposed list, and reply to the email with the solution. If the solution is associated with notes, attachments, or other solutions, the system uses the Solution component to display complete solution information.
Search Solutions/Documents	RB_EM_IB_SEARCH	Correspondence, Search Inbound Emails, Search Solutions/Documents	Search for solutions and documents to help resolve an email.
History	RB_EM_IB_HIST	Correspondence, Search Inbound Emails, History	Review an email's event history, routing history, audit trail, and content analysis scores.
Message Details	RB_EM_IB_MESSAGE	Correspondence, Search Inbound Emails, Message Details	Review email message properties.
Thread	RB_EM_THREAD	<ul style="list-style-type: none"> Correspondence, Search Inbound Emails, Thread Correspondence, Search Outbound Emails, Thread 	Review an email's thread information. You cannot modify the thread information in the Outbound Email component. As for inbound emails, you can modify the information modified on the Recent Activities tab under the Assistance section on the Email page.

Page Name	Definition Name	Navigation	Usage
Note	RB_EMAIL_NOTE	<ul style="list-style-type: none"> Correspondence, Search Inbound Emails, Note Correspondence, Search Outbound Emails, Note 	Enter and view email notes.
Email Workspace User Preferences	RB_EW_PREFERENCE	Click the User Preferences toolbar button on the email workspace.	Personalize the email workspace.
Mailbox Reset	RB_EM_MBXFORW_SBP	Click the Mailbox Reset toolbar button on the email workspace.	Submit emails to another mailbox. This functionality resets most data of the email before sending it back to the ERMS system for reprocessing.
Select Worklist	RB_EM_IB_RAS_SEC	Click the Reassign button on the toolbar.	Reassign an email to a another group or individual worklist.

Managing Inbound Email

Access the Email page.

The screenshot displays the 'Email Workspace' interface. At the top, there is a navigation bar with buttons like 'Save', 'Search', 'Next', 'Previous', 'Spell Check', 'Reassign', 'Requeue', '360-Degree View', and 'User Preferences'. Below this, the email header shows the sender as 'Angela Augustine' from 'Angel Co.' with a status of 'Assigned' and a due date of '06/05/2006 6:27:34AM PDT'. The email body contains a message from 'ermsqa@hotmail.com' to 'Cameras' with the subject 'Need information about SR1015'. The message text reads: 'I am planning ot buy the Dishwasher bearing Model# SR1015. Can you please send me some literature about it?'. To the right, the 'Email Details' section shows fields for Status (Open), Category (Problem), Product Group, Mood (4-Neutral), Priority (3-Normal), and Type (Hardware). Below this is an 'Assistance' section with tabs for 'Recommended Actions', 'Suggested Documents', 'Suggested Solutions', and 'Recent Activities'. The 'Suggested Documents' tab is active, showing a list of documents with columns for 'Select', 'Score', 'Package Name', 'Summary', and 'Last Modified'. Two documents are listed: 'AMP Auto Response' and 'Auto Acknowledgement'. At the bottom, there are buttons for 'Add Selection(s) to Proposed List', 'Add Selection(s) and Reply', and 'View Selection(s)'.

Email page

Email Message

This group box displays basic information and the content of the inbound email. It appears on the Email page, the Response page, and the Search Solutions/Documents page to provide persistent email information wherever agents perform research.

Received On	Displays the date and time when the email was either received by the mail server or the date and time when it was saved into the database (if the received date is not populated, as in the case of POP3). These date and time values are the basis for the external response time alert computation. This group box is also used to compute the elapsed time for the email.
Elapsed Time	Displays the days and hours that have passed since the date and time that are specified in the Received On field until the email is closed. The system changes the email status to closed after a response has been submitted.
From	Displays the address from which the email was sent. The system uses this email address to identify the sender when an email arrives in the system.
To	Displays the name of the mailbox to which the email was sent. The Cc field appears if the incoming email has a Cc email list.
Subject	Displays the subject of the email as specified by the sender. If the email doesn't have a subject, ERMS populates the standard no subject phrase as defined on the System Installations page.
Wide View of E-mail Body	Click to access the E-mail Viewer page (RB_EM_TEXT_VIEWER) to view the email on a full page. You can edit the content from the full page view, but changes are not saved to the system.
Attachment	Click to view a list of attachments (in active links) for the email, if available. Files that were originally sent as attachments retain their original file names. Attachments that PeopleTools creates when it transfers the email from the mail server to the PeopleSoft system have the generic name <i>attachment</i> .

Email Details - Main

This group box contains two tabs: Main and More.

The Main tab displays the email's status that agents work with. If NLP is installed and suggestions are available, the system prepopulates the categorization information accordingly. Agents can update these values manually.

The system provides action buttons to perform common email functions quickly. You can define these action buttons at the system or mailbox level.

Status	Displays the status of the email: <i>Open</i> , <i>Closed - Auto Response</i> , <i>Closed - Canceled</i> , <i>Closed - Duplicate</i> , and <i>Closed - Response</i> .
Priority	Specify a priority for the email if NLP or a suggested value is unavailable. Establish priorities on the Priority Setup page.
Category and Type	Specify a category and a type within that category for the email if NLP or suggested values are unavailable. Establish categories on the Category Setup page; establish types on the Associate Types page.

Product Group	Specify an appropriate product group for the email if NLP or a suggested value is unavailable. Establish product groups on the Product Group page.
Product	Specify an appropriate product for the email if NLP or a suggested value is unavailable. Establish products on the Product Definition page.
Mood	Specify mood for the email if NLP or a suggested value is unavailable. Establish moods on the Mood Setup page.
Reply, Reply All, and Forward	<p>Click to access the Response page to send a reply or forward the inbound email to others.</p> <p>The operations of these buttons are the same, with several exceptions:</p> <ul style="list-style-type: none"> • The Reply operation populates only the To field with the email address of the inbound email sender. The email subject includes the prefix <i>RE:</i>. • The Reply All operation populates the To and Cc fields (not the Bcc field) with the email address of the inbound email sender and other recipients. The email subject includes the prefix <i>RE:</i>. <p>The Reply All button appears if the incoming email has a Cc list.</p> <ul style="list-style-type: none"> • The Forward operation does not populate the To, Cc, or Bcc field. You can click the Add/Modify Recipient List link to select appropriate recipients. The email subject remains the same, and the body of the inbound email is not populated as part of the email response.
Mark as Spam	Click to label the email as spam mail; the email closes automatically.
Mark as Duplicate	Click to mark the email as a duplicate mail; the email closes automatically.
Create New <CRM transaction>	<p>Click to create a new CRM transaction for the email. Specify the quick create action buttons in the Mailbox Activity List page of the mailbox definition. Enable only one quick action button for a mailbox to avoid scrolling.</p> <p>Agents who need to create these transactions must be given the permission to add them in advance. Otherwise they cannot create any transactions for the email.</p>

See *PeopleSoft Enterprise CRM 9 Product and Item Management PeopleBook*, "Setting Up Products," Defining Products; *PeopleSoft Enterprise CRM 9 Automation and Configuration Tools PeopleBook*, "Setting Up Correspondence Templates," Defining Template Categories and Types and [Chapter 5, "Setting Up ERMS System," Defining Priorities and Moods, page 73](#).

Email Details - More

The More tab displays customer information. This tab also lists any CRM transaction that the email is associated with or any solution that the email has attempted to resolve its issue.

Business Unit	Displays the email business unit that is specified in the mailbox definition. The email business unit cannot be updated; the only way to change this value is to perform the mailbox reset functionality and associate it with a mailbox that has the desired business unit setting. You cannot create transactions from the email if the setID of the email business unit does not match the sender's setID.
Language	Displays the language to be used to handle the email. You can modify the value if the system identifies the language incorrectly.

Sender	Displays the sender of the email. If you select a different sender, the system automatically updates the corresponding value in the toolbar summary area. The role of the sender is shown if the selected sender has more than one role. You must identify the sender completely (by specifying the sender role) before attempting to create transactions.
Representing	Displays the company or consumer that the sender represents. If you modify the value here, the system automatically updates the corresponding value in the toolbar summary area. This field applies to external and partner mailboxes and still appears in the toolbar summary area even if the value is unavailable. <hr/> Note. If the sender is associated with more than one representing entity, and later some of these relationships are deactivated in the system, these relationships don't expire immediately; instead, they expire at the end of the day (that is, midnight). <hr/>
Related Transactions	Displays CRM transactions that are selected on the Response page to associate with the email, if available.
Attempted Solutions, Status, and Update Solution Status	Displays solutions that are associated with the email. This grid appears after the email response, including selected solutions, is sent. Agents can update the solution status based on customer's feedback. The result is then submitted to the NLP system knowledge base for teaching and learning purposes. For example, if the customer sends a reply and confirms that the solution resolves the issue, the agent can select the solution and change its status to <i>successful resolution</i> . If the solution doesn't solve the issue, change the status to <i>failed resolution</i> instead. Click the Update Solution Status button to submit the result to the NLP system.

See [Chapter 5, "Setting Up ERMS System," Defining System Settings for Email Processing, page 52](#); [Chapter 13, "Managing Email," Email Sender Identification, page 185](#) and [Chapter 13, "Managing Email," Quick Action Buttons, page 194](#).

Assistance

This group box provides agents suggestions to resolve issues raised in emails. Possible suggestions include activities, solutions, and documents.

The Recommended Actions tab contains a list of recommended actions for the agent to perform. The list is based on email category.

Select	Click to perform the corresponding activity. The list is short, and most recommended actions are related to replying email.
---------------	---

Suggested Documents

This section contains a list of suggested documents recommended by NLP. The fields listed here appear if the system returns suggested documents.

Score	Displays the relevance score for each returned document listed in the grid.
Package Name	Displays the correspondence package.
Summary	Displays the link of the document. Click to access the corresponding document setup on the E-mail Template Text Previewer page.

Search for More Documents and Search for Documents

Click to find additional documents using keyword search. It transfers agents to the to the Search Solutions/Documents page in the *document* search mode.

The Search for Documents link appears if there's no suggested documents.

See [Chapter 13, "Managing Email," Common Element Used in This Section, page 204](#).

Suggested Solutions

This section contains a list of suggested solutions recommended by NLP.

Score

Displays the relevance score for each returned solution listed in the grid.

Summary and Library Name

Displays the link of the solution and the library to which it belong. Click to view the solution in detail in a new browser window.

Search for more Solutions and Search for Solutions

Click to find additional solution using keyword search. It transfers agents to the Search Solutions/Documents page in the *solution* search mode.

The Search for Solutions link appears if there's no suggested solutions.

See [Chapter 13, "Managing Email," Common Element Used in This Section, page 204](#).

Recent Activities

This section contains a list of most recent activities that are associated with the sender of the email.

Activity Type

Select the CRM transaction to relate to or create for the email:

- *Emails.*

When you click Refresh, the system returns inbound emails and outbound emails that are associated with the sender. You can see other recent email conversations and modify thread association if needed. If no matches return, you can click the Search Outbound Emails link to find emails using other search criteria. When the Search for Outbound Email page appears, you can find and select the current email's parent in the email thread, which causes the thread association to update accordingly. The current email inherits all of the selected parent's related transactions.

Note. Use the Search Outbound Emails link only if you want to change the thread association of the current inbound email with another outbound email.

- CRM transactions that are enabled in the Mailbox Activity List page of the mailbox definition.

When you first access the Recent Activities tab, the Activity Type field is blank. Select an activity type and click Refresh to retrieve transactions of that type that are created under the sender's name and the email business unit. If no matches are found, you can click the Full Search link to access the search page and find the corresponding transaction using other search criteria. The email business unit does not limit the type of activities that you enable at the mailbox level.

You can configure each enabled activity type to support the create new functionality, which enables agents to create new activities (and associate them with the email) by clicking the Create New link on the Recent Activities tab.

Note. You cannot relate duplicate transactions to an email.

After you create and save the new transaction, you can return to the Email page using the History drop-down list box that is available on the transaction's toolbar. You can also use the new transaction's interaction list, which automatically includes the original email.

If agents set up their personalized activity lists on the Email Workspace User Preferences page, this setup overrides the default activity list, which is what appears when the Activity Type drop-down list box is empty (it is the default behavior when you enter the component initially).

Rows to Retrieve

Enter the maximum number of rows to return for the selected activity type, if search matches are found.

See Also

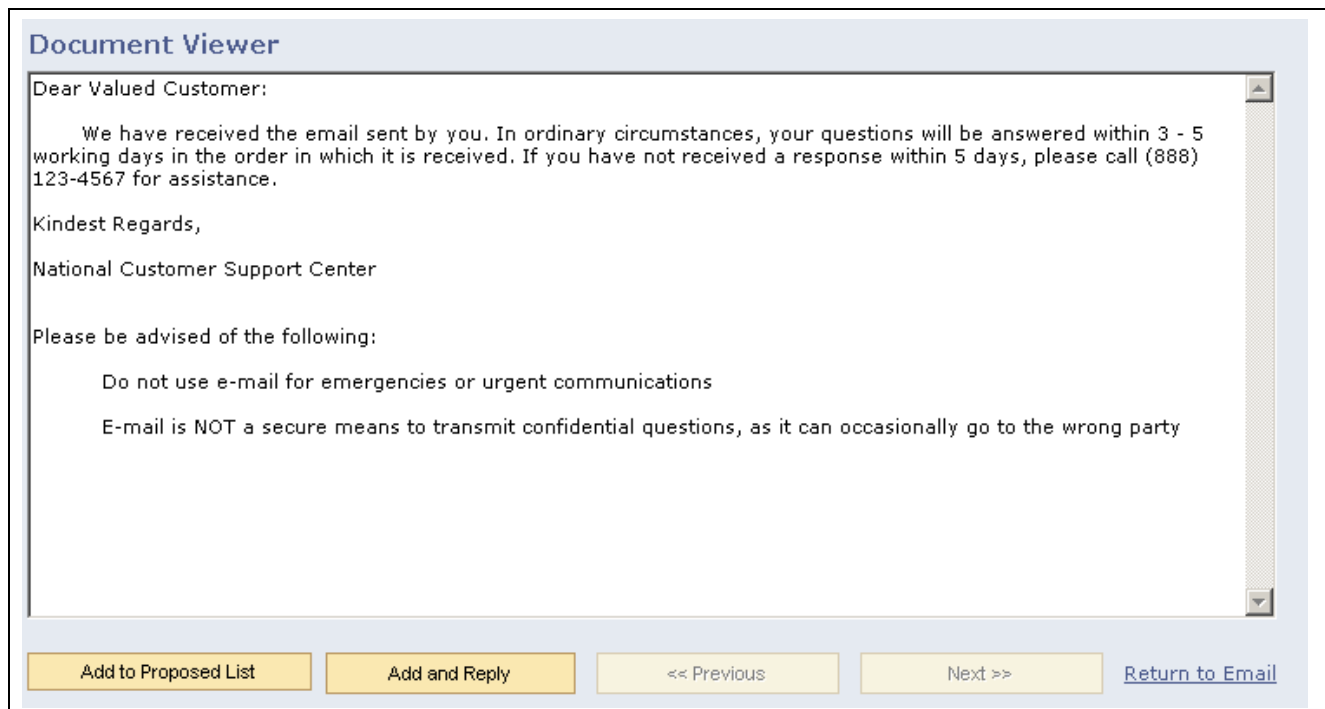
[Chapter 13, "Managing Email," Assistance, page 192](#)

[Chapter 13, "Managing Email," Content Sources, page 193](#)

[Chapter 13, "Managing Email," Solution and Document Search, page 194](#)

Previewing Selected Documents

Access the Document Viewer page.



Document Viewer page

See [Chapter 13, "Managing Email," Common Element Used in This Section, page 204](#).

Previewing Selected Solutions

Access the Solution Viewer page.

Solution Viewer

Solution ID 10
Type Standard Solution
Status 4 - Active
Visibility All
Summary How to fix dishwasher leaks.
Keyword or Phrase
Symptoms The Dishwasher is leaking.
Details Your dishes are probably blocking the spray arm from rotating, causing it to spray too much water toward the door. Also make sure the unit's door is closing freely, that your detergent is fresh and that you are not using too much detergent

Solution Library CRM1
☐ F.A.Q.

Metrics

Usage Count
0

Solved Count
0

Date Created
04/03/2001 9:12AM PDT

Date Modified
04/03/2001 9:12AM PDT

Solution Libraries

[Solution Details](#)

Modified 04/03/2001 9:12AM PDT MG634

Add to Proposed List

Add and Reply

<< Previous

Next >>

[Return to Email](#)

Solution Viewer page

See [Chapter 13, "Managing Email," Common Element Used in This Section, page 204](#) and *PeopleSoft Enterprise CRM 9 Services Foundation PeopleBook*, "Using Solutions," Searching for Solutions.

Finding Solutions and Documents

Access the Search Solutions/Documents page.

Email Workspace

Save Search Next Previous Spell Check Reassign Requeue 360-Degree View User Preferences Personalize

Sender: [Angela Augustine](#)
 Representing: [Angel Co.](#)
 Group: CameraDefaultWL
 Closed On

Status: Assigned
 Due Date: 06/05/2006 6:27:34AM PDT
 Assigned To: Jose,Patrick

Email Response Search Solutions / Documents History Message Details Thread Note

Go To: Select One...

Email Message

Received On: 05/31/2006 6:27:34AM PDT
 Elapsed Time: 0 days 2 hours 50 minutes
 From: ermsqa@hotmail.com
 To: Camaras
 *Subject: Need information about SR1015

I am planning to buy the Dishwasher bearing Model# SR1015. Can you please send me some literature about it?

Wide View of E-mail Body

Attachments

No Attachments are associated with this Email.

Proposed Solutions / Documents

Select	Type	ID	Summary	Last Modified
<input checked="" type="checkbox"/>	Solutions	10	How to fix dishwasher leaks.	04/03/2001 9:12AM PDT

Reply Forward

Search

*Search For: Documents Search Auto-Suggestions

Suggested Documents Customize Find First 1-2 of 2 Last

Select	Score	Package Name	Last Modified
<input type="checkbox"/>	57.00	AMP Auto Response	05/05/2004 10:05AM
<input type="checkbox"/>	57.00	Auto Acknowledgement	04/30/2004 7:57AM

☒ Select All ☐ Clear All

Add Selection(s) to Proposed List Add Selection(s) and Reply View Selection(s)

Search Solutions/Documents page

This page is available regardless of the presence of NLP. However, the appearance of this page will vary slightly if NLP is not available. The Search group box does not have tabs because auto-suggestion is unavailable without NLP.

Proposed Solutions/Documents

This group box contains the collection of solutions and documents that can be content sources for the email (for example, to perform template search) and can potentially resolve customer issues. You can select items in the list to send to customers. Selecting an item means that you are adding it to the list of content sources to be associated with the email and its possible response. When you perform search on solutions or documents on the Email page or the Search Solutions/Documents page and click the button to add selected items to the proposed list, the system populates those items here in the Proposed Solutions/Documents group box.

Search

The group box contains two tabs, Auto-Suggestions and Search, if NLP is available. The Auto-Suggestions tab lists the suggested items for the selected repository (either solution or document) that NLP returns. The interface resembles the Suggested Documents and Suggested Solution tabs on the Email page. You can select items from either repository and add them to the proposed solutions or document group box. The Search tab enables you to perform keyword search by Verity. If NLP is not available, there are no tabs in this group box and the type of search that you can perform is a keyword search.

Search For

Select which type of content to search on: *solutions* or *documents*. You cannot search across both solution and document repositories at the same time.

To specify the default repository for this field, click the User Preferences button on the toolbar and select the default search.

Advanced Search

Click to perform a more refined search where you can enter keywords with these variations:

- *With all the Words*: Each item that returns has references to all the words entered in this field.
- *With the Exact Phrase*: Each item that returns has references to the exact same phrase entered in this field.
- *With any of the Words*: Each item that returns has references to any of the words entered in this field.
- *Without the Words*: Each item that returns has no references to any of the words entered in this field.

Rows to Display

Specify the number of items to show in the search results list. This field appears when you're in the advanced search mode.

Search Tips

Click to access the page (RB_SEARCH_TIPS_SEC) that lists the definition and sample for each search criterion.

Preferences

Click to access the page (RB_USR_PREFERENCES) to specify the default search mode and settings for each search mode: basic and advanced. You can specify the same options available on this page on the Email Workspace User Preferences page.

Search Text

Enter keywords in this field for the search. This field appears when you're in the basic search mode.

Search

Click the Search button to invoke the keyword search.

See [Chapter 13, "Managing Email," Common Element Used in This Section, page 204](#).

See Also

[Chapter 13, "Managing Email," Solution and Document Search, page 194](#)

[Chapter 13, "Managing Email," Personalizing Email Workspace, page 223](#)

Reviewing Email Event History

Access the History: Actions Taken page.

Email Workspace

Save | Search | Next | Previous | Spell Check | Reassign | Requeue | 360-Degree View | User Preferences | Personalize

Sender: [Angela Augustine](#)
 Representing: [Angel Co.](#)
 Group: CameraDefaultWL
 Closed On: _____

Status: Assigned
 Due Date: 06/05/2006 6:27:34AM PDT
 Assigned To: Jose,Patrick

Email | Response | Search Solutions / Documents | **History** | Message Details | Thread | Note

Actions Taken | Routing History | Audit History | Content Analysis Scoring

Date	Event Name	Old Value	New Value	By
05/31/2006 6:27AM	E-mail Created			ERMSMGR
05/31/2006 6:32AM	E-mail Routed to Group		CameraDefaultWL	ERMSMGR
05/31/2006 6:48AM	Email Accepted	CameraDefaultWL	ERMSMGR	ERMSMGR
05/31/2006 6:49AM	E-mail Routed to Group	ERMSMGR	CameraDefaultWL	ERMSMGR
05/31/2006 9:19AM	Email Accepted	CameraDefaultWL	ERMSMGR	ERMSMGR

History: Actions Taken page

Actions Taken

This grid displays email history events that the system captures.

Date	Displays the date that the event occurred.
Event Name	Displays the event name that is defined in the ERMS application. ERMS logs four types of events: <ul style="list-style-type: none"> • Email Created (old and new values do not apply to this event). • Email Routed to Group. • Email Accepted. • Email Canceled/Closed.
Old Value and New Value	If the event captures changes to a specific field, these fields display the original and changed values.
By	Displays the user ID of the user who triggered the event.

See Also

[Chapter 5, "Setting Up ERMS System," Understanding ERMS Setup, page 47](#)

Reviewing Email Routing History

Access the History: Routing History page.

Email Workspace

Save | Search | Next | Previous | Spell Check | Reassign | Requeue | 360 360-Degree View | User Preferences | Personalize

Sender: [Angela Augustine](#)
Representing: [Angel Co.](#)
Group: CameraDefaultWL
Closed On: [Date]
Status: Assigned
Due Date: 06/05/2006 6:27:34AM PDT
Assigned To: Jose,Patrick

Email | Response | Search Solutions / Documents | **History** | Message Details | Thread | Note

Actions Taken | **Routing History** | Audit History | Content Analysis Scoring

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

Routing History | Customize | Find | View All | First 1-4 of 4 Last

From	To	Routing Method	Reason	By	Date	Comments
CameraDefaultWL	CameraDefaultWL	Worklist	Routed	ERMSMGR	05/31/2006 6:32AM	
CameraDefaultWL	ERMSMGR	Manual	Accepted	ERMSMGR	05/31/2006 6:48AM	
ERMSMGR	CameraDefaultWL	Manual	Accepted	ERMSMGR	05/31/2006 6:49AM	
CameraDefaultWL	ERMSMGR	Manual	Accepted	ERMSMGR	05/31/2006 9:19AM	

History: Routing History page

This Routing History grid displays email routing events. The system creates a new row of data every time that the email is reassigned to a new group worklist or individual worklist.

From and To	Displays the name of the worklist from which the email was routed and to which it is sent. Individual worklists are identified by the associated user ID. The first entry in the routing history represents the routing that the unstructured email process performs. Because this is the first time that the email is routed, the From field is empty.
Routing Method	Routings that occur after the first routing by the unstructured email process have a routing method of <i>Manual</i> .

Other routing method values apply only to the initial routing action of the unstructured email process. The following values indicate the criteria that the unstructured email process uses to select a worklist: *Thread*, *Customer Event*, *Address*, *Domain*, *Content*, and *Worklist*.

Reason

The following routing reasons indicate why the unstructured email process routed an email to the mailbox's default worklist: *Routed*, *Bypassed*, *Oversized*, and *Encoding*.

The following reasons are set by the system when it automatically moves an email to a new worklist: *Accepted*, *Reassigned*, and *Requeued*.

In addition to the reasons used by the system, the following reasons are available when users perform manual routing actions: *Escalated*, *Misrouted*, *Overridden*, and *Other*.

By and Date

Displays the user ID of the person who performed the routing, along with the date and time when the routing was performed.

The user ID for the routing that the unstructured email process performs is the user ID that was used to schedule the process.

Comments

If an agent who manually reassigns an email to a new group worklist enters comments in the Select Worklist page, those comments appear here. Comments are required if the routing reason is *Other*.

See Also

[Chapter 8, "Setting Up Unstructured Email Handling," Understanding Unstructured Email Routing, page 109](#)

Reviewing Email Audit History

Access the History: Audit History page.

Email / Response / Search Solutions / Documents / History / Message Details / Thread / Note						
Actions Taken / Routing History / Audit History / Content Analysis Scoring						
Audit History						
Record Name	Field Name	Action Taken	Date/Time	Changed By	Value Before Change	Value After Change
RB_IN_EMAIL	EMAIL_STATUS	Change Old (PPR Only)	03/27/2004 6:21:13.000000PM PST	ERMS Agent	NEW	ASGN
RB_IN_EMAIL	Worklist	Change Old (PPR Only)	03/27/2004 6:21:13.000000PM PST	ERMS Agent	CameraDefaultWL	ERMSAGENT
RB_IN_EMAIL	Assigned To	Change Old (PPR Only)	03/27/2004 6:21:13.000000PM PST	ERMS Agent		400001
RB_IN_EMAIL	ASSIGNED_DTTM	Change Old (PPR Only)	03/27/2004 6:21:13.000000PM PST	ERMS Agent		2004-03-27-18.20.22.000000
RB_IN_EMAIL	Last Changed	Change Old (PPR Only)	03/27/2004 6:21:13.000000PM PST	ERMS Agent	2004-03-24-21.33.25.000000	2004-03-27-18.20.22.000000
RB_IN_EMAIL	EMAIL_STATUS	Change Old (PPR Only)	03/24/2004 9:33:25.000000PM PST	Jose,Patrick	INPR	NEW

History: Audit History page

The Audit History grid displays record level and field level audit information, including the type of change performed (add, update, or delete), field values before and after the change, the user ID of the person who made the change, and the date and time of the change.

The PeopleSoft system is delivered with auditing features turned off. Turning on auditing can have a significant impact on application performance. Analyze your audit needs carefully to ensure that you turn on auditing only when there is a strong business reason to do so.

See Also

PeopleSoft Enterprise CRM 9 Application Fundamentals PeopleBook, "Setting Up Auditing for Cases and Inbound Email"

Reviewing Email Content Analysis Scores

Access the History: Content Analysis Scoring page.

Email Workspace

Save | Search | Next | Previous | Spell Check | Reassign | Requeue | 360 360-Degree View | User Preferences | Personalize

Sender: Angela Augustine
Representing: Angel Co.
Group: CameraDefaultWL
Closed On:

Status: Assigned
Due Date: 06/05/2006 6:27:34AM PDT
Assigned To: Jose,Patrick

Email | Response | Search Solutions / Documents | **History** | Message Details | Thread | Note

Actions Taken | Routing History | Audit History | **Content Analysis Scoring**

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

Classification Scores

Category/Type	Product	Mood	Priority	Threshold (%)
Spam				3.00
Close the Mail				4.00
Complaint				5.00
Inquiry				39.00
Problem				56.00

Assistance Scores

Documents	Solutions	Threshold (%)
AMP Auto Response		57.00
Auto acknowledge that we have received the customers inquiry. Notify the customer that we will get back to them within 48 hours.		57.00

Access the History: Content Analysis Scoring page

The Content Analysis Scoring tab is available if NLP is licensed. The scoring data for different email classification and assistance types is available only with NLP. These threshold scores return as a result of the content analysis that NLP performs.

Reviewing Email Message Properties

Access the Message Details page.

System Disposition	
Email Status Assigned	Process State Email Routed
Group CameraDefaultWL	Routed On 05/31/2006 9:19:51AM PDT
Assigned To Jose,Patrick	Date Assigned 05/31/2006 9:19:51AM PDT
Closed By	Date Closed
Last Modified By ERMSMGR	Last Modified 05/31/2006 9:19AM PDT
Internal Warning 06/03/2006 6:32:10AM PDT	Internal Due 06/04/2006 6:32:10AM PDT
External Warning 06/03/2006 6:27:34AM PDT	External Due 06/05/2006 6:27:34AM PDT

Message Details page (1 of 2)

Message Header	
Date Sent 05/31/2006 6:22:20AM PDT -360	Date Received 05/31/2006 6:27:34AM PDT
To cameras@rt.peoplesoft.com	Mailbox ID Cameras
From ermsqa@hotmail.com	Reply To ermsqa@hotmail.com
Subject Need information about SR1015	
UID List 3597-1030150488	
Email Message Id <200605311322.K4VDMK8T012957@RGMGW2.US.ORACLE.COM>	
Reference ID List	
Reply To Ids	
Language ENG	
Email Size 192	
Attachment List	
Attach Sizes	
Custom Headers	
Multichannel Message Parts First ◀ 1 of 1 ▶ Last	
File Name or Text Preview	Content Type
I am planning ot buy the Dishwasher bearing Model# SR1015. C	text/plain; charset=UTF-8

Message Details page (2 of 2)

Computed Message Body

This group box displays essentially the same email message that you see on most pages. The bigger display area enables for better readability.

System Disposition

This group box contains information about the email regarding status, routing, assignment, and response time deadlines that comes from the CRM system. It provides a visual indicator next to each response date and time that indicates if this email close to missing the deadline.

Email Status Displays the current status of the email to reflect where the email stands. This status is read only and is maintained by the system. The same email status is

shown in the toolbar summary area. The email workspace uses this value when it evaluates the response time alerts.

Process State

Displays the status of the mail processor in regards to the email. The mail reader process refers to the process state of emails when resending them through the system. Values are:

- Email Instance Created.
- Queue for Routing.
- Auto Responded by System.
- Email Routed.
- Mailbox Forwarding.

The process state is a system level status of where the email is in the preprocessing phase of the system. If you open emails from a worklist or the Multichannel Toolbar, the process state of the email is typically *Email Routed*. However all emails (regardless of the processing state) can be accessed using the Search Inbound Email component.

Message Header

This group box displays email data that comes from PeopleTools (with the exception of the Mailbox ID field). The values in the Date Sent and the Date Received fields are followed by a number, which is the respective time zone offset.

Date Sent and Date Received

Displays the date and time when the inbound email was sent and received. The values for these fields come either from the mail server or the CRM database, depending on the mail server type (POP3 or nonPOP3). The number at the end of the values is the time zone offset between the mail server and the CRM database, in minutes. Take the Date Received value as an example. If the mail server is of type POP3, ERMS uses the date and time when the email was saved to the CRM database as the value of this field. In this case, the offset value is zero. But if the mail server is not a POP3 type, ERMS displays in this field the date and time information that was returned from the mail server. In this case, the offset value is present, ranging from +720 to -720.

The *PeopleSoft MultiChannel Framework PeopleBook* contains more information on time zone offsets.

See *Enterprise PeopleTools PeopleBook: PeopleSoft MultiChannel Framework*

Customers can take advantage of the custom header information to drive additional business processes. PeopleSoft Multichannel Communications does not provide the infrastructure to facilitate customization projects of this kind.

See *Enterprise PeopleTools PeopleBook: PeopleSoft MultiChannel Framework*

Multichannel Message Parts

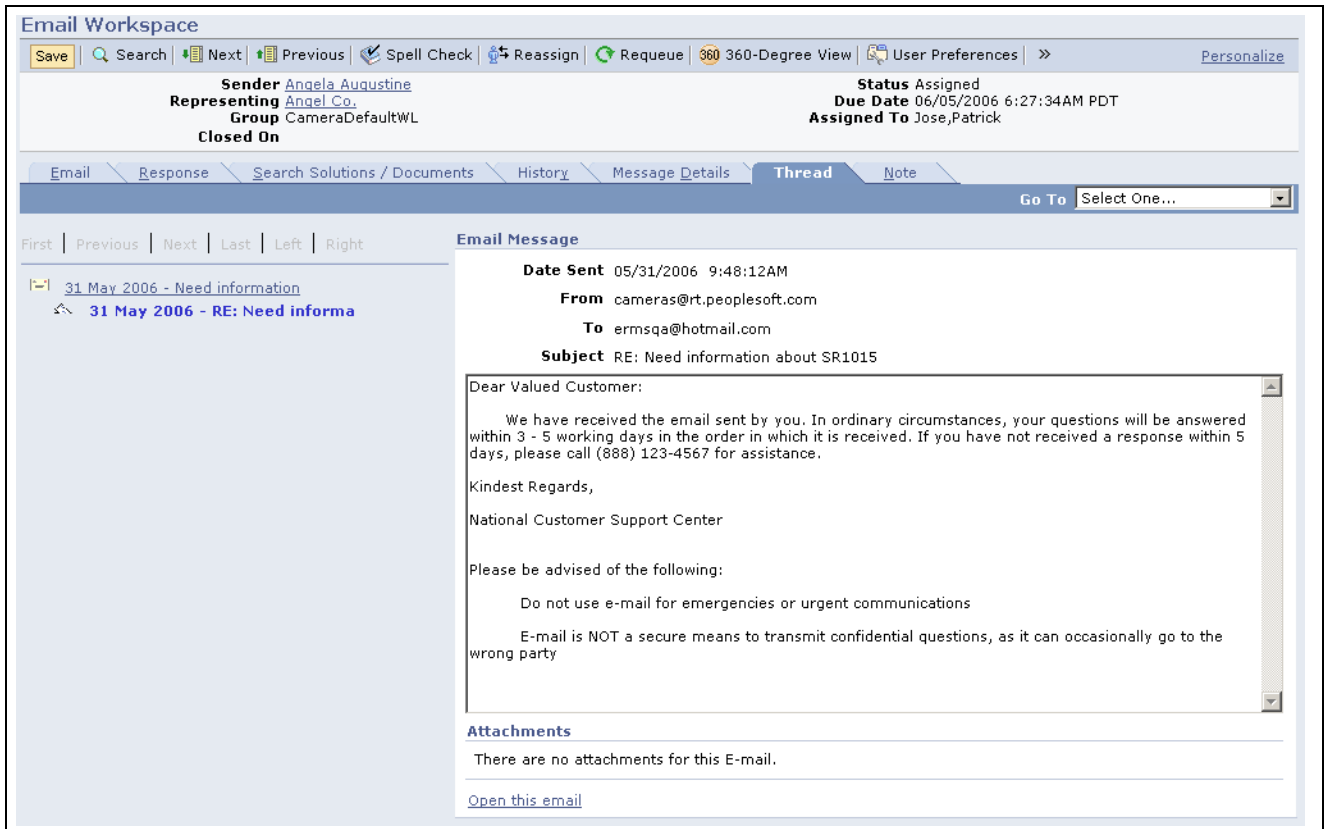
This group box lists the message parts as stored by the PeopleTools Email Repository. A message part can be:

- The inline text, which can be a representation of the computed message body displayed on the left of the page.
- A sender specified attachment, which has a specific filename and content type.

- A PeopleTools generated attachment that is created when a system-size threshold is violated (meaning that the size of the text exceeds the threshold value) or the content type is not plain text. For example, if the mail client is configured to send both plain text and HTML email messages, two different parts appear in this section: a plain text part and an HTML part.

Reviewing Thread Information

Access the Thread page.



Thread page

The construction of the thread tree on the left is based on the interaction thread information that is stored as part of a conversation. When you click an email link, the email content shows in the message area on the right. If you want to change the association of the current email (change email threading), perform the action on the Recent Activities tab on the Email page by relating the current email to another email as the new parent.



Indicates that the corresponding email is an inbound email.



Indicates that the corresponding email is an outbound email.

Open this email

Click to open the email that appears in the message area. If the email is an outbound email, the Outbound Email page appears. If the email is an inbound email, the Email page of the email workspace appears.

Reassigning an Email

Access the Select Worklist page.

Select Worklist page

Select Worklist page (if worklist scores are available)

Group Worklist Name	Select the group worklist where you want to reassign the email.
Individual (Optional)	Select the person in the selected group worklist to whom you want to reassign the email.
Reason	<p>Select a routing reason. Use the following values for manual rerouting: <i>Escalated, Misrouted, Overridden Reassigned, or Other.</i></p> <p>Other values that are used during automatic rerouting are also available. These values are <i>Accepted, Bypassed, Encoding, Oversized, Queued, and Routed.</i></p>
Comment	Enter a comment that provides information about the reassignment. This is required if the routing reason is <i>Other</i> .
OK	Click to reassign the email to the selected worklist.

Note. Similar functionality is available from My Worklist.

Reassign to Selected Worklist

If Verity returns worklists in the Worklist Scores grid of the History: Content Analysis Scoring page, the Reassign to Selected Worklist grid appears. From the grid, select a group worklist and optionally select a member of the group. The last row of the grid is a free form field where you can enter any group worklist and optionally select an individual from that worklist.

See Also

PeopleSoft Enterprise CRM 9 Automation and Configuration Tools PeopleBook, "Setting Up and Using Worklists," Forwarding and Reassigning Worklist Entries

Adding Email Notes

Access the Note page.

Here's some considerations for adding notes in the email workspace:

- You cannot email notes that you create for emails.
- Email notes don't use the visibility feature.

See *PeopleSoft Enterprise CRM 9 Application Fundamentals PeopleBook*, "Working with Notes and Attachments," Understanding Notes and Attachments.

Personalizing Email Workspace

Access the Email Workspace User Preferences page.

Email Workspace User Preferences

Use this page to customize the email workspace default behavior

Message Action

***Response** ☐ Do not include the original message when replying
☒ Include the original message in the greeting when replying
☐ Include the original message in the closing when replying

***Note Entry Warning** ☐ Prompt for note entry after outbound email has been sent or submitted

General Setting

***Maximum Row to Display**

Recent Activity List

Find | View All | First 1-10 of 18 Last

Select	Activity Type
<input checked="" type="checkbox"/>	Support Case (COM)
<input type="checkbox"/>	Support Case (ENE)
<input checked="" type="checkbox"/>	Support Case
<input type="checkbox"/>	Support Case (GOV)
<input checked="" type="checkbox"/>	HelpDesk Case
<input type="checkbox"/>	HelpDesk Case (HR)
<input type="checkbox"/>	Support Case (INS)
<input checked="" type="checkbox"/>	Issue
<input type="checkbox"/>	Lead
<input type="checkbox"/>	Product Application

Email Workspace User Preferences page (1 of 2)

The screenshot displays the 'Email Workspace User Preferences' page, specifically the 'Document/Solution Search' section. It is divided into four main areas: 'Default Search On', 'Default Settings', 'Basic Search Options', and 'Advanced Search Options'. The 'Default Search On' section has a dropdown menu set to 'Solution'. The 'Default Settings' section includes 'Search Mode' set to 'Basic Search' and '*Results to display' set to '50 rows'. The 'Basic Search Options' section shows 'Search Behavior' set to 'With all words', 'Word Variations' set to an empty dropdown, and two checked checkboxes: 'Case Sensitive' and 'Display noise words'. The 'Advanced Search Options' section has a 'Search Behavior' header with four checked checkboxes: 'With all words', 'With the exact phrase', 'With any words', and 'Without the words'. A 'Search tips' link is visible in the top right of the 'Default Settings' section.

Email Workspace User Preferences page (2 of 2)

Message Action

Response

Specify if you want to include email history when responding to inbound email, and if so, indicate if the history should appear at the beginning or the end of the response.

Note Entry Warning

Select to enable the system to prompt agents to enter a note after they have submitted outbound responses from either the email workspace or the Outbound Email page (when agents start a new thread from a CRM transaction by clicking the Send Email toolbar button).

General Setting

Maximum Row to Display

Specify the default maximum number of rows that users see from the activity result grid on the Recent Activities tab on the Email page.

Recent Activity List

Select the types of transactions (activities) to be included when the email workspace retrieves the default activity result list initially.

If no activity is selected in the Activity Type drop-down list box, the system uses the default activity list (those activities that are marked with the Default check box in the mailbox definition) to determine which activities to display on the Recent Activities tab of the email workspace.

Agents, however, can override the default activity list defined on the mailbox by selecting rows in the Recent Activity List grid of the Email Workspace User Preferences page. Activities that are selected do not change the actual list that appears in the Activity Type drop-down list box but changes the types of activities that are retrieved as part of the default activity list retrieval (when the Activity Type drop-down list box is empty).

Note. If the activity selected in the user preferences is not enabled for the mailbox with which the email is associated, it does not appear in the default activity results. When no activities are selected in the Recent Activity List grid of the user preferences, the email workspace uses the mailbox definition of default activities.

Document/Solution Search

Default Search On Select whether the default search repository is *document* or *solution*. The default value is used in the Search group box on the Search Solutions/Documents page.

Default Settings

Search Mode Select the default search mode that is used to perform Verity keyword search. Options are *basic search*, *advanced search*, and *advanced search - more search options*.

Results to display Specify the default maximum number of rows that users see from the search results grid on the Search tab on the Search Solutions/Documents page.

Basic Search Options

Search Behavior Select a default behavior to use based on user-entered text in the basic search. Options are:

- With all words (default).
- With the exact phrase.
- With any words.
- Without the words.

Word Variations Select a default word variation type to incorporate into the basic search. Options are:

- Alternate spellings.
- Exact words.
- Include synonyms.
- Similar sounds.
- Stemming.

Case Sensitive Select if you want the solution and document search to be case sensitive.

Display noise words Select if you want to view the list of noise words that were used in a search. Noise words are excluded from the search process because they are often not meaningful to the search. Examples are prepositions (*from*, *to*, *in*, and *up*) and articles (*a*, *an*, and *the*).

Advanced Search Options

Search Behavior Select behavior (none or multiple) that users can choose to use in the advanced search.

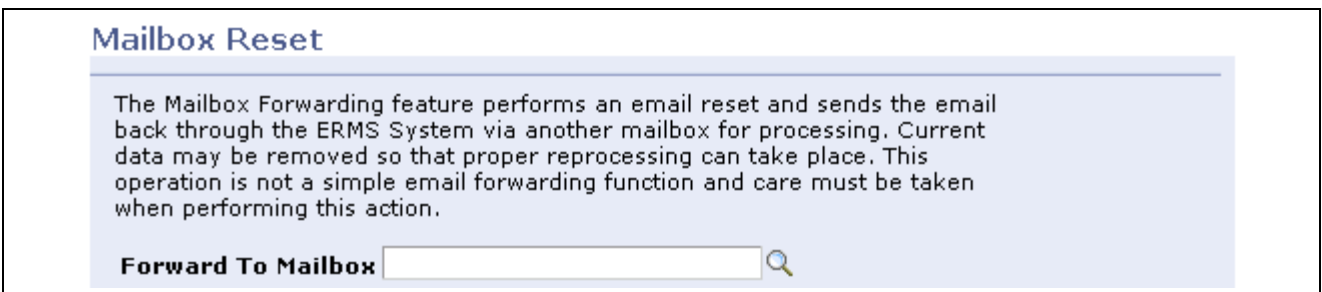
Restore to System Defaults Click to overwrite the personalization setting with the system default setting.

See Also

PeopleSoft Enterprise CRM 9 Automation and Configuration Tools PeopleBook, "Setting Up Search Collections," Understanding PeopleSoft CRM Searching

Submitting Email to Another Mailbox

Access the Mailbox Reset page.



Mailbox Reset page

Replying to Inbound Email

This section discusses how to:

- Reply to inbound email from email workspace.
- Send emails from CRM transactions.
- Send emails from CRM transactions that are associated with emails.
- Review outbound email.
- Review outbound email thread information.
- Review outbound email notes.

You can reply to email either from the context of the email itself, or from the context of a transaction that is associated with the email. The methods are similar, except that when you reply from a transaction, you must explicitly indicate that you are replying to an email. In addition, you must identify the email to which you are replying.

Pages Used to Reply to Inbound Email

Page Name	Definition Name	Navigation	Usage
Response	RB_EM_IB_RESP	<ul style="list-style-type: none"> Correspondence, Search Inbound Emails, Response Click the Reply button on the Email page. Click the Email button from the toolbar of a transaction (for example, case) and select the Reply to Another Email check box (with an existing email selected) on the Email Reply or Start New Thread page. 	Reply to an inbound email.
Email Reply or Start New Thread	RB_EM_OPERATE_SEC	Click the Email button from the toolbar of a transaction (for example, case), which you navigated to from another email.	Start a new email thread from the CRM transaction or reply to an email of that transaction.
Outbound Email	RB_EM_OB_VIEW, RB_EM_OB_ADD	<ul style="list-style-type: none"> Correspondence, Search Outbound Emails, Outbound Email Select the Start a New Email Thread check box on the Email Reply or Start New Thread page. 	<ul style="list-style-type: none"> Send emails from CRM transactions that are not associated with any email (RB_EM_OB_ADD). Review outbound email and process approval (RB_EM_OB_VIEW).

Replying to Inbound Email from Email Workspace

Access the Response page.

Email Workspace

Save Search Next Previous Spell Check Reassign Requeue 360 360-Degree View User Preferences Personalize

Sender [Angela Augustine](#)
 Representing [Angel Co.](#)
 Group CameraDefaultWL
 Closed On

Status Assigned
 Due Date 06/05/2006 6:27:34AM PDT
 Assigned To Jose,Patrick

Email Response Search Solutions / Documents History Message Details Thread Note Go To Select One...

Email Message

Received On 05/31/2006 6:27:34AM PDT
 Elapsed Time 0 days 2 hours 50 minutes
 From ermsqa@hotmail.com
 To Cameras
 *Subject Need information about SR1015

I am planning ot buy the Dishwasher bearing Model# SR1015. Can you please send me some literature about it?

[Wide View of E-mail Body](#)
[Attachments](#)
 No Attachments are associated with this Email.

Compose

From Delivery Options
 To Add/Modify Recipient List

Template Search

Related Transactions

There are No Related Transactions associated with this Email

Solutions

Select	ID	Summary	Date Modified
<input checked="" type="checkbox"/>	10	How to fix dishwasher leaks.	04/03/2001 9:12AM

Category Type
 Product Group Product
 Keywords

Refresh Template List Clear Template Search

Template Selected Templates
 Auto Acknowledgement

Preview Apply Template

Add Closing Send Restart Response Cancel

Message Area

Response page (1 of 2)

Message Area

Subject RE: Need information about SR1015

Dear Valued Customer:

We have received the email sent by you. In ordinary circumstances, your questions will be answered within 3 - 5 working days in the order in which it is received. If you have not received a response within 5 days, please call (888) 123-4567 for assistance.

Kindest Regards,

National Customer Support Center

Please be advised of the following:

Do not use e-mail for emergencies or urgent communications

E-mail is NOT a secure means to transmit confidential questions, as it can occasionally go to the wrong party

Attachments

No Attachment.

Add Attachment

Response page (2 of 2)

Compose

If the system is unable to find any matching template for the email response when agents access the Response page, a warning message appears, and the Template Search section is expanded automatically. The agent can modify the classification criteria and refresh the template list.

From	Displays the from address of the response. The system populates it with the reply to address that is specified in the mailbox definition.
To	Displays the to address of the response. The system populates it with the sender's primary to address of the inbound email. Additional to addresses can be added by accessing the Add/Modify Recipient List link.
<hr/> <p>Important! If you change the primary to address either by updating the To field directly or accessing the Add/Modify Recipient List link, the system restarts the correspondence because the templates that are applied may include old recipient information. Restarting the correspondence is the same as clicking the Restart Response button in the section.</p> <hr/>	
Delivery Options	Click to access the Delivery Options page, where you can set the delivery date and time.
Add/Modify Recipient List	Click to access the E-mail Workspace - Look Up Recipient page, where you can search for and select recipients for the email. You can specify additional recipients to the To, CC, and BCC lists or modify the primary to sender.
Related Transactions	Displays CRM transactions that are associated with the email. Select transactions that you want the system to consider in the template search.
Solutions	Displays the list of solutions that are added to the proposed list. This grid displays only proposed solutions that are available.
Category, Type, Product Group, Product, and Keywords	<p>Enter values in these fields as criteria the system uses to perform the template search for the email. The system prepopulates all of the classification data associated with the inbound email in these fields.</p> <p>Click Refresh Template List to run the template search after you update any of these values or related transactions. Click Clear Template Search to remove values from these fields and search for templates using only related transactions.</p>
Template	Select a template to use for the email response. The results of the template search appear as values in this drop-down list box, along with the documents that are added to the proposed list.
Preview	Click to access the E-mail Template Text Viewer page (RB_EM_TEXT_VIEWER) to view the email response that is formatted with the selected template.
Apply Template	<p>Click to populate the email response to which a template is applied in the Message Area group box.</p> <p>One or more templates may be applied to an email message. Templates are appended to the email body in the order that they are applied. Applied templates appear in the Selected Templates grid.</p>
Add Closing	Click to add a closing text to the end of the email response.

Send or Send for Approval	Click to submit the email response, or if approval is required for the sign-on agent, send a notification to the approver's Action Request worklist, notifying the approver that the original notification needs to be reviewed. After an email is submitted for approval, the response is reset. You cannot view a submitted email from the email workspace unless you go to the Thread page and refresh the thread tree. The system allows the sending of blank email (email without message body).
Restart Response	Click to begin the response mode again with the initial state in which the page was first presented.
Cancel	Click to cancel the response operation and return to the previous page before accessing the Response page. The system displays a message stating that the response is canceled.

You can set up the system to request notes from agents after they send email response or submit them for approval. If agents are email owners, sending responses automatically updates the email status to *closed - response*, removes the email item from the owner's individual worklist, and deletes the email task from the Multichannel Toolbar if the email was opened from it. In this case, the message about adding a note, if enabled, appears after these tasks are completed.

Sending Emails from CRM Transactions

If you click the Send Email button (or the Email button) on the toolbar from a transaction to send an email, the system either transfers you to the Outbound Email page to start a new email thread or displays a page where you can select to start a new thread or reply to an existing email of the transaction.

If you select to reply to an existing email, the Response page of the email workspace appears.

If you select to start a new thread, the Outbound Email component appears in the edit mode where you compose the new message. On the left of the Outbound Mail page, the transaction summary appears as a visual aid for the composition of the email.

The transaction and the email classification data that you enter all serve as inputs to the template search. Solution and document search is not available in the Outbound Email component.

Please note that the Outbound Email component does not support the inclusion of transactions' URLs in the email. If you want to attach URLs in emails, use the Send Notification feature instead.

Note. The Thread page is not available when you create an outbound email; you will see the information when you review the outbound email by navigating under Correspondence, Outbound Emails, Outbound Email.

See Also

PeopleSoft Enterprise CRM 9 Automation and Configuration Tools PeopleBook, "Sending Manual Notifications," Sending Manual Notifications From CRM Transactions

Sending Emails from CRM Transactions That Are Associated with Emails

Access the Email Reply or Start New Thread page.

Email Reply or Start New Thread

You have been presented this page because you either navigated from an email to this transaction or emails are associated with this transaction. You can either choose to reply to an existing email, or you can start a new email thread.

Email Operation

☐ **Reply to Another Email**

Emails	Customize	Find	View All	First	1-3 of 3	Last
Select	Subject			Date Received		
<input type="checkbox"/>	RE: Common Email 2			05/18/2004 3:02:58PM		
<input type="checkbox"/>	Common Email 2			05/18/2004 2:24:41PM		
<input type="checkbox"/>	new			05/17/2004 1:03:53PM		

☒ **Start a New Email Thread**

Email Reply or Start New Thread page

Email Operation

When you click the Email or Send Email button on the toolbar of a transaction, you see this page if you previously navigated to the transaction from an email or if the transaction is associated with other emails. This button is available only if PeopleSoft Multichannel Communications is licensed.

Note. This page does not appear if the transaction is not associated with any inbound emails. Agents are transferred to the Outbound Email page to start new email thread.

Reply to Another Email

Select to send a response to an existing email that's associated with the transaction. Specify the email to which the new one responds in the Emails grid. This grid lists the emails that are related to the transaction. If you navigated to the transaction from an email, the system identifies that email to be as the current one and preselects it in the grid.

The Response page of the email workspace appears after clicking OK, and the selected email appears as the inbound email.

Start a New Email Thread

Click to start a brand new email with no links to any existing email. The Outbound Email component appears with two pages: the Outbound Email page and the Note page. The Thread page is not available when you send an outbound email without association to any email. You see thread information about outbound emails when you access the Outbound Email component from the menu navigation under Correspondence, Outbound Emails, Outbound Email.

Reviewing Outbound Email

To search for and review outbound email, use the Search Outbound Emails (RB_EM_OB and RB_EM_OB_SRCH) components.

Access the Outbound Email page.

Outbound Email

Refresh Search Next Previous 360-Degree View User Preferences Text Tray Personalize

Recipient [Angela Augustine](#)
Representing

Outbound Email Thread Note

Email Message

Received On 05/31/2006 6:27:34AM PDT
From ermsqa@hotmail.com
To Cameras
Subject Need information about SR1015

I am planning ot buy the Dishwasher bearing Model# SR1015. Can you please send me some literature about it?

Message Area

From cameras@rt.peoplesoft.com
To ermsqa@hotmail.com
CC
BCC
Subject RE: Need information about SR1015

Dear Valued Customer:

We have received the email sent by you. In ordinary circumstances, your questions will be answered within 3 - 5 working days in the order in which it is received. If you have not received a response within 5 days, please call (888) 123-4567 for assistance.

Kindest Regards,
National Customer Support Center

Please be advised of the following:

Do not use e-mail for emergencies or urgent communications

E-mail is NOT a secure means to transmit confidential questions, as it can occasionally go to the wrong party

Attachments

There are no attachments for this E-mail.

Outbound Email page (1 of 2)

Related Transactions

There are no related transactions for this E-mail.

Solutions

ID	Summary	Date Modified
10	How to fix dishwasher leaks.	04/03/2001 9:12AM

Selected Templates Customize Find View All First 1-2 of 2 Last

Selected Templates
Auto Acknowledgement

Outbound Email page (2 of 2)

The Outbound Email component is in read-only mode when you access it from the menu navigation. The interface is similar to the Response page of the email workspace. You can review the content of the outbound email and the corresponding inbound email. The interface also lists any related transactions and solutions for the email, and as well as the template used to format the final email body.

Email approvers use the Outbound Email component to approve or disapprove emails. If you associate an agent with an approver in the system, the system sends an action request worklist entry to notify the approver whenever the agent sends an email. The approver must approve the email before it is delivered. When the approver clicks the approval request link from the worklist, the system opens the email in the Outbound Email page. The approver can edit the subject and message before clicking the Approval button on the toolbar, or disapprove it. The email is sent when it's approved; if it's not approved, the system sends a notification to the agent indicating that the email has been disapproved.

For agents whose emails require approval before delivery, the Submit for Approval button appears on the Response page instead of the Send button.

Reviewing Outbound Email Thread Information

Access the Thread page.

The system uses the same Thread page for inbound and outbound emails.

See [Chapter 13, "Managing Email," Reviewing Thread Information, page 221](#).

Reviewing Outbound Email Notes

Access the Note page.

The system uses the same Thread page for inbound and outbound emails.

See *PeopleSoft Enterprise CRM 9 Application Fundamentals PeopleBook*, "Working with Notes and Attachments," Entering and Viewing Notes.

CHAPTER 14

Working with Chat in PeopleSoft Enterprise CRM

This chapter provides an overview of the chat workspace and discusses how to:

- Work with the customer chat window.
- Work with the chat workspace.
- View chat logs and reports.

Understanding the Chat Workspace

This section discusses:

- Unified Agent Desktop.
- Agent chat window.
- Agent popup page.
- Chat session categorization.

Unified Agent Desktop

After a customer submits a chat request from a self-service page, the request is routed to an appropriate queue and then an available agent. Usually, a notification about the task appears (depending on the agent setup) on the Unified Agent Desktop (UAD) with some information about the requester. Upon accepting the chat task, the UAD provides:

- Chat-specific action buttons that the agent can use during the session to perform actions, such as inviting another agent to join the chat, transferring the chat session to another queue for a new agent to take over, and terminating the chat session.
- Statistics of the chat session, including the customer wait time before the agent accepted the session and the duration of the ongoing session.
- Agent-to-agent chat, which can be initiated during a chat session with customers for consultation purposes. A consultation chat is different from a conference chat because the dialog between agents is unavailable to the customer.
- A task navigation list in which the agent can switch among accepted tasks that are currently in working progress.

See [Chapter 16, "Working with Unified Agent Desktop," Understanding Multichannel Toolbar Functionality, page 281](#).

Agent Chat Window

The agent chat window, along with the agent popup page, appears after the agent accepts a chat request. The window contains a history box that captures the entire chat conversation as it proceeds and a field in which the agent enters text messages to interact with the participants.

To help agents monitor the activities of multiple chat sessions that they work on concurrently, the agent chat window lists all the active chat requests in the Open Customer Chats field. If any one of the sessions receives a response, a visual cue appears to alert the agent of the activity.

Text Tray

The agent can use the text tray feature to include predefined messages automatically in the Input Text field by pressing quick keys or selecting the messages from the Text Tray link. This link contains a list of static quick keys that are defined in the system. The agent can modify the populated text before sending it.

See *PeopleSoft Enterprise CRM 9 Automation and Configuration Tools PeopleBook*, "Working with the Text Tray".

Quick Actions

The agent chat window provides a list of actions that the agent can perform for customers while interacting with them. PeopleSoft Enterprise CRM (Customer Relationship Management) delivers these common actions:

- Email password to the customer.

This action resets the customer's user password to *password*.

Oracle's PeopleSoft Enterprise CRM delivers this feature, and customers need to implement their own password retrieving mechanism (for example, asking users personal questions) and send the user ID as part of the payload. This effort requires code change on PeopleTools. Specifically, implementers must change the *TriggerQAction* function on HTML.RB_AGTCHAT_FUNCTIONS2 to obtain the user IDs using their own implementations.

- Email chat log to the customer.
- Push web pages to the customer.

Web pages can be any external websites or CRM self-service pages.

Be sure to give your customers security access to the pages that agents can push to them. For example, if you want to push a page with solution information to the customer, you may want to use the customer solution search rather than the helpdesk solution search.

- Display the initial screen of the agent popup page.

This is useful after the agent navigates in different pages for a while and wants to return to the initial agent popup page.

Agent Popup Page

The agent popup page is a CRM transactional page that is associated with the self-service page from which the chat request originates, and it appears next to the agent chat window when the agent accepts the chat request. The purpose of this page is to assist agents in finding relevant information about the customer or the transaction about which the customer inquires.

The agent can resize or minimize the agent chat window to view the agent popup page in full while researching information for the customer.

See Also

[Chapter 9, "Setting Up Chat," Application Data in the Chat Workspace, page 132](#)

[Chapter 12, "Setting Up Unified Agent Desktop," Configuring Agents for Unified Agent Desktop, page 170](#)

Chat Session Categorization

When the agent chooses to end a chat session, all the fields in the agent chat window and buttons on the Multichannel Toolbar are disabled. The agent must categorize the session on the toolbar before closing the chat workspace browser window.

CRM delivers a chat-specific category set that you can use to categorize chat sessions.

See Also

PeopleSoft Enterprise CRM 9 Automation and Configuration Tools PeopleBook, "Setting Up Natural Language Processing," Defining Category Sets

Working with the Customer Chat Window

This section discusses how self-service customers:

- Send chat requests.
- Use the customer chat window.

Sending Chat Requests

Access any CRM self-service page that is enabled for the chat feature.

The screenshot shows a web interface titled "Live Chat with Agent". It contains a "Subject" dropdown menu set to "Documentation" and a "Question" text area with the text "Dishwasher is not cleaning dishes and is leaving stains on them.". Below the question is a "Get Auto-answer" button. Underneath is a section titled "Auto-suggested answers to your question" which contains a table with one row of suggestions. The table has four columns: "Score (%)", "Solution ID", "Description", and "This solution solves your question?". The first row shows a score of 100, a solution ID of 2, a description about factors affecting dishwasher cleanliness, and a "Yes" button. At the bottom of the window is a "Start Chat" button.

Score (%)	Solution ID	Description	This solution solves your question?
100	2	Cleaning dishes in the Dishwasher. A lot of factors can affect the cleanliness of your dishes when the wash cycle is done: Do not overload the dishwasher M...	Yes

Chat portion of a self-service page if autosuggestion is enabled

This chat portion is unavailable if ERMS (Email Response Management System) is not licensed or the chat feature is disabled. When users first access a self-service page, only the Subject, Question, and Get Auto-answer fields appear.

Subject	Select the subject of the question from values that are defined in the Contact Us Subject page. The CRM system uses the subject information for routing chat requests to corresponding queues.
Question	Enter the specific customer question. Natural Language Processing (NLP) analyzes the content in this field and returns auto-suggested solutions to customers (if applicable). You can make this a required field in the chat profile.
Get Auto-answer	Click to invoke NLP to return auto-suggested answers based on information that the customer enters.

Note. If NLP is not available or if chat automation is disabled for the self-service page on the Chat Profile Setup page, the Get Auto-answer button becomes the Start Chat button. The CRM system routes the chat request directly to the appropriate queue based on the selected subject.

A self-service customer clicks this button to access the customer chat window and to send a request to start a chat session. The system sends the request to the universal queue server, which routes the request to the queue that you defined on the Chat Enabled Page Setup page. When an agent who belongs to that queue accepts the chat request, the customer and the agent can use chat functionality to communicate with each other in real time over the Internet.

Start Chat Click to submit a chat session to the queue server.

If the queue server receives the chat session, it returns a chat ID for the session, which automatically gets updated on the Chat Details page. The CRM system creates an interaction for the chat session if the requester is a registered self-service user.

Auto-suggested answers to your question

This grid lists the solutions that are returned by NLP that may answer customer questions. Each row of returned solution includes its actual relevance score, solution description, and a button that customers click to indicate that the given solution solves their issues. If customers click the Yes button, the feedback is logged in the Chat Details page and is sent back to the NLP system in real time for knowledge-base teaching and learning purposes. Click the description link to view the solution in detail.

If NLP doesn't return any solutions, the CRM system displays a message to inform customers that the chat request is submitted to the queue server automatically.

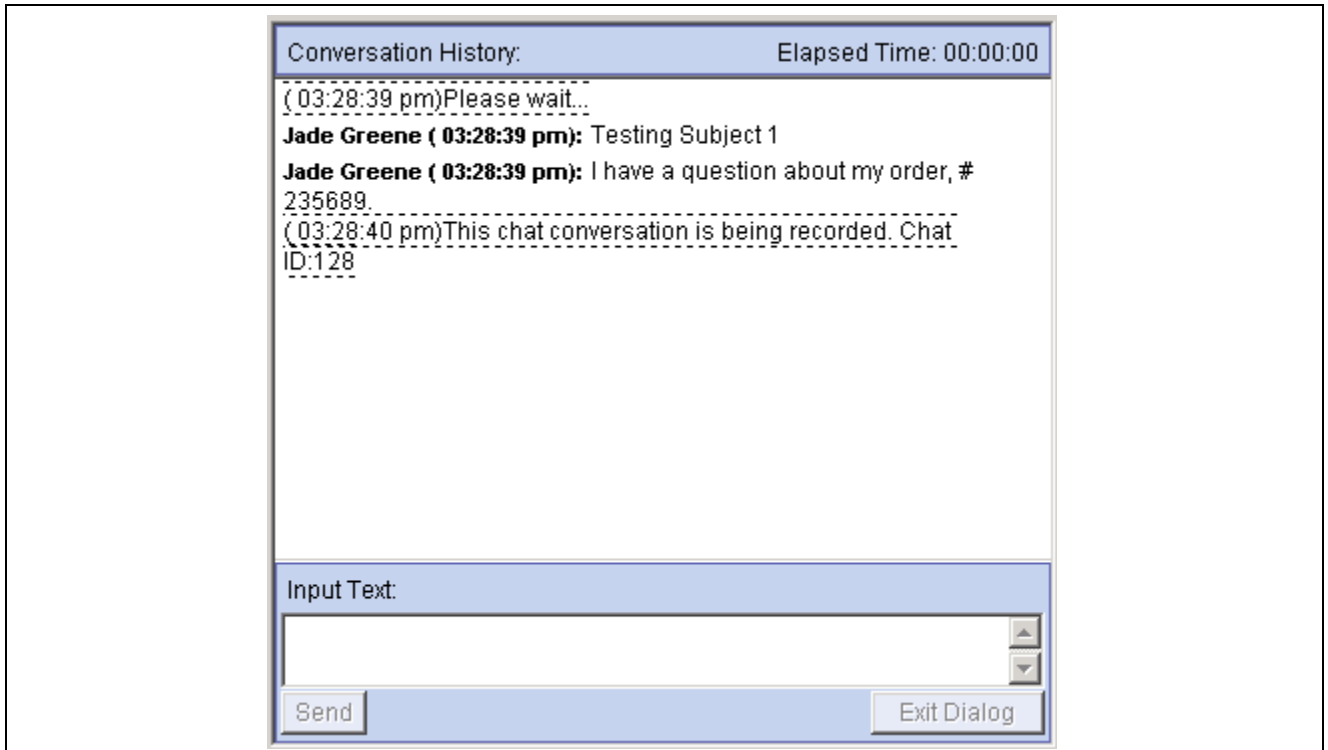
See Also

PeopleSoft Enterprise CRM 9 Application Fundamentals PeopleBook, "Working with Customer Self-Service Transactions," Sending Contact Us Messages

PeopleSoft Enterprise CRM 9 Automation and Configuration Tools PeopleBook, "Setting Up Natural Language Processing," Understanding NLP

Using the Customer Chat Window

Access the customer chat window by clicking the Start Chat button on a chat-enabled self service page.



Customer chat window

A customer uses the customer chat window to chat with the agent who accepted the chat request. The customer chat window provides only simple chat functionality, not the more extensive capabilities of the agent chat window.

The customer chat window is common to all PeopleTools chat implementations. You can find more detailed information about the customer chat window in your PeopleTools documentation.

See *Enterprise PeopleTools PeopleBook: PeopleSoft MultiChannel Framework*

Working with the Agent Chat Workspace

This section discusses how to:

- Process chat requests.
- Push pages to customers.
- Email passwords.
- Email chat logs.
- Transfer chat sessions to other queues.
- Conference with other agents.
- Chat with other agents.

- End chat sessions.

Page Used to Work with the Agent Chat Workspace

Page Name	Definition Name	Navigation	Usage
Push Web Page	RB_CHAT_WIZARD	Select the Push web page action on the chat workspace.	Displays the pages that you've defined to show here so that you can select a page whose URL you want to push to the customer.

Processing Chat Requests

Access the chat workspace.

The screenshot shows the Oracle Agent Chat Workspace. At the top, there's a navigation bar with links: Home, Worklist, Add to Favorites, and Sign out. Below this, a status bar indicates the agent's status as 'Available' with a 'Switch To...' button and an 'Agent Chat...' button. The main workspace is divided into several panels. On the left, the 'Conversation History' panel shows a list of messages: 'Teri Thomas (11:44:39 am): Testing Subject 1', 'Teri Thomas (11:44:39 am): Need update on my case', 'Aluri (11:46:27 am): Please wait while I review your information.', and 'Aluri (11:46:49 am): What is the case number?'. Below this is an 'Input Text' field with a 'Send' button, a 'Text Tray' button, and a 'Push Page' button. There's also an 'Actions' dropdown menu with a 'Go' button. On the right, the 'Quick Navigation' panel contains 'Customer Information' (Name: Teri Thomas, Company: MMA Property Management Group, Cust. Value: Gold, Address: 1200 Lake Drive, Circle Pines, MN, 55014, USA, Email: tthomas@mma.com, Telephone: 651/779-3232(4569), and a '360-Degree View' link), 'Case' (Case ID field and Open button), 'Order' (Order ID field and Open button), and 'Solution' (Keywords field and Search button). At the bottom right, there's a 'Tip of the Day' section with a message: 'Click 360-degree View hyperlink to view more customer information.' and a 'Refresh' button.

Chat workspace

Depending on the accept and popup modes that are selected for agent-to-agent and agent-to-customer chat window types in the agent configuration, the agent may not be required to click the chat task notification that appears on the Multichannel Toolbar to accept the chat request. Typically, if both modes are automatic, the chat workspace appears with information about the new chat request that the system automatically accepts for the agent. If the popup mode is manual, a notification appears, and the agent can preview, click to accept, or reject (by not clicking) it.

The chat workspace consists of three sections where agents research, interact with customers, and perform chat-related actions: the Multichannel Toolbar, the agent chat window, and the agent popup page.

Unified Agent Desktop (UAD)

The UAD provides action buttons for agents to invite another agents to join the customer-to-agent chat (conference), initiate an agent-to-agent chat, transfer the session to another queue as needed, and end the session. It also displays statistics about the chat session for reference.

Agent Chat Window

Conversation History	<p>Displays the ongoing chat dialog. Each response has a time stamp and is color-coded by participant for easy recognition.</p> <p>The system makes note in the dialog box when a chat action is performed (for example, when the password or chat log is sent to the customer, a web page is pushed to the customer) or the session is being transferred to another queue.</p>
Input Text	<p>Enter the agent's response.</p> <p>In addition to entering text manually, agents can use the text tray feature to populate predefined messages by typing quick keys or using the Text Tray link.</p>
Text Tray	Click to open the Text Tray window to review a list of available messages and select one to use in the response.
Push Page	Click to push the page that currently appears on the right of the chat workspace (agent popup page) to the customer. For example, the agent can push the Case search page to the customer who needs to look up a case during the chat session. Note that customers can view only those pages that they are authorized to see.
Actions	<p>Select an action to perform on the chat session. Options are:</p> <ul style="list-style-type: none"> • Email password. • Email chat log. • Push web page. • Display initial screen.
Open Customer Chats	<p>Displays all active chat sessions that the agent is currently processing.</p> <p>If any one of the sessions receives a response, a visual cue appears to alert the agent of the activity.</p>

Agent Popup Page

This section displays a CRM transactional page that is associated with the self-service page from which the chat session originates. Typically, it is the 360-Degree View page or the mini navigation page on which agents can search for multiple CRM objects. The page can also be the main page of any CRM object (for example, case, if the self-service page that it associates with pertains to that object).

Pushing Pages to Customers

When the agent selects the action to push a web page to the customer, the Push Web Page page appears:

Push Web Page

Select a static URL, a self-service web page, or enter a URL then press 'Push' or 'Push and Close' to send the URL.

URL

Static URL

Self-service Pages Customize | Find |  First  1-6 of 6  Last

Select	Description	Copy URL
<input type="radio"/>	HR HelpDesk Case Search	 http
<input type="radio"/>	HelpDesk Case Search	 http
<input checked="" type="radio"/>	Customer Case Search	 http
<input type="radio"/>	HR HelpDesk Solution Search	 http
<input type="radio"/>	HelpDesk Solution Search	 http
<input type="radio"/>	Customer Solution Search	 http

Push Web Page page

In addition to performing the push web page action, agents can also push a transactional page to customers by clicking the Push <transaction> button that's available (if agents are navigating transactions on the agent popup page section, for example, order). Currently, CRM supports the pushing of case and order pages using buttons.

After the URL has been pushed to the customer, a confirmation message appears in the Conversation History field.

URL Enter the URL of a website to push to the customer. The page appears in a new browser window on the customer's workstation.

Remember to enter *http://* at the beginning of the URL.

Static URL Select a predefined URL to push to the customer's workstation.

Define static URLs under the Chat Setting section on the Configure Agent - Multichannel Configuration page.

See [Chapter 15, "Working with Supervisor Desktop," Configuring Agents, page 262](#).

Self-service Pages Select a self-service search page from the list to push to the customer's workstation.

You establish the list of search pages on the Self-Service Page Mapping page.

Select and URL The URL of the corresponding page appears in the URL field automatically. You can edit the URL if you already know the application keys (such as an order ID) to the URL; the URL with keys directs the customer to the exact CRM transaction.

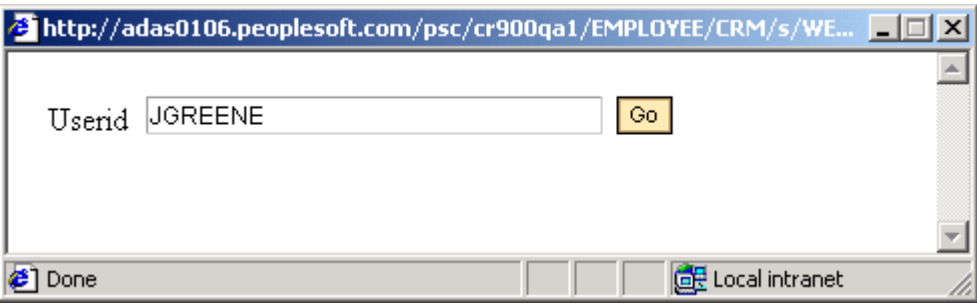
Description Click to access the search page of the corresponding CRM object. From the search page, agents can look up transactions that relate to the customer and select one that the customer would be interested in viewing.

Copy URL Click to copy the URL of the corresponding search page in the clipboard. The agent can paste the copied URL on a browser window or text file and modify it as needed.

- Push** Click to send the URL to the customer's workstation without closing the Push Webpage window.
- Push and Close** Click to send the URL to the customer's chat workstation and close the Push Webpage window.

Emailing Passwords

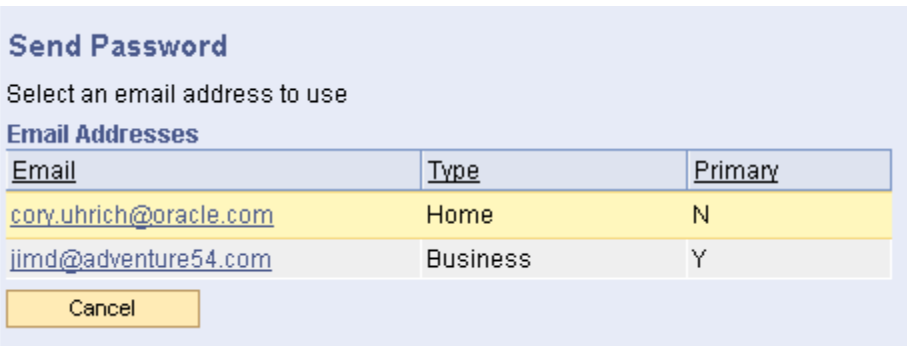
When the agent selects the action to email the user password to the customer, a window appears. The agent enters the user ID of the customer:



The screenshot shows a web browser window with the address bar displaying <http://adas0106.peoplesoft.com/psc/cr900qa1/EMPLOYEE/CRM/s/WE...>. The main content area contains a label 'Uuserid' followed by a text input field containing the text 'JGREENE'. To the right of the input field is a yellow 'Go' button. At the bottom of the window, there is a status bar with a 'Done' button and a 'Local intranet' indicator.

Enter user ID window

The Send Password window then appears:



The screenshot shows a 'Send Password' dialog box. It has a title bar 'Send Password' and a subtitle 'Select an email address to use'. Below the subtitle is a section titled 'Email Addresses' containing a table with three columns: 'Email', 'Type', and 'Primary'. The table has two rows of data. The first row is highlighted in yellow and contains the email 'cory.uhrich@oracle.com', type 'Home', and primary status 'N'. The second row contains the email 'jimd@adventure54.com', type 'Business', and primary status 'Y'. Below the table is a yellow 'Cancel' button.

Email	Type	Primary
cory.uhrich@oracle.com	Home	N
jimd@adventure54.com	Business	Y

Send Password window

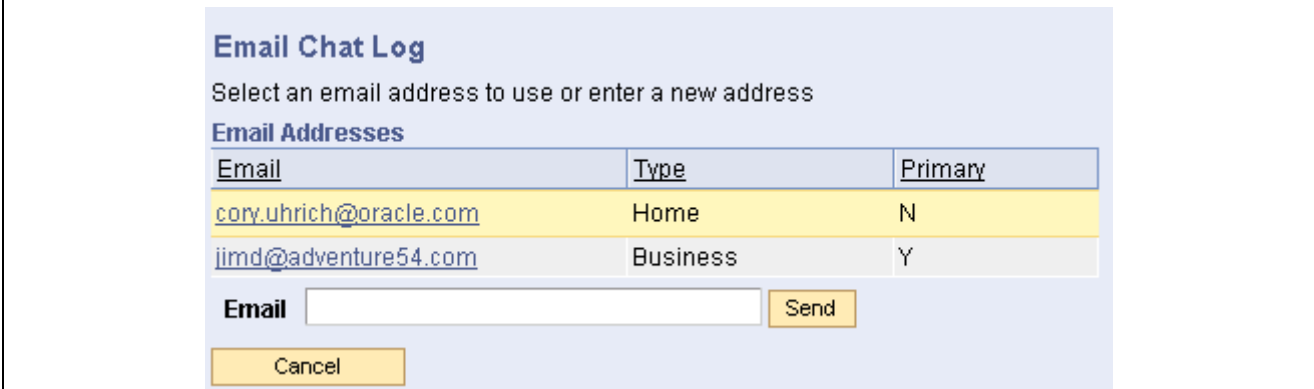
Click the customer email address to which the password is sent. This action resets the user's password to *password*. After the password has been mailed to the customer, a confirmation message appears in the Conversation History field.

Note. This implementation is delivered as an example on how user passwords can be retrieved. Customers should come up with their own design to obtain the user ID and make the modification in PeopleTools accordingly. Refer to this see reference for guidelines.

See [Chapter 14, "Working with Chat in PeopleSoft Enterprise CRM," Agent Chat Window, page 236.](#)

Emailing Chat Logs

When the agent selects the action to send the chat transcript to the customer, the Email Chat Log window appears:



Email Chat Log
Select an email address to use or enter a new address

Email Addresses

Email	Type	Primary
cory.uhrich@oracle.com	Home	N
jimd@adventure54.com	Business	Y

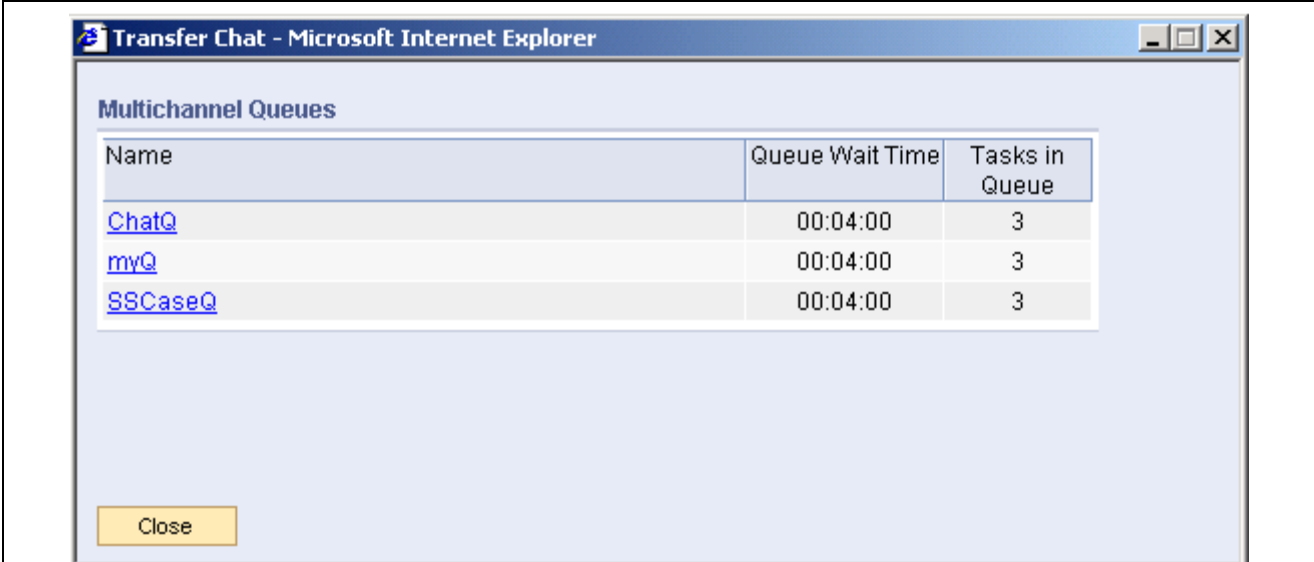
Email

Email Chat Log window

Select or enter the customer email address to which the chat log is sent. The agent can enter multiple email addresses in the field and separate them by commas. After the log has been mailed to the customer, a confirmation message appears in the Conversation History field.

Transferring Chat Sessions to Other Queues

When the agent clicks the Transfer Chat button, the Transfer Chat to Queue window appears:



Transfer Chat - Microsoft Internet Explorer

Multichannel Queues

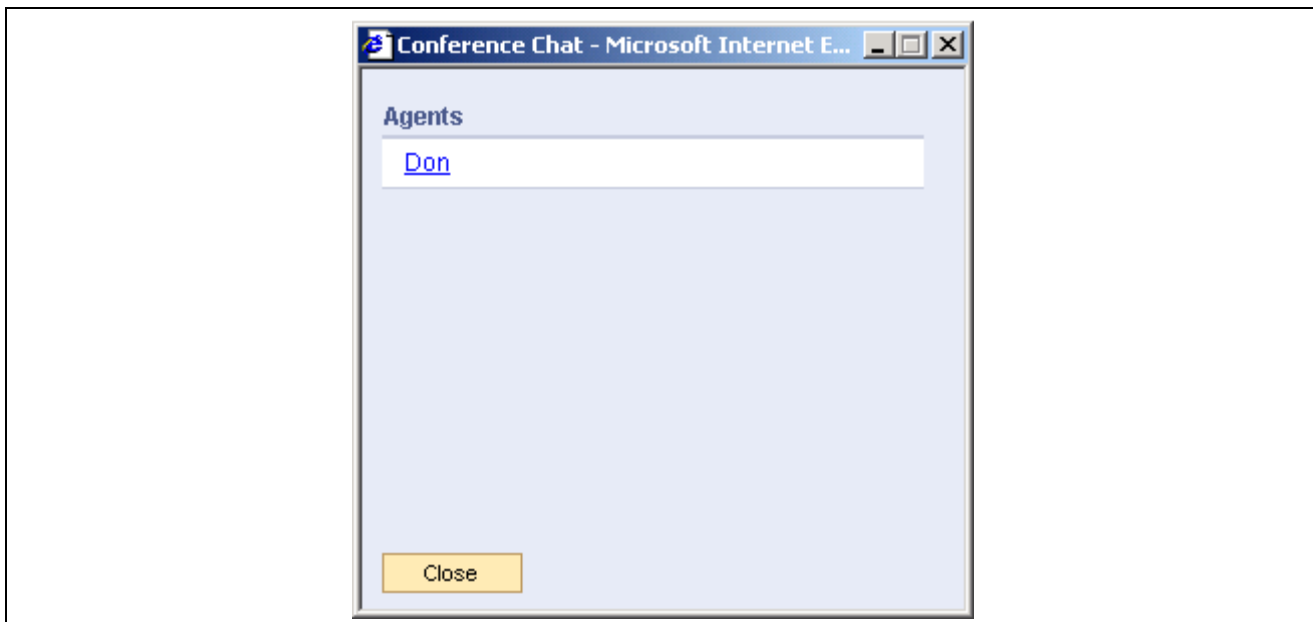
Name	Queue Wait Time	Tasks in Queue
ChatQ	00:04:00	3
myQ	00:04:00	3
SSCaseQ	00:04:00	3

Transfer Chat to Queue window

The agent selects a queue from the list to transfer the chat session. When the transfer is completed, the current session ends automatically, and the agent must categorize it on the Multichannel Toolbar before closing the chat workspace for that session.

Conferencing with Other Agents

When the agent clicks the Conference button, the Conference Chat window appears:



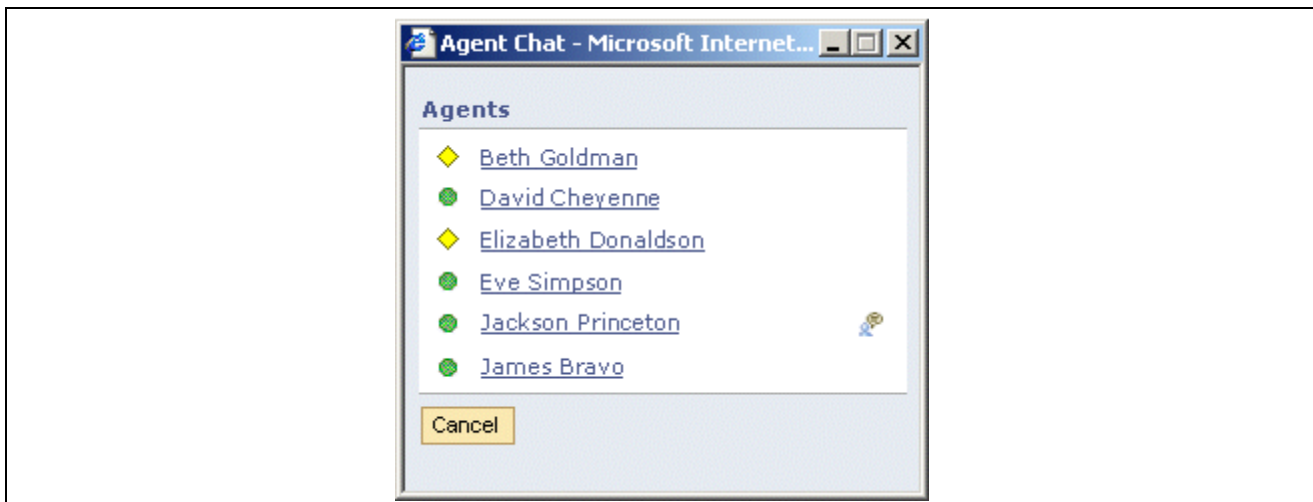
Conference Chat window

During a chat session, the agent can invite an available agent to join the chat. The invited agent can interact with all participants to exchange ideas and discuss issues.

Available agents have a green circle next to them. Click the agent's name to initiate the conference chat. Unavailable agents also appear, but the agent cannot choose them to join the chat.

Chatting with Other Agents

When the agent clicks the Agent Chat button, the Agent Chat window appears:



Agent Chat window

In addition to inviting an agent to start a three-way chat, the agent can initiate a chat session with another agent without the customer's knowledge. When the second agent accepts the chat session, the chat history between the first agent and the customer appears for reference. The agents can discuss the customer's issue and later relay the information back to the customer.

Because two agents are involved in the session, the system generates two chat IDs and separate interactions. Each agent can categorize the session individually when it closes.

Ending Chat Sessions

When the agent ends a chat session, all fields on the agent chat window and chat buttons on the Multichannel Toolbar are disabled. The agent must categorize the session in the Category field that appears on the toolbar.

See Also

[Chapter 12, "Setting Up Unified Agent Desktop," Configuring Agents for Unified Agent Desktop, page 170](#)

Enterprise PeopleTools PeopleBook: PeopleSoft MultiChannel Framework

Viewing Chat Logs and Reports

To view chat details, use the Chat Detail (RB_CHAT_DETAIL) component.

This section discusses how to:

- View chat logs.
- View chat details.
- View chat reports.

Pages Used to View Chat Logs and Reports

Page Name	Definition Name	Navigation	Usage
Chat Log	RB_CHAT_LOG	Correspondence, Chat Detail, Chat Log	View chat transcripts and related transactions.
Chat Details	RB_CHAT_DETAIL	Correspondence, Chat Detail, Chat Details	View system information about the chat session and chat automation results (if NLP is available).

Viewing Chat Logs

Access the Chat Log page.

Chat Detail

Refresh | Next | Previous | 360 360-Degree View | Worklist | Personalize

Chat user Sally Smith
Start Date/Time 5/12/2004 06:03:10 PM
Wait Time 0h 1m 14s
Customer Value Gold
End Date/Time
Duration

Chat Log | Chat Details

Chat Log

(06:01:55 PM) Username=Sally Smith, Subject=Documentation, Question=Where can I find documentation on the configurato

MCFLOG (06:01:55 PM) 5

Elsa (06:03:10 PM) Please wait while I review your information.

Elsa (06:04:36 PM) You can find this documentation in our website.

Sally Smith (06:08:50 PM) Can you point me to it?

Elsa (06:10:45 PM) /psc/c890r60bx_5/EMPLOYEE/CRM/c/RC_SELF_SERVICE.RC_CASE_HD_SS_SRCH.GBL?Page=RC_CASE_HD_SS_SRCH&Action=U&DISP_TMPL_ID=RC_HELPDESK

Chat Log page

Related Transactions

This grid displays CRM application objects that are associated with the selected chat session (if applicable). These objects are subinteractions of the chat interaction.

Chat Log

This area records the dialog between the agent and chat requester. The time that corresponds to each line in the conversation changes based on the time zone that is selected on the toolbar. The right column displays the content of the dialog. Customer's name appears in red and agent's name appears in black.

Viewing Chat Details

Access the Chat Details page.

Chat Detail

Refresh | Next | Previous | 360 360-Degree View | Worklist | Personalize

Chat user Sally Smith
Start Date/Time 5/12/2004 06:03:10 PM
Wait Time 0h 1m 14s

Customer Value Gold
End Date/Time
Duration

Chat Log | **Chat Details**

Detail Summary

CRM Chat ID 2 [View System Chat Detail](#)

Initial Queue DocQ **Subject** Documentation

Final Queue DocQ **Agent Name** Elsa LaVigne

Description Customer Self-service Contact Us Page

Question Where can I find documentation on the configurator product?

Chat Details page

Detail Summary

CRM Chat ID	Displays the unique identification number of the chat request.
View System Chat Detail	Click to access the Chat Log component in PeopleTools in a new browser window.
Initial Queue and Final Queue	Displays the first queue to which the chat session was submitted and the last one to which it belonged. These values are different if the chat request was reassigned.
Source Page	Displays the self-service page where the chat was initiated.
Question and Subject	Displays the question (if available) and subject that was entered by the customer in the chat request.
Agent Name	Displays the agent who was last assigned to the chat request.

Chat Automation

This grid lists solutions that returned from NLP as suggested answers to customer's questions. It appears only if NLP is installed and if autosuggestion was available in the chat session.

Solution ID	Displays the ID of the suggested solution.
Resolved Chat Question	Displays whether the solution answers the customer's question successfully.
Problem Summary	Displays the solution summary.

Viewing Chat Reports

See [Appendix A, "PeopleSoft Multichannel Communications Reports," page 293](#).

CHAPTER 15

Working with Supervisor Desktop

This chapter discusses how to:

- Monitor real-time information.
- Run performance reports and access dashboards.
- Approve emails.
- Manage timeout entries.
- Configure agents.
- Manage teams and queues.
- Personalize Supervisor Desktop.

Monitoring Real-Time Information

This section discusses how to:

- Monitor real-time information.
- View agent details.
- View queue details.

The Supervisor Desktop component is accessible to users who have the SD_TEAMLEADER, SD_SUPERVISOR, or SD_ADMINISTRATOR role. The available functionality varies based on the role that is assigned to them.

See Chapter 11, "Setting Up Supervisor Desktop," Defining System-Level Settings for Supervisor Desktop, page 160.

Page Used to Monitor Real-Time Information

Page Name	Definition Name	Navigation	Usage
Realtime Monitoring	RB_SD_MONITOR	MultiChannel, Supervisor Desktop, Real-time Monitoring	Monitor real-time information.
Realtime Monitoring - Details for <agent name>	RB_SD_MONITOR	Click an agent link on the Realtime Monitoring page while the Monitor Type is set to <i>Agent Statistics</i> .	View agent details.
Realtime Monitoring - Details for <queue name>	RB_SD_MONITOR	Click a queue link on the Realtime Monitoring page while the Monitor Type is set to <i>Queue Statistics</i> .	View queue details.

Monitoring Real-Time Information

Access the Realtime Monitoring page.

Lines:

Status Connected Available

Switch To... Agent Chat...

Supervisor Desktop

Manage Queue List Define Teams Configure Agent Refresh All Lists Preferences Personalize

Realtime Monitoring Email Approval (0) Timeout Administration (0) Performance Reports

Monitor Settings

Monitor Type Agent Statistics Filter By Assigned Queues Monitor Status Active Pause

Agent Name	Chat	Queue Name	Queue Status		Total Queue Time	
			State	Reason	Time In State	Available
Andy Wang		MCFQ1	●	Capacity - 100%	00:12:33	00:12:33 00:00:00
Maureen McGuire		8000	■	Ready	-	- 00:01:17
		MCFQ1	■	Capacity - 90%	00:03:55	00:03:55 00:00:00
Yoshi Sato		UADQ1	●	Capacity - 100%	00:09:47	00:09:47 00:00:00

Realtime Monitoring page showing agent statistics by assigned queues; an agent is currently on call

Supervisor Desktop

Manage Queue List | Define Teams | Configure Agent | Refresh All Lists | Preferences | Personalize

Realtime Monitoring | Email Approval (0) | Timeout Administration (0) | Performance Reports

Monitor Settings

Monitor Type: Agent Statistics
Filter By: Assigned Queues
Monitor Status: Active [Pause]

Statistics

Agent Name	Chat	Queue Name	Queue Status			Total Queue Time	
			State	Reason	Time In State	Available	Unavailable
Andy Wang		MCFQ1	●	Capacity - 100%	00:13:33	00:13:33	00:00:00
Maureen McGuire	Chat	8000	■	Ready	-	-	00:00:32
		MCFQ1	●	Capacity - 100%	00:04:59	00:04:55	00:00:00
Yoshi Sato	Chat	UADQ1	●	Capacity - 100%	00:10:47	00:10:47	00:00:00

Realtime Monitoring page showing agent statistics by assigned queues; an agent is resuming the Ready status after releasing a call

Supervisor Desktop

Manage Queue List | Define Teams | Configure Agent | Refresh All Lists | Preferences | Personalize

Realtime Monitoring | Email Approval (0) | Timeout Administration (0) | Performance Reports

Monitor Settings

Monitor Type: Agent Statistics
Filter By: Assigned Queues
Monitor Status: Active [Pause]

Statistics

Agent Name	Chat	Queue Name	Queue Status			Total Queue Time	
			State	Reason	Time In State	Available	Unavailable
Andy Wang		MCFQ1	●	Capacity - 100%	00:16:33	00:16:33	00:00:00
Maureen McGuire	Chat	8000	◆	Busy	-	-	00:01:25
		MCFQ1	●	Capacity - 100%	00:07:55	00:07:55	00:00:00
Yoshi Sato	Chat	UADQ1	●	Capacity - 95%	00:14:04	00:13:47	00:00:00

Realtime Monitoring page showing agent statistics by assigned queues; one agent is currently on call (status is set to busy) and one agent is working on a chat session (available capacity is at 95 percent)

Supervisor Desktop

Manage Queue List | Define Teams | Configure Agent | Refresh All Lists | Preferences | Personalize

Realtime Monitoring | Email Approval (0) | Timeout Administration (0) | Performance Reports

Monitor Settings

Monitor Type: Agent Statistics
Filter By: Team
*Team Name: TeamA
Monitor Status: Active [Pause]

Statistics

Agent Name	Chat	Queue Name	Queue Status			Total Queue Time	
			State	Reason	Time In State	Available	Unavailable
Andy Wang		MCFQ1	●	Capacity - 100%	00:23:18	00:23:18	00:00:00
Maureen McGuire	Chat	8000	●	Ready	-	-	00:01:22
		MCFQ1	●	Capacity - 100%	00:17:11	00:17:11	00:00:00

Realtime Monitoring page showing agent statistics by team

Supervisor Desktop

Manage Queue List | Define Teams | Configure Agent | Refresh All Lists | Preferences | [Personalize](#)

Realtime Monitoring | Email Approval (0) | Timeout Administration (10) | Performance Reports

Monitor Settings

Monitor Type: Agent Statistics
Filter By: Queue List

Monitor Status
Active [Pause](#)

Statistics

Agent Name	Chat	Queue Name	Queue Status		Total Queue Time	
			State	Reason	Time In State	Available
Andy Wang		MCFQ1	●	Capacity - 100%	00:29:18	00:29:18
Maureen McGuire	Chat	8000	●	Ready	-	00:00:21
		MCFQ1	●	Capacity - 100%	00:23:11	00:23:11

Realtime Monitoring page showing agent statistics by queue list

Supervisor Desktop

Manage Queue List | Define Teams | Configure Agent | Refresh All Lists | Preferences | [Personalize](#)

Realtime Monitoring | Email Approval (0) | Timeout Administration (0) | Performance Reports

Monitor Settings

Monitor Type: Queue Statistics
Filter By: Assigned Queues

Monitor Status
Active [Pause](#)

Statistics

Queue Name	Agent			Task		Task Time	
	Assigned	Logged On	Available	Abandoned	In Queue	Average Wait	Average Duration
8000	11	57	-	95	25	00:00:23	-
MCFQ1	3	2	2	-	0	00:00:00	00:00:00
UADQ1	2	1	1	-	0	00:00:06	00:00:00

Realtime Monitoring page showing queue statistics by assigned queues

Supervisor Desktop

Manage Queue List | Define Teams | Configure Agent | Refresh All Lists | Preferences | [Personalize](#)

Realtime Monitoring | Email Approval (0) | Timeout Administration (0) | Performance Reports

Monitor Settings

Monitor Type: Queue Statistics
Filter By: Team
*Team Name: TeamA

Monitor Status
Active [Pause](#)

Statistics

Queue Name	Agent			Task		Task Time	
	Assigned	Logged On	Available	Abandoned	In Queue	Average Wait	Average Duration
8000	11	2	-	79	22	00:01:18	-
MCFQ1	3	1	1	-	0	00:00:00	00:00:00
UADQ1	2	0	0	-	0	00:00:00	00:05:20

Realtime Monitoring page showing queue statistics by team

The screenshot shows the Supervisor Desktop interface. At the top, there are navigation links: Manage Queue List, Define Teams, Configure Agent, Refresh All Lists, and Preferences. Below these is a 'Realtime Monitoring' tab, which is active. Under this tab, there are sub-tabs: Email Approval (0), Timeout Administration (10), and Performance Reports. The 'Monitor Settings' section has two dropdown menus: 'Monitor Type' set to 'Queue Statistics' and 'Filter By' set to 'Queue List'. To the right, the 'Monitor Status' is 'Active' with a 'Pause' button. Below this is a 'Statistics' section with a table showing queue statistics.

Queue Name	Agent			Task		Task Time	
	Assigned	Logged On	Available	Abandoned	In Queue	Average Wait	Average Duration
8000	11	89	-	92	34	00:01:20	-
MCFQ1	3	2	2	-	0	00:00:00	00:00:00

Realtime Monitoring page showing queue statistics by queue list

Users can select the different types of data as well as the collection of data to be monitored by switching values in the Monitor Type and Filter By fields respectively:

- Agent statistics by:
 - Assigned queues.
 - Queues that are specified in the queue list.
 - Defined teams.
- Queue statistics by:
 - Assigned queues.
 - Queues that are specified in the queue list.
 - Defined teams.

Note. Queue lists or teams must be defined before they are available as options under filter statistics.

Monitor Status

When the monitor status is active, real-time statistics are constantly updated. Click the Pause button to freeze the display. Click the Resume button to the restart real-time update.

A text message appears in this section if Supervisor Desktop is unable to perform real-time monitoring.

Statistics

The information that appears in this grid changes slightly based on the selected monitor type: agent or queue statistics.

The following real-time data and functionality are available when users view agent statistics:

- The list of agents, who are logged into a queue, that resulted from the selected filter.
Click the agent link to view additional real-time information of the corresponding agent.
See [Chapter 15, "Working with Supervisor Desktop," Viewing Agent Details, page 254](#).
- The ability to chat with agents if applicable (only available if the agent is logged into a multichannel queue).
- The queue to which each agent is connected (separate displays for voice versus multichannel queues).
- The queue status, the duration in which the agent remains in this status, and its current unused capacity (duration in status and capacity are only applicable to multichannel queues).

- The total time in which the agent has been available (multichannel only) or unavailable since logging into the current queue.

The following real-time data is available when users view queue statistics:

- The list of queues that resulted from the selected filter.

Click the queue link to view additional real-time information of the corresponding queue.

See [Chapter 15, "Working with Supervisor Desktop," Viewing Queue Details, page 255.](#)

- Numbers of agents that are configured for each queue, currently signed in, and are available to accept tasks (available agents only applicable for multichannel queues).
- Numbers of tasks that have been abandoned by the queue (voice channel only) and are currently queued.
- The average wait time to accept tasks and the average duration to finish tasks. The average duration is available to multichannel queues only.

Viewing Agent Details

Access the Realtime Monitoring - Details for <agent name> page.

Supervisor Desktop

Manage Queue List | Define Teams | Configure Agent | Refresh All Lists | Preferences | Personalize

Realtime Monitoring | Email Approval (0) | Timeout Administration (0) | Performance Reports

Details for Maureen McGuire

Monitor Settings

[Return to Summary View](#) | [Configure this Agent](#) | **Monitor Status**: Active [Pause](#)

Statistics

Agent Name	Chat	Queue Name	Queue Status			Total Queue Time	
			State	Reason	Time In State	Available	Unavailable
Maureen McGuire	Chat	8000	●	Ready	-	-	00:00:25
		MCFQ1	●	Capacity - 100%	00:14:11	00:14:11	00:00:00

Additional Voice Statistics

Statistic	Data
Calls Handled	62
Average Queue Time	00:01:04
Average Call Time	00:00:06
Average Hold Time	00:00:01

Additional Multichannel Statistics

Statistic	Data
Time Since Login	00:14:11
Time Not Ready	00:00:00
Time Idle	00:14:11
Percent Idle	100%

Task Totals

Statistic	Chat	Email	Generic
Tasks Accepted	0	0	0
Tasks Done	0	0	0
Tasks Unaccepted/Escalated	0	0	0

Realtime Monitoring - Details for <agent name> page

Monitor Settings

Return to Summary View

Click to return to the previous page where summary agent statistics are displayed.

Configure this Agent

Click to access the Configure Agent component on a new browser window to add or edit the configuration of the selected agent.

Additional Multichannel Statistics

This grid appears if the selected agent is a configured multichannel agent.

Time Since Login

Displays the time duration since the agent signed into a multichannel queue.

Time Not Ready	Displays the duration during which the agent is in a not-ready mode since sign-in. This state is different from being in an <i>unavailable</i> state. This value is updated when the agent's maximum workload is reached (that is, capacity drops to 0 percent) and the server can no longer assign new tasks to this agent.
Time Idle	Displays the duration during which the agent remains idle since sign-in.
Percent Idle	Displays the agent's idle time in percentage.

Additional Voice Statistics

This grid appears if the selected agent is a configured voice agent.

Number Calls Handled	Displays the number of calls that are handled by the agent since sign-in.
Average Queue Time	Displays the average time that calls remain in queue taken by the agent.
Average Call Time	Displays the average time to complete calls by the agent.
Average Hold Time	Displays the average time that calls are put on hold by the agent.

Task Totals (Multichannel only)

Tasks Accepted	Displays the number of tasks of each task type that are accepted by the agent.
Tasks Done	Displays the number of tasks of each task type that are completed by the agent.
Tasks Unaccepted/Escalated	Displays the number of tasks of each task type that are unassigned by the system, either because the agent did not accept them when the system notified the agent through the Multichannel Toolbar or the tasks have been escalated.

Viewing Queue Details

Access the Realtime Monitoring - Details for <queue name> page.

Note. Details for a voice queue are not available. For this reason, voice queues are not hyperlinked in the queue summary display.

Supervisor Desktop

[Manage Queue List](#) |
 [Define Teams](#) |
 [Refresh All Lists](#) |
 [Preferences](#) |
 [Personalize](#)

Realtime Monitoring

Email Approval (0)

Timeout Administration (19)

Performance Reports

Details for UADQ1

Monitor Settings

[Return to Summary View](#)

Monitor Status

Active

Pause

Statistics

Queue Name	Agent			Task		Task Time	
	Assigned	Logged On	Available	Abandoned	In Queue	Average Wait	Average Duration
UADQ1	6	3	2	-	0	00:00:16	00:04:22

Realtime Monitoring - Details for <queue name> page (1 of 2)

Multichannel Detail Statistics				
Statistic	Aggregate	Chat	Email	Generic
Tasks In Queue	0	0	0	0
Tasks Accepted	13	13	0	0
Tasks Done	3	2	1	0
Tasks Escalated	3	0	2	1
Tasks Overflowed	2	2	0	0
Most Recent Task Time	00:00:00	00:00:00	00:00:00	00:00:00
Oldest Task Time	74:17:45	74:17:45	00:00:00	00:00:00
Average Wait Time	00:00:16	00:00:16	00:00:00	00:00:00
Average Duration	00:04:22	00:07:55	00:00:49	00:00:00
Time Since Queue Start	77:18:55			

Realtime Monitoring - Details for <queue name> page (2 of 2)

Multichannel Detail Statistics

Tasks In Queue	Displays the number of tasks (by task type) that are currently queued.
Tasks Accepted	Displays the number of tasks of each task type that have been accepted since the queue or server starts. This value is incremental only.
Tasks Done	Displays the number of tasks of each task type that are completed. This value is incremental only.
Tasks Escalated	Displays the number of tasks of each task type that have been removed from the queue or the agent's task list and categorized as the escalated timeout type. This value is incremental only.
Tasks Overflowed	Displays the number of tasks of each task type that are removed from the queue and categorized as the overflow timeout type. This value is incremental only.
Most Recent Task Time	Displays the elapsed time of the most recent task in the queue.
Oldest Task Time	Displays the elapsed time of the oldest task.
Average Wait Time	Displays the average wait time for tasks to be accepted in the queue.
Average Duration	Displays the average time that is used to complete tasks in the queue.
Time Since Queue Start	Displays the elapsed time since the server (or a specific queue) starts.

Running Performance Reports and Accessing Dashboards

This section discusses how to run performance reports and access dashboards.

Page Used to Run Performance Reports and Access Dashboards

Page Name	Definition Name	Navigation	Usage
Performance Reports	RB_SD_REPORT	MultiChannel, Supervisor Desktop, Performance Reports	Run multichannel communications reports and access dashboards that are configured in Supervisor Desktop.

Running Performance Reports and Accessing Dashboards

Access the Performance Reports page.

Supervisor Desktop

Manage Queue List | Define Teams | Configure Agent | Refresh All Lists | Preferences

Realtime Monitoring / Email Approval (0) / Timeout Administration (10) / **Performance Reports**

Run a Performance Report

*Report:

Dashboards

- [Common Dashboard](#)
- [Contact Center Dashboard](#)
- [Order Management Dashboard](#)
- [Sales Dashboard](#)
- [Service Dashboard](#)

Performance Reports page

Run a Performance Report

Report and Execute

Select a report that you want to generate. Available reports in this field come from the Supervisor Desktop setup for reports.

Click the Execute button to access the run control page of the selected report in a new browser window. Enter report criteria and run the report.

The desktop displays a message if no reports are enabled.

See [Appendix A, "PeopleSoft Multichannel Communications Reports," page 293](#).

Dashboards

This section displays dashboard links that are enabled in the Supervisor Desktop setup. Click the links to open a new browser window to access the corresponding dashboards directly from Supervisor Desktop.

This section does not appear if no dashboards are enabled.

See Also

[Chapter 11, "Setting Up Supervisor Desktop," Specifying Images and Text Display Options, page 161](#)

Approving Emails

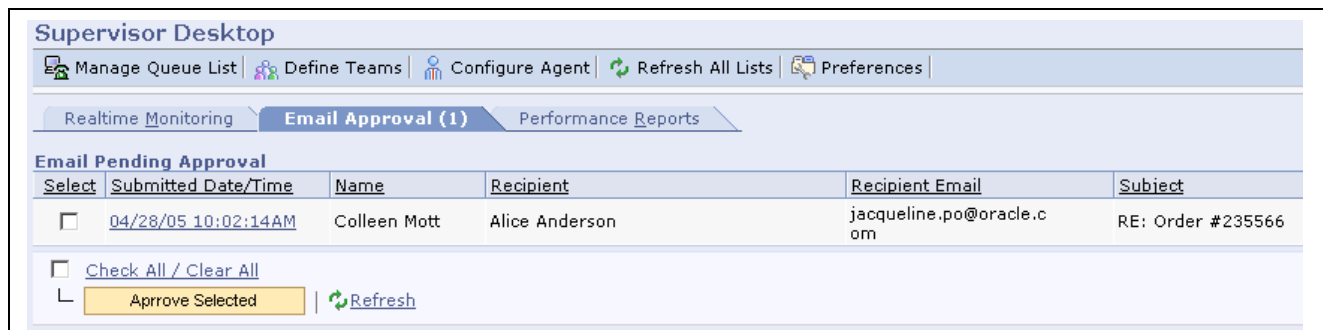
This section discusses how to approve emails.

Page Used to Approve Emails

Page Name	Definition Name	Navigation	Usage
Email Approval	RB_SD_APPROVAL	MultiChannel, Supervisor Desktop, Email Approval	Approve email. This page lists email (currently pending approval) for this agent to perform individual review or mass approval.

Approving Emails

Access the Email Approval page.



Email Approval page

Next to the page name is the number of email that is pending approval for the signed-in user, who is the email approver defined in the agent's configuration.

Note. The email counts are only updated when you select the page, click the Refresh All Lists toolbar button or click the Refresh button on the page.

Email Pending Approval

Submitted Date/Time

Click to access the Outbound Email page to review the content of the outgoing text that needs approval before it is sent to the recipient. You can either approve or disapprove the email.

Approve Selected

The system delivers approved emails to their target recipients, and the corresponding worklist entries are marked as complete automatically. Agents are notified if their outgoing emails are being disapproved.

Click to approve all the selected emails on the list. After these emails are approved, corresponding worklist entries are marked as complete automatically.

The system displays a message if some of the selected emails weren't approved successfully. These emails remain on the list to be further reviewed.

Note. For performance purposes, you can only approve five email messages at a time with this mass approval feature. If you select more than five messages, only the first five are approved. The remainder of the selected email messages continue to be selected so that you can click this button again to approve the next five messages (if more than five are selected).

Refresh

Click to refresh the email list and the number indicator as needed.

Managing Timeout Entries

This section discusses how to:

- Manage timeout entries.
- View timeout entry detail.

Pages Used to Manage Timeout Entries

Page Name	Definition Name	Navigation	Usage
Timeout Administration	RB_SD_TIMEOUT	MultiChannel, Supervisor Desktop, Timeout Administration	Manage timeout entries.
Supervisor Desktop - Timeout Entry Details	RB_SD_TIMEOUT_SEC	Click the timeout date and time link of an entry on the Timeout Administration page.	View timeout entries.

Managing Timeout Entries

Access the Timeout Administration page.

Supervisor Desktop

Manage Queue List | Define Teams | Configure Agent | Refresh All Lists | Preferences | Personalize

Realtime Monitoring | Email Approval (0) | **Timeout Administration (10)** | Performance Reports

Timeout Entry Filter

*Queue ID Timeout Type

Task Type ☐ Include Closed Timeout Entries

Search

Timeout Entries

Select	Timeout Date/Time	Timeout Type	Queue ID	Task Type	Task Description	
<input type="checkbox"/>	05/30/06 2:37:18PM	Overflow	MCFQ1	Chat		
<input type="checkbox"/>	05/30/06 2:38:59PM	Overflow	MCFQ1	Chat		
<input type="checkbox"/>	05/30/06 2:36:55PM	Overflow	MCFQ1	Email	test 1	Reassign
<input type="checkbox"/>	05/30/06 2:37:55PM	Overflow	MCFQ1	Email	Email from Jim Jacobs	Reassign
<input type="checkbox"/>	05/30/06 2:37:55PM	Overflow	MCFQ1	Email	Email from Jim Jacobs	Reassign
<input type="checkbox"/>	05/30/06 2:39:55PM	Overflow	MCFQ1	Email	Email from Jim Jacobs	Reassign
<input type="checkbox"/>	05/30/06 2:39:55PM	Overflow	MCFQ1	Email	test 6	Reassign
<input type="checkbox"/>	05/30/06 2:43:55PM	Overflow	MCFQ1	Email	test 6	Reassign
<input type="checkbox"/>	05/30/06 2:50:55PM	Overflow	MCFQ1	Generic	Sales Information	Reassign
<input type="checkbox"/>	05/30/06 2:52:55PM	Overflow	MCFQ1	Generic	Sales Information	Reassign

☐ Check All / Clear All

Close Close with Comments Requeue Refresh

Timeout Administration page

The number shown to the right of the page name indicates the number of pending timeout entries in all queues belonging to the queue list. It is not always the total number of entries that appear in the timeout summary list. This page is unavailable if the user is not configured for multichannel queues.

The queues included in the queue list are defined by clicking the Manage Queue List toolbar button. Before beginning to manage timeout entries, you must add multichannel queues to the queue list.

Important! You should use this page, instead of the pages that are provided by PeopleTools, to manage timeout entries because it contains built-in, PeopleSoft CRM-specific business logic. Failure to use this page can cause potential problems in working with emails that are routed through the Multichannel Toolbar.

Timeout Entry Filter

Queue ID

Select *Queue List* (which includes all multichannel queues defined on the queue list) or a queue that is specified in the queue list to which timeout entries are filtered.

Timeout Type

Select the type of timeout entry to be listed. Values are *Escalation*, *Overflow*, and blank. Specifying no value means that all types are displayed.

Task Type

Select the timeout entries associated with specific types of tasks to be displayed. Options are *Email*, *Chat*, *Generic* and blank. Specifying no value means that timeout entries for any task types are displayed.

Include Closed Timeout Entries

Select to include entries that are marked closed in the list. By default, this check box is cleared, meaning that only unprocessed timeout entries are displayed.

Timeout Entries

The system displays the timeout summary list based on the filtering criteria. You can perform these actions on the entries:

- View detail on the Supervisor Desktop - Timeout Entry Details page by clicking the timeout date and time link.
- View the task content in the corresponding component by clicking the task type link. This applies to generic and email tasks only.
- Close the selected entries, with or without comments.
- Resubmit selected entries to their queues (that is, requeue). This applies to generic and email tasks only.
- Reassign email entries.

This action applies only to email entries that are type overflow and are not closed. You reassign email entries to a group worklist or an individual the same way that you do from My Worklist or the Email Workspace.

- Reassign generic entries.

This action applies only to generic entries that are type overflow and are not closed. You reassign them to another queue and can optionally add a comment about the reassignment.

All the actions, except for viewing entry details, result in the removal of the entries from the timeout list.

Note. If closed entries appear on this summary list, no other functions apply besides viewing the details.

Viewing Timeout Entry Detail

Access the Supervisor Desktop - Timeout Entry Details page.

Supervisor Desktop
Timeout Entry Details

Task identifier email3	Language Code English
Queue ID MCFQ1	Task Type Email
Agent ID CCAG_CTI	Timeout Type Overflow
Timeout Date/Time 05/30/2006 2:37:55PM	Task priority 1
Time enqueued 05/30/2006 2:21:59PM	Cost of Task 2
Action Timeout 05/30/2006 2:36:59PM	Skill level 1
Completion Timeout 05/30/2006 3:21:59PM	<input type="checkbox"/> Is Closed
Application Data	/psc/c900r20bnt/EMPLOYEE/CRM/c/PT_MCF.MCFEM_DEMOERMS_CMP,GBL?Page=MCFEM_ERMSMN&Action=U&ps_emailid=13
Comments	

Supervisor Desktop - Timeout Entry Details page

Use this page to review the timeout information and optionally enter a comment if the entry is not closed.

Configuring Agents

To configure agents, use the Configure Agent (RB_AGT_CONFIG) component.

This section lists common elements and discusses how to:

- Define voice queue configuration for agents.
- Define multichannel queue configuration for agents.
- Define email settings for agents.
- Define multichannel toolbar settings for agents.
- Copy agent settings.

Note. Administrators should leverage Supervisor Desktop to configure agents. If system managers use the Agent Configuration component (accessible through Supervisor Desktop) to create agents for Computer Telephony Interface (CTI) or universal queue, the system automatically creates the same agent records in the Unified Agent Desktop (or Multichannel Toolbar) Agent Configuration component and PeopleTools.

If you use the PeopleTools pages to create CTI or universal queue agents, the same records are created in the Agent Configuration component that are accessible through Supervisor Desktop. However, these agent records are not automatically available in the Unified Agent Desktop Agent Configuration component.

Common Elements Used in This Section

Popup Mode

Select how the selected task window should appear. Values are:

- *Automatic.*

The window appears automatically.

- *Manual.*

The window appears after the agent accepts the corresponding task from the Multichannel Toolbar.

Top and Left

Enter the distance in pixels from the top and left edge of the screen when the window first appears.

Width and Height

Enter the width and height, in pixels, of the window when it first appears.

Pages Used to Configure Agents

Page Name	Definition Name	Navigation	Usage
Configure Agent - Voice Configuration	RB_AGT_CFG_VOICE	<ul style="list-style-type: none"> MultiChannel, Supervisor Desktop <p>Click the Configure Agent toolbar button, find an agent to be configured or click the Configure this Agent hyperlink while monitoring agent details, and access the Configure Agent - Voice Configuration page.</p> <ul style="list-style-type: none"> Set Up CRM, Product Related, Multichannel Definitions, Agent Configuration, Search for Agent <p>Find an agent to be configured, and access the Configure Agent - Voice Configuration page.</p>	Specify agent properties for supporting voice tasks, including agent and CTI configuration IDs, window preferences, phone book entries, and status codes.
Configure Agent - Multichannel Configuration	RB_AGT_CFG_MCF	<ul style="list-style-type: none"> MultiChannel, Supervisor Desktop <p>Click the Configure Agent toolbar button, find an agent to be configured or click the Configure this Agent hyperlink while monitoring agent details, and access the Configure Agent - Multichannel Configuration page.</p> <ul style="list-style-type: none"> Set Up CRM, Product Related, Multichannel Definitions, Agent Configuration, Search for Agent <p>Look up an agent to be configured and access the Configure Agent - Multichannel Configuration page.</p>	Specify agent properties for supporting multichannel tasks (email, chat, and generic), including queue assignment, supported languages, window preferences, trace setting, status codes, buddy lists, and chat settings.

Page Name	Definition Name	Navigation	Usage
Configure Agent - Email Configuration	RB_AGT_CFG_ERMS	<ul style="list-style-type: none"> MultiChannel, Supervisor Desktop <p>Click the Configure Agent toolbar button, find an agent to be configured, and access the Configure Agent - Email Configuration page.</p> <ul style="list-style-type: none"> Set Up CRM, Product Related, Multichannel Definitions, Agent Configuration, Search for Agent <p>Find an agent to be configured, and access the Configure Agent - Email Configuration page.</p>	Specify default reply to addresses and email approval settings for agents' outgoing emails.
Configure Agent - Miscellaneous Configuration	RB_AGT_CFG_MISC	<ul style="list-style-type: none"> MultiChannel, Supervisor Desktop <p>Click the Configure Agent toolbar button, look up an agent to be configured or click the Configure this Agent hyperlink while monitoring agent details, and access the Configure Agent - Miscellaneous Configuration page.</p> <ul style="list-style-type: none"> Set Up CRM, Product Related, Multichannel Definitions, Agent Configuration, Search for Agent <p>Look up an agent to be configured, and access the Configure Agent - Miscellaneous Configuration page.</p>	Specify warning settings to be used on the Multichannel Toolbar.
Agent Configuration - Copy Agent Settings	RB_AGT_CFG_COPY	Click the Copy Settings toolbar button.	Copy settings of the current agent and apply them to another agent.

Defining Voice Queue Configuration for Agents

Access the Configure Agent - Voice Configuration page.

Configure Agent

Save | Copy Settings | Search

User ID CCAG_CTI
Description For CTI Testing

Voice Configuration Configured
Multichannel Configuration Configured
Email Settings Not Configured

Voice Configuration | Multichannel Configuration | Email Configuration | Miscellaneous Configuration

Agent Detail | Toolbar / Window Settings | Phone Book | Presence | Go To Select One...

Voice Agent Details First 1 of 2 Last

Effective Date 05/26/2006 (Active Configuration)

Voice Agent ID CCAG_CTI

Password *****

Configuration ID SIM CTI SIMULATOR

Queue 8000 CTI Test Queue

Toolbar Tracing 0 - None
 Note: Select a value other than "0 - None" to enable a pop-up window display for voice interface diagnostics on the Multichannel Toolbar.

Add Voice Agent Detail | Delete Voice Agent Detail | Edit Voice Agent Detail

Configure Agent - Voice Configuration page: Agent Detail

Voice Agent ID and Password	Enter the ID and password to be used by the agent when handling voice tasks.
Configuration ID	<p>Select the name of the configuration that you want to associate with the agent. The configuration ID is the name of the configuration that you created using the CTI component in PeopleTools.</p> <p>See <i>Enterprise PeopleTools PeopleBook: PeopleSoft MultiChannel Framework</i>, "Configuring PeopleSoft CTI."</p>
Queue	<p>Select the name of the queue that you want to assign to an agent.</p> <p>See <i>Enterprise PeopleTools PeopleBook: PeopleSoft MultiChannel Framework</i>, "Configuring PeopleSoft CTI."</p>
Toolbar Tracing	<p>Select the level of tracing for voice interface. This information appears in a tracer window that appears when the Multichannel Toolbar starts. Values are 0 - None, 1 - Info, and 2 - Debug.</p> <p>Note that the higher the level of tracing, the more it affects system performance.</p> <hr/> <p>Note. You can set up tracing for both voice and multichannel queues. If the selected levels are different, the deeper level of debugging is used.</p> <hr/>
Add Voice Agent Detail	Click to add a new voice configuration for the selected agent.
Edit Voice Agent Detail	Click to set the agent configuration in edit mode to update the information.
Delete Voice Agent Detail	Click to delete the current voice configuration.

Note. To delete the agent's voice configuration, you must first click the Edit Voice Agent Detail button before clicking the Delete Voice Agent Detail button. A warning message appears if the agent configuration is not in edit mode when you attempt to delete it.

Configure Agent

Save | Copy Settings | Search

User ID CCAG_CTI
Description For CTI Testing

Voice Configuration Configured
Multichannel Configuration Configured
Email Settings Not Configured

Voice Configuration | Multichannel Configuration | Email Configuration | Miscellaneous Configuration

Agent Detail | Toolbar / Window Settings | Phone Book | Presence | Go To Select One...

Voice Toolbar Settings

*Extension 1 610
 Redial List Size 10

Popup Window Settings

Popup Mode 1 - Popup after answer
 Top 0 Width 800
 Left 0 Height 600

Configure Agent - Voice Configuration page: Toolbar/Window Settings

Extension 1 and Extension 2 Enter the agent's phone extension numbers. These fields disappear after you save the page.

When agents sign in to the PeopleSoft application from a workstation for the first time, the system displays a pop-up window where agents enter their extensions. The values are stored in the cookie of the machine for future use.

Note. The Extension 2 field appears if your CTI system is configured to support two extensions for each agent.

Redial list Size

Enter the maximum number of phone numbers to be stored in the redial list for outbound calls.

Popup Mode

Select when the voice-specific transaction window appears in the Unified Agent Desktop area below the Multichannel Toolbar during the time that the call comes or after the agent answers the call.

See [Chapter 15, "Working with Supervisor Desktop," Common Elements Used in This Section, page 262.](#)

Configure Agent

Save | Copy Settings | Search

User ID CCAG_CTI
Description For CTI Testing

Voice Configuration Configured
Multichannel Configuration Configured
Email Settings Not Configured

Voice Configuration | Multichannel Configuration | Email Configuration | Miscellaneous Configuration

Agent Detail | Toolbar / Window Settings | Phone Book | Presence | Go To Select One...

Phone Book

*Phone Number	*Type	Description
8003362356	Directory Number	Third Party Support

Add Phone Number

Configure Agent - Voice Configuration page: Phone Book

Phone Number and Description

Enter a frequently dialed phone number to associate with this configuration and add a meaningful description of the phone number.

The system removes all the non-digit symbols (for example, spaces, hyphens, and dots) in this field automatically.

Type

Values are *Directory Number* and *Queue*.

A Directory Number (or DN) identifies a telephone set on a PBX (private branch exchange) or in the public network. The caller dials this number to establish a connection to the addressed party. The DN can be a local PBX extension (a local DN) or a public network telephone number.

A queue number identifies an automatic call distributor (ACD) queue or group. Calls to a group are distributed to agents belonging to the group, according to ACD algorithms.

Configure Agent

Save | Copy Settings | Search

User ID CCAG_CTI
Description For CTI Testing

Voice Configuration Configured
Multichannel Configuration Configured
Email Settings Not Configured

Voice Configuration | Multichannel Configuration | Email Configuration | Miscellaneous Configuration

Agent Detail | Toolbar / Window Settings | Phone Book | Presence | Go To Select One...

Presence

*Presence State	*Reason Code	Presence Description
Ready		Available
Not Ready	At Lunch	Not Ready - At Lunch

Add Presence

Configure Agent - Voice Configuration page: Presence

Presence State

Select the state that the selected agent can use to indicate availability on the Multichannel Toolbar. Values are *Ready*, *Not Ready*, *Work Ready* and *Work Not Ready*.

Reason Code

Select the reason to elaborate the not ready state, for example, out to lunch, on the phone, in a meeting, and so on. Reason code does not apply to the ready state.

Select PeopleTools, MultiChannel Framework, CTI Configuration, CTI and establish reason codes on the Reason Code page.

Defining Multichannel Queue Configuration for Agents

Access the Configure Agent - Multichannel Configuration page.

Configure Agent

Save | Copy Settings | Search

User ID CCAg_CTI
Description For CTI Testing

Voice Configuration Configured
Multichannel Configuration Configured
Email Settings Not Configured

Voice Configuration | **Multichannel Configuration** | Email Configuration | Miscellaneous Configuration

Agent Detail | Window Preferences | Presence | Chat Settings | Chat Agent List | Go To Select One...

Multichannel Agent Details

*Name CTI Testing,For (Last Name,First Name)
 *Nick Name For

Queue Assignments

Auto-Login	*Logical Queue	*Physical Queue	*Skill Level	*Max Workload
<input checked="" type="checkbox"/>	MCFQ	MCFQ1	10	100

Add Queue Assignment

Language Skills

Language Code
English

Add Language Skill

Delete Multichannel Configuration

Configure Agent - Multichannel Configuration page: Agent Detail

Auto-Login

Select to allow the selected agent to sign in to the corresponding queue when the agent signs in to the Multichannel Toolbar. Auto-login applies to one multichannel queue only.

Logical Queue and Physical Queue

Enter the name of a logical queue to which this agent is assigned. The agent can sign in to only one queue at a time. After selecting a logical queue, the system assigns a physical queue to the agent automatically.

Note. The expectation is that one physical queue is associated with one logical queue.

Skill Level

Select the skill level of this agent for the tasks assigned for this queue.

The agent is assigned only tasks requiring a skill level less than or equal to the skill level specified here. If there is more than one qualified agent

available to accept the task, the queue server gives preference to the agent with the lowest skill level.

Each agent can have a different skill level for each queue to which the agent is assigned.

Max Workload (maximum workload)

Select the maximum load that this agent can be assigned before tasks are held or assigned to other agents.

The cost of each accepted task is added to the agent's current workload. A task is not assigned to an agent if its cost pushes the agent's current workload over the maximum.

Language Code

Select the language(s) that the selected agent supports.

For agents to be able to receive task notifications on the Multichannel Toolbar properly, one of the languages to specify here is the base language of the CRM system to which they sign in.

Configure Agent

Save | Copy Settings | Search

User ID CCA_G_CTI
Description For CTI Testing

Voice Configuration Configured
Multichannel Configuration Configured
Email Settings Not Configured

Voice Configuration | **Multichannel Configuration** | Email Configuration | Miscellaneous Configuration

Agent Detail | **Window Preferences** | Presence | Chat Settings | Chat Agent List | Go To Select One...

Use Window Preferences to determine the type of task notifications, acceptance mode, and window characteristics for multichannel tasks for this user.

Window Preferences

Window Type	Popup mode	Accept Mode	Top	Left	Width	Height	
Agent to Customer Chat	Automatic	Automatic	10	10	900	640	

Add Window Preference

Unassigned Task Action and Trace Settings

*Unassigned Task Action Prompt whether to close window

*Toolbar Tracing 0 - None

Note: Select a value other than "0 - None" to enable a pop-up window display for multichannel interface diagnostics on the Multichannel Toolbar.

Configure Agent - Multichannel Configuration page: Window Preferences

Set up preferences for the types of window that agents use to perform their tasks. For example, set up *Agent to Agent Chat* and *Agent to Customer Chat* windows if agents need to chat with other agents and customers or set up the *E-mail* window if agents process emails.

See [Chapter 15, "Working with Supervisor Desktop," Common Elements Used in This Section, page 262.](#)

Window Type

Select the window to which the specified configuration applies. Values are:

- *Agent to Agent Chat.*
- *Agent to Customer Chat.*
- *E-mail.*
- *Generic Alert.*

Accept Mode

- *Grab URL.*

Select how to accept tasks belonging to the chat-related window type. Values are:

- *Automatic.*

For agent to agent chat, select *automatic* to accept chat tasks as soon as the chat window appears.

For agent to customer chat, the accept mode is always automatic, regardless of the window popup mode.

- *Manual.*

For agent to agent chat, if both the popup mode and accept mode are manual, the agent must click the link on the Multichannel Toolbar to view the window and the icon to accept the task. If the popup mode is automatic and the accept mode is manual, the agent sees the window appearing automatically. The manual accept mode gives the agent time to view the task content before taking or rejecting it. Clicking the icon accepts the task.

Unassigned Task Action

Select from the following the action that occurs when a task assigned to an agent is unassigned:

- Prompt whether to close window (default).
- Close the task window.
- Do not close the task window.

Toolbar Tracing

Select from the following log trace levels:

- *0 - None*
- *1 - Information*
- *2 - Debug*

If you select a value other than *0 — None*, a tracer window appears to display activities and events on the MultiChannel Toolbar for debugging purposes.

Note. You can set up tracing for both voice and multichannel queues. If the selected levels are different, the deeper level of debugging is used.

Configure Agent

Save | Copy Settings | Search

User ID CCAg_CTI
Description For CTI Testing

Voice Configuration Configured
Multichannel Configuration Configured
Email Settings Not Configured

Voice Configuration | **Multichannel Configuration** | Email Configuration | Miscellaneous Configuration

Agent Detail | Window Preferences | **Presence** | Chat Settings | Chat Agent List | Go To Select One...

Presence

Presence State	Presence Description	
Available	Available	
Unavailable	Unavailable	
Assumed Unavailable	Assumed Unavailable	

Add Presence

Configure Agent - Multichannel Configuration: Presence page

You specify the set of presence states that the selected agent uses for the multichannel queue. Options are Available, Unavailable, and Assumed Unavailable.

Do not enter duplicate presence states.

Configure Agent

Save | Copy Settings | Search

User ID CCAg_CTI
Description For CTI Testing

Voice Configuration Configured
Multichannel Configuration Configured
Email Settings Not Configured

Voice Configuration | **Multichannel Configuration** | Email Configuration | Miscellaneous Configuration

Agent Detail | Window Preferences | Presence | **Chat Settings** | Chat Agent List | Go To Select One...

Response Messages

*Response ID	*Response Name	Description	*Response Text	
Accept	ACCEPT	Accept Request	Please wait while I review your	

Add Response Message

Static Push URLs

*URL Name	Description	*URL	
ORACLE	Oracle website	http://www.oracle.com	

Add Static Push URL

Configure Agent - Multichannel Configuration: Chat Settings page

Response ID

Responses, except those identified by *Other*, are linked to specific events. These responses, except for those identified *Other*, are always sent on these events from this agent. If an agent does not have a configured response for a specific event, it is read from a default response that is set in the Message Catalog. The response text that is set here overrides the default text that is set in the Message Catalog.

Values are:

- *Abandon*: A chat is abandoned when a chat initiator closes the chat window before the chat is accepted by an agent. This message appears when the agent accepts the abandoned chat.

- *Accept*: This greeting is automatically sent to the chat initiator when an agent accepts a chat in response to a chat request that does not include a question.
- *Answer Question*: This greeting is automatically sent to the chat initiator when an agent accepts a chat in response to a chat request that includes a question.
- *Deny*: This applies to collaborative chat only. If an agent elects not to accept a chat, this message is automatically sent to the chat initiator.
- *End*: If either party quits a chat after the chat is accepted, this message appears from the agent.
- *Forward*: If the agent forwards a chat session to another queue, this message is sent to the customer.
- *Other*: These messages are never automatically sent in a chat session. Their message names appear in the Template Messages drop-down list box on the agent chat page. These messages are appended to the template messages (chat responses) that are defined for the queue.

Response Name

Enter the name for the response that appears in the agent's template response drop-down list box.

Response Text

Enter the response text to appear in the chat window.

URL Name

Enter the name of the URL that appears on the agent's URL drop-down list box.

URL

Enter a static URL to be pushed during chat sessions.

All static URLs that are defined for the agent are downloaded when the agent launches the chat workspace by accepting a customer chat.

If you send a PeopleSoft Pure Internet Architecture URL, be sure that the recipient has permissions to access that portal, node, or page.

Configure Agent History Select One...

Save Copy Settings

User ID CMOTT
Description Mott,Coleen

Voice Configuration Configured
Multichannel Configuration Configured
Email Settings Not Configured

Voice Configuration Multichannel Configuration Email Configuration Miscellaneous Configuration

Agent Detail Window Preferences Presence Chat Settings Chat Agent List Go To Select One...

Chat Agent List

*Agent Buddy	Name
ERMSSV	Greene,Elizabeth
ERMSVP1	Lee,Sandra

Add Chat Agent

Configure Agent - Multichannel Configuration: Chat Agent List page

Agent Buddy

Enter the user ID of an agent with whom this agent can have a chat session or can ask to conference onto another chat.

Refer to the Configuring MCF Agents chapter on *Enterprise PeopleTools PeopleBook: PeopleSoft MultiChannel Framework* for more information on agent definition.

Defining Email Settings for Agents

Access the Configure Agent - Email Configuration page.

Configure Agent - Email Configuration page

Reply-To Settings

You can specify email configuration for agents on this page or on the Agent Setup page under Set Up CRM, Common Definitions, Correspondence, Agent Setup.

Group Worklist	This field is the same as the Reply To Group Worklist field on the Agent Setup page.
External Email Address	This field is the same as the External Reply Address field on the Agent Setup page.
Internal Email Address	This field is the same as the Internal Reply Address field on the Agent Setup page.
Internal HR Email Address (internal human resources email address)	This field is the same as the Internal HR Reply Address field on the Agent Setup page.

Outbound Email Approval Settings

Approval Frequency	Select the frequency of sending the agent's outgoing emails to an approver for review before they are sent to customers. You can send all of them, 1 out of X number of composed emails, or none. These values are translate values that are predefined in the system.
Approver Name	Enter the name of the worker who must approve all outbound emails that are sent by this agent based on the specified frequency. If you leave this field

blank, no approvals are necessary. Otherwise, emails that are pending approval are automatically routed to the approver's worklist.

See *PeopleSoft Enterprise CRM 9 Automation and Configuration Tools PeopleBook*, "Defining General Settings for Correspondence and Notifications," Defining User Settings.

Defining Multichannel Toolbar Settings for Agents

Access the Configure Agent - Miscellaneous Configuration page.

Configure Agent

Save | Copy Settings | Search

User ID CCAG_CTI
Description For CTI Testing

Voice Configuration Configured
Multichannel Configuration Configured
Email Settings In Progress

Voice Configuration / Multichannel Configuration / Email Configuration / **Miscellaneous Configuration**

Go To Select One...

Multichannel Toolbar Settings

Agent Warning Settings

Style PSTIMEWARNING
Minute 5
Second 0
Display Image PS_STATUS_ALERT_ICN

Agent Expired Settings

Style PSTIMEEXPIRED
Minute 10
Second 0
Display Image PS_STATUS_URGENT_ICN

Configure Agent - Miscellaneous Configuration page

The information that you specify on this page for agents can also be defined on the Unified Agent Desktop Agent Configuration page.

See Chapter 12, "Setting Up Unified Agent Desktop," Pages Used to Configure Agents for Unified Agent Desktop, page 171.

Copying Agent Settings

Access the Agent Configuration - Copy Agent Settings page.

Agent Configuration

Copy Agent Settings

Use this page to copy selected settings from the current agent to another agent. Select the target agent to configure and the settings to copy to this agent. Selecting OK opens up the target agent's configuration. No changes are applied until you choose to save the agent's configuration.

Target Agent ID

ATURNER

Annie Turner

Only settings which are configured for the current agent and not configured for the target agent may be copied.

☒ Voice Settings
 ☒ Multichannel Settings
 ☒ Email Settings

OK

Cancel

Agent Configuration - Copy Agent Settings page

Target Agent ID

Enter the user ID of another agent whose configuration is to be a copy of the current agents configuration.

Voice Settings, Multichannel Settings, and Email Settings

Select the settings from the current configuration to be copied to the target agent.

Note. Only the settings that are not already populated in the target agent's configuration can be copied. In other words, you cannot overwrite settings.

Managing Teams and Queues

This section discusses how to:

- Define teams.
- Manage the queue list.

Pages Used to Manage Teams and Queues

Page Name	Definition Name	Navigation	Usage
Supervisor Desktop - Team Definition	RB_SD_TEAM_DFN	MultiChannel, Supervisor Desktop Click the Define Teams toolbar button.	Define teams and add team members to be used as filters in real-time monitoring.
Supervisor Desktop - Queue List	RB_SD_QUEUE_LIST	MultiChannel, Supervisor Desktop Click the Manage Queue List toolbar button.	Select queues to be included in the queue list whenever the queue list is referenced on Supervisor Desktop. Queue list can be used as a filter in real-time monitoring and for timeout administration.

Defining Teams

Access the Supervisor Desktop - Team Definition page.

Supervisor Desktop
Team Definition

Team List

Team Name	
Support	

Add Team

Team Detail

***Team Name** Support

Description Support - Americas

Team Members

*Agent's User ID	Description	Include Multichannel Queues	Include Voice Queues	
CMOTT	Mott, Colleen	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
JPO	Jacqueline Po - ERMS SD	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Add Team Member

Supervisor Desktop - Team Definition page

Team List

Add Team

Click to create a team. Enter the team name and associated members in the Team Details group box.

After you save a team, it is listed in this team list. Click the team's active link to view and update its definition in the Team Details group box.

Team Details

Team Name

Enter the name of the team to create. Each team name must be unique.

Note. Team definitions are personalizations of Supervisor Desktop and are not shared among users. Therefore, uniqueness is only within an agent's personalization of Supervisor Desktop.

Agent's User ID

Select the user ID of an agent who you want to add to this team. The agent's name appears in the description automatically.

Include Multichannel Queues and Include Voice Queues

Select to include any multichannel and voice queues that are associated with this agent in the agent configuration.

If this agent does not have a multichannel configuration, or the user who defines this team does not have access to the queues that are specified in the agent's configuration, the corresponding check box does not appear.

The same is true for voice queues. The check box to include voice queues does not appear if this agent does not have a voice configuration.

The system requires that at least one type of queue (multichannel or voice) must be included for an agent to be included in a team definition.

Managing the Queue List

Access the Supervisor Desktop - Queue List page.

Supervisor Desktop
Queue List

Use this page to select queues to be included any time "Queue List" is referenced within the Supervisor Desktop. For Multichannel queues, only queues located on the same multichannel cluster can be monitored at the same time. In order to monitor queues on different clusters, you must use the Multichannel Toolbar to log onto a queue on that cluster.

Enabled	*Queue Type	*Queue	Cluster ID	
<input checked="" type="checkbox"/>	Voice	8000		
<input checked="" type="checkbox"/>	Multichannel	MCFQ1	RENCLSTR_0002	

Add Queue

Save Cancel

Supervisor Desktop - Queue List page

The queue list becomes read-only after you save this page.

Queue Type

Select the type of queue. The selected queue type controls the actual queues that you can choose from the Queue field. Values are *Multichannel* and *Voice* (if the user is configured as an agent).

Queue

Select a queue of the selected queue type to be included in the queue list. The cluster ID (if any) to which this queue belongs appears automatically.

All the listed queues are included when monitoring or performing timeout administration until you clear the Enabled check box or delete the entry from the queue list.

Personalizing Supervisor Desktop

This section discusses how to personalize supervisor desktop.

Page Used to Personalize Supervisor Desktop

Page Name	Definition Name	Navigation	Usage
Supervisor Desktop - Preferences	RB_SD_USER_PREF	Click the Preferences button on Supervisor Desktop.	Define default monitor settings and different service level alerts for real-time monitoring.

Personalizing Supervisor Desktop

Access the Supervisor Desktop - Preferences page.

Supervisor Desktop - Preferences page

Default Monitor Type

Select the value of the monitor type that is used when you open Supervisor Desktop initially. Choose from *Queue Statistics* and *Agent Statistics*. By default, this field value comes from the Supervisor Desktop setup data.

Default Monitor Filter By

Select the value of the monitor filter that is used when you open to Supervisor Desktop initially. Choose from *Assigned Queues*, *Queue List* and *Team*. By default, this field value comes from the Supervisor Desktop setup data.

Monitor Alert Color

Select the color that is used to highlight service-level threshold crossing on Supervisor Desktop. By default, this field value comes from the Supervisor Desktop setup data.

Agent Statistics Settings

Time in State Exceeds	Select and enter the time length that causes an alert to appear on Supervisor Desktop if the actual time frame during which agents remain in the same state is longer than this threshold value.
Available Queue Time Exceeds	Select and enter the time length that causes an alert to appear on Supervisor Desktop if the time that a agent remains available is longer than this threshold value.
Unavailable Queue Time Exceeds	Select and enter the time length that causes an alert to appear on Supervisor Desktop if the time that a agent remains unavailable is longer than this threshold value.

Queue Statistics Alerts

Number of Agents Logged On Falls Below	Select and enter the number that causes an alert to appear on Supervisor Desktop if the actual number of signed in (available or unavailable) agents is lower than this threshold value.
Number of Agents Available Falls Below	Select and enter the number that causes an alert to appear on Supervisor Desktop if the actual number of available agents is lower than this threshold value.
Number of Tasks Abandoned Exceeds	Select and enter the number that causes an alert to appear on Supervisor Desktop if the actual number of abandoned tasks is higher than this threshold value.
Number of Tasks In Queue Exceeds	Select and enter the number that causes an alert to appear on Supervisor Desktop if the actual number of tasks in a queue is higher than this threshold value.
Average Queue Wait Time Exceeds	Select and enter the time length that causes an alert to appear on Supervisor Desktop if the average wait time of a queue is longer than this threshold value.
Average Task Duration Exceeds	Select and enter the time length that causes an alert to appear on Supervisor Desktop if the average time to finish a task is longer than this threshold value.

CHAPTER 16

Working with Unified Agent Desktop

This chapter provides an overview of Multichannel Toolbar functionality and discusses how to use Multichannel Toolbar.

Understanding Multichannel Toolbar Functionality

When an agent (configured for voice, multichannel, or both queues) logs on to PeopleSoft Pure Internet Architecture and the application dispatcher launches successfully, the Multichannel Toolbar appears in a pagelet on the Pure Internet Architecture home page. The system then automatically logs the agent on to the voice queue and multichannel queue that are selected in the agent configuration. When logon completes, the toolbar notifies the agent of any incoming tasks that are passed from the agent's assigned queues.

Note. To use the Multichannel Toolbar, users must add the CRM Multichannel Toolbar pagelet to their home page and they must be configured as voice, multichannel, or blended agents.

The application dispatcher processes all events that happen between the Multichannel Toolbar and the Computer Telephony Interface (CTI) and universal queue servers.

Use the Multichannel Toolbar to:

- Receive and process calls, emails, chat requests, and generic tasks.

The Multichannel Toolbar can display a maximum of two incoming task notifications concurrently waiting to be accepted. For voice tasks, appropriate action buttons appear based on the current state of the task. For example, if the voice task is currently in transfer, available actions are Hold and Release, not Accept and Release Hold.

Agents continue to receive incoming tasks until their preset maximum workload limit is reached. When this limit is reached, the agent status changes to unavailable for that queue.

Note. If agents are configured to automatically accept tasks, no notifications will be sent for those tasks. The task-specific work page appears automatically.

- Resynchronize queues.

Sometimes the CRM CTI system may not be synchronized with the CTI switch. While the application dispatcher monitors the two systems and resynchronizes them when needed, agents can perform this action manually as well. A resynchronization restores the correct CTI state from the CTI system and updates it on the Multichannel Toolbar.

- View queue statistics.

Agents can view statistics of the queues to which they log on. Information such as the number of tasks in a queue and the average wait time for tasks in the queue are available for review.

See Also

[Chapter 12, "Setting Up Unified Agent Desktop," page 167](#)

Using Multichannel Toolbar

This section discusses how to:

- Connect to voice and multichannel queues.
- Accept incoming tasks.
- Review queue statistics.
- Navigate to different tasks.
- Process phone calls.
- Use the phone directory.
- Process emails.
- Process chat requests.
- Switch agent status.
- Switch to another queue.
- Disconnect from voice or multichannel queues.

Connecting to Voice and Multichannel Queues

When agents (voice, multichannel, or blended) first log on to PeopleSoft Pure Internet Architecture, they are automatically logged on to the voice queue and the multichannel queue (if marked with the auto-login property) that are selected in the agent configuration through Multichannel Toolbar. The queue status of the connection is shown on the toolbar while the logon process is in progress. If the logon process fails, for example, the CTI server or multichannel queue server is not in service, error messages appear. Contact the system administrator and log on to the system at a later time.

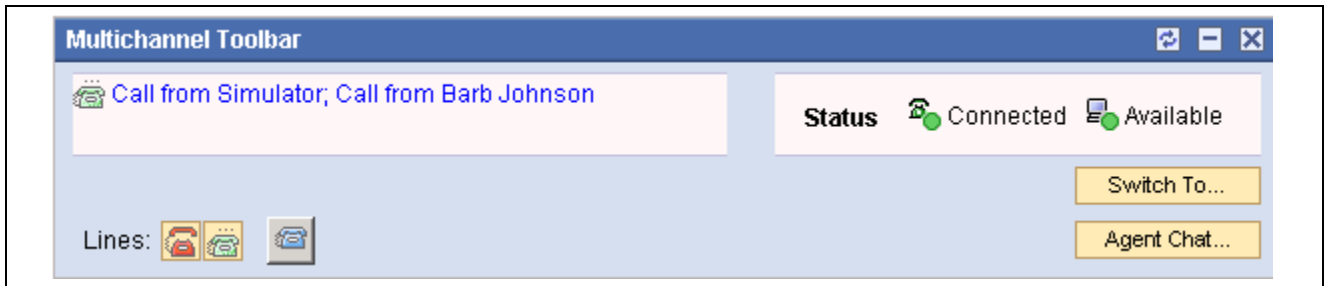
If the connection to the corresponding server drop after an agent logs on to the system, the queue status automatically changes to *Not in Service*.

Accepting Incoming Tasks

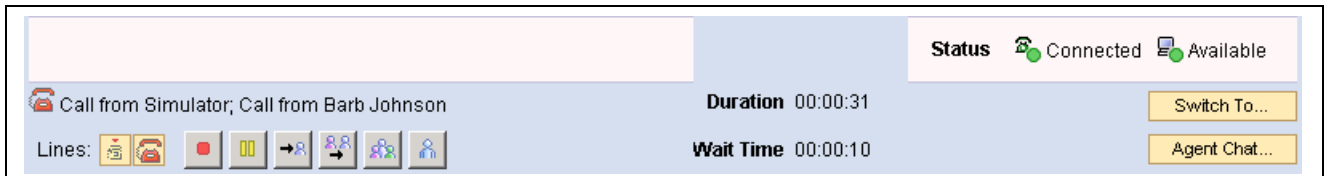
Click task notifications that appear on the Multichannel Toolbar to accept new tasks.

For chat, email, and generic tasks, if the accept mode of any of these window preferences is set to automatic, notifications do not appear. When any of these tasks is routed to an agent, the acceptance becomes automatic and the corresponding workspace appears.

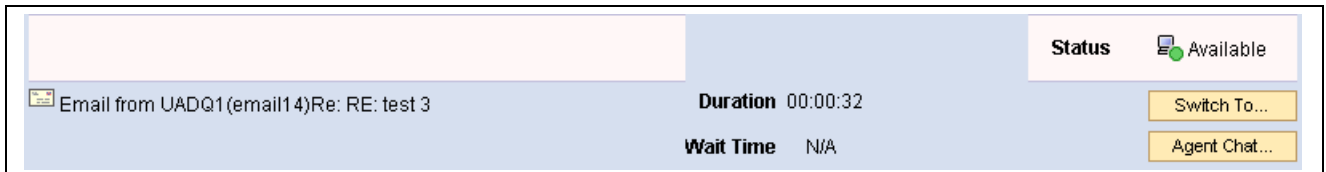
These examples show task, call, email, and chat notifications on the Multichannel Toolbar:



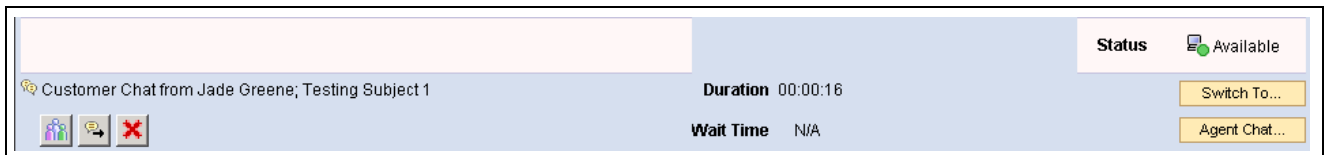
Example of a voice call notification on Multichannel Toolbar before acceptance



Example display of Multichannel Toolbar after voice call acceptance



Example display of Multichannel Toolbar after email acceptance



Example display of Multichannel Toolbar after customer chat acceptance

Note. If the length of the task description exceeds one single line, the remainder is truncated and displayed in ellipsis. To view the entire description, place the mouse over the task icon.

If an agent works on more than one open task concurrently, task-related action buttons for these tasks appear on the toolbar in each task window.

After an agent accepts a new incoming task, the application dispatcher passes state-specific details to allow the toolbar to:

1. Remove the notification from the toolbar and display the current task.
2. Render task-related action buttons on the toolbar, depending on the current state of the agent.
3. Register the accepted task in the task list.

The task appears in the task navigation window when the agent clicks the Switch To button on the toolbar.

4. Make task-specific queue statistics available in the queue status window.
5. Maintain the status or state of queues on to which the agent logs.

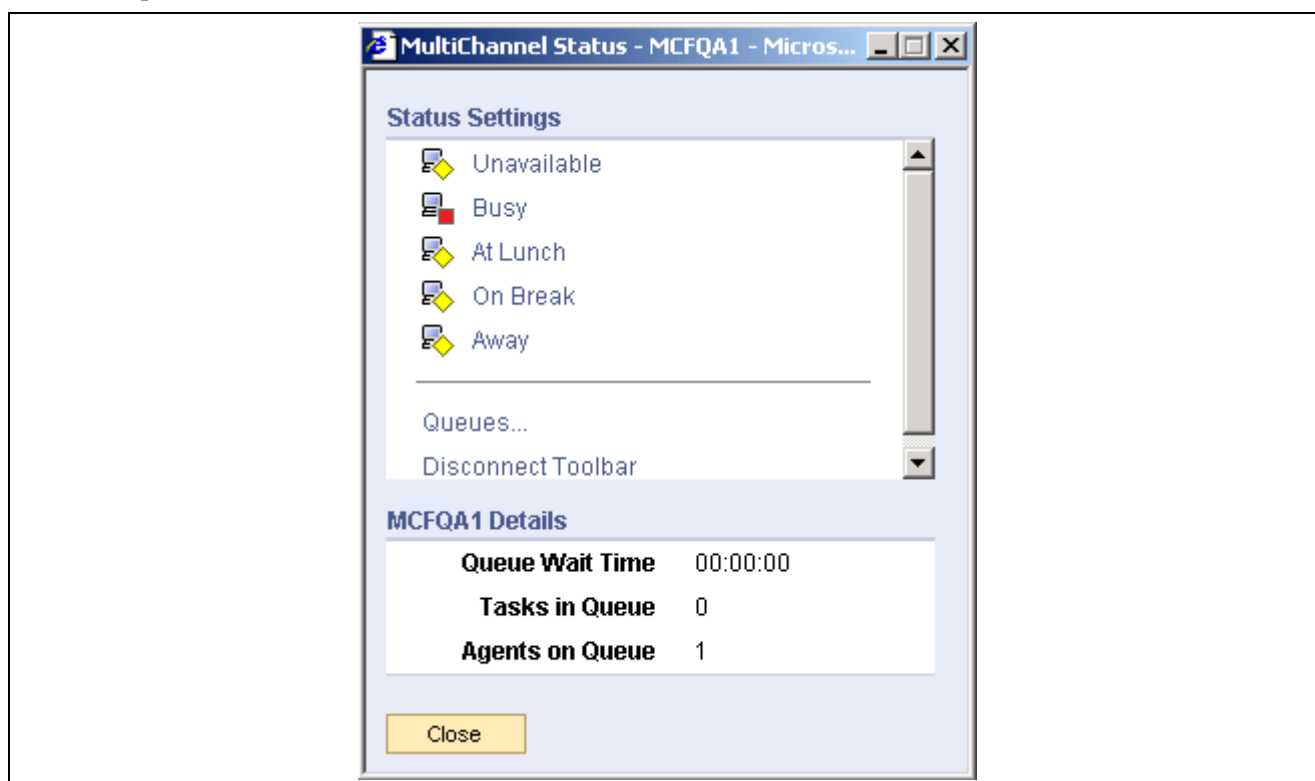
Note. If the agent closes the application dispatcher window while working on some tasks, the status area of the toolbar on each Unified Agent Desktop (UAD) window shows “Activate UAD Toolbar.” To relaunch the application dispatcher and reregister current tasks with the application dispatcher, the agent must click the “Activate UAD Toolbar” message in each task window. For voice task windows, it is recommended that the agent close them before restarting the application dispatcher.

The agent should log on to the PeopleSoft application again if all browser windows (including the initial home session) are closed.

Reviewing Queue Statistics

Click the queue status (this status must be available) on the Multichannel Toolbar to access queue details in the Queue Status window.

This example shows the Queue Status window:

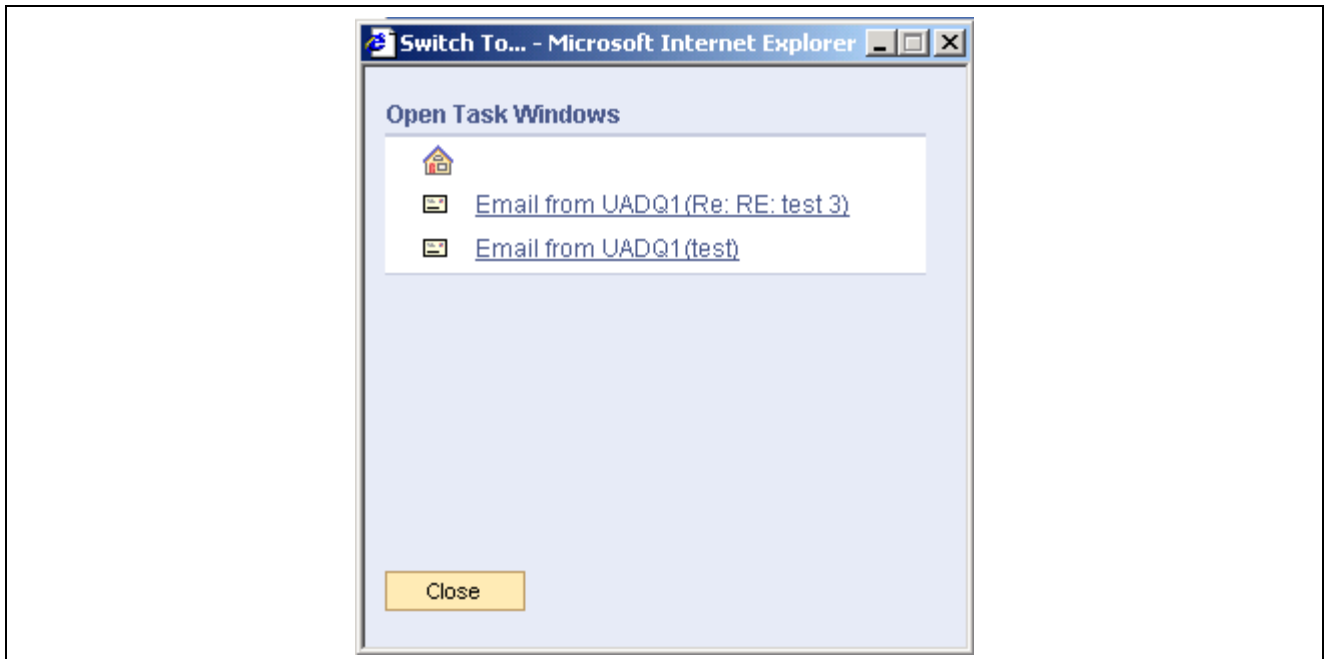


Example of the Queue Status window

Note. For voice queues only, the Resynchronize Queue option is available in the Queue Status window. Agents use this option to synchronize the CRM CTI system with the CTI switch manually. A resynchronization restores the correct CTI state from the CTI system and updates it on the Multichannel Toolbar.

Navigating to Different Tasks

Click the Switch To button on the Multichannel Toolbar to access the task navigation window.

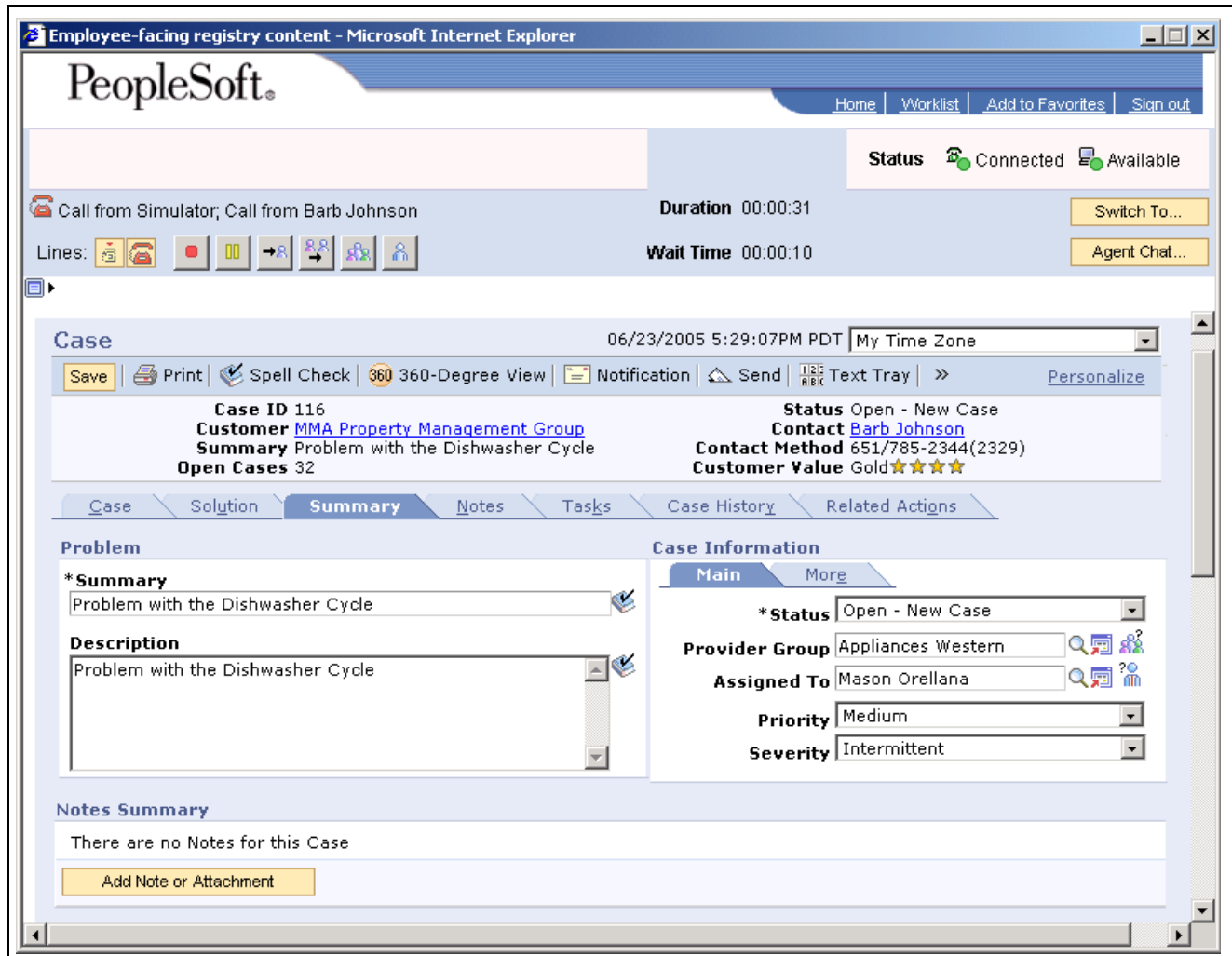


Task navigation window

If the agent works on multiple task windows concurrently, use this window to navigate to another open task or the initial browser session (indicated by the house icon) by clicking the appropriate icon or text description.

Processing Phone Calls

Access the call-related transaction page that appears after you accept a call on the Multichannel Toolbar.



Display of the call-related transaction after accepting a call

When a call arrives, it carries call details to the CRM system. Call details contain a transaction ID that is used to identify the CRM transaction that appears on the agent's desktop when the call is accepted. For example, if the customer call is an inquiry to case number 116, its call details contain the transaction ID for the Case component and case number 116. Upon acceptance, the Case component appears in a separate browser window with information about case number 116.

Call-Specific Action Buttons

Depending on the current state of the call, different action buttons that pertain to the state appear. For example, when a call is on hold, only relevant action buttons, such as release, dial (using the other line), retrieve, and complete, are available on the toolbar. These call-specific action buttons are available for call processing:



(dial)

Click to dial out using an available phone line. A phone directory appears for phone number selection.

Phone book entries are defined in the agent configuration.



(retrieve)

Click to retrieve the customer call from a hold state and continue the phone conversation.



(release)

Click to release the customer call after a transfer or the conversation ends.



(hold)

Click to place the customer call on hold. Click the Retrieve button to resume the call.



(transfer)

Click to transfer the customer call to an agent, a queue, or an external number without talking to the target party.



(conference)

Click to invite a target agent to join the customer call that is in progress.

When the target agent accepts the conference request and session bookmark details are attached to the request, the customer chat window appears on the target agent's desktop and the task is registered to the task navigation list.



(consultative transfer)

Click to transfer the customer call to an agent, a queue, or an external number after talking to the target party.

The customer call is placed on hold while waiting for the target party to respond. The agent can either retrieve the call if the target party doesn't reply or release the call after transferring the call to the target party.



(consult)

Click to dial out to an agent, a queue, or an external number using a second line while talking to a customer on the first line.

The customer call is placed on hold while the agent awaits a response from the target party. After consultation completes, the agent releases the line 2 phone call and resumes the customer call on line 1.



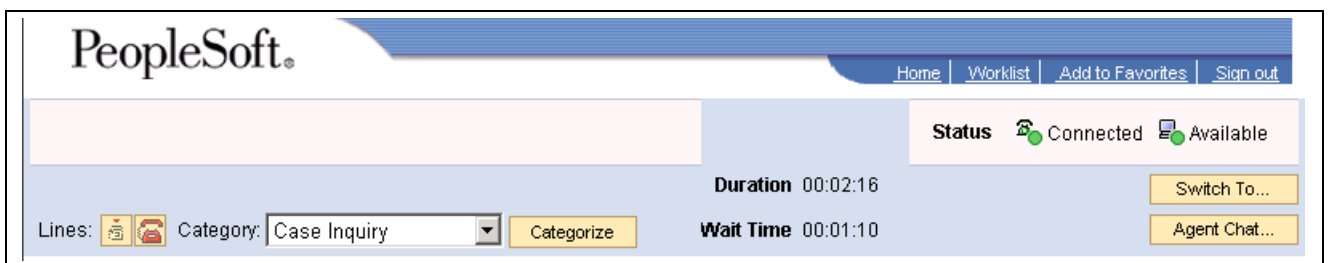
(complete)

Click to end the customer call when it is in a hold state, to complete a transfer to an internal agent, or to join another voice agent to a conference.

Categorization

The agent needs to categorize the call after it is released or completed.

This example shows the Category field on the Multichannel Toolbar:



Example of categorizing a call on the Multichannel Toolbar after the call is ended

Category and Categorize

Select a category for the closed phone call and click the Categorize button to confirm the categorization. Default options are:

- Case Inquiry.
- Order Capture Inquiry.
- Support Issues.

These category codes can be modified based on the business model of the customer.

See [Chapter 12, "Setting Up Unified Agent Desktop," Defining Category Codes, page 175.](#)

See Also

[Chapter 12, "Setting Up Unified Agent Desktop," Specifying Action Buttons, page 174](#)

[Chapter 10, "Configuring CTI Application Pages," Identifying Transactions for Each Content Provider, page 154](#)

Using the Phone Directory

The phone directory appears when users perform these call actions: dial, transfer, conference, transfer, and consultative transfer.

This example shows the Phone Directory page:

Phone Directory

Select the recipient or enter the digits you wish to call. Select Dial to place the call.

☒ **Send Current Page**

Phone Number Dial

Type	Name	Phone Number	Dial
	TEAM LEAD - Amy Smith	8005551212	Dial
	SUPPORT QUEUE	8000	Dial

Cancel

Example of the Phone Directory page

The Phone Directory grid lists phone number entries that are defined in the agent's phone book.

Send Current Page Click to attach the current page to the call segment and transfer it to the target party.

Recently Dialed Displays the 10 most recently dialed phone numbers that agents can use to make calls.

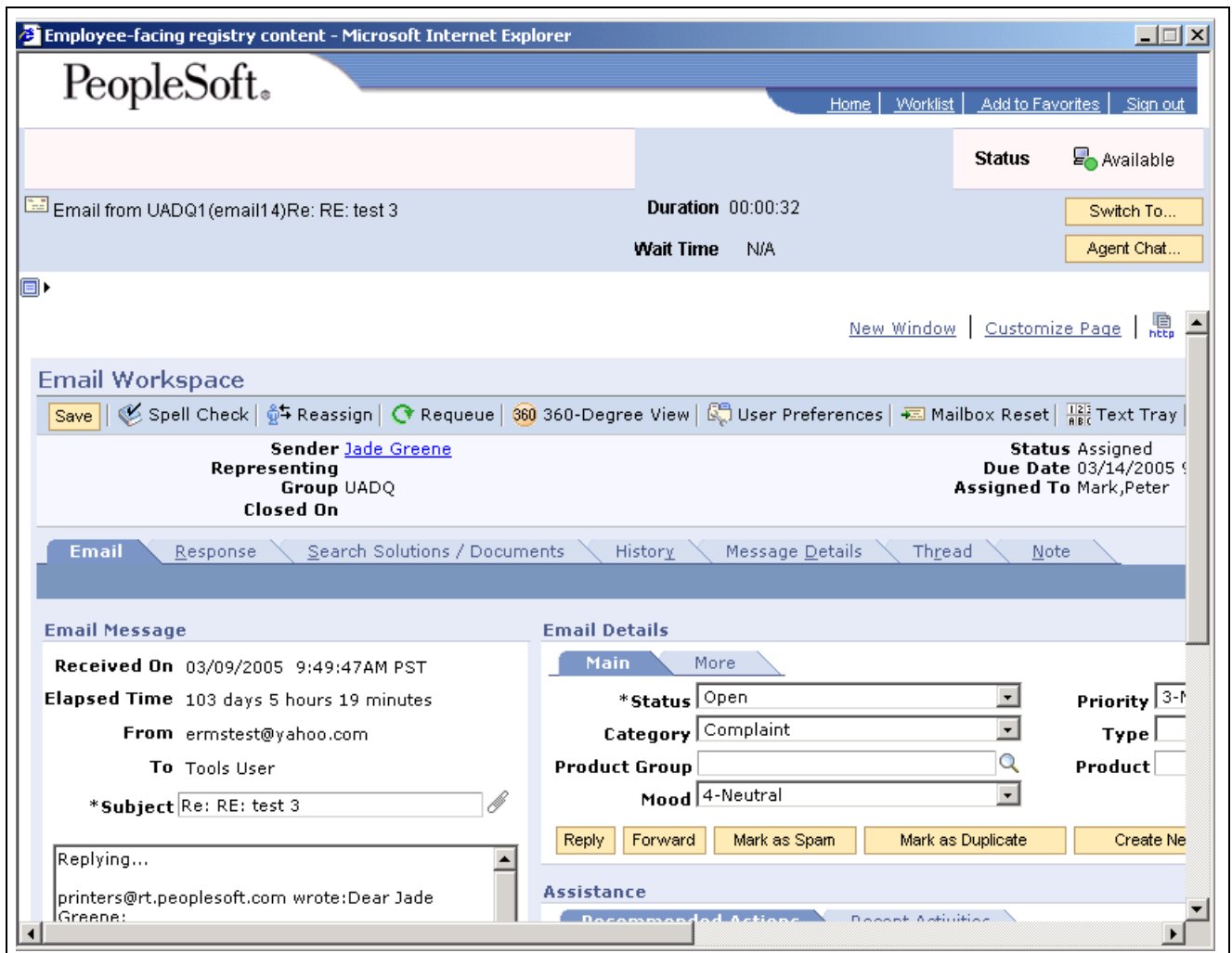
Line 1/2 Select an open phone line to make an outbound call.

See Also

[Chapter 15, "Working with Supervisor Desktop," Defining Voice Queue Configuration for Agents, page 264](#)

Processing Emails

Access the email workspace to process email after accepting (manually or automatically) an email notification on the Multichannel Toolbar.

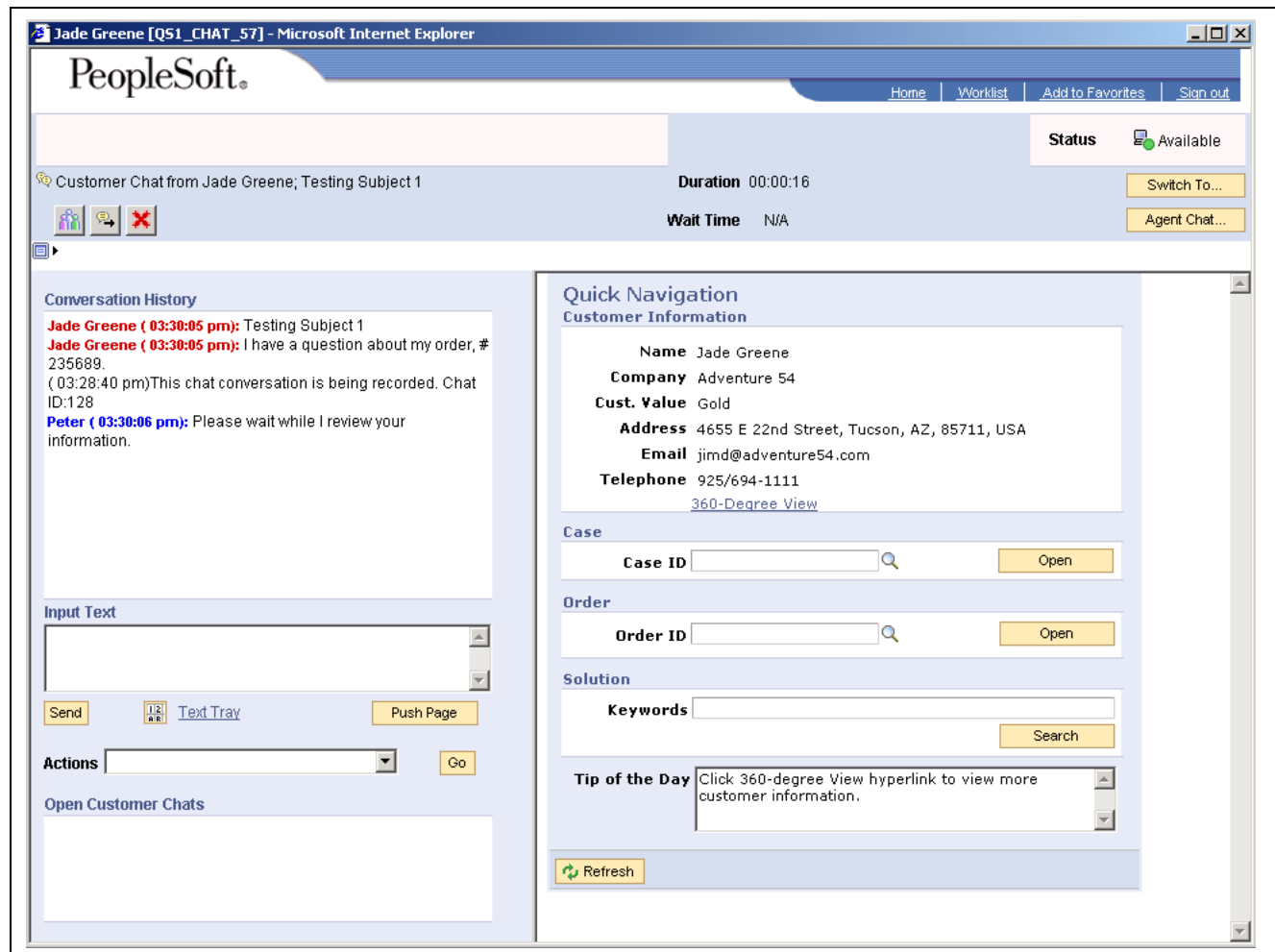


Email workspace

See [Chapter 13, "Managing Email," Working with Inbound Email, page 202](#).

Processing Chat Requests

Access the chat workspace to process a chat request after accepting (manually or automatically) a chat notification on the Multichannel Toolbar.



Customer to Agent Chat window

Agent Chat

Click to initiate a chat session with any agent on the buddy list, whether or not the target agent is currently logged on or in an available state.

Agent buddy list for chat is established in the agent configuration.

Chat-Specific Action Buttons



(conference chat)

Click to access the Conference Chat dialog box to select an agent with whom to discuss the customer issue.



(transfer chat)

Click to access the Transfer Chat dialog box to select a queue to transfer this chat session.

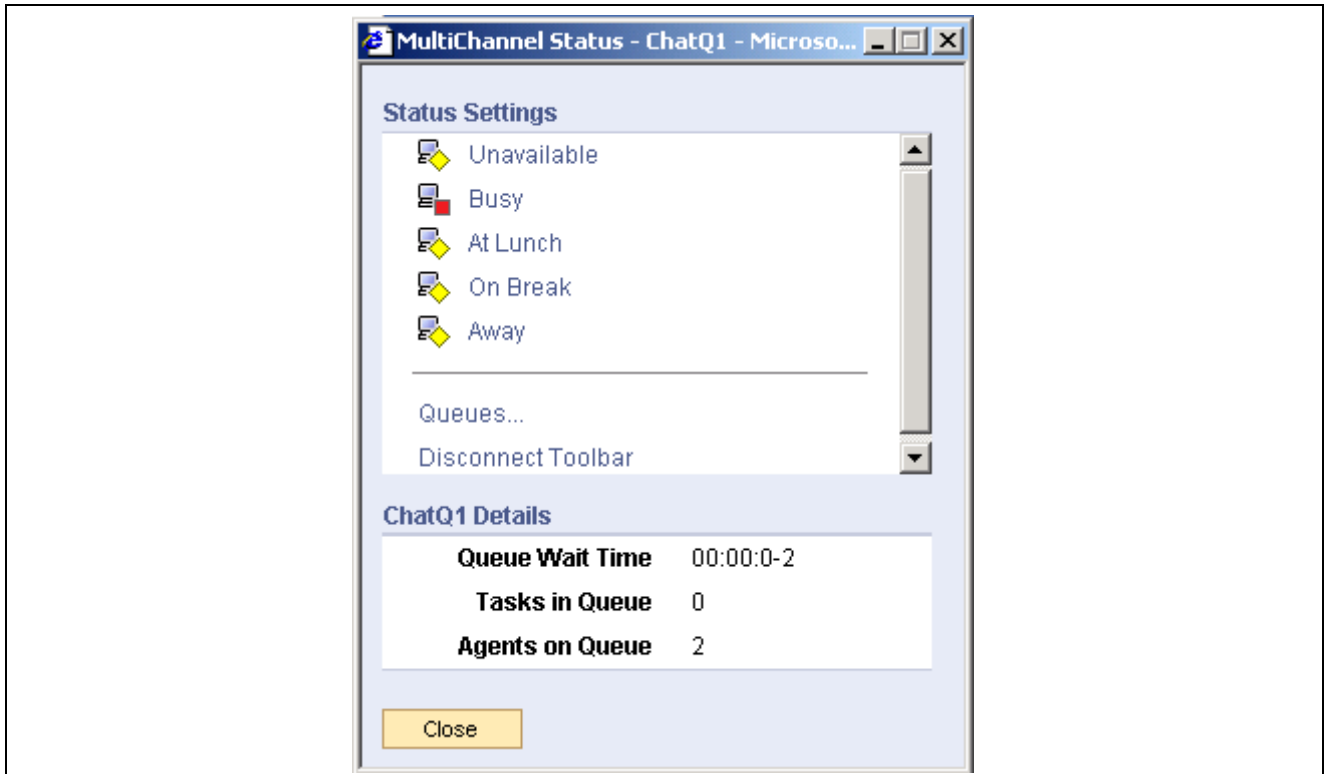


Click to close this chat session. The chat window displays a drop-down list box for categorization purposes. Categorize the chat session appropriately using the values provided.

See Chapter 14, "Working with Chat in PeopleSoft Enterprise CRM," Working with the Customer Chat Window, page 237.

Switching Agent Status

Click the queue status to switch agent status in the Queue Status window.

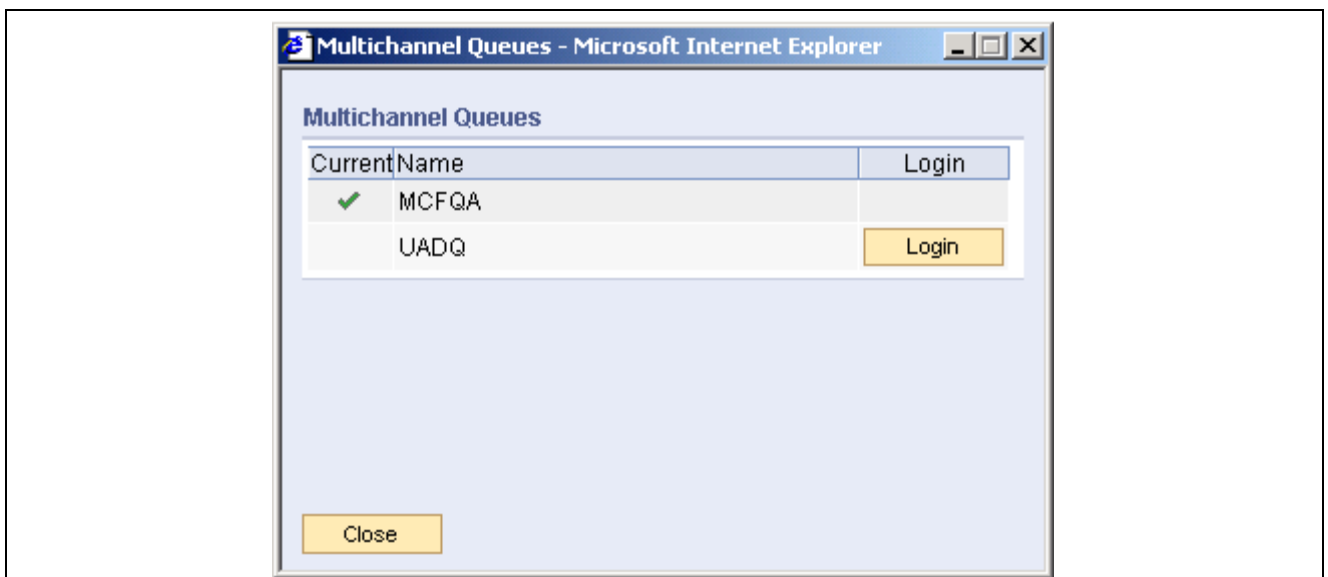


Queue Status window

The agent uses this window to switch to another status by clicking the appropriate icon or text description.

Switching to Another Queue

Access the Switch Queues window by clicking Queues in the Queue Status window.



Switch Queues window

The queue onto which the agent currently logs is marked by a green check mark. To switch to another queue, click the Login button of the target queue.

Disconnecting from Voice and Multichannel Queues

Click Disconnect Toolbar or Logoff in the Queue Status window to terminate all sessions, close the application dispatcher, and log off from the server. A message appears for agents to confirm the action.

Note. If the agent wants to reactivate the toolbar and clicks Activate UAD Toolbar on a window, the system first starts the application dispatcher if it's not up already, and registers only that window session to the application dispatcher. To reactivate the toolbar in other previously terminated window sessions and register them with the application dispatcher, click Activate UAD Toolbar in each of them.

APPENDIX A

PeopleSoft Multichannel Communications Reports

This appendix provides an overview of reports that PeopleSoft delivers for ERMS and chat operations.

For each delivered report, specify criteria on the run control pages that determine what information shows up in a report. In addition, you can decide the time frequency by which data is grouped and presented in a report. For example, you can run the report by hour, which gives hourly statistics within the specified date range. Other options are to run reports by day, by week, or by month.

Hourly reports display data on the hour for hours that contain actual data. If data exists in 3 hours within the specified date range, the report shows only 3 rows of data. These reports are useful when measuring the peak hours of system usage and the effectiveness of agents, worklists, and so on.

Like hourly reports, daily reports display data for days that contain actual data between the start and end dates. A day begins at 12 a.m. and ends at 12 p.m. Use daily reports to identify days in a week that have relatively high task volume and be able to come up with plans to manage workload more effectively.

Weekly reports give statistics in a 7-day period beginning Sundays through Saturdays. If the start date is a Tuesday (May 10), the end date is a Friday (May 20) of the following week and data exists in Thursday (May 12) through Monday (May 16), the weekly report displays two rows of data, one for the week of May 8 and one for the week of May 15. Each week will consist of data for those days that have it.

Monthly reports are useful in determining the operation's busiest and slowest quarters. You see that data is categorized by month within the specified date range. Months without data are not shown on the report.

Enter values for some or all criteria to create meaningful reports, such as:

- Data within a time frame specified by Start Date and End Date.
- The appropriate filter used for the selected report—by agent, by worklist or queue, by category, or by mailbox.

Note. For samples of these reports, see the Portable Document Format (PDF) files published on CD-ROM with your documentation.

See Also

Enterprise PeopleTools PeopleBook: PeopleSoft Process Scheduler

Enterprise PeopleTools PeopleBook: PeopleSoft MultiChannel Framework

PeopleSoft CRM Multichannel Communications Reports: General Description

This table lists the PeopleSoft Enterprise CRM Multichannel Communications reports.

Note. In addition to the left hand navigation, you can execute reports from Supervisor Desktop if so configured.

Report ID and Report Name	Description	Navigation	Run Control Page
RBAGTEFD, RBAGTEFH, RBAGTEFM, and RBAGTEFW ERMS Agent Effectiveness Report	Provides, during the specified date range, the total number of emails assigned to the selected agent and the average time used to respond to them. The report shows on each row the number of emails that are closed after the due date, how many of them were responded using a template, and the number of emails closed in each of these statuses: response (an email was closed because a reply was sent), duplicate (an email was closed because it's a duplicate), spam, and cancelled. If you leave the Agent field blank, the report includes statistics of all agents in the system.	MultiChannel, Reports, ERMS Agent Effectiveness, ERMS Agent Effectiveness Report	RB_ERMS_EFFEC_RPT
RBCHTAAD, RBCHTAAH, RBCHTAAM, and RBCHTAAW Agent Chat Volume and Efficiency	Provides, during the specified date range, the total number of accepted and transferred chat sessions that were hosted by the selected agent. The report shows on each row the queue on which the chat sessions are routed, the number of agent to agent chat, the total and average time length of the sessions, and the time that the longest session took to complete. If you leave the Agent field blank, the report includes statistics of all agents in the system.	MultiChannel, Reports, Agent Chat Volume, Agent Chat Volume and Efficiency	RB_AGT_CHATVOL_RPT

Report ID and Report Name	Description	Navigation	Run Control Page
RBCHTAQD, RBCHTAQH, RBCHTAQM and RBCHTAQW Queue Chat Volume and Efficiency Report	Provides, during the specified date range, the total number of queued, accepted, transferred, and abandoned chat sessions that were hosted by the selected queue. The report shows on each row the queue on which the chat sessions are routed, the total and average time length of the sessions, and the time that the longest session took to complete. If you leave the Physical Queue field blank, the report includes statistics of all queues in the system.	MultiChannel, Reports, Queue Chat Volume, Queue Chat Volume and Efficiency Report	RB_QUE_VOL_RPT
RBEFFCTD, RBEFFCTH, RBEFFCTM and RBEFFCTW ERMS Effectiveness for Category	Provides, during the specified date range, the total number of emails received for the selected category and the percentage of these emails that were responded automatically. The report shows on each row the average NLP score for that category, the number of cases that were attached to emails, the number of emails that were closed after a single response, and the number of those that were closed after multiple responses. If you leave the Category field blank, the report includes statistics of all categories in the system.	MultiChannel, Reports, ERMS Category Effectiveness, ERMS Effectiveness for Category	RB_CAT_EFFECT_RPT

Report ID and Report Name	Description	Navigation	Run Control Page
RBEFFMBD, RBEFFMBH, RBEFFMBM and RBEFFMBW ERMS Effectiveness for Mailbox	Provides, during the specified date range, the total number of emails received for the selected mailbox and the percentage of these emails that were responded automatically. The report shows on each row the average NLP score for that category, the number of cases that were attached to emails, the number of emails that were closed after a single response, and the number of those that were closed after multiple responses. If you leave the Mailbox field blank, the report includes statistics of all mailboxes in the system.	MultiChannel, Reports, ERMS Mailbox Effectiveness, ERMS Effectiveness for Mailbox	RB_MBOX_EFFECT_RPT
RBERMSID, RBERMSIH, RBERMSIM and RBERMSIW ERMS Integration	Provides, during the date range, the total number of cases received by the selected mailbox. The report shows on each row the number of new and existing email threads that were sent, the number of cases, solutions and related objects (CRM transactions) that were attached to emails of that mailbox. If you leave the Mailbox field blank, the report includes statistics of all mailboxes in the system.	MultiChannel, Reports, ERMS Integration, ERMS Integration	RB_ERMS_INTGRT_RPT
RBMBTMP ERMS Template Package Usage Report	Provides, during the specified date range, the list of correspondence templates that were used in emails of the selected mailbox. The report shows on each row the number of usage, the date it was last used and the date that the template was created. If you leave the Mailbox field blank, the report includes statistics of all mailboxes in the system.	MultiChannel, Reports, Template Package Usage, ERMS Template Package Usage Report	RB_TEMPLT_USG_RPT

Report ID and Report Name	Description	Navigation	Run Control Page
RBVOLCTD, RBVOLCTH, RBVOLCTM and RBVOLCTW ERMS Volume for Category	Provides, during the date range, the total number of emails that were processed by agents and their average response time for the selected category. The report shows on each row the number of new and existing email threads that were sent, the number of emails that were reassigned, the total number of emails received and how many of them were closed after the due date. It also displays the number of emails closed in each of these statuses: response (an email was closed because a reply was sent), duplicate (an email was closed because it's a duplicate), auto response (an email was closed because a reply was sent), and cancelled. If you leave the Category field blank, the report includes statistics of all categories in the system.	MultiChannel, Reports, ERMS Category Volume, ERMS Volume for Category	RB_CAT_VOLUME_RPT
RBVOLMBD, RBVOLMBH, RBVOLMBM and RBVOLMBW ERMS Volume for Mailbox	Provides, during the date range, the total number of emails that were processed by agents and their average response time for the selected mailbox. The report shows on each row the number of new and existing email threads that were sent, the number of emails that were reassigned, the total number of emails received and how many of them were closed after the due date. It also displays the number of emails closed in each of these statuses: response (an email was closed because a reply was sent), duplicate (an email was closed because it's a duplicate), auto response (an email was closed because a reply was sent), and cancelled. If you leave the Mailbox field blank, the report includes statistics of all mailboxes in the system.	MultiChannel, Reports, ERMS Mailbox Volume, ERMS Volume for Mailbox	RB_MBOX_EFFECT_RPT

Report ID and Report Name	Description	Navigation	Run Control Page
RBEFFWLD, RBEFFWLH, RBEFFWLM and RBEFFWLW ERMS Effectiveness for Worklist	Provides, during the specified date range, the total number of emails received for the selected worklist and the percentage of these emails that were responded automatically. The report shows on each row the average NLP score for that category, the number of cases that were attached to emails, the number of emails that were closed after a single response, and the number of those that were closed after multiple responses. If you leave the Worklist field blank, the report includes statistics of all worklists in the system.	MultiChannel, Reports, ERMS Worklist Effectiveness, ERMS Effectiveness for Worklist	RB_WLST_EFFECT_RPT
RBVOLWLD, RBVOLWLH, RBVOLWLM and RBVOLWLW ERMS Volume for Worklist	Provides, during the date range, the total number of emails that were processed by agents and their average response time for the selected worklist. The report shows on each row the number of new and existing email threads that were sent, the number of emails that were reassigned, the total number of emails received and how many of them were closed after the due date. It also displays the number of emails closed in each of these statuses: response (an email was closed because a reply was sent), duplicate (an email was closed because it's a duplicate), auto response (an email was closed because a reply was sent), and cancelled. If you leave the Worklist field blank, the report includes statistics of all worklists in the system.	MultiChannel, Reports, ERMS Worklist Volume, ERMS Volume for Worklist	RB_WLST_VOLUME_RPT

Glossary of PeopleSoft Enterprise Terms

absence entitlement	This element defines rules for granting paid time off for valid absences, such as sick time, vacation, and maternity leave. An absence entitlement element defines the entitlement amount, frequency, and entitlement period.
absence take	This element defines the conditions that must be met before a payee is entitled to take paid time off.
academic career	In PeopleSoft Enterprise Campus Solutions, all course work that a student undertakes at an academic institution and that is grouped in a single student record. For example, a university that has an undergraduate school, a graduate school, and various professional schools might define several academic careers—an undergraduate career, a graduate career, and separate careers for each professional school (law school, medical school, dental school, and so on).
academic institution	In PeopleSoft Enterprise Campus Solutions, an entity (such as a university or college) that is independent of other similar entities and that has its own set of rules and business processes.
academic organization	In PeopleSoft Enterprise Campus Solutions, an entity that is part of the administrative structure within an academic institution. At the lowest level, an academic organization might be an academic department. At the highest level, an academic organization can represent a division.
academic plan	In PeopleSoft Enterprise Campus Solutions, an area of study—such as a major, minor, or specialization—that exists within an academic program or academic career.
academic program	In PeopleSoft Enterprise Campus Solutions, the entity to which a student applies and is admitted and from which the student graduates.
accounting class	In PeopleSoft Enterprise Performance Management, the accounting class defines how a resource is treated for generally accepted accounting practices. The Inventory class indicates whether a resource becomes part of a balance sheet account, such as inventory or fixed assets, while the Non-inventory class indicates that the resource is treated as an expense of the period during which it occurs.
accounting date	The accounting date indicates when a transaction is recognized, as opposed to the date the transaction actually occurred. The accounting date and transaction date can be the same. The accounting date determines the period in the general ledger to which the transaction is to be posted. You can only select an accounting date that falls within an open period in the ledger to which you are posting. The accounting date for an item is normally the invoice date.
accounting split	The accounting split method indicates how expenses are allocated or divided among one or more sets of accounting ChartFields.
accumulator	You use an accumulator to store cumulative values of defined items as they are processed. You can accumulate a single value over time or multiple values over time. For example, an accumulator could consist of all voluntary deductions, or all company deductions, enabling you to accumulate amounts. It allows total flexibility for time periods and values accumulated.
action reason	The reason an employee's job or employment information is updated. The action reason is entered in two parts: a personnel action, such as a promotion, termination, or change from one pay group to another—and a reason for that action. Action reasons are used by PeopleSoft Enterprise Human Resources, PeopleSoft Enterprise Benefits

	Administration, PeopleSoft Enterprise Stock Administration, and the COBRA Administration feature of the Base Benefits business process.
action template	In PeopleSoft Enterprise Receivables, outlines a set of escalating actions that the system or user performs based on the period of time that a customer or item has been in an action plan for a specific condition.
activity	<p>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.</p> <p>In PeopleSoft Enterprise Performance Management, the work of an organization and the aggregation of actions that are used for activity-based costing.</p> <p>In PeopleSoft Enterprise Project Costing, the unit of work that provides a further breakdown of projects—usually into specific tasks.</p> <p>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.</p>
address usage	In PeopleSoft Enterprise Campus Solutions, a grouping of address types defining the order in which the address types are used. For example, you might define an address usage code to process addresses in the following order: billing address, dormitory address, home address, and then work address.
adjustment calendar	In PeopleSoft Enterprise Campus Solutions, the adjustment calendar controls how a particular charge is adjusted on a student's account when the student drops classes or withdraws from a term. The charge adjustment is based on how much time has elapsed from a predetermined date, and it is determined as a percentage of the original charge amount.
administrative function	In PeopleSoft Enterprise Campus Solutions, a particular functional area that processes checklists, communication, and comments. The administrative function identifies which variable data is added to a person's checklist or communication record when a specific checklist code, communication category, or comment is assigned to the student. This key data enables you to trace that checklist, communication, or comment back to a specific processing event in a functional area.
admit type	In PeopleSoft Enterprise Campus Solutions, a designation used to distinguish first-year applications from transfer applications.
agreement	In PeopleSoft Enterprise eSettlements, provides a way to group and specify processing options, such as payment terms, pay from a bank, and notifications by a buyer and supplier location combination.
allocation rule	In PeopleSoft Enterprise Incentive Management, an expression within compensation plans that enables the system to assign transactions to nodes and participants. During transaction allocation, the allocation engine traverses the compensation structure from the current node to the root node, checking each node for plans that contain allocation rules.
alternate account	A feature in PeopleSoft Enterprise General Ledger that enables you to create a statutory chart of accounts and enter statutory account transactions at the detail transaction level, as required for recording and reporting by some national governments.
analysis database	In PeopleSoft Enterprise Campus Solutions, database tables that store large amounts of student information that may not appear in standard report formats. The analysis database tables contain keys for all objects in a report that an application program can use to reference other student-record objects that are not contained in the printed report. For instance, the analysis database contains data on courses that are considered

	for satisfying a requirement but that are rejected. It also contains information on courses captured by global limits. An analysis database is used in PeopleSoft Enterprise Academic Advisement.
Application Messaging	PeopleSoft Application Messaging enables applications within the PeopleSoft Enterprise product family to communicate synchronously or asynchronously with other PeopleSoft Enterprise and third-party applications. An application message defines the records and fields to be published or subscribed to.
AR specialist	Abbreviation for <i>receivables specialist</i> . In PeopleSoft Enterprise Receivables, an individual in who tracks and resolves deductions and disputed items.
arbitration plan	In PeopleSoft Enterprise Pricer, defines how price rules are to be applied to the base price when the transaction is priced.
assessment rule	In PeopleSoft Enterprise Receivables, a user-defined rule that the system uses to evaluate the condition of a customer's account or of individual items to determine whether to generate a follow-up action.
asset class	An asset group used for reporting purposes. It can be used in conjunction with the asset category to refine asset classification.
attribute/value pair	In PeopleSoft Enterprise Directory Interface, relates the data that makes up an entry in the directory information tree.
audience	In PeopleSoft Enterprise Campus Solutions, a segment of the database that relates to an initiative, or a membership organization that is based on constituent attributes rather than a dues-paying structure. Examples of audiences include the Class of '65 and Undergraduate Arts & Sciences.
authentication server	A server that is set up to verify users of the system.
base time period	In PeopleSoft Enterprise Business Planning, the lowest level time period in a calendar.
benchmark job	In PeopleSoft Enterprise Workforce Analytics Solution, a benchmark job is a job code for which there is corresponding salary survey data from published, third-party sources.
billing career	In PeopleSoft Enterprise Campus Solutions, the one career under which other careers are grouped for billing purposes if a student is active simultaneously in multiple careers.
bio bit or bio brief	In PeopleSoft Enterprise Campus Solutions, a report that summarizes information stored in the system about a particular constituent. You can generate standard or specialized reports.
book	In PeopleSoft Enterprise Asset Management, used for storing financial and tax information, such as costs, depreciation attributes, and retirement information on assets.
branch	A tree node that rolls up to nodes above it in the hierarchy, as defined in PeopleSoft Tree Manager.
budgetary account only	An account used by the system only and not by users; this type of account does not accept transactions. You can only budget with this account. Formerly called "system-maintained account."
budget check	In commitment control, the processing of source transactions against control budget ledgers, to see if they pass, fail, or pass with a warning.
budget control	In commitment control, budget control ensures that commitments and expenditures don't exceed budgets. It enables you to track transactions against corresponding budgets and terminate a document's cycle if the defined budget conditions are not met.

	For example, you can prevent a purchase order from being dispatched to a vendor if there are insufficient funds in the related budget to support it.
budget period	The interval of time (such as 12 months or 4 quarters) into which a period is divided for budgetary and reporting purposes. The ChartField allows maximum flexibility to define operational accounting time periods without restriction to only one calendar.
business activity	The name of a subset of a detailed business process. This might be a specific transaction, task, or action that you perform in a business process.
business event	In PeopleSoft Enterprise Receivables, defines the processing characteristics for the Receivable Update process for a draft activity. In PeopleSoft Enterprise Sales Incentive Management, an original business transaction or activity that may justify the creation of a PeopleSoft Enterprise Incentive Management event (a sale, for example).
business process	A standard set of 17 business processes are defined and maintained by the PeopleSoft Enterprise product families and are supported by the Business Process Engineering group. An example of a business process is Order Fulfillment, which is a business process that manages sales orders and contracts, inventory, billing, and so forth. See also <i>detailed business process</i> .
business task	The name of the specific function depicted in one of the business processes.
business unit	A corporation or a subset of a corporation that is independent with regard to one or more operational or accounting functions.
buyer	In PeopleSoft Enterprise eSettlements, an organization (or business unit, as opposed to an individual) that transacts with suppliers (vendors) within the system. A buyer creates payments for purchases that are made in the system.
campus	In PeopleSoft Enterprise Campus Solutions, an entity that is usually associated with a distinct physical administrative unit, that belongs to a single academic institution, that uses a unique course catalog, and that produces a common transcript for students within the same academic career.
catalog item	In PeopleSoft Enterprise Learning Management, a specific topic that a learner can study and have tracked. For example, "Introduction to Microsoft Word." A catalog item contains general information about the topic and includes a course code, description, categorization, keywords, and delivery methods. A catalog item can have one or more learning activities.
catalog map	In PeopleSoft Enterprise Catalog Management, translates values from the catalog source data to the format of the company's catalog.
catalog partner	In PeopleSoft Enterprise Catalog Management, shares responsibility with the enterprise catalog manager for maintaining catalog content.
categorization	Associates partner offerings with catalog offerings and groups them into enterprise catalog categories.
category	In PeopleSoft Enterprise Campus Solutions, a broad grouping to which specific comments or communications (contexts) are assigned. Category codes are also linked to 3C access groups so that you can assign data-entry or view-only privileges across functions.
channel	In PeopleSoft MultiChannel Framework, email, chat, voice (computer telephone integration [CTI]), or a generic event.
ChartField	A field that stores a chart of accounts, resources, and so on, depending on the PeopleSoft Enterprise application. ChartField values represent individual account numbers, department codes, and so forth.

ChartField balancing	You can require specific ChartFields to match up (balance) on the debit and the credit side of a transaction.
ChartField combination edit	The process of editing journal lines for valid ChartField combinations based on user-defined rules.
ChartKey	One or more fields that uniquely identify each row in a table. Some tables contain only one field as the key, while others require a combination.
checkbook	In PeopleSoft Enterprise Promotions Management, enables you to view financial data (such as planned, incurred, and actual amounts) that is related to funds and trade promotions.
checklist code	In PeopleSoft Enterprise Campus Solutions, a code that represents a list of planned or completed action items that can be assigned to a staff member, volunteer, or unit. Checklists enable you to view all action assignments on one page.
class	In PeopleSoft Enterprise Campus Solutions, a specific offering of a course component within an academic term. See also <i>course</i> .
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 <i>sub-classification</i> .
clearance	In PeopleSoft Enterprise Campus Solutions, the period of time during which a constituent in PeopleSoft Enterprise Contributor Relations is approved for involvement in an initiative or an action. Clearances are used to prevent development officers from making multiple requests to a constituent during the same time period.
clone	In PeopleCode, to make a unique copy. In contrast, to <i>copy</i> may mean making a new reference to an object, so if the underlying object is changed, both the copy and the original change.
cohort	In PeopleSoft Enterprise Campus Solutions, the highest level of the three-level classification structure that you define for enrollment management. You can define a cohort level, link it to other levels, and set enrollment target numbers for it. See also <i>population</i> and <i>division</i> .
collection	To make a set of documents available for searching in Verity, you must first create at least one collection. A collection is set of directories and files that allow search application users to use the Verity search engine to quickly find and display source documents that match search criteria. A collection is a set of statistics and pointers to the source documents, stored in a proprietary format on a file server. Because a collection can only store information for a single location, PeopleTools maintains a set of collections (one per language code) for each search index object.
collection rule	In PeopleSoft Enterprise Receivables, a user-defined rule that defines actions to take for a customer based on both the amount and the number of days past due for outstanding balances.
comm key	See <i>communication key</i> .
communication key	In PeopleSoft Enterprise Campus Solutions, a single code for entering a combination of communication category, communication context, communication method, communication direction, and standard letter code. Communication keys (also called <i>comm keys</i> or <i>speed keys</i>) can be created for background processes as well as for specific users.

compensation object	In PeopleSoft Enterprise Incentive Management, a node within a compensation structure. Compensation objects are the building blocks that make up a compensation structure's hierarchical representation.
compensation structure	In PeopleSoft Enterprise Incentive Management, a hierarchical relationship of compensation objects that represents the compensation-related relationship between the objects.
component interface	A component interface is a set of application programming interfaces (APIs) that you can use to access and modify PeopleSoft Enterprise database information using a program instead of the PeopleSoft client.
condition	In PeopleSoft Enterprise Receivables, occurs when there is a change of status for a customer's account, such as reaching a credit limit or exceeding a user-defined balance due.
configuration parameter catalog	Used to configure an external system with PeopleSoft Enterprise. For example, a configuration parameter catalog might set up configuration and communication parameters for an external server.
configuration plan	In PeopleSoft Enterprise Incentive Management, configuration plans hold allocation information for common variables (not incentive rules) and are attached to a node without a participant. Configuration plans are not processed by transactions.
constituents	In PeopleSoft Enterprise Campus Solutions, friends, alumni, organizations, foundations, or other entities affiliated with the institution, and about which the institution maintains information. The constituent types delivered with PeopleSoft Enterprise Contributor Relations Solutions are based on those defined by the Council for the Advancement and Support of Education (CASE).
content reference	Content references are pointers to content registered in the portal registry. These are typically either URLs or iScripts. Content references fall into three categories: target content, templates, and template pagelets.
context	<p>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.</p> <p>In PeopleSoft Enterprise Campus Solutions, a specific instance of a comment or communication. One or more contexts are assigned to a category, which you link to 3C access groups so that you can assign data-entry or view-only privileges across functions.</p> <p>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.</p>
control table	Stores information that controls the processing of an application. This type of processing might be consistent throughout an organization, or it might be used only by portions of the organization for more limited sharing of data.
cost-plus contract line	A rate-based contract line associated with a fee component of Award, Fixed, Incentive, or Other. Rate-based contract lines associated with a fee type of None are not considered cost-plus contract lines.
cost profile	A combination of a receipt cost method, a cost flow, and a deplete cost method. A profile is associated with a cost book and determines how items in that book are valued, as well as how the material movement of the item is valued for the book.
cost row	A cost transaction and amount for a set of ChartFields.
course	In PeopleSoft Enterprise Campus Solutions, a course that is offered by a school and that is typically described in a course catalog. A course has a standard syllabus and

credit level; however, these may be modified at the class level. Courses can contain multiple components such as lecture, discussion, and lab.

See also *class*.

course share set	In PeopleSoft Enterprise Campus Solutions, a tag that defines a set of requirement groups that can share courses. Course share sets are used in PeopleSoft Enterprise Academic Advisement.
current learning	In PeopleSoft Enterprise Learning Management, a self-service repository for all of a learner's in-progress learning activities and programs.
data acquisition	In PeopleSoft Enterprise Incentive Management, the process during which raw business transactions are acquired from external source systems and fed into the operational data store (ODS).
data cube	In PeopleSoft Analytic Calculation Engine, a data cube is a container for one kind of data (such as Sales data) and works with in tandem with one or more dimensions. Dimensions and data cubes in PeopleSoft Analytic Calculation Engine are unrelated to dimensions and online analytical processing (OLAP) cubes in PeopleSoft Cube Manager.
data elements	<p>Data elements, at their simplest level, define a subset of data and the rules by which to group them.</p> <p>For Workforce Analytics, data elements are rules that tell the system what measures to retrieve about your workforce groups.</p>
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	<p>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.</p> <p>In PeopleSoft Enterprise Supply Chain Management, identifies the method by which goods are shipped to their destinations (such as truck, air, and rail). The delivery method is specified when creating shipment schedules.</p>
delivery method type	In PeopleSoft Enterprise Learning Management, identifies how learning activities can be delivered—for example, through online learning, classroom instruction, seminars, books, and so forth—in an organization. The type determines whether the delivery method includes scheduled components.
detailed business process	A subset of the business process. For example, the detailed business process named Determine Cash Position is a subset of the business process called Cash Management.
dimension	In PeopleSoft Analytic Calculation Engine, a dimension contains a list of one kind of data that can span various contexts, and it is a basic component of an analytic model. Within the analytic model, a dimension is attached to one or more data cubes. In PeopleSoft Cube Manager, a dimension is the most basic component of an OLAP cube and specifies the PeopleSoft metadata to be used to create the dimension's rollout structure. Dimensions and data cubes in PeopleSoft Analytic Calculation Engine are unrelated to dimensions and OLAP cubes in PeopleSoft Cube Manager.
directory information tree	In PeopleSoft Enterprise Directory Interface, the representation of a directory's hierarchical structure.

division	<p>In PeopleSoft Enterprise Campus Solutions, the lowest level of the three-level classification structure that you define in PeopleSoft Enterprise Recruiting and Admissions for enrollment management. You can define a division level, link it to other levels, and set enrollment target numbers for it.</p> <p>See also <i>population</i> and <i>cohort</i>.</p>
document sequencing	A flexible method that sequentially numbers the financial transactions (for example, bills, purchase orders, invoices, and payments) in the system for statutory reporting and for tracking commercial transaction activity.
dynamic detail tree	A tree that takes its detail values—dynamic details—directly from a table in the database, rather than from a range of values that are entered by the user.
edit table	A table in the database that has its own record definition, such as the Department table. As fields are entered into a PeopleSoft Enterprise application, they can be validated against an edit table to ensure data integrity throughout the system.
effective date	A method of dating information in PeopleSoft Enterprise applications. You can predate information to add historical data to your system, or postdate information in order to enter it before it actually goes into effect. By using effective dates, you don't delete values; you enter a new value with a current effective date.
EIM ledger	Abbreviation for <i>Enterprise Incentive Management ledger</i> . In PeopleSoft Enterprise Incentive Management, an object to handle incremental result gathering within the scope of a participant. The ledger captures a result set with all of the appropriate traces to the data origin and to the processing steps of which it is a result.
elimination set	In PeopleSoft Enterprise General Ledger, a related group of intercompany accounts that is processed during consolidations.
entry event	In PeopleSoft Enterprise General Ledger, Receivables, Payables, Purchasing, and Billing, a business process that generates multiple debits and credits resulting from single transactions to produce standard, supplemental accounting entries.
equitization	In PeopleSoft Enterprise General Ledger, a business process that enables parent companies to calculate the net income of subsidiaries on a monthly basis and adjust that amount to increase the investment amount and equity income amount before performing consolidations.
equity item limit	In PeopleSoft Enterprise Campus Solutions, the amounts of funds set by the institution to be awarded with discretionary or gift funds. The limit could be reduced by amounts equal to such things as expected family contribution (EFC) or parent contribution. Students are packaged by Equity Item Type Groups and Related Equity Item Types. This limit can be used to assure that similar student populations are packaged equally.
event	<p>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.</p> <p>In PeopleSoft Enterprise Human Resources, also refers to an incident that affects benefits eligibility.</p>
event propagation process	In PeopleSoft Enterprise Sales Incentive Management, a process that determines, through logic, the propagation of an original PeopleSoft Enterprise Incentive Management event and creates a derivative (duplicate) of the original event to be processed by other objects. PeopleSoft Enterprise Enterprise Sales Incentive Management uses this mechanism to implement splits, roll-ups, and so on. Event propagation determines who receives the credit.
exception	In PeopleSoft Enterprise Receivables, an item that either is a deduction or is in dispute.

exclusive pricing	In PeopleSoft Enterprise Order Management, a type of arbitration plan that is associated with a price rule. Exclusive pricing is used to price sales order transactions.
fact	In PeopleSoft Enterprise applications, facts are numeric data values from fields from a source database as well as an analytic application. A fact can be anything you want to measure your business by, for example, revenue, actual, budget data, or sales numbers. A fact is stored on a fact table.
financial aid term	In PeopleSoft Enterprise Campus Solutions, a combination of a period of time that the school determines as an instructional accounting period and an academic career. It is created and defined during the setup process. Only terms eligible for financial aid are set up for each financial aid career.
forecast item	A logical entity with a unique set of descriptive demand and forecast data that is used as the basis to forecast demand. You create forecast items for a wide range of uses, but they ultimately represent things that you buy, sell, or use in your organization and for which you require a predictable usage.
fund	In PeopleSoft Enterprise Promotions Management, a budget that can be used to fund promotional activity. There are four funding methods: top down, fixed accrual, rolling accrual, and zero-based accrual.
gap	In PeopleSoft Enterprise Campus Solutions, an artificial figure that sets aside an amount of unmet financial aid need that is not funded with Title IV funds. A gap can be used to prevent fully funding any student to conserve funds, or it can be used to preserve unmet financial aid need so that institutional funds can be awarded.
generic process type	In PeopleSoft Process Scheduler, process types are identified by a generic process type. For example, the generic process type SQR includes all SQR process types, such as SQR process and SQR report.
gift table	In PeopleSoft Enterprise Campus Solutions, a table or so-called <i>donor pyramid</i> describing the number and size of gifts that you expect will be needed to successfully complete the campaign in PeopleSoft Enterprise Contributor Relations. The gift table enables you to estimate the number of donors and prospects that you need at each gift level to reach the campaign goal.
GL business unit	Abbreviation for <i>general ledger business unit</i> . A unit in an organization that is an independent entity for accounting purposes. It maintains its own set of accounting books. See also <i>business unit</i> .
GL entry template	Abbreviation for <i>general ledger entry template</i> . In PeopleSoft Enterprise Campus Solutions, a template that defines how a particular item is sent to the general ledger. An item-type maps to the general ledger, and the GL entry template can involve multiple general ledger accounts. The entry to the general ledger is further controlled by high-level flags that control the summarization and the type of accounting—that is, accrual or cash.
GL Interface process	Abbreviation for <i>General Ledger Interface process</i> . In PeopleSoft Enterprise Campus Solutions, a process that is used to send transactions from PeopleSoft Enterprise Student Financials to the general ledger. Item types are mapped to specific general ledger accounts, enabling transactions to move to the general ledger when the GL Interface process is run.
group	In PeopleSoft Enterprise Billing and Receivables, a posting entity that comprises one or more transactions (items, deposits, payments, transfers, matches, or write-offs). In PeopleSoft Enterprise Human Resources Management and Supply Chain Management, any set of records that are associated under a single name or variable to

	run calculations in PeopleSoft business processes. In PeopleSoft Enterprise Time and Labor, for example, employees are placed in groups for time reporting purposes.
incentive object	In PeopleSoft Enterprise Incentive Management, the incentive-related objects that define and support the PeopleSoft Enterprise Incentive Management calculation process and results, such as plan templates, plans, results data, and user interaction objects.
incentive rule	In PeopleSoft Enterprise Sales Incentive Management, the commands that act on transactions and turn them into compensation. A rule is one part in the process of turning a transaction into compensation.
incur	In PeopleSoft Enterprise Promotions Management, to become liable for a promotional payment. In other words, you owe that amount to a customer for promotional activities.
initiative	In PeopleSoft Enterprise Campus Solutions, the basis from which all advancement plans are executed. It is an organized effort targeting a specific constituency, and it can occur over a specified period of time with specific purposes and goals. An initiative can be a campaign, an event, an organized volunteer effort, a membership drive, or any other type of effort defined by the institution. Initiatives can be multipart, and they can be related to other initiatives. This enables you to track individual parts of an initiative, as well as entire initiatives.
inquiry access	In PeopleSoft Enterprise Campus Solutions, a type of security access that permits the user only to view data. See also <i>update access</i> .
institution	In PeopleSoft Enterprise Campus Solutions, an entity (such as a university or college) that is independent of other similar entities and that has its own set of rules and business processes.
integration	A relationship between two compatible integration points that enables communication to take place between systems. Integrations enable PeopleSoft Enterprise applications to work seamlessly with other PeopleSoft Enterprise applications or with third-party systems or software.
integration point	An interface that a system uses to communicate with another PeopleSoft Enterprise application or an external application.
integration set	A logical grouping of integrations that applications use for the same business purpose. For example, the integration set <code>ADVANCED_SHIPPING_ORDER</code> contains all of the integrations that notify a customer that an order has shipped.
item	In PeopleSoft Enterprise Inventory, a tangible commodity that is stored in a business unit (shipped from a warehouse). In PeopleSoft Enterprise Demand Planning, Inventory Policy Planning, and Supply Planning, a noninventory item that is designated as being used for planning purposes only. It can represent a family or group of inventory items. It can have a planning bill of material (BOM) or planning routing, and it can exist as a component on a planning BOM. A planning item cannot be specified on a production or engineering BOM or routing, and it cannot be used as a component in a production. The quantity on hand will never be maintained. In PeopleSoft Enterprise Receivables, an individual receivable. An item can be an invoice, a credit memo, a debit memo, a write-off, or an adjustment.
item shuffle	In PeopleSoft Enterprise Campus Solutions, a process that enables you to change a payment allocation without having to reverse the payment.

joint communication	In PeopleSoft Enterprise Campus Solutions, one letter that is addressed jointly to two people. For example, a letter might be addressed to both Mr. Sudhir Awat and Ms. Samantha Mortelli. A relationship must be established between the two individuals in the database, and at least one of the individuals must have an ID in the database.
keyword	In PeopleSoft Enterprise Campus Solutions, a term that you link to particular elements within PeopleSoft Enterprise Student Financials, Financial Aid, and Contributor Relations. You can use keywords as search criteria that enable you to locate specific records in a search dialog box.
KPI	An abbreviation for <i>key performance indicator</i> . 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 <i>Lightweight Directory Access Protocol (LDAP) Data Interchange Format file</i> . Contains discrepancies between PeopleSoft Enterprise data and directory data.
learner group	In PeopleSoft Enterprise Learning Management, a group of learners who are linked to the same learning environment. Members of the learner group can share the same attributes, such as the same department or job code. Learner groups are used to control access to and enrollment in learning activities and programs. They are also used to perform group enrollments and mass enrollments in the back office.
learning components	In PeopleSoft Enterprise Learning Management, the foundational building blocks of learning activities. PeopleSoft Enterprise Learning Management supports six basic types of learning components: web-based, session, webcast, test, survey, and assignment. One or more of these learning component types compose a single learning activity.
learning environment	In PeopleSoft Enterprise Learning Management, identifies a set of categories and catalog items that can be made available to learner groups. Also defines the default values that are assigned to the learning activities and programs that are created within a particular learning environment. Learning environments provide a way to partition the catalog so that learners see only those items that are relevant to them.
learning history	In PeopleSoft Enterprise Learning Management, a self-service repository for all of a learner's completed learning activities and programs.
ledger mapping	You use ledger mapping to relate expense data from general ledger accounts to resource objects. Multiple ledger line items can be mapped to one or more resource IDs. You can also use ledger mapping to map dollar amounts (referred to as <i>rates</i>) to business units. You can map the amounts in two different ways: an actual amount that represents actual costs of the accounting period, or a budgeted amount that can be used to calculate the capacity rates as well as budgeted model results. In PeopleSoft Enterprise Warehouse, you can map general ledger accounts to the EW Ledger table.
library section	In PeopleSoft Enterprise Incentive Management, a section that is defined in a plan (or template) and that is available for other plans to share. Changes to a library section are reflected in all plans that use it.
linked section	In PeopleSoft Enterprise Incentive Management, a section that is defined in a plan template but appears in a plan. Changes to linked sections propagate to plans using that section.
linked variable	In PeopleSoft Enterprise Incentive Management, a variable that is defined and maintained in a plan template and that also appears in a plan. Changes to linked variables propagate to plans using that variable.
LMS	Abbreviation for <i>learning management system</i> . In PeopleSoft Enterprise Campus Solutions, LMS is a PeopleSoft Enterprise Student Records feature that provides a

	common set of interoperability standards that enable the sharing of instructional content and data between learning and administrative environments.
load	In PeopleSoft Enterprise Inventory, identifies a group of goods that are shipped together. Load management is a feature of PeopleSoft Enterprise Inventory that is used to track the weight, the volume, and the destination of a shipment.
local functionality	In PeopleSoft Enterprise HRMS, the set of information that is available for a specific country. You can access this information when you click the appropriate country flag in the global window, or when you access it by a local country menu.
location	Locations enable you to indicate the different types of addresses—for a company, for example, one address to receive bills, another for shipping, a third for postal deliveries, and a separate street address. Each address has a different location number. The primary location—indicated by a <i>1</i> —is the address you use most often and may be different from the main address.
logistical task	In PeopleSoft Enterprise Services Procurement, an administrative task that is related to hiring a service provider. Logistical tasks are linked to the service type on the work order so that different types of services can have different logistical tasks. Logistical tasks include both preapproval tasks (such as assigning a new badge or ordering a new laptop) and postapproval tasks (such as scheduling orientation or setting up the service provider email). The logistical tasks can be mandatory or optional. Mandatory preapproval tasks must be completed before the work order is approved. Mandatory postapproval tasks, on the other hand, must be completed before a work order is released to a service provider.
market template	In PeopleSoft Enterprise Incentive Management, additional functionality that is specific to a given market or industry and is built on top of a product category.
mass change	In PeopleSoft Enterprise Campus Solutions, mass change is a SQL generator that can be used to create specialized functionality. Using mass change, you can set up a series of Insert, Update, or Delete SQL statements to perform business functions that are specific to the institution. See also <i>3C engine</i> .
match group	In PeopleSoft Enterprise Receivables, a group of receivables items and matching offset items. The system creates match groups by using user-defined matching criteria for selected field values.
MCF server	Abbreviation for <i>PeopleSoft MultiChannel Framework server</i> . Comprises the universal queue server and the MCF log server. Both processes are started when <i>MCF Servers</i> is selected in an application server domain configuration.
merchandising activity	In PeopleSoft Enterprise Promotions Management, a specific discount type that is associated with a trade promotion (such as off-invoice, billback or rebate, or lump-sum payment) that defines the performance that is required to receive the discount. In the industry, you may know this as an offer, a discount, a merchandising event, an event, or a tactic.
meta-SQL	Meta-SQL constructs expand into platform-specific SQL substrings. They are used in functions that pass SQL strings, such as in SQL objects, the <i>SQLExec</i> function, and PeopleSoft Application Engine programs.
metastring	Metastings are special expressions included in SQL string literals. The metastings, prefixed with a percent (%) symbol, are included directly in the string literals. They expand at run time into an appropriate substring for the current database platform.
multibook	In PeopleSoft Enterprise General Ledger, multiple ledgers having multiple-base currencies that are defined for a business unit, with the option to post a single

	transaction to all base currencies (all ledgers) or to only one of those base currencies (ledgers).
multicurrency	The ability to process transactions in a currency other than the business unit's base currency.
national allowance	In PeopleSoft Enterprise Promotions Management, a promotion at the corporate level that is funded by nondiscretionary dollars. In the industry, you may know this as a national promotion, a corporate promotion, or a corporate discount.
need	In PeopleSoft Enterprise Campus Solutions, the difference between the cost of attendance (COA) and the expected family contribution (EFC). It is the gap between the cost of attending the school and the student's resources. The financial aid package is based on the amount of financial need. The process of determining a student's need is called <i>need analysis</i> .
node-oriented tree	A tree that is based on a detail structure, but the detail values are not used.
pagelet	Each block of content on the home page is called a pagelet. These pagelets display summary information within a small rectangular area on the page. The pagelet provide users with a snapshot of their most relevant PeopleSoft Enterprise and non-PeopleSoft Enterprise content.
participant	In PeopleSoft Enterprise Incentive Management, participants are recipients of the incentive compensation calculation process.
participant object	Each participant object may be related to one or more compensation objects. See also <i>compensation object</i> .
partner	A company that supplies products or services that are resold or purchased by the enterprise.
pay cycle	In PeopleSoft Enterprise Payables, a set of rules that define the criteria by which it should select scheduled payments for payment creation.
payment shuffle	In PeopleSoft Enterprise Campus Solutions, a process allowing payments that have been previously posted to a student's account to be automatically reapplied when a higher priority payment is posted or the payment allocation definition is changed.
pending item	In PeopleSoft Enterprise Receivables, an individual receivable (such as an invoice, a credit memo, or a write-off) that has been entered in or created by the system, but hasn't been posted.
PeopleCode	PeopleCode is a proprietary language, executed by the PeopleSoft Enterprise component processor. PeopleCode generates results based on existing data or user actions. By using various tools provided with PeopleTools, external services are available to all PeopleSoft Enterprise applications wherever PeopleCode can be executed.
PeopleCode event	See <i>event</i> .
PeopleSoft Pure 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.
person of interest	A person about whom the organization maintains information but who is not part of the workforce.
personal portfolio	In PeopleSoft Enterprise Campus Solutions, the user-accessible menu item that contains an individual's name, address, telephone number, and other personal information.
plan	In PeopleSoft Enterprise Sales Incentive Management, a collection of allocation rules, variables, steps, sections, and incentive rules that instruct the PeopleSoft Enterprise Incentive Management engine in how to process transactions.
plan context	In PeopleSoft Enterprise Incentive Management, correlates a participant with the compensation plan and node to which the participant is assigned, enabling the PeopleSoft Enterprise Incentive Management system to find anything that is associated with the node and that is required to perform compensation processing. Each participant, node, and plan combination represents a unique plan context—if three participants are on a compensation structure, each has a different plan context. Configuration plans are identified by plan contexts and are associated with the participants that refer to them.
plan template	In PeopleSoft Enterprise Incentive Management, the base from which a plan is created. A plan template contains common sections and variables that are inherited by all plans that are created from the template. A template may contain steps and sections that are not visible in the plan definition.
planned learning	In PeopleSoft Enterprise Learning Management, a self-service repository for all of a learner's planned learning activities and programs.
planning instance	In PeopleSoft Enterprise Supply Planning, a set of data (business units, items, supplies, and demands) constituting the inputs and outputs of a supply plan.
population	In PeopleSoft Enterprise Campus Solutions, the middle level of the three-level classification structure that you define in PeopleSoft Enterprise Recruiting and Admissions for enrollment management. You can define a population level, link it to other levels, and set enrollment target numbers for it. See also <i>division</i> and <i>cohort</i> .
portal registry	In PeopleSoft Enterprise applications, the portal registry is a tree-like structure in which content references are organized, classified, and registered. It is a central repository that defines both the structure and content of a portal through a hierarchical, tree-like structure of folders useful for organizing and securing content references.
price list	In PeopleSoft Enterprise Pricer, enables you to select products and conditions for which the price list applies to a transaction. During a transaction, the system either determines the product price based on the predefined search hierarchy for the transaction or uses the product's lowest price on any associated, active price lists. This price is used as the basis for any further discounts and surcharges.
price rule	In PeopleSoft Enterprise Pricer, defines the conditions that must be met for adjustments to be applied to the base price. Multiple rules can apply when conditions of each rule are met.
price rule condition	In PeopleSoft Enterprise Pricer, selects the price-by fields, the values for the price-by fields, and the operator that determines how the price-by fields are related to the transaction.
price rule key	In PeopleSoft Enterprise Pricer, defines the fields that are available to define price rule conditions (which are used to match a transaction) on the price rule.

primacy number	In PeopleSoft Enterprise Campus Solutions, a number that the system uses to prioritize financial aid applications when students are enrolled in multiple academic careers and academic programs at the same time. The Consolidate Academic Statistics process uses the primacy number indicated for both the career and program at the institutional level to determine a student's primary career and program. The system also uses the number to determine the primary student attribute value that is used when you extract data to report on cohorts. The lowest number takes precedence.
primary name type	In PeopleSoft Enterprise Campus Solutions, the name type that is used to link the name stored at the highest level within the system to the lower-level set of names that an individual provides.
process category	In PeopleSoft Process Scheduler, processes that are grouped for server load balancing and prioritization.
process group	In PeopleSoft Enterprise Financials, a group of application processes (performed in a defined order) that users can initiate in real time, directly from a transaction entry page.
process definition	Process definitions define each run request.
process instance	A unique number that identifies each process request. This value is automatically incremented and assigned to each requested process when the process is submitted to run.
process job	You can link process definitions into a job request and process each request serially or in parallel. You can also initiate subsequent processes based on the return code from each prior request.
process request	A single run request, such as a Structured Query Report (SQR), a COBOL or Application Engine program, or a Crystal report that you run through PeopleSoft Process Scheduler.
process run control	A PeopleTools variable used to retain PeopleSoft Process Scheduler values needed at runtime for all requests that reference a run control ID. Do not confuse these with application run controls, which may be defined with the same run control ID, but only contain information specific to a given application process request.
product	A PeopleSoft Enterprise or third-party product. PeopleSoft organizes its software products into product families and product lines. Interactive Services Repository contains information about every release of every product that PeopleSoft sells, as well as products from certified third-party companies. These products appear with the product name and release number.
product category	In PeopleSoft Enterprise Incentive Management, indicates an application in the PeopleSoft Enterprise Incentive Management suite of products. Each transaction in the PeopleSoft Enterprise Incentive Management system is associated with a product category.
product family	A group of products that are related by common functionality. The family names that can be searched using Interactive Service Repository are Oracle's PeopleSoft Enterprise, PeopleSoft EnterpriseOne, PeopleSoft World, and third-party, certified partners.
product line	The name of a PeopleSoft Enterprise product line or the company name of a third-party certified partner. Integration Services Repository enables you to search for integration points by product line.
programs	In PeopleSoft Enterprise Learning Management, a high-level grouping that guides the learner along a specific learning path through sections of catalog items. PeopleSoft Enterprise Learning Systems provides two types of programs—curricula and certifications.

progress log	In PeopleSoft Enterprise Services Procurement, tracks deliverable-based projects. This is similar to the time sheet in function and process. The service provider contact uses the progress log to record and submit progress on deliverables. The progress can be logged by the activity that is performed, by the percentage of work that is completed, or by the completion of milestone activities that are defined for the project.
project transaction	In PeopleSoft Enterprise Project Costing, an individual transaction line that represents a cost, time, budget, or other transaction row.
promotion	In PeopleSoft Enterprise Promotions Management, a trade promotion, which is typically funded from trade dollars and used by consumer products manufacturers to increase sales volume.
prospects	In PeopleSoft Enterprise Campus Solutions, students who are interested in applying to the institution. In PeopleSoft Enterprise Contributor Relations, individuals and organizations that are most likely to make substantial financial commitments or other types of commitments to the institution.
publishing	In PeopleSoft Enterprise Incentive Management, a stage in processing that makes incentive-related results available to participants.
rating components	In PeopleSoft Enterprise Campus Solutions, variables used with the Equation Editor to retrieve specified populations.
record group	A set of logically and functionally related control tables and views. Record groups help enable TableSet sharing, which eliminates redundant data entry. Record groups ensure that TableSet sharing is applied consistently across all related tables and views.
record input VAT flag	Abbreviation for <i>record input value-added tax flag</i> . Within PeopleSoft Enterprise Purchasing, Payables, and General Ledger, this flag indicates that you are recording input VAT on the transaction. This flag, in conjunction with the record output VAT flag, is used to determine the accounting entries created for a transaction and to determine how a transaction is reported on the VAT return. For all cases within Purchasing and Payables where VAT information is tracked on a transaction, this flag is set to Yes. This flag is not used in PeopleSoft Enterprise Order Management, Billing, or Receivables, where it is assumed that you are always recording only output VAT, or in PeopleSoft Enterprise Expenses, where it is assumed that you are always recording only input VAT.
record output VAT flag	Abbreviation for <i>record output value-added tax flag</i> . See <i>record input VAT flag</i> .
recname	The name of a record that is used to determine the associated field to match a value or set of values.
recognition	In PeopleSoft Enterprise Campus Solutions, the recognition type indicates whether the PeopleSoft Enterprise Contributor Relations donor is the primary donor of a commitment or shares the credit for a donation. Primary donors receive hard credit that must total 100 percent. Donors that share the credit are given soft credit. Institutions can also define other share recognition-type values such as memo credit or vehicle credit.
reference data	In PeopleSoft Enterprise Sales Incentive Management, system objects that represent the sales organization, such as territories, participants, products, customers, and channels.
reference object	In PeopleSoft Enterprise Incentive Management, this dimension-type object further defines the business. Reference objects can have their own hierarchy (for example, product tree, customer tree, industry tree, and geography tree).

reference transaction	In commitment control, a reference transaction is a source transaction that is referenced by a higher-level (and usually later) source transaction, in order to automatically reverse all or part of the referenced transaction's budget-checked amount. This avoids duplicate postings during the sequential entry of the transaction at different commitment levels. For example, the amount of an encumbrance transaction (such as a purchase order) will, when checked and recorded against a budget, cause the system to concurrently reference and relieve all or part of the amount of a corresponding pre-encumbrance transaction, such as a purchase requisition.
regional sourcing	In PeopleSoft Enterprise Purchasing, provides the infrastructure to maintain, display, and select an appropriate vendor and vendor pricing structure that is based on a regional sourcing model where the multiple ship to locations are grouped. Sourcing may occur at a level higher than the ship to location.
relationship object	In PeopleSoft Enterprise Incentive Management, these objects further define a compensation structure to resolve transactions by establishing associations between compensation objects and business objects.
remote data source data	Data that is extracted from a separate database and migrated into the local database.
REN server	Abbreviation for <i>real-time event notification server</i> in PeopleSoft MultiChannel Framework.
requester	In PeopleSoft Enterprise eSettlements, an individual who requests goods or services and whose ID appears on the various procurement pages that reference purchase orders.
reversal indicator	In PeopleSoft Enterprise Campus Solutions, an indicator that denotes when a particular payment has been reversed, usually because of insufficient funds.
role	Describes how people fit into PeopleSoft Workflow. A role is a class of users who perform the same type of work, such as clerks or managers. Your business rules typically specify what user role needs to do an activity.
role user	A PeopleSoft Workflow user. A person's role user ID serves much the same purpose as a user ID does in other parts of the system. PeopleSoft Workflow uses role user IDs to determine how to route worklist items to users (through an email address, for example) and to track the roles that users play in the workflow. Role users do not need PeopleSoft user IDs.
roll up	In a tree, to roll up is to total sums based on the information hierarchy.
run control	A run control is a type of online page that is used to begin a process, such as the batch processing of a payroll run. Run control pages generally start a program that manipulates data.
run control ID	A unique ID to associate each user with his or her own run control table entries.
run-level context	In PeopleSoft Enterprise Incentive Management, associates a particular run (and batch ID) with a period context and plan context. Every plan context that participates in a run has a separate run-level context. Because a run cannot span periods, only one run-level context is associated with each plan context.
SCP SCBM XML message	Abbreviation for <i>Supply Chain Planning Supply Chain Business Modeler Extensible Markup Language message</i> . Supply Chain Business Modeler uses XML as the format for all data that it imports and exports.
search query	You use this set of objects to pass a query string and operators to the search engine. The search index returns a set of matching results with keys to the source documents.
search/match	In PeopleSoft Enterprise Campus Solutions and PeopleSoft Enterprise Human Resources Management Solutions, a feature that enables you to search for and identify duplicate records in the database.

seasonal address	In PeopleSoft Enterprise Campus Solutions, an address that recurs for the same length of time at the same time of year each year until adjusted or deleted.
section	In PeopleSoft Enterprise Incentive Management, a collection of incentive rules that operate on transactions of a specific type. Sections enable plans to be segmented to process logical events in different sections.
security event	In commitment control, security events trigger security authorization checking, such as budget entries, transfers, and adjustments; exception overrides and notifications; and inquiries.
serial genealogy	In PeopleSoft Enterprise Manufacturing, the ability to track the composition of a specific, serial-controlled item.
serial in production	In PeopleSoft Enterprise Manufacturing, enables the tracing of serial information for manufactured items. This is maintained in the Item Master record.
service impact	In PeopleSoft Enterprise Campus Solutions, the resulting action triggered by a service indicator. For example, a service indicator that reflects nonpayment of account balances by a student might result in a service impact that prohibits registration for classes.
service indicator	In PeopleSoft Enterprise Campus Solutions, indicates services that may be either withheld or provided to an individual. Negative service indicators indicate holds that prevent the individual from receiving specified services, such as check-cashing privileges or registration for classes. Positive service indicators designate special services that are provided to the individual, such as front-of-line service or special services for disabled students.
session	<p>In PeopleSoft Enterprise Campus Solutions, time elements that subdivide a term into multiple time periods during which classes are offered. In PeopleSoft Enterprise Contributor Relations, a session is the means of validating gift, pledge, membership, or adjustment data entry . It controls access to the data entered by a specific user ID. Sessions are balanced, queued, and then posted to the institution's financial system. Sessions must be posted to enter a matching gift or pledge payment, to make an adjustment, or to process giving clubs or acknowledgements.</p> <p>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.</p>
session template	In PeopleSoft Enterprise Learning Management, enables you to set up common activity characteristics that may be reused while scheduling a PeopleSoft Enterprise Learning Management activity—characteristics such as days of the week, start and end times, facility and room assignments, instructors, and equipment. A session pattern template can be attached to an activity that is being scheduled. Attaching a template to an activity causes all of the default template information to populate the activity session pattern.
setup relationship	In PeopleSoft Enterprise Incentive Management, a relationship object type that associates a configuration plan with any structure node.
share driver expression	In PeopleSoft Enterprise Business Planning, a named planning method similar to a driver expression, but which you can set up globally for shared use within a single planning application or to be shared between multiple planning applications through PeopleSoft Enterprise Warehouse.
single signon	With single signon, users can, after being authenticated by a PeopleSoft Enterprise application server, access a second PeopleSoft Enterprise application server without entering a user ID or password.

source key process	In PeopleSoft Enterprise Campus Solutions, a process that relates a particular transaction to the source of the charge or financial aid. On selected pages, you can drill down into particular charges.
source transaction	In commitment control, any transaction generated in a PeopleSoft Enterprise or third-party application that is integrated with commitment control and which can be checked against commitment control budgets. For example, a pre-encumbrance, encumbrance, expenditure, recognized revenue, or collected revenue transaction.
speed key	See <i>communication key</i> .
SpeedChart	A user-defined shorthand key that designates several ChartKeys to be used for voucher entry. Percentages can optionally be related to each ChartKey in a SpeedChart definition.
SpeedType	A code representing a combination of ChartField values. SpeedTypes simplify the entry of ChartFields commonly used together.
staging	A method of consolidating selected partner offerings with the offerings from the enterprise's other partners.
standard letter code	In PeopleSoft Enterprise Campus Solutions, a standard letter code used to identify each letter template available for use in mail merge functions. Every letter generated in the system must have a standard letter code identification.
statutory account	Account required by a regulatory authority for recording and reporting financial results. In PeopleSoft Enterprise, this is equivalent to the Alternate Account (ALTACCT) ChartField.
step	In PeopleSoft Enterprise Sales Incentive Management, a collection of sections in a plan. Each step corresponds to a step in the job run.
storage level	In PeopleSoft Enterprise Inventory, identifies the level of a material storage location. Material storage locations are made up of a business unit, a storage area, and a storage level. You can set up to four storage levels.
subcustomer qualifier	A value that groups customers into a division for which you can generate detailed history, aging, events, and profiles.
Summary ChartField	You use summary ChartFields to create summary ledgers that roll up detail amounts based on specific detail values or on selected tree nodes. When detail values are summarized using tree nodes, summary ChartFields must be used in the summary ledger data record to accommodate the maximum length of a node name (20 characters).
summary ledger	An accounting feature used primarily in allocations, inquiries, and PS/nVision reporting to store combined account balances from detail ledgers. Summary ledgers increase speed and efficiency of reporting by eliminating the need to summarize detail ledger balances each time a report is requested. Instead, detail balances are summarized in a background process according to user-specified criteria and stored on summary ledgers. The summary ledgers are then accessed directly for reporting.
summary time period	In PeopleSoft Enterprise Business Planning, any time period (other than a base time period) that is an aggregate of other time periods, including other summary time periods and base time periods, such as quarter and year total.
summary tree	A tree used to roll up accounts for each type of report in summary ledgers. Summary trees enable you to define trees on trees. In a summary tree, the detail values are really nodes on a detail tree or another summary tree (known as the <i>basis</i> tree). A summary tree structure specifies the details on which the summary trees are to be built.
syndicate	To distribute a production version of the enterprise catalog to partners.

system function	In PeopleSoft Enterprise Receivables, an activity that defines how the system generates accounting entries for the general ledger.
system source	<p>The system source identifies the source of a transaction row in the database. For example, a transaction that originates in PeopleSoft Enterprise Expenses contains a system source code of BEX (Expenses Batch).</p> <p>When PeopleSoft Enterprise Project Costing prices the source transaction row for billing, the system creates a new row with a system source code of PRP (Project Costing pricing), which represents the system source of the new row. System source codes can identify sources that are internal or external to the PeopleSoft Enterprise system. For example, processes that import data from Microsoft Project into PeopleSoft Enterprise applications create transaction rows with a source code of MSP (Microsoft Project).</p>
TableSet	A means of sharing similar sets of values in control tables, where the actual data values are different but the structure of the tables is the same.
TableSet sharing	Shared data that is stored in many tables that are based on the same TableSets. Tables that use TableSet sharing contain the SETID field as an additional key or unique identifier.
target currency	The value of the entry currency or currencies converted to a single currency for budget viewing and inquiry purposes.
tax authority	In PeopleSoft Enterprise Campus Solutions, a user-defined element that combines a description and percentage of a tax with an account type, an item type, and a service impact.
template	A template is HTML code associated with a web page. It defines the layout of the page and also where to get HTML for each part of the page. In PeopleSoft Enterprise, you use templates to build a page by combining HTML from a number of sources. For a PeopleSoft Enterprise portal, all templates must be registered in the portal registry, and each content reference must be assigned a template.
territory	In PeopleSoft Enterprise Sales Incentive Management, hierarchical relationships of business objects, including regions, products, customers, industries, and participants.
third party	A company or vendor that has extensive PeopleSoft Enterprise product knowledge and whose products and integrations have been certified and are compatible with PeopleSoft Enterprise applications.
3C engine	Abbreviation for <i>Communications, Checklists, and Comments engine</i> . In PeopleSoft Enterprise Campus Solutions, the 3C engine enables you to automate business processes that involve additions, deletions, and updates to communications, checklists, and comments. You define events and triggers to engage the engine, which runs the mass change and processes the 3C records (for individuals or organizations) immediately and automatically from within business processes.
3C group	Abbreviation for <i>Communications, Checklists, and Comments group</i> . In PeopleSoft Enterprise Campus Solutions, a method of assigning or restricting access privileges. A 3C group enables you to group specific communication categories, checklist codes, and comment categories. You can then assign the group inquiry-only access or update access, as appropriate.
TimeSpan	A relative period, such as year-to-date or current period, that can be used in various PeopleSoft Enterprise General Ledger functions and reports when a rolling time frame, rather than a specific date, is required. TimeSpans can also be used with flexible formulas in PeopleSoft Enterprise Projects.

trace usage	In PeopleSoft Enterprise Manufacturing, enables the control of which components will be traced during the manufacturing process. Serial- and lot-controlled components can be traced. This is maintained in the Item Master record.
transaction allocation	In PeopleSoft Enterprise Incentive Management, the process of identifying the owner of a transaction. When a raw transaction from a batch is allocated to a plan context, the transaction is duplicated in the PeopleSoft Enterprise Incentive Management transaction tables.
transaction state	In PeopleSoft Enterprise Incentive Management, a value assigned by an incentive rule to a transaction. Transaction states enable sections to process only transactions that are at a specific stage in system processing. After being successfully processed, transactions may be promoted to the next transaction state and “picked up” by a different section for further processing.
Translate table	A system edit table that stores codes and translate values for the miscellaneous fields in the database that do not warrant individual edit tables of their own.
tree	The graphical hierarchy in PeopleSoft Enterprise systems that displays the relationship between all accounting units (for example, corporate divisions, projects, reporting groups, account numbers) and determines roll-up hierarchies.
tuition lock	In PeopleSoft Enterprise Campus Solutions, a feature in the Tuition Calculation process that enables you to specify a point in a term after which students are charged a minimum (or <i>locked</i>) fee amount. Students are charged the locked fee amount even if they later drop classes and take less than the normal load level for that tuition charge.
unclaimed transaction	In PeopleSoft Enterprise Incentive Management, a transaction that is not claimed by a node or participant after the allocation process has completed, usually due to missing or incomplete data. Unclaimed transactions may be manually assigned to the appropriate node or participant by a compensation administrator.
universal navigation header	Every PeopleSoft Enterprise portal includes the universal navigation header, intended to appear at the top of every page as long as the user is signed on to the portal. In addition to providing access to the standard navigation buttons (like Home, Favorites, and signoff) the universal navigation header can also display a welcome message for each user.
update access	In PeopleSoft Enterprise Campus Solutions, a type of security access that permits the user to edit and update data. See also <i>inquiry access</i> .
user interaction object	In PeopleSoft Enterprise Sales Incentive Management, used to define the reporting components and reports that a participant can access in his or her context. All PeopleSoft Enterprise Sales Incentive Management user interface objects and reports are registered as user interaction objects. User interaction objects can be linked to a compensation structure node through a compensation relationship object (individually or as groups).
variable	In PeopleSoft Enterprise Sales Incentive Management, the intermediate results of calculations. Variables hold the calculation results and are then inputs to other calculations. Variables can be plan variables that persist beyond the run of an engine or local variables that exist only during the processing of a section.
VAT exception	Abbreviation for <i>value-added tax exception</i> . 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 <i>value-added tax exempt</i> . 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 <i>value-added tax exoneration</i> . An organization that has been granted a permanent exemption from paying VAT due to the nature of that organization.
VAT suspension	Abbreviation for <i>value-added tax suspension</i> . An organization that has been granted a temporary exemption from paying VAT.
warehouse	A PeopleSoft Enterprise data warehouse that consists of predefined ETL maps, data warehouse tools, and DataMart definitions.
work order	In PeopleSoft Enterprise Services Procurement, enables an enterprise to create resource-based and deliverable-based transactions that specify the basic terms and conditions for hiring a specific service provider. When a service provider is hired, the service provider logs time or progress against the work order.
worker	A person who is part of the workforce; an employee or a contingent worker.
workset	A group of people and organizations that are linked together as a set. You can use worksets to simultaneously retrieve the data for a group of people and organizations and work with the information on a single page.
worksheet	A way of presenting data through a PeopleSoft Enterprise Business Analysis Modeler interface that enables users to do in-depth analysis using pivoting tables, charts, notes, and history information.
worklist	The automated to-do list that PeopleSoft Workflow creates. From the worklist, you can directly access the pages you need to perform the next action, and then return to the worklist for another item.
XML link	The XML Linking language enables you to insert elements into XML documents to create a links between resources.
XML schema	An XML definition that standardizes the representation of application messages, component interfaces, or business interlinks.
XPI	Abbreviation for <i>eXtended Process Integrator</i> . PeopleSoft XPI is the integration infrastructure that enables both real-time and batch communication with JD Edwards EnterpriseOne applications.
yield by operation	In PeopleSoft Enterprise Manufacturing, the ability to plan the loss of a manufactured item on an operation-by-operation basis.
zero-rated VAT	Abbreviation for <i>zero-rated value-added tax</i> . 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.

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