ORACLE
PeopleSoft

PeopleSoft CRM 9.2: PeopleSoft Multichannel Applications

August 2023

ORACLE

Contents

Preface

Understanding the PeopleSoft Online Help and PeopleBooks

The PeopleSoft Online Help is a website that enables you to view all help content for PeopleSoft applications and PeopleTools. The help provides standard navigation and full-text searching, as well as context-sensitive online help for PeopleSoft users.

Hosted PeopleSoft Online Help

You can access the hosted PeopleSoft Online Help on the Oracle Help Center. The hosted PeopleSoft Online Help is updated on a regular schedule, ensuring that you have access to the most current documentation. This reduces the need to view separate documentation posts for application maintenance on My Oracle Support. The hosted PeopleSoft Online Help is available in English only.

To configure the context-sensitive help for your PeopleSoft applications to use the Oracle Help Center, see Configuring Context-Sensitive Help Using the Hosted Online Help Website.

Locally Installed Help

If you're setting up an on-premise PeopleSoft environment, and your organization has firewall restrictions that prevent you from using the hosted PeopleSoft Online Help, you can install the online help locally. See Configuring Context-Sensitive Help Using a Locally Installed Online Help Website.

Downloadable PeopleBook PDF Files

You can access downloadable PDF versions of the help content in the traditional PeopleBook format on the Oracle Help Center. The content in the PeopleBook PDFs is the same as the content in the PeopleSoft Online Help, but it has a different structure and it does not include the interactive navigation features that are available in the online help.

Common Help Documentation

Common help documentation contains information that applies to multiple applications. The two main types of common help are:

- Application Fundamentals

- Using PeopleSoft Applications

Most product families provide a set of application fundamentals help topics that discuss essential information about the setup and design of your system. This information applies to many or all applications in the PeopleSoft product family. Whether you are implementing a single application, some combination of applications within the product family, or the entire product family, you should be familiar with the contents of the appropriate application fundamentals help. They provide the starting points for fundamental implementation tasks.

In addition, the *PeopleTools: Applications User's Guide* introduces you to the various elements of the PeopleSoft Pure Internet Architecture. It also explains how to use the navigational hierarchy, components, and pages to perform basic functions as you navigate through the system. While your application or implementation may differ, the topics in this user's guide provide general information about using PeopleSoft applications.

Field and Control Definitions

PeopleSoft documentation includes definitions for most fields and controls that appear on application pages. These definitions describe how to use a field or control, where populated values come from, the effects of selecting certain values, and so on. If a field or control is not defined, then it either requires no additional explanation or is documented in a common elements section earlier in the documentation. For example, the Date field rarely requires additional explanation and may not be defined in the documentation for some pages.

Typographical Conventions

The following table describes the typographical conventions that are used in the online help.

Typographical Convention	Description
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.
. . . (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 (	).
[ ] (square brackets)	Indicate optional items in PeopleCode syntax.
& (ampersand)	When placed before a parameter in PeopleCode syntax, an ampersand indicates that the parameter is an already instantiated object. Ampersands also precede all PeopleCode variables.
⇒	This continuation character has been inserted at the end of a line of code that has been wrapped at the page margin. The code should be viewed or entered as a single, continuous line of code without the continuation character.

ISO Country and Currency Codes

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

ISO country codes may appear as country identifiers, and ISO currency codes may appear as currency identifiers in your PeopleSoft documentation. Reference to an ISO country code in your documentation does not imply that your application includes every ISO country code. The following example is a country-specific heading: "(FRA) Hiring an Employee."

The PeopleSoft Currency Code table (CURRENCY_CD_TBL) contains sample currency code data. The Currency Code table is based on ISO Standard 4217, "Codes for the representation of currencies," and also relies on ISO country codes in the Country table (COUNTRY_TBL). The navigation to the pages where you maintain currency code and country information depends on which PeopleSoft applications you are using. To access the pages for maintaining the Currency Code and Country tables, consult the online help for your applications for more information.

Region and Industry Identifiers

Information that applies only to a specific 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 region-specific heading: "(Latin America) Setting Up Depreciation"

Region Identifiers

Regions are identified by the region name. The following region identifiers may appear in the PeopleSoft Online Help:

- 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 the PeopleSoft Online Help:

- USF (U.S. Federal)

- E&G (Education and Government)

Translations and Embedded Help

PeopleSoft 9.2 software applications include translated embedded help. With the 9.2 release, PeopleSoft aligns with the other Oracle applications by focusing our translation efforts on embedded help. We are not planning to translate our traditional online help and PeopleBooks documentation. Instead we offer very direct translated help at crucial spots within our application through our embedded help widgets. Additionally, we have a one-to-one mapping of application and help translations, meaning that the software and embedded help translation footprint is identical—something we were never able to accomplish in the past.

Using and Managing the PeopleSoft Online Help

Select About This Help in the left navigation panel on any page in the PeopleSoft Online Help to see information on the following topics:

- Using the PeopleSoft Online Help.

- Managing hosted Online Help.

- Managing locally installed PeopleSoft Online Help.

PeopleSoft CRM Related Links

Oracle Help Center

PeopleSoft Online Help Home

PeopleSoft Information Portal

My Oracle Support

PeopleSoft Training from Oracle University

PeopleSoft Video Feature Overviews on YouTube

PeopleSoft Business Process Maps (Microsoft Visio format)

PeopleSoft Spotlight Series

Contact Us

Send your suggestions to psoft-infodev_us@oracle.com.

Please include the applications update image or PeopleTools release that you're using.

Follow Us

Icon	Link
	YouTube
	Twitter@PeopleSoft_Info.

Icon	*Link*
	PeopleSoft Blogs
	LinkedIn

Chapter 1

Getting Started with PeopleSoft CRM Multichannel Applications

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 topic summarizes the business processes associated with PeopleSoft CRM Multichannel applications. We discuss these business processes in the business process topics in this documentation.

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 topics in this documentation.

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 integrates with Oracle-validated third-party CTI middleware.

  For a list of partners that offer CTI middleware integrations, refer to the link in the See section.

- ERMS mail servers and mailboxes.

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

See Oracle Validated Application Integrations - Find a Partner Solution.

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 *PeopleTools: 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 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 Defining System Settings for Email Processing.
RB_ERMS_SETUP	RB_ERMS_SETUP_SCI	See Defining Mail Filters.
RB_MAILBOX_DEFN	RB_MAILBOX_DEFN_SCI	See Defining Mailboxes.
RB_APPSRV_DEFN	RB_APPSRV_DEFN_SCI	See Defining Application Services.
RB_WEBFORM_DEFN	RB_WEBFORM_DEFN_SCI	See Defining Webform Templates.
RB_QUERY	RB_QUERY_SCI	See Query/Keyword Details Page.
RB_QUERY_GROUP	RB_QUERY_GROUP_SCI	See Query Groups Page.
RB_WL_ROUTING	RB_WL_ROUTING_SCI	See Query Group/Worklist Associations Page.
RB_CHAT_ADMIN	RB_CHAT_ADMIN_SCI	See Chat Enabled Page Setup Page.

Component	Component Interface	Reference
RB_CHAT_MAP	RB_CHAT_MAP_SCI	See Service Page Mapping Page.
CTI_CONFIG	CTI_CONFIG_SCI	See CTI Configuration Page.
CTI_MAPPING	CTI_MAPPING_SCI	See CTI Mapping Page.

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 available in these topics, with information on where to find the most up-to-date version of each:

- "PeopleSoft CRM Application Fundamentals Overview" (Application Fundamentals)

- "PeopleSoft Automation and Application Configuration Overview" (Automation and Configuration Tools)

- "CRM Business Object Management Overview" (Business Object Management)

- "PeopleSoft CRM Product and Item Management Overview" (PeopleSoft Product and Item Management)

See product documentation for *PeopleTools: Security Administration*, *PeopleTools: PeopleSoft Setup Manager*, and *PeopleTools: PeopleSoft Component Interfaces*.

Chapter 2

Navigating in PeopleSoft 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 *PeopleTools: PeopleSoft Applications User's Guide*.

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.
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.

Page Name	Navigation	Usage
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.

Page Name	Navigation	Usage
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.
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

Page Name	Navigation	Usage
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.

Page Name	Navigation	Usage
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.
Search Correspondence	Click the **Search 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 Bulk Correspondence	Click the **Search Bulk Correspondence** link on the General Administration page.	View bulk 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.

Page Name	Navigation	Usage
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

Understanding Multichannel Applications Supported by PeopleSoft CRM

These topics discuss:

- 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 *PeopleTools: 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 Understanding Multichannel Toolbar Functionality.

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 Understanding Supervisor Desktop and Monitoring Real-Time Information.

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.

Related Links
Using Multichannel Toolbar

Setting Up Universal Queuing

This topic discusses how to set up universal queuing.

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).

Pages Used to Set Up the Universal Queuing Infrastructure

Page Name	Definition Name	Usage
System Installations Page	RB_ERMS_SYSDEFN	Define default values for queues that are created through PeopleSoft CRM group worklists.

Page Name	Definition Name	Usage
Group Worklist Page	RB_WF_WL_GRP	Define a group worklist and its members so that the system will create corresponding queue and agent definitions.

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 *PeopleTools: PeopleSoft MultiChannel Framework*.

System Installations Page

Use the System Installations page (RB_ERMS_SYSDEFN) to define default values for queues that are created through PeopleSoft CRM group worklists.

Navigation:

Set Up CRM > **Product Related** > **Multichannel Definitions** > **Email** > **System Installation** > **System Installations**

This example illustrates the fields and controls on the System Installations page (1 of 2). You can find definitions for the fields and controls later on this page.

This example illustrates the fields and controls on the System Installations page (2 of 2). You can find definitions for the fields and controls later on this page.

Field or Control	Description
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 the product documentation for *PeopleTools: PeopleSoft MultiChannel Framework*.

Related Links
System Installations Page

Group Worklist Page

Use the Group Worklist page (RB_WF_WL_GRP) to define a group worklist and its members so that the system will create corresponding queue and agent definitions.

Navigation:

Set Up CRM > **Common Definitions** > **Workflow** > **Group Worklist** > **Group Worklist**

This example illustrates the fields and controls on the Group Worklist page. You can find definitions for the fields and controls later on this 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.

Field or Control	Description
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 though 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 topic 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 documentation for detailed information on setting up queues, agents, and agent personalizations.

Se the product documentation for *PeopleTools: PeopleSoft MultiChannel Framework*.

Related Links

"Understanding CRM Worklists" (Automation and Configuration Tools)

Configuring Agents

Chapter 4

Understanding ERMS

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.

Related Links
ERMS Processes
Understanding Email Management

Unstructured and Structured Email

These topics discuss:

- 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.

   The system sends the email directly to the default group worklist of the associated mailbox if the automatic routing option is disabled.

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.

The ERMS system routes an unstructured email to a relevant group worklist based on the information provided in the email. Information used in the evaluation process includes:

- 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.

- 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.

Each mailbox is associated with a default group worklist. An email is routed to the default group worklist under these situations:

- None of the routing processes returns a valid group worklist to which the email can be sent.

- The email is oversized (and therefore cannot be analyzed).

- The mailbox to which the email belongs is set up to not perform automatic routing.

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.

Related Links

Understanding Unstructured Email Routing
Understanding Email Management

Structured Email

A *structured* email is sent when a user 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 PeopleSoft Search system to analyze content and return for the email a category and a score value, if the webform definition is not set to use the default category to apply automated mail processing (AMP) rules. Using this information, the AMP rules engine 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). Your organization is responsible for constructing webforms that gather the appropriate data. These custom webforms must generate and format structured email properly so that they can be collected and processed by the ERMS system.

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.

Related Links

Understanding Structured Email

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) by clicking the **Notification** toolbar button, one of the following occurs:

  * If the transaction is not associated with any email, the Outbound Notification page is used.

  * If the transaction is associated with one or more email, a secondary page appears and it asks if you want to respond to any current email or send a brand new email. If it is a response, and the option to use email workspace for responding to existing notifications is selected at the system level, the Response page of the email workspace is used. The Outbound Notification page is used either if it's a new mail, or it's a response but the option to use email workspace is not selected.

The interfaces of the Outbound Notification page and email workspace are similar. The Outbound Notification page functions the same as the Response page in the email workspace, except that you cannot search for solutions or documents on the Outbound Notification page. You can, however, use the page to email solutions from cases.

Related Links
"Understanding Manual Notifications" (Automation and Configuration Tools)
"Finding and Attempting Solutions" (PeopleSoft Services Foundation)
"Understanding Correspondence and Notification Settings" (Automation and Configuration Tools)
"Correspondence and Notifications" (Automation and Configuration Tools)
Email Replies

ERMS Processes

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

These topics discuss:

* 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, thread-based routing and keyword-based routing. It carries out necessary email processing based on the email type (structured or unstructured). At the end, either some actions are preformed 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 emails in queue, it schedules the unstructured content analysis job (PRCEMAIL), which includes the following two processes.

  - The feed generation process (PTSF_GENFEED), which generates an XML feed for inbound email. This feed is used by the search engine to build the inbound email search index that is used for content-based routing.

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

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

- 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 the mail reader, mail route, scheduler, and email alert processes work together to process emails that are sent to an organization:
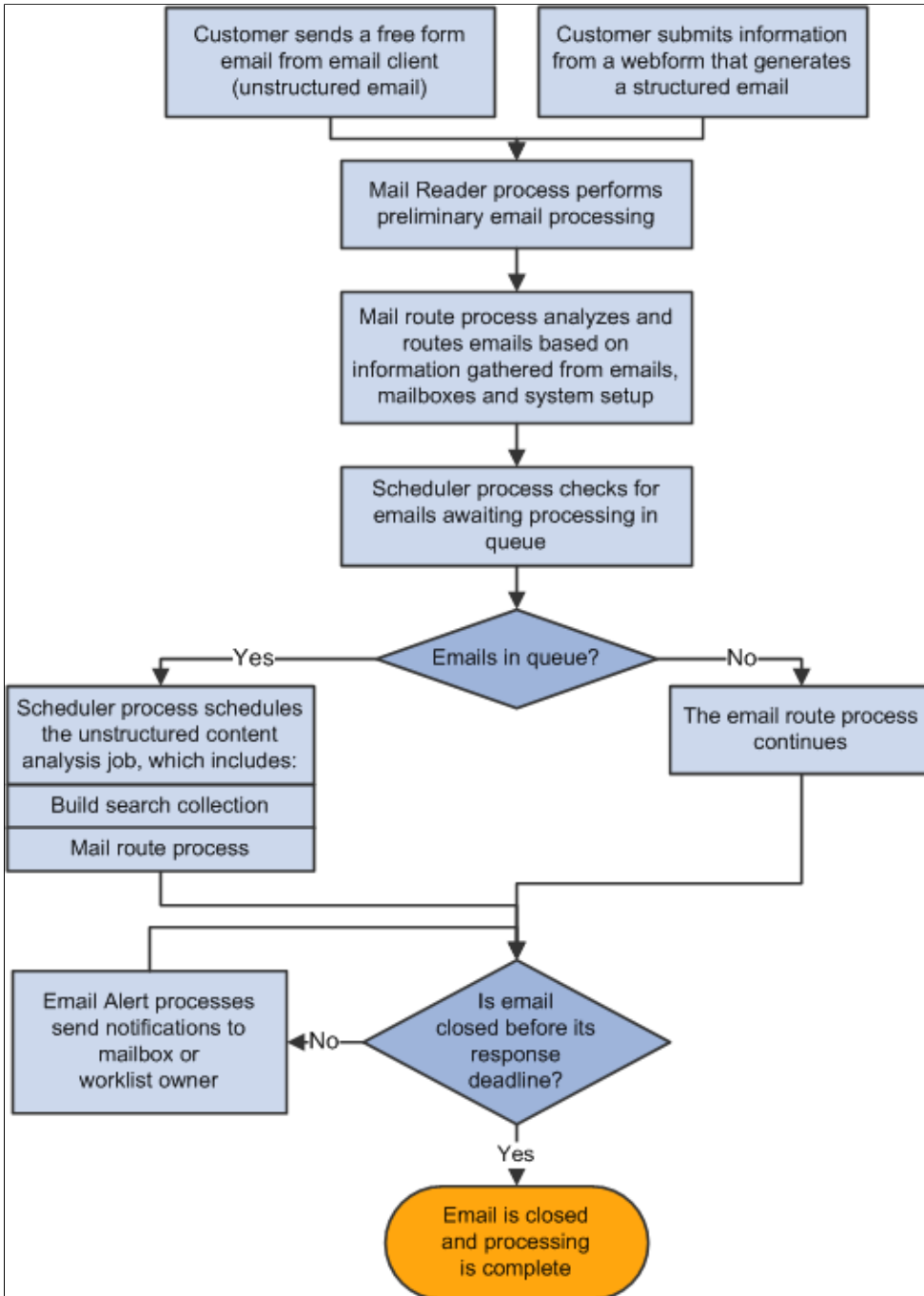
Related Links

ERMS Processes

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.

    Email body text is saved to a PeopleTools tabled named MCFEM_MAIL_PART. The PTSF_GENFEED process calls the RB_STG_EMAIL AE process to populate email body text in the staging table (RB_IN_EMAIL_STG) before the PSQuery built for indexing email runs to extract data for the XML feed. After the feed is generated successfully, the RB_STG_EMAIL process deletes the email body text from the staging table.

    See *PeopleTools: 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 "Understanding Interactions" (Application Fundamentals).

    •   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.

13. Checks if the system option to create case for new inbound email is selected; if yes, create cases accordingly.

14. Check if the system option to add notification as note to the associated case; if yes, add case notes accordingly.

The following diagram illustrates the mail reader flow, which classifies incoming email and stores email data in appropriate database tables:
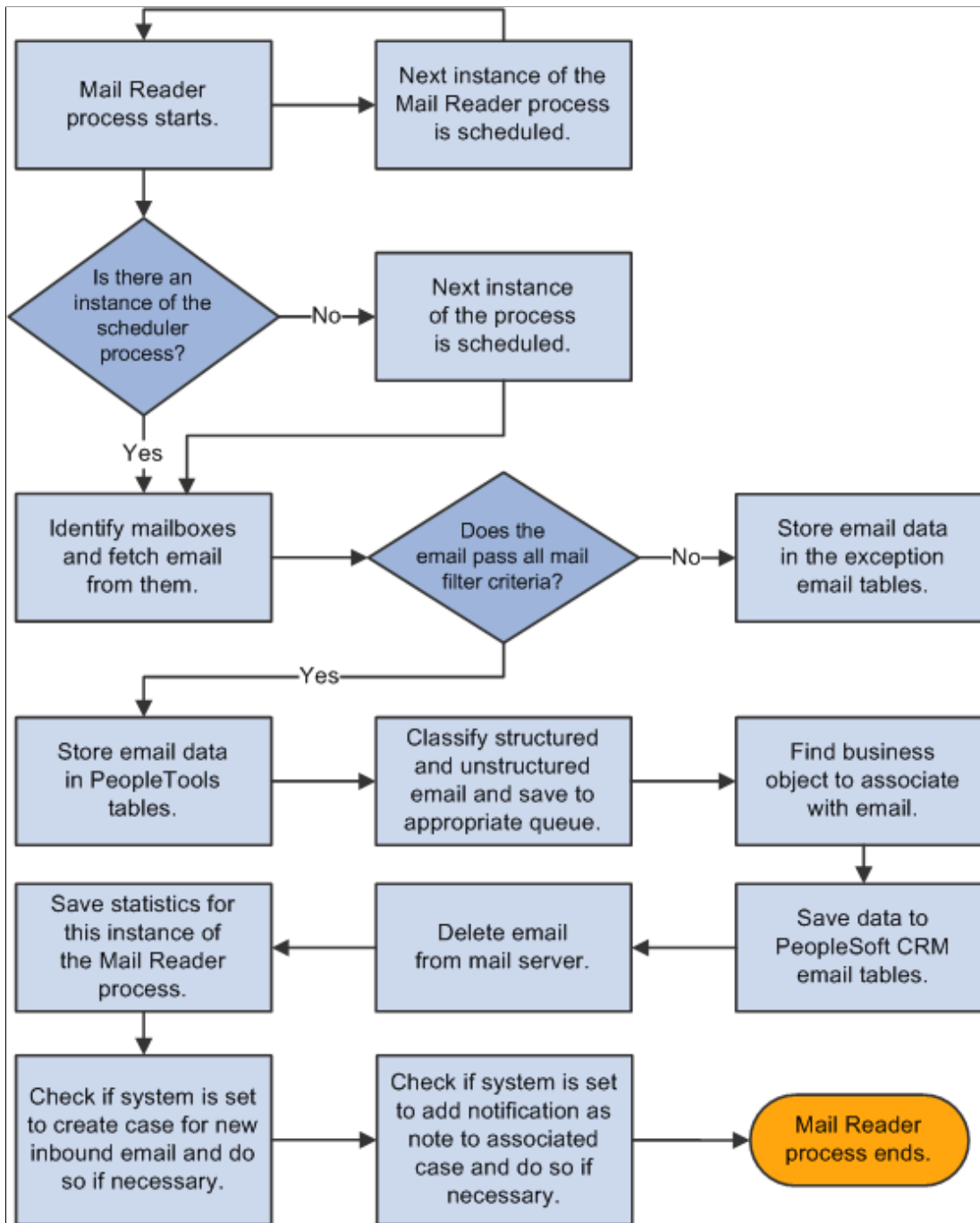
The Mail Route Process

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

If the incoming email is unstructured:

1. The mail route process first checks if automatic routing is enabled at the mailbox level.

2. If automatic routing is enabled, the process checks to see if the address or domain based routing applies to the email and route it accordingly.

3. If address-based routing doesn't apply, then it checks to see if customer-based routing applies to the email and route it to the group worklist specified in the custom application class code.

4. If customer-based routing doesn't apply, it checks to see if the email is threaded. If yes, it is routed to:

   • (If the Process customer response as new email option is selected at the system level) The group worklist to which the previous inbound email was routed.

   • (If the Process customer response as new email option is selected at the system level) The group worklist of the provider group, if the email is associated with a case and the case is assigned to a provider group.

   • (If the Process customer response as new email option is not selected at the system level) The group worklist to which the sender (agent) of the previous outbound email belongs.

5. If thread-based routing doesn't apply, it proceeds to keyword-based routing that is performed by PeopleSoft Search and routes the email to the best suited group worklist based on the predefined query and worklist association.

   See Content-Based Routing.

6. In the case where automatic routing is disabled at the mailbox level, Automated Mail Processing (AMP) is used for email routing purposes. The AMP rules engine uses PeopleSoft Search to search for predefined keywords (which are associated with categories) in email. For each keyword match that is found, a score is given to the associated category. As a result, email is assigned to the category with the highest score, and the rules engine can then trigger the actions that are associated with that category on the email. If the score returned for the email category does not meet the confidence level of any AMP rules for that email category, or that the email category is not associated with any rules, the system routes the email to the default group worklist of the mailbox.

   See AMP Overview.

If the incoming email is structured:

1. The mail route process first converts the email from XML to plain text and extracts the email subject and body based on the webform and email workspace field mapping.

2. It identifies the default category from the webform definition that is associated with the email.

3. It checks if the option to always use the default category is selected in the webform definition.

   If yes, the system uses the default category as the email category, looks up any AMP rules that are associated with it, and performs rule actions on the email.

   Make sure that the default category is associated to a AMP rule to apply actions. If using the default category doesn't resolve in performing any rule actions, the system routes the email to the mailbox's default group worklist.

   If no, the system uses PeopleSoft Search to identify the category of the structured email, just like the way unstructured email are processed when automatic routing is disabled in the system. If the

returned category score does not meet the confidence value of any AMP rule associated with the category, the system routes the email to the default group worklist of the mailbox.

Lastly, the mail route process 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.

The mail route process schedules the next instance of the scheduler process.
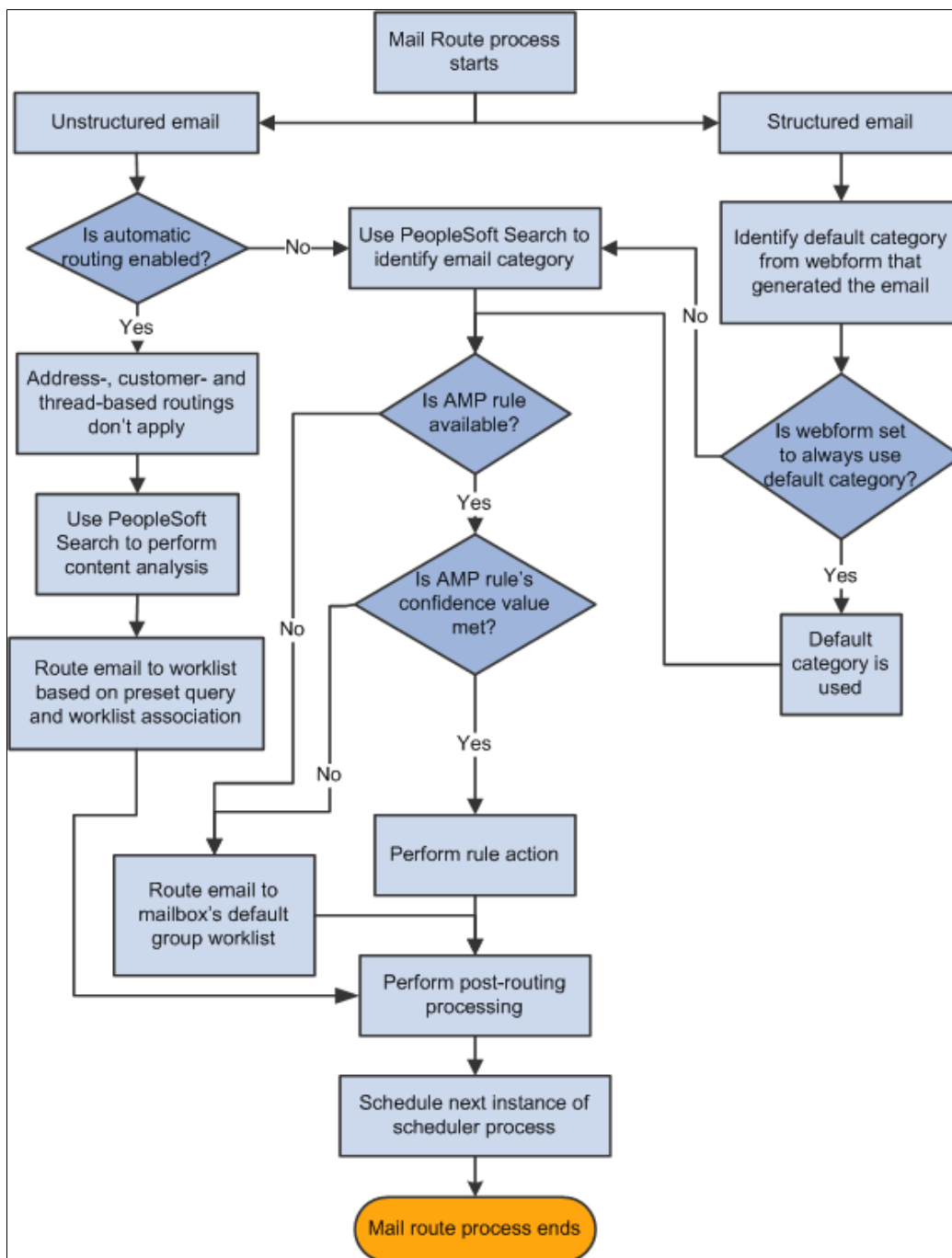
Related Links

The Scheduler Process

This topic 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 .

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 search index unnecessarily.

   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 *Queued for Content Analysis.* This ensures that emails that were partially processed (those with a status of 0 - Queued for Content Analysis, 1 - Index Built, and 2 - Content Analysis Processing) are ready to be reprocessed.

2. If the queue contains emails, the scheduler process schedules the unstructured content analysis job (PRCEMAIL), which consists of the PTSF_GENFEED process and the mail route process.

   • The feed generation process (PTSF_GENFEED) creates XML feed for inbound emails in the queue.

   • The mail route process analyzes and routes the email based on its content. Refer to the mail route process topic 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 graphic illustrates the scheduler process flow:
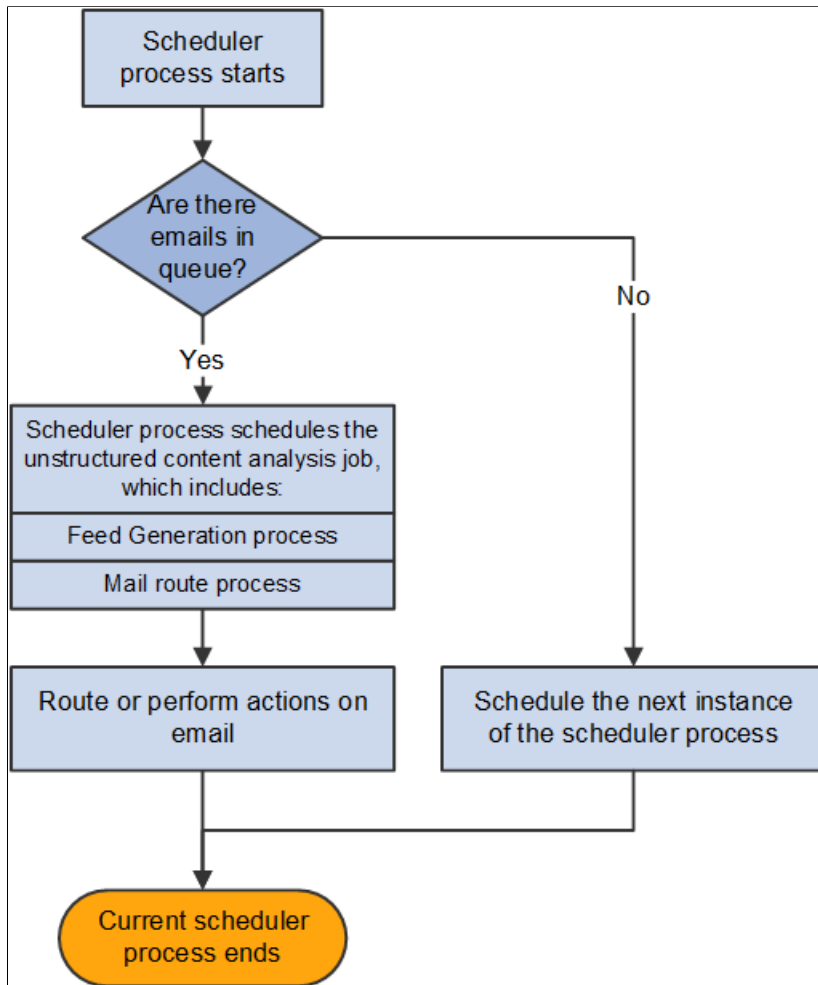
The Email Alert Process

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 graphic illustrates the email alert flow that sends out notifications for emails reaching commitment deadlines:
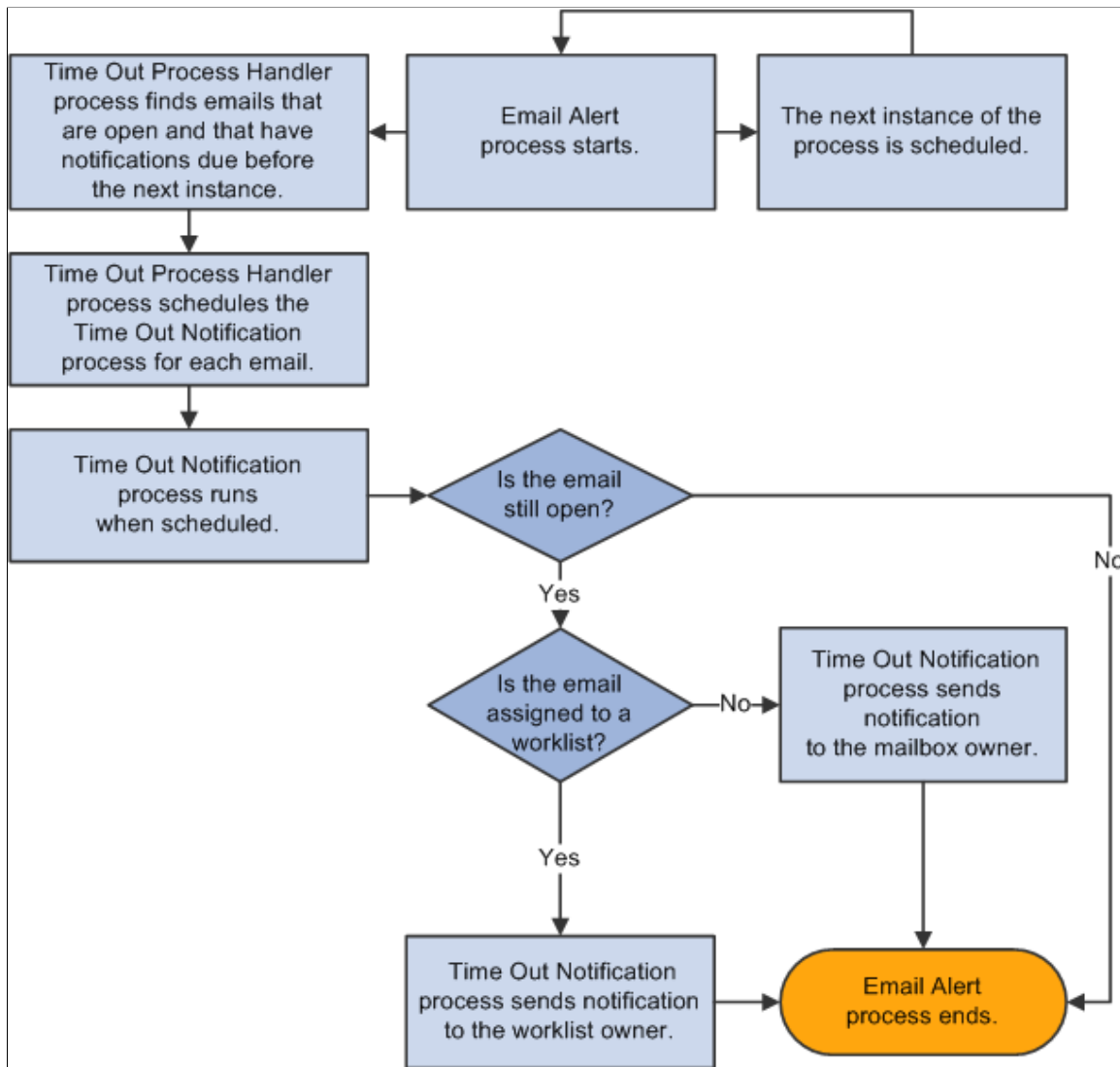
Process Instantiation

The mail reader process is the primary 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 graphic illustrates the relationship between all ERMS processes and how one process triggers the rest:
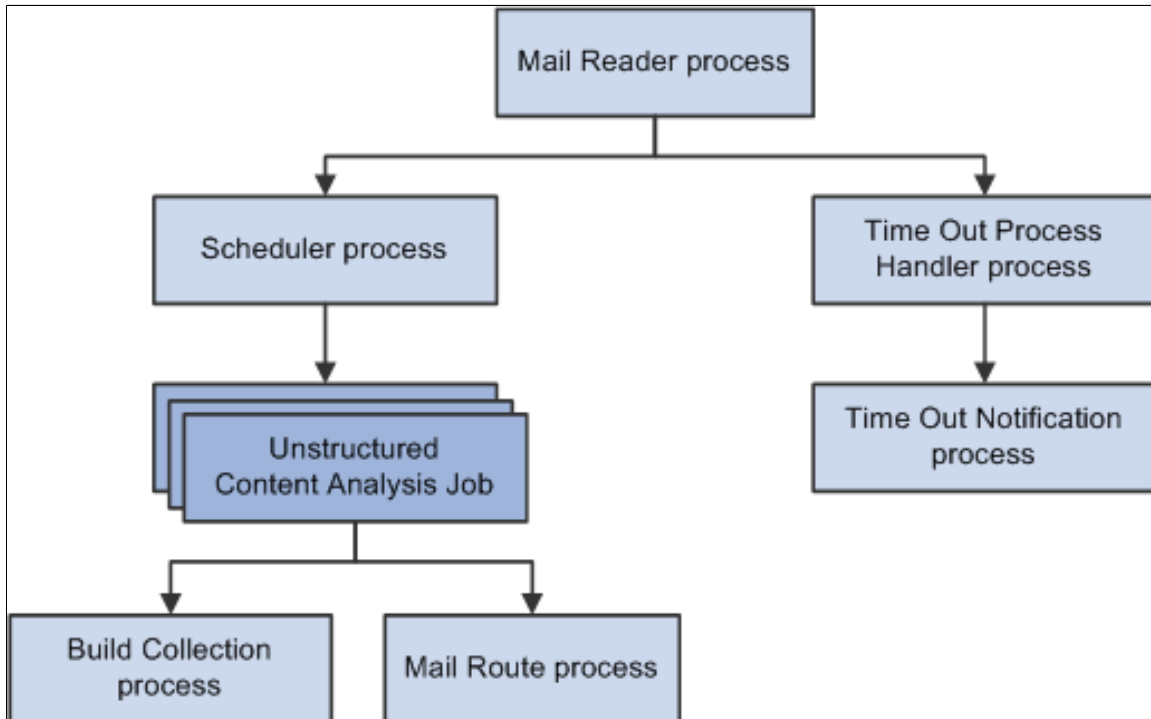
Related Links
Understanding ERMS Setup

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.

Related Links
Email Status Tracking

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:* 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

These topics discuss how to run and monitor ERMS processes.

Pages Used to Run and Monitor Mail Reader Processes

Page Name	Definition Name	Usage
Mailbox Viewer Page	RB_MAILBOX_VIEW	Review, and optionally modify, the status and polling frequency of all mailboxes.
Start/Stop ERMS Batch Process Page	RB_ERMS_BATCH_RUN	Start or stop ERMS processes.
Mailreader Process Monitor Page	RB_MCF_BTH_MONITOR	Review Mail Reader processing details, and research trouble reports (for example, if agents report that no new emails are arriving).

Mailbox Viewer Page

Use the Mailbox Viewer page (RB_MAILBOX_VIEW) to review, and optionally modify, the status and polling frequency of all mailboxes.

Navigation:

Set Up CRM > **Product Related** > **Multichannel Definitions** > **Email** > **Define Servers and Security** > **Batch User Monitor Form** > **Mailbox Viewer**

This example illustrates the fields and controls on the Mailbox Viewer page. You can find definitions for the fields and controls later on this 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.

Related Links

Defining Mailboxes

Start/Stop ERMS Batch Process Page

Use the Start/Stop ERMS Batch Process page (RB_ERMS_BATCH_RUN) to start or stop ERMS processes.

Navigation:

Set Up CRM > **Product Related** > **Multichannel Definitions** > **Email** > **Define Servers and Security** > **Batch User Monitor Form** > **Start/Stop ERMS Batch Process**

This example illustrates the fields and controls on the Start/Stop ERMS Batch Process page. You can find definitions for the fields and controls later on this page.

Field or Control	Description
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 search index 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.

Mailreader Process Monitor Page

Use the Mailreader Process Monitor page (RB_MCF_BTH_MONITOR) to review Mail Reader processing details, and research trouble reports (for example, if agents report that no new emails are arriving).

Navigation:

Set Up CRM > **Product Related** > **Multichannel Definitions** > **Email** > **Define Servers and Security** > **Batch User Monitor Form** > **Mailreader Process Monitor**

This example illustrates the fields and controls on the Mailreader Process Monitor page. You can find definitions for the fields and controls later on this 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.

Field or Control	Description
Status	Select a status: *All, Scheduled, Processing, Completed, Canceled,* or *Failed.* 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 *Days, Hours,* or *Minutes.* 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

Field or Control	Description
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.

Field or Control	Description
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 product documentation for *PeopleTools: PeopleSoft Process Scheduler*.

Reviewing Detailed Process Information

These topics discuss how to review detailed process information.

Pages Used to Review Detailed Process Information

Page Name	Definition Name	Usage
Mail Reader Process Log Page	RB_MAILREAD_LOG	Review statistics for a specific instance of the Mail Reader process.
Exception Email Details Page	RB_EMAIL_VIEWER	Review information about a specific exception email.

Mail Reader Process Log Page

Use the Mail Reader Process Log page (RB_MAILREAD_LOG) to review statistics for a specific instance of the Mail Reader process.

Navigation:

Click the **Mail Reader Details** link on the Mailreader Process Monitor page.

This example illustrates the fields and controls on the Mail Reader Process Log page. You can find definitions for the fields and controls later on this page.

Mail Reader Statistics

Field or Control	Description
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.

Field or Control	Description
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.

Exception Email Details Page

Use the Exception Email Details page (RB_EMAIL_VIEWER) to review information about a specific exception email.

Navigation:

Click the **Details** link in the Exception Details Captured by this Mail Reader Instance grid on the Mail Reader Process Log page.

This example illustrates the fields and controls on the Exception Email Details page. You can find definitions for the fields and controls later on this page.

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

Field or Control	Description
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.

Viewing Email Error Logs

These topics discuss how to view email error logs.

Pages Used to View Email Error Logs

Page Name	Definition Name	Usage
Mailbox Errors Page	RB_MAIL_EXCP_LOG	View mailbox errors.
Mailbox Control Page	RB_MLR_ERR_CNTL	View mailbox controls.
Exception UIDs Page	RB_UID_EXCP_LST	View exception emails.

Related Links
Mail Reader Error Handling Options

Mailbox Errors Page

Use the Mailbox Errors page (RB_MAIL_EXCP_LOG) to view mailbox errors.

Navigation:

Correspondence > **Inbound Email Error Log** > **Mailbox Errors**

This example illustrates the fields and controls on the Mailbox Errors page. You can find definitions for the fields and controls later on this page.
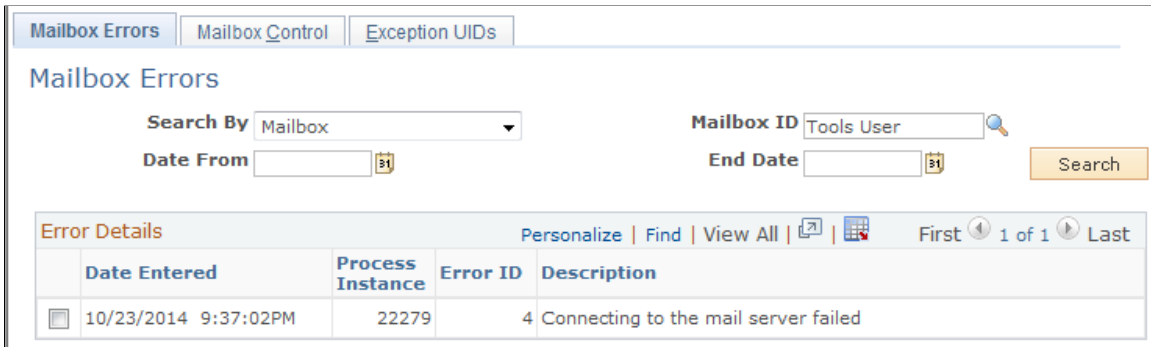
Use this page to view logs that are generated when an error is encountered. Logs can be searched by Mailbox ID, process instance number, and date ranges.

Mailbox Control Page

Use the Mailbox Control page (RB_MLR_ERR_CNTL) to view mailbox controls.

Navigation:

Correspondence > Inbound Email Error Log > Mailbox Control

This example illustrates the fields and controls on the Mailbox Control page. You can find definitions for the fields and controls later on this page.

Use this page to view the list of mailboxes that are being processed by the Mail Reader at that instance of time. When the process instance is completed, the status is set to *Completed* in the **Tools Read Mail Status** column. You can use this page to check if the Mail Reader is working properly or not. For

example, if Mail Reader crashes for some reason, the mailboxes being processed would remain in *In Process* status and would never be picked up by another instance of Mail Reader to read mails.

This page lets you clean up stalled process. To do so, select the entries you want to remove and click the **Delete Selected** button. Entries with the *Completed* status are removed automatically by the Mail Reader once the corresponding mailboxes are processed successfully.

Exception UIDs Page

Use the Exception UIDs page (RB_UID_EXCP_LST) to view exception emails.

Navigation:

Correspondence > **Inbound Email Error Log** > **Exception UIDs**

This example illustrates the fields and controls on the Exception UIDs page. You can find definitions for the fields and controls later on this page.

The Mail Reader may encounter problems while processing emails that are fetched from mail server. When that happens, the Mail Reader stops processing those emails further and stores their UIDs into a log table so that other Mail Reader instances are aware of these problematic emails (if they are not already deleted from the mail server) and do not spend resources processing them again. Administrators can correct issues with these emails on the mail server or delete them from the mail server. When an administrator successfully corrects an email, its corresponding entry needs to be deleted from this log

so that it can be processed by the Mail Reader. To remove an entry, select it and click **Delete Selected** button.

Chapter 5

Setting Up ERMS System

Understanding ERMS Setup

These topics discuss:

- Mail servers and mailboxes.

- Email handling options.

- Email classification.

- ERMS application engine processes.

- Mail reader error handling options.

Note: These topics do not discuss routing rules for structured or unstructured email.

Related Links

Understanding Structured Email
Understanding Unstructured Email Routing

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 HelpDesk or PeopleSoft 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, these topics do not discuss those pages. Refer instead to the documentation for unstructured email routing rules.

See the product documentation for *PeopleTools: PeopleSoft MultiChannel Framework*.

Related Links
Understanding Structured Email
Understanding Unstructured Email Routing

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 or worker (depending on the mailbox type: external 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 a group worklist based on the **Process Customer response as new email** system option.

See System Installations Page.

- 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 (HR) 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.

Related Links

Defining System Settings for Email Processing
"Understanding Audit Information" (Application Fundamentals)
"Defining User Settings" (Automation and Configuration Tools)

Email Classification

The ability to correctly identify the intent of an email enables more accurate suggestions to be given on 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*).

  Depending on the nature of an email (unstructured or structured) and system configuration, the category of an email (if populated) can come from AMP or system default.

- 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.

Agents can manually adjust these classification values if needed. 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 correspondence templates for the email response.

Related Links

Recommended Actions Page
Understanding Email Management
"Defining Template Categories and Types" (Automation and Configuration Tools)
"Understanding Products in PeopleSoft CRM" (PeopleSoft Product and Item Management)

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 topic of the Understanding ERMS topics describe what these processes do; this topic discusses setup tasks for these processes.

See ERMS Processes.

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 inbound email search index.

  The search index is used in 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.

Mail Reader Error Handling Options

ERMS Mail Reader uses PeopleTools APIs to fetch emails from the mail server. When an email is not fetched successfully, these APIs return an error code. Mail Reader invokes the *Error Mail Handler* using this error code to take the appropriate action.

The setup for handling mail reader errors includes these steps:

1. Define actions.

    See Define Action Code Page.

2. Define action groups.

    See Define Action Groups Page.

3. Map action groups and error codes.

    The system triggers desired actions based on the error that occurs.

    See Map Error and Action Group Page.

Delivered Actions

This table provides a list of system-delivered action codes:

Action Code	Description
CUSTM	Customized Action List Application Class
DELEML	Delete Email from Mail Server
INACTM	Inactive or Skip the same Mailbox
LGTBL	Log into Exceptional Table
NDFWL	Not to Routing To Default Worklist
NSTEML	Not to store Email in CRM tables
NTFY	Notify Action
RETEML	Retain Email from Mail Server
STEML	Store Email in CRM table

Delivered Action Groups

This table provides a list of system-delivered action groups:

Action Group	Description
000	Successful
001	Connector Size Overflow
002	PSFT IB threshold Size Overflow
004	Connecting to the mail server failed
007	Unsupported Encoding
008	Cannot write to the attachment Repository
009	Messages were downloaded to repository and deleted from mail server
010	Generic Email Connect Error
013	Internal Error
9993	Integration Broker or Gateway Problem. Please Check with the Administrator
9994	Not able to fetch further email. Too many bad emails
9995	UID Empty
9996	Inbound Email CI Save Error!
9997	Inbound Email CI Create Error!
9998	Abort Error
9999	Unknown Error

Related Links
Viewing Email Error Logs

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 CRM Automation and Configuration Tools.*

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 "Defining Worklists" (Automation and Configuration Tools).

  See Defining System Settings for Email Processing.

- 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 "Understanding Correspondence and Notification Settings" (Automation and Configuration Tools).

  See Configure Agent - Email Configuration Page.

- Define settings for template-based correspondence.

  See "Understanding Correspondence Generation" (Automation and Configuration Tools).

- Define correspondence templates.

  See "Understanding Correspondence Templates" (Automation and Configuration Tools).

Defining System Settings for Email Processing

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

These topics list prerequisites and common elements and discuss how to define system settings for email processing.

Pages Used to Define System Settings for Email Processing

Page Name	Definition Name	Usage
System Installations Page	RB_ERMS_SYSDEFN	Define settings for email processing, including: • General email handling options. • Mailbox and queue defaults. • Processing rules for the mail reader process and other ERMS processes.
History Templates Page Greeting Templates Page Closing Templates Page No Subject Phrase Page	RB_ERMS_TMPL_DEFN	• Define reply with history templates. • Specify email greetings. • Specify closing text for email. • Define the default subject text to use when replying to an email that has no subject.
Process Notifications Page	RB_PRCS_NOTIFY	Define notifications for the PeopleSoft AE processes that are used in ERMS.
Job Notification Page	PRCSJOBNOTIFY	Define the messages that are to be sent when a job finishes successfully or when an error occurs in the job.
System Activities Page	RB_EM_ACTIVITY	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.

Prerequisites

Before you set up system settings for ERMS:

• Define the person(s) who will represent unknown senders.

Enter one name for role type 4 (Employee) and one name for role type 9 (Consumer). Set up these person(s) in the Worker component, and enter the minimum required data. The person's name for the appropriate role type appears on all emails for which the sender is not identified. To associate a role type with the name, enter each of these person names and role types on the Anonymous Object page of the Installation Options component. You might enter role type ID of *4* for the name of *Anonymous Employee* and role type ID of *9* for name of *Anonymous User*. 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.

Related Links

"Understanding Correspondence Templates" (Automation and Configuration Tools)
Setting Up Universal Queuing
"Understanding Workers in CRM" (Business Object Management)
"Setting Up PeopleSoft CRM Application Installation Options" (Application Fundamentals)

Common Element Used to Define System Settings for Email Processing

Field or Control	Description
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.

System Installations Page

Use the System Installations page (RB_ERMS_SYSDEFN) to define settings for email processing, including general email handling options, mailbox and queue defaults, and processing rules for the mail reader process and other ERMS processes.

Navigation:

Set Up CRM > **Product Related** > **Multichannel Definitions** > **Email** > **System Installation** > **System Installations**

This example illustrates the fields and controls on the System Installations page (1 of 2). You can find definitions for the fields and controls later on this page.

System Installations	Process Notifications	System Activities	Mapping Fields

System Settings

*Commit Frequency For Emails 10

*ERMS Process Scheduler PSNT

☐ Use Email Workspace while responding to an existing notification
☐ Process customer response as new email
☑ Add every notification as Note to the Associated Case

Mailbox And Queue Defaults

*Warning Notification 1   *Unit of Time Day(s)
*Final Notification 2   *Unit of Time Day(s)
*Polling Frequency 5   *Unit of Time Minute(s)
*Routing Rule Type Highest Query Group Score
REN Server Cluster ID RENCLSTR_0001
*Maximum Workload 100   *Skill level 10
☑ Auto Acknowledgement
☑ Automatic Routing

This example illustrates the fields and controls on the System Installations page (2 of 2). You can find definitions for the fields and controls later on this page.

Content Analysis and Time Out Scheduler Sleep Time

*Mail Processor Sleep Time 5   *Unit of Time Minute(s)
*Time Out Scheduler Sleep Time 2   *Unit of Time Day(s)

Build Search Index Run Control, Reply With History On, Templates and No Subject Phrase

*Search Index Run Control ERMS_INBOUND_EMAIL
*Reply With History On Bottom
Spam Category Spam

| Set Up History Template | Set Up Greeting Template |
| Set Up Closing Template | Set Up No Subject Phrase |

Date Created   VP1
Last Modified 03/07/2013 12:38AM PST   VP1

System Settings

Field or Control	Description
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.
Use Email Workspace while responding to an existing notification	Select to have the system launch the email workspace for agents to compose and send response to existing email. If this option is clear, the system launches the Outbound Notification page for sending email replies.
Process customer response as new email	Select to have the system route any incoming threaded email as a new mail, namely using the usual routing rules for unstructured email. For example, if the system successfully identifies a context tag in the incoming threaded email, it sends the inbound email to the last group worklist associated with the previous inbound email. See Routing Methods. If this option is clear, the inbound email is routed to the group worklist to which the sender of the previous outbound email belongs.

Field or Control	Description
Add every notification as Note to the Associated Case	Select to have the system add a note to a case whenever an inbound email is received or outbound email sent for that case. If the email contains attachments, they are added as case note attachments. The system creates an interaction for each inbound and outbound email. This feature applies to reminders as well (for cases). See "Understanding Notes and Attachments" (PeopleSoft Call Center Applications).

Mailbox and Queue Defaults

Field or Control	Description
Warning Notification, 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 Defining Mailboxes.
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

Field or Control	Description
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.

Field or Control	Description
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 *Minutes, Hours,* or *Days* as the unit of time.

Build Search Index Run Control, Reply With History On, Templates and No Subject Phrase

Field or Control	Description
Search Index Run Control	Enter the search index run control to be used to build the search index for unstructured inbound email messages. When you save this page, the system creates the run control using the name entered here. After saving this page, navigate to the Build Search Index page (**PeopleTools** > **Search Framework** > **Administration** > **Schedule Search Index**) to verify the search index run control. **Important!** Make sure that the run control for this search index is set to always run in the *Full index.* Do not manually schedule a PTSF_GENFEED process to build the search index for unstructured inbound email messages. Also, make sure that the CR_CRO_INBOUND _EMAIL search definition and search category are at the deployed status.
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.*

Field or Control	Description
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 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.
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.

Related Links

"Understanding CRM Worklists" (Automation and Configuration Tools)

"Understanding PeopleSoft Search Framework Implementation for CRM" (Automation and Configuration Tools)

"Understanding Global Search for CRM" (Automation and Configuration Tools)

"Understanding PeopleSoft Search Framework Definitions for CRM" (Automation and Configuration Tools)

"Understanding Runtime Search Options" (Automation and Configuration Tools)

History Templates Page

Use the History Templates page (RB_ERMS_TMPL_DEFN) to define reply with history templates.

Navigation:

Click the **Set Up History Template** button on the System Installations page.

This example illustrates the fields and controls on the History Templates page. You can find definitions for the fields and controls later on this page.

ERMS System Installation
History Templates

Language Code	Template Name		
English	Simple Email	🔍	+ −

Field or Control	*Description*
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.

Related Links

"Understanding Correspondence Templates" (Automation and Configuration Tools)

Greeting Templates Page

Use the Greeting Templates page (RB_ERMS_TMPL_DEFN) to specify email greetings.

Navigation:

Click the **Set Up Greeting Template** button on the System Installations page.

This example illustrates the fields and controls on the Greeting Templates page. You can find definitions for the fields and controls later on this page.

ERMS System Installation
Greeting Templates

Language Code	Template Name		
English	FSI Sample Template	🔍	+ −

Field or Control	*Description*
Template Name	Select the template for the system to include a greeting in the new outbound email. Select a template, not a template package.

Related Links

"Understanding Correspondence Templates" (Automation and Configuration Tools)

Closing Templates Page

Use the Closing Templates page (RB_ERMS_TMPL_DEFN) to specify closing text for email.

Navigation:

Click the **Set Up Closing Template** button on the System Installations page.

This example illustrates the fields and controls on the Closing Templates page. You can find definitions for the fields and controls later on this page.

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

Related Links
"Understanding Correspondence Templates" (Automation and Configuration Tools)

No Subject Phrase Page

Use the No Subject Phrase page (RB_ERMS_TMPL_DEFN) to define the default subject text to use when replying to an email that has no subject.

Navigation:

Click the **Set Up No Subject Phrase** button on the System Installations page.

This example illustrates the fields and controls on the No Subject Phrase page. You can find definitions for the fields and controls later on this page.

Field or Control	Description
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.

Process Notifications Page

Use the Process Notifications page (RB_PRCS_NOTIFY) to define notifications for the PeopleSoft AE processes that are used in ERMS.

Navigation:

Set Up CRM > **Product Related** > **Multichannel Definitions** > **Email** > **System Installation** > **Process Notifications**

This example illustrates the fields and controls on the Process Notifications page. You can find definitions for the fields and controls later on this 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.

Field or Control	Description
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 the product documentation for *PeopleTools: PeopleSoft Process Scheduler*.

System Activities Page

Use the System Activities page (RB_EM_ACTIVITY) to 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.

Navigation:

Set Up CRM > Product Related > Multichannel Definitions > Email > System Installation > System Activities

This example illustrates the fields and controls on the System Activities page. You can find definitions for the fields and controls later on this page.

System Installations	Process Notifications	System Activities	Mapping Fields

System Activity List Personalize | Find | ⧉ | 📊 First ◀ 1-21 of 21 ▶ Last

Enable	*Activity Type	*Application Class ID	*Application Class Path	
☑	Support Case (COM) ▼	CaseCOMTransaction 🔍	ERMS:Transaction 🔍	🗑
☑	Campaign ▼	CampaignTransaction 🔍	ERMS:Transaction 🔍	🗑
☑	Support Case (ENE) ▼	CaseENETransaction 🔍	ERMS:Transaction 🔍	🗑
☑	Support Case ▼	CaseGBLTransaction 🔍	ERMS:Transaction 🔍	🗑
☑	Support Case (GOV) ▼	CaseGOVTransaction 🔍	ERMS:Transaction 🔍	🗑
☑	HelpDesk Case ▼	CaseHDTransaction 🔍	ERMS:Transaction 🔍	🗑
☑	Higher Education Case ▼	CaseHETransaction 🔍	ERMS:Transaction 🔍	🗑
☑	HelpDesk Case (HR) ▼	CaseHDHRTransaction 🔍	ERMS:Transaction 🔍	🗑
☑	Support Case (INS) ▼	CaseINSTransaction 🔍	ERMS:Transaction 🔍	🗑

Field or Control	Description
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.

Related Links
Related Transactions

Identifying Email Workspace Fields for Mapping

See Identifying Email Workspace Fields for Mapping.

Defining Mail Servers

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

Page Used to Define Mail Servers

Page Name	Definition Name	Usage
Mail Server Definition Page	RB_MAILSERVER_DEFN	Define 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* topics of the *PeopleTools: PeopleSoft Integration Broker Administration* documentation.

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

See *PeopleTools: PeopleSoft MultiChannel Framework*

Mail Server Definition Page

Use the Mail Server Definition page (RB_MAILSERVER_DEFN) to define mail servers in the ERMS system.

Navigation:

Set Up CRM > **Product Related** > **Multichannel Definitions** > **Email** > **Define Servers and Security** > **System Parameters/Defaults** > **Mail Server Definition**

This example illustrates the fields and controls on the Mail Server Definition page. You can find definitions for the fields and controls later on this page.

Field or Control	Description
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.

Pages Used to Define Mail Filters

Page Name	Definition Name	Usage
Spam List Page	RB_SPAM_LIST_DEFN	Set up address-based and domain-based filters.
Mail Filters Page	RB_ERMS_SETUP	Activate the filters that you set up on the Spam List page, and apply your own custom email filters.

Spam List Page

Use the Spam List page (RB_SPAM_LIST_DEFN) to set up address-based and domain-based filters.

Navigation:

Set Up CRM > **Product Related** > **Multichannel Definitions** > **Email** > **Define Servers and Security** > **System Parameters/Defaults** > **Spam List**

This example illustrates the fields and controls on the Spam List page. You can find definitions for the fields and controls later on this page.

Field or Control	Description
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 the product documentation for *PeopleTools: PeopleCode Developer's Guide* and *PeopleTools: PeopleCode Language Reference*.

Mail Filters Page

Use the Mail Filters page (RB_ERMS_SETUP) to activate the filters that you set up on the Spam List page, and apply your own custom email filters.

Navigation:

Set Up CRM > **Product Related** > **Multichannel Definitions** > **Email** > **Define Servers and Security** > **System Parameters/Defaults** > **Mail Filters**

This example illustrates the fields and controls on the Mail Filters page. You can find definitions for the fields and controls later on this page.

Mail Server Definition	Spam List	**Mail Filters**

ERMS Mail Filters Setup

*Mail Filter ID SYS_SPAM_LIST	*Status Active
*Application Class ID SpamFilter	Package Tree Viewer
*Application Class Path RB_MCF_SETUP	
Description Spam list Setup using Peoplesoft Delivered PIA Page	
☑ **Retain Email Body As Exception**	

Field or Control	Description
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.

Related Links

"Understanding Application Classes and Packages" (Automation and Configuration Tools)

Exception Email Details Page

Defining Mailboxes

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

Note: These topics discuss 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.

Pages Used to Define Mailboxes

Page Name	*Definition Name*	*Usage*
Mailbox Definition Page	RB_MAILBOX_DEFN	Define a mailbox, its connection settings, and its email handling options.
Recommended Actions Page	RB_MB_RECMDACTIONS	Associate categories with actions, which appear in email workspace as recommended actions.
Mailbox Activity List Page	RB_MBOX_ACTIVITY	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 Page	RB_MBOX_SAVEAS	Clone an existing mailbox.
Default Solution Template Page	RB_EM_SOL_TMPL	Select a default solution template.

Related Links

Understanding Unstructured Email Routing

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.

Mailbox Definition Page

Use the Mailbox Definition page (RB_MAILBOX_DEFN) to define a mailbox, its connection settings, and its email handling options.

Navigation:

Set Up CRM > **Product Related** > **Multichannel Definitions** > **Email** > **Define Servers and Security** > **Mailbox Details** > **Mailbox Definition**

This example illustrates the fields and controls on the Mailbox Definition page (1 of 2). You can find definitions for the fields and controls later on this page.

Chapter 5 Setting Up ERMS System

This example illustrates the fields and controls on the Mailbox Definition page (2 of 2). You can find definitions for the fields and controls later on this page.

Auto Acknowledgement

- ○ Always Auto-Acknowledge
- ○ Only while not Auto-Responding
- ○ Determine from Rule
- ● Never Auto-Acknowledge

Template Package [   ] 🔍

Create New Customer

- ○ Create new user based on Email
- ● Use Anonymous User

Unstructured Email Processing

Application Class ID [   ] 🔍   Package Tree Viewer

Application Class Path [   ] 🔍

*Routing Rule Type [Average Query Group Score ▾]   ☑ Automatic Routing

Date Created 01/03/2007 1:59PM PST   JYUN

Last Modified 10/23/2014 10:11PM PDT   VP1

Field or Control	Description
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 H* (Internal HR) if you use this mailbox in conjunction with PeopleSoft HelpDesk for Human Resources. Select *Higher Ed* if you use this mailbox to receive Higher Education-specific email messages. 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.

Field or Control	Description
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

Field or Control	Description
Reply to Address	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. 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.
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 *Complete* 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.

Field or Control	Description
Default Group Worklist	Enter the default group worklist. Email that is sent to this mailbox is routed to the default group worklist in these situations: • The automatic routing option is not selected for this mailbox. 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. • 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.

Field or Control	Description
Language Code	Select the language in which the mailbox is processing.
Default 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.
	If the feature to create cases for inbound email is enabled for a group worklist, and in order to create a case for an inbound email, the system needs to access the mailbox definition of that inbound email to identify the email business unit, the default business unit is then used as the email business unit to derive the appropriate business unit and display template family for the new case. This condition applies if the mailbox that is associated with the inbound email is of type *Internal*, *Internal H*, or *Higher Education*.
	This field is unavailable for the *external* type mailboxes.
	See "Group Worklist Page" (Automation and Configuration Tools).
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.

Email Business Unit Mapping

This section appears if the mailbox type is *External*. This customer setID and email business unit mapping is used for the feature that, when enabled for a group worklist, creates cases for inbound email that are routed to that group worklist. The system uses the business unit and display template family code that are specified in group worklist definition to construct the case prior to populating email data to the case. If these default values are not specified for the group worklist, the system goes to the mailbox definition for the inbound email to collect the needed information from the email business unit mapping. First of all, the system identifies the setID of the email sender, who is also the customer of the new case. Then, it looks at the mapping to find out the matching email business unit. From the definition of the matching email business unit, the system knows which business unit and display template family to use for the case.

For mailboxes of types *Internal* and *Internal HR*, the default business unit is used as the email business unit to derive the corresponding business unit and display template family for case creation.

Information in this section is not used if the case defaulting information is already specified in the group worklist definition.

Field or Control	Description
Default, Customer Setid and **Email Business Unit**	Enter a setID of case customers and map it with an email business unit, which is associated with business units and display template families that the system uses to create cases and other supported CRM transactions. The selected setID determines the list of email business units available for selection by tableset control. If a customer setID cannot be identified from the inbound email successfully, the entry marked as *Default* is used for case creation.

See "Group Worklist Page" (Automation and Configuration Tools).

Auto Acknowledgement

Field or Control	Description
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.

Field or Control	Description
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.
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.

Field or Control	Description
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.*

Field or Control	Description
Using Anonymous User	Select to let the system assign the email to the anonymous user who is specified on the Anonymous Object page of the Installation Options component. If the mailbox type is *Internal* or *Internal HR,* the system uses the default *Anonymous Employee* entry (with the *Worker* role type) to derive the BO ID; for other mailbox types, the *Anonymous User* entry (with the *Individual Consumer* role type) is used. 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

Field or Control	Description
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 Defining Customer-Based Routing Rules.
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 PeopleSoft Search. 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.

Related Links

"Defining User Settings" (Automation and Configuration Tools)

Understanding Unstructured Email Routing

Understanding Automated Mail Processing

Email Sender Identification

"Understanding Application Classes and Packages" (Automation and Configuration Tools)

Recommended Actions Page

Use the Recommended Actions page (RB_MB_RECMDACTIONS) to associate categories with actions, which appear in email workspace as recommended actions.

Navigation:

Set Up CRM > **Product Related** > **Multichannel Definitions** > **Email** > **Define Servers and Security** > **Mailbox Details** > **Recommended Actions**

This example illustrates the fields and controls on the Recommended Actions page. You can find definitions for the fields and controls later on this 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 as default by the system or manually by an agent) 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.

Related Links

Assistance

Mailbox Activity List Page

Use the Mailbox Activity List page (RB_MBOX_ACTIVITY) to specify the list of activities to be used in the email workspace for users to search for recent activities and create new ones.

Navigation:

Set Up CRM > Product Related > Multichannel Definitions > Email > Define Servers and Security > Mailbox Details > Mailbox Activity List

This example illustrates the fields and controls on the Mailbox Activity List page. You can find definitions for the fields and controls later on this page.

Field or Control	Description
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.

Field or Control	Description
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.

Related Links

Assistance

Clone Mailbox Page

Use the Clone Mailbox page (RB_MBOX_SAVEAS) to clone an existing mailbox.

Navigation:

Click the **Clone Mailbox** button on the Mailbox Definition page.

This example illustrates the fields and controls on the Clone Mailbox page. You can find definitions for the fields and controls later on this page.
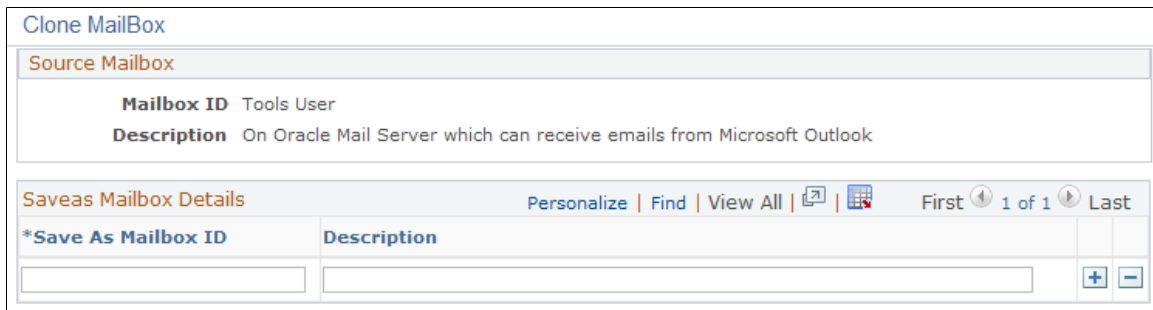
Field or Control	Description
Save As Mailbox ID and **Description**	Enter IDs and descriptions for the mailboxes that you want to create.

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 Email Business Units

This topic discusses how to define email business units.

Page Used to Define Email Business Units

Page Name	Definition Name	Usage
Email Definition Page	BUS_UNIT_TBL_RB	Associate an email business unit with business units of other CRM transactions and case display template families, which are used for creating transactions from email.

Understanding Case Creation for Inbound Email

At the group worklist level, an option is available that, when selected, allows the system to automatically create a case for every unstructured inbound email routed to that group worklist. The system uses the business unit and display template family that are specified in the group worklist definition to generate cases for inbound email.

If this information is not available in the definition, the system accesses the mailbox definition of the inbound email and uses the setID of the email sender (which is also the customer of the new case) to derive the corresponding email business unit from the **Email Business Unit Mapping** section.

In an email business unit definition, you specify the default business units for a list of common CRM transactions, which are used for creating these transactions. Additionally, you specify the display template family to be used for each mailbox type for the purpose of case creation.

See "Group Worklist Page" (Automation and Configuration Tools).

Email Definition Page

Use the Email Definition page (BUS_UNIT_TBL_RB) to associate an email business unit with business units of other CRM transactions and case display template families, which are used for creating transactions from email.

Navigation:

Set Up CRM > **Business Unit Related** > **Email Definition** > **Email Definition**

This example illustrates the fields and controls on the Email Definition page. You can find definitions for the fields and controls later on this page.

Business Unit Definition

Field or Control	Description
Description and **Short Description**	Enter a long and a short descriptions for the email business unit, which are required. These fields are prepopulated if the business unit that you are adding is already an existing business unit.
Support Business Unit, Help Desk Business Unit, Service Order Unit, Sales Unit, Online Marketing Unit, and **Order Capture Unit**	Specify a business unit for each listed CRM transaction, which is used by the system to create and search for the corresponding transaction for email. For example, if an agent creates a case from an email on the email workspace (or the system creates a case automatically for an inbound email), the business unit that is specified in this email's mailbox becomes the business unit for the newly created case.

Field or Control	Description
Create Business Unit	Click to create the email business unit. This button appears if the business unit that you are adding does not already exist in the CRM system.

Case Display Template Details

Use this section to specify a display template family for each mailbox type. The system uses the selected display template family for creating cases, if the Create Case for every new inbound Email feature is enabled for a group worklist but the display template family is not already specified in the group worklist definition.

Defining Priorities and Moods

These topics discuss how to define priorities and moods.

Pages Used to Define Priorities and Moods

Page Name	Definition Name	Usage
Priority Setup Page	RB_PRIORITY_SETUP	Define priorities to appear for email on the email workspace.
Mood Setup Page	RB_MOOD_SETUP	Define mood attributes for email on the email workspace.

Priority Setup Page

Use the Priority Setup page (RB_PRIORITY_SETUP) to define priorities to appear for email on the email workspace.

Navigation:

Set Up CRM > **Product Related** > **Multichannel Definitions** > **Email** > **Priorities** > **Priority Setup**

This example illustrates the fields and controls on the Priority Setup page. You can find definitions for the fields and controls later on this 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.

Mood Setup Page

Use the Mood Setup page (RB_MOOD_SETUP) to define mood attributes for email on the email workspace.

Navigation:

Set Up CRM > **Product Related** > **Multichannel Definitions** > **Email** > **Moods** > **Mood Setup**

This example illustrates the fields and controls on the Mood Setup page. You can find definitions for the fields and controls later on this 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 topic discusses how to define email audit history tracking in the CRM system.

Page Used to Define Email Audit History Tracking

Page Name	Definition Name	Usage
"Audit - Setup Page" (Application Fundamentals)	RC_COMP_AUDIT	Define auditing behavior for inbound email. See "Understanding Audit Information" (Application Fundamentals).

Defining Mail Reader Error Handling

These topics discuss how to define mail reader error handling.

Related Links
Mail Reader Error Handling Options
Viewing Email Error Logs

Pages Used to Define Mail Reader Error Handling

Page Name	Definition Name	Usage
Define Action Code Page	RB_MAIL_ACT_DEFN	Define action groups to categorize actions.
Define Action Groups Page	RB_MAIL_ACT_GRP	Define action groups to categorize actions.
Map Error and Action Group Page	RB_MAIL_ERR_ACT	Map error codes with action groups.

Define Action Code Page

Use the Define Action Code page (RB_MAIL_ACT_DEFN) to define actions to handle possible mail reader errors.

Navigation:

Set Up CRM > Product Related > Multichannel Definitions > Email > Define Errors and Actions > Define Actions > Define Action Code

This example illustrates the fields and controls on the Define Action Code page. You can find definitions for the fields and controls later on this page.

Use this page to define an action that needs to be taken when an error is encountered. The system delivers a number of actions, such as deleting email from the mail server, notifying action, inactivating or skipping a mailbox and so on. You can add new actions to the system as well, which require new PeopleCode to be written to support these actions.

Field or Control	Description
Action ID	Displays the unique identifier of the action code. An action ID can contain a maximum of 10 characters.
Description	Enter the description of the action code, which can contain up to 100 characters.
Application Class ID and Application Class Path	Enter the application class details, including the application class ID and path (application package and sub-package details) to handle the error. An application package and classes are provided for system-delivered action codes.

Define Action Groups Page

Use the Define Action Groups page (RB_MAIL_ACT_GRP) to define action groups to categorize actions.

Navigation:

Set Up CRM > Product Related > Multichannel Definitions > Email > Define Errors and Actions > Define Action Group > Define Action Groups

This example illustrates the fields and controls on the Define Action Groups page. You can find definitions for the fields and controls later on this page.

Field or Control	Description
Action Group	Displays the unique identifier of the action group, which can contain a maximum of 10 characters.
Description	Enter the description of the action group, which can contain up to 100 characters.
Order by	Enter the order in which actions listed in the section to be taken.
Action ID	Enter the ID of the action to be taken.
Active	Click to set the status of the corresponding action to active. Only active actions can be triggered.

Map Error and Action Group Page

Use the Map Error and Action Group page (RB_MAIL_ERR_ACT) to map error codes with action groups.

Navigation:

Set Up CRM > **Product Related** > **Multichannel Definitions** > **Email** > **Define Errors and Actions** > **Map Error and Action Group** > **Map Error and Action Group**

This example illustrates the fields and controls on the Map Error and Action Group page. You can find definitions for the fields and controls later on this page.

Use this page to map standard error codes (returned by PeopleTools API) to action groups. For example, when the connection to the email server is failed, an error code of 4 is returned. This error code is mapped to the action group that contains 3 actions. At runtime, when PeopleTools API returns an error code of 4, the ERMS system performs these 3 actions according to their order by numbers.

Field or Control	Description
Error ID	Displays the unique identifier of the error code, which is defined by PeopleTools API.
Description	Enter a description for the mapping.
Action Group	Enter the ID of the action group to associate with the error code. The system performs the actions listed in this action group when the corresponding error occurs.
Notify Error Email Addresses	Enter the email addresses to which notifications about the corresponding error are sent.

Chapter 6

Setting Up Automated Mail Processing

Understanding Automated Mail Processing

These topics discuss:

- 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 email categories and their associated behavioral rules that are established in the system. The framework consists of these components and concepts:

- Categories.

- Actions.

- Rules, rules engine, and mailbox relationships.

Categories

An email has to be associated with a category in order to be processed by AMP. The system uses PeopleSoft Search to identify categories for emails that are either:

- Structured but aren't set to use the default email category specified in their corresponding webform definitions.

- Unstructured and are not set to be route automatically.

AMP triggers email actions by matching the *category* and *score value* of an email to a list of rules that you define in the system. It uses these two pieces of information to find a behavioral rule with a matching email category and a confidence level that the email's score value meets, and invoke rule actions. 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 in the Category Set page under **Set Up CRM** > **Product Related** > **Multichannel Definitions** > **Email** > **Define 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.

Related Links
Defining Webform Templates

Use of AMP in Unstructured and Structured Email

AMP supports the recommendation of actions to address issues that come in the form of unstructured and structured emails.

AMP is used to process unstructured email messages when automatic routing is disabled at the mailbox level, and structured email messages that are not set to use the default email category at the webform level. For each keyword match that is found, a score is given to the associated category. As a result, email is assigned to the category with the highest score, and the rules engine can then trigger the actions that are associated with that category on the email. If the score returned for the email category does not meet

the confidence level of any AMP rules for that email category, or that the email category is not associated with any rules, the system routes the email to the default group worklist of the mailbox.

Please refer to the mail route process section for a diagram on how automated mail processing is used in the mail route process.

See The Mail Route Process.

PeopleSoft Search and Email Category

The AMP rules engine uses PeopleSoft Search to calculate and return email score values. A score value is used to identify the category of an email and subsequently the AMP rule used to perform actions on that email. At design time, you specify keywords for each email category in the system. At runtime, the system searches for keywords in the subject line and body of an email and keeps score. The higher the number of keywords found for a category, the higher its score value. As a result, the email is assigned to the category with the highest score value.

See Category Set Page.

Delivered Behavioral Rules

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

Category	Rule Name	Action
Complaint	Complaint Rule -1	First priority: • 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: • Create a case. • Auto route email.

Category	Rule Name	Action
Problem	Problem Rule 2	First priority: • 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: • Send auto acknowledge email. • Create a case.
Problem	Problem Rule 4	First priority: • 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: • 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.

Category	Rule Name	Action
Inquiry	Inquiry Rule 2	First priority: • 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.

Pages Used to Set Up Automated Mail Processing

Page Name	Definition Name	Usage
Register Action Type Page	EOCF_ACTN_TYPE_REG	Define actions that can be invoked by the AMP rule engine for incoming emails.
"Categories & Types Page" (Automation and Configuration Tools)	RBC_CATEGORY_SETUP	Define categories in the category set for AMP.
Category Set Page	RBN_DFN_CATGSET	Add or remove categories in a set to be used by the AMP rule engine.
Define Automated Mail Processor Rule Page	RB_DEFINE_AMPRULE	Define rules that associate a category with one or more actions.
Configure Auto-Response Action Page	RB_CFG_AUTOREPLY	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 Page	RB_CFG_AUTOACK	Specify the correspondence template package used for generating the acknowledgement email.
Configure Create Case Page	RB_CFG_CREATECASE	Specify the display template ID used for creating the case.
Configure Auto-Suggest Page	RB_CFG_AUTOSUGGEST	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 Page	RB_CFG_SPAM	Specify the method to handle spam email.
Associate Rules and Worklist Page	RB_MB_WL_ASSOC	Associate mailboxes with categories and rules.
Select Rule Page	RB_MB_RULE_SEC	Specify a rule for the selected category.
Configure Actions on Mailbox Page	RB_MB_CFG_ACTIONS	Configure rule actions.

Defining Webform Templates

See <u>Defining Webform Templates</u>.

Identifying Email Workspace Fields for Mapping

See <u>Identify E-mail Workspace Fields for Mapping Page</u>.

Specifying Webform and Email Workspace Field Mapping

See <u>Map Email Fields Page</u>.

Register Action Type Page

Use the Register Action Type page (EOCF_ACTN_TYPE_REG) to define actions that can be invoked by the AMP rule engine for incoming emails.

Navigation:

Enterprise Components > **Active Analytics Framework** > **Action Framework** > **Register Action Type** > **Register Action Type**

This example illustrates the fields and controls on the Register Action Type page. You can find definitions for the fields and controls later on this 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.

Note: 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.

Field or Control	Description
Action Type Name	Enter a name that uniquely identifies the action type.
Design Time Application Class and **Design Time 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.
Configuration required	Select if actions of this type need further configuration. If you select this check box, the design time application class method runs.
Run Time Application Class and **Run Time Class Path**	Select the ID and path of the application class method that runs when the rules engine triggers an action of this type.

See *PeopleSoft: Active Analytics Framework*.

Category Set Page

Use the Category Set page (RBN_DFN_CATGSET) to add or remove categories in a set to be used by the AMP rule engine.

Navigation:

Set Up CRM > **Product Related** > **Multichannel Definitions** > **Email** > **Define Category Set**

This example illustrates the fields and controls on the Category Set page. You can find definitions for the fields and controls later on this page.

PeopleSoft CRM delivers a set of categories that can be used to classify emails for further automated mail processing. To add new categories here to be used for AMP, define them first on the Categories & Types page.

See "Defining Template Categories and Types" (Automation and Configuration Tools).

Field or Control	Description
Template Category ID and **Keywords**	Select an existing template category to be an email category and list the keywords to be associated with it. AMP assigns email categories to email messages based on the number of keywords it can find in the subject and body of the email messages. The more keywords of a category that are identified in an email, the higher the score this category gets. The email is then assigned to the category that has the highest score returned from the PeopleSoft Search.

Define Automated Mail Processor Rule Page

Use the Define Automated Mail Processor Rule page (RB_DEFINE_AMPRULE) to define rules that associate a category with one or more actions.

Navigation:

Set Up CRM > **Product Related** > **Multichannel Definitions** > **Email** > **Define Servers and Security** > **Define AMP Rule** > **Define Automated Mail Processor Rule**

This example illustrates the fields and controls on the Define Automated Mail Processor Rule page. You can find definitions for the fields and controls later on this page.

Field or Control	Description
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 *AMP Categories*.
Confidence Must Exceed	Enter the minimum threshold value that an email needs to obtain for the specified category before this rule can apply. If PeopleSoft Search returns a category for an email with a threshold that doesn't exceed the confidence level that is specified here, the system routes this email to the default group worklist of the mailbox.

Actions

Field or Control	Description
Priority	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. 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.
Action Type	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.

Configure Auto-Response Action Page

Use the Configure Auto-Response Action page (RB_CFG_AUTOREPLY) to 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.

Navigation:

Click the **Configure** link of the *Auto Response* action type on the Define Automated Mail Processor Rule page.

This example illustrates the fields and controls on the Configure Auto-Response Action page. You can find definitions for the fields and controls later on this page.

Configure Auto-Acknowledge Page

Use the Configure Auto-Acknowledge page (RB_CFG_AUTOACK) to specify the correspondence template package used for generating the acknowledgement email.

Navigation:

Click the **Configure** link of the *Auto Acknowledge* action type on the Define Automated Mail Processor Rule page.

This example illustrates the fields and controls on the Configure Auto-Acknowledge page. You can find definitions for the fields and controls later on this 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.

Related Links

Mailbox Definition Page

Configure Create Case Page

Use the Configure Create Case page (RB_CFG_CREATECASE) to specify the display template ID used for creating the case.

Navigation:

Click the **Configure** link of the *Create Case* action type on the Define Automated Mail Processor Rule page.

This example illustrates the fields and controls on the Configure Create Case page. You can find definitions for the fields and controls later on this page.

Select the display template used to create the case.

Note: A setup option that creates a case for every new inbound email is available at the system level. If this option is selected, it is recommended that you don't add the create case action to any AMP rules.

Configure Auto-Suggest Page

Use the Configure Auto-Suggest page (RB_CFG_AUTOSUGGEST) to configure threshold values for solutions and documents to be suggested and the maximum number of entries that can return at any given time.

Navigation:

Click the **Configure** link of the *Auto Suggest* action type on the Define Automated Mail Processor Rule page.

This example illustrates the fields and controls on the Configure Auto-Suggest page. You can find definitions for the fields and controls later on this page.

Auto-Suggest

Field or Control	Description
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

Field or Control	Description
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.

Configure SPAM Page

Use the Configure SPAM page (RB_CFG_SPAM) to specify the method to handle spam email.

Navigation:

Click the **Configure** link of the *Spam* action type on the Define Automated Mail Processor Rule page.

This example illustrates the fields and controls on the Configure SPAM page. You can find definitions for the fields and controls later on this page.

Field or Control	Description
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.

Associate Rules and Worklist Page

Use the Associate Rules and Worklist page (RB_MB_WL_ASSOC) to associate mailboxes with categories and rules.

Navigation:

Set Up CRM > **Product Related** > **Multichannel Definitions** > **Email** > **Define Servers and Security** > **Mailbox Details** > **Associate Rules and Worklist**

This example illustrates the fields and controls on the Associate Rules and Worklist page. You can find definitions for the fields and controls later on this page.

Behavior Summary

Field or Control	Description
Category Name	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)	Select to route the email to a group worklist that PeopleSoft Search 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 PeopleSoft Search suggests.

Associated Worklists

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

See Associate Rules and Worklist Page.

Select Rule Page

Use the Select Rule page (RB_MB_RULE_SEC) to specify a rule for the selected category.

Navigation:

Click the **Modify Behavior** link on the Associate Rules and Worklist page.

This example illustrates the fields and controls on the Select Rule page. You can find definitions for the fields and controls later on this 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.

Configure Actions on Mailbox Page

Use the Configure Actions on Mailbox page (RB_MB_CFG_ACTIONS) to configure rule actions.

Navigation:

Click the **Configure** link that becomes active after selecting a rule on the Select Rule page.

This example illustrates the fields and controls on the Configure Actions on Mailbox page. You can find definitions for the fields and controls later on this 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

Understanding Structured Email

These topics discuss:

- 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.

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.

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 service operation.

  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 for the email if the associated webform is set to always use the default category as the email category. The default category is also used if the engine cannot identify an email category with a threshold value that exceeds the category's confidence level.

- 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 an 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 mail route process identifies the default category from the webform definition that is associated with the email, and checks if the option to always use the default category is selected in the webform definition.

   If yes, the system uses the default category as the email category, looks up any AMP rules that are associated with it, and performs rule actions on the email. If the default category is not associated with any rules, the system routes the email to the mailbox's default group worklist.

   If no, the AMP rules engine uses PeopleSoft Search to identify either the most appropriate group worklist to route the email (if automatic routing is enabled), or the category of the email (if automatic routing is disabled). If the rules engine returns an email category with a threshold value but the threshold value is not high enough to meet the confidence value of any AMP rule associated with the category, the default category is used instead.

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.

Related Links
ERMS Processes

Defining Application Services

These topics discuss 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 the Messages component of Integration Broker to create the application service message definition that defines the structure for structured email.

Refer to the see also reference for more information on managing message definitions.

See the product documentation for *PeopleTools: PeopleSoft Integration Broker*.

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.
Outcome	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. Possible outcome values are: • *Success:* The email structure is valid and all required data is present. • *Failure:* The structure is valid, but not all required data is present. • *Error:* The structure is invalid. 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.

Property	Description
CorrespondencePackageid	This is an output property that each application class's ExecuteApi method can optionally set. 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.
TransactionRecord	This is an output property that each application class's ExecuteApi method sets. 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.
SubInteractionRecord	An output property that each application class's ExecuteApi method sets. 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.
RecepientBoId	An output property that each application class's ExecuteApi method sets. 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.
RecepientRoleType	An output property that each application class's ExecuteApi method sets. 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.

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.
RecepientBoId and RecepientRoleType	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  numb⇒
er);
   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_T⇒
ype_Contact, &Market);

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

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

      MessageBox(0, " ", 17834, 70333, "Bo Id Cust from Email is " | %This.BoId   C⇒
ust);
      MessageBox(0, " ", 17834, 70333, "Bo Id CONtACT from Email is " | %This.BoId ⇒
```

```
   Contact);
      MessageBox(0, " ", 17834, 70333, "Bo Id Cust From Case is " | &Bo_Cust);
      MessageBox(0, " ", 17834, 70333, "Bo Id CONtACT from Case is " | &Bo_   Conta⇒

ct);

      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 Receipient Details for Correspondence Management ----⇒

;
         Rem **********************************************************************⇒

;
         %This.RecepientBoId = &Rec1.BO_ID_CONTACT.Value;
         %This.RecepientRoleType = &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

To define webform templates, use the Webforms (RB_WEBFORM_DEFN and RB_QA_WEBFORMS)
components. Perform the various tasks to complete the setup of automated mail processing for structured
emails.

Pages Used to Define Webform Templates

Page Name	Definition Name	Usage
Define Webform Templates Page	RB_WEBFORM_DEFN	Create webform IDs and associate them with default categories and application messages.
Identify E-mail Workspace Fields for Mapping Page	RB_ERMS_FLDS	Specify email workspace fields that are used for mapping with webform fields.
Map Email Fields Page	RB_WEBFORM_FLDS	Enter field labels for webform fields and map them to identified email workspace fields.

Define Webform Templates Page

Use the Define Webform Templates page (RB_WEBFORM_DEFN) to create webform IDs and associate them with default categories and application messages.

Navigation:

Set Up CRM > **Product Related** > **Multichannel Definitions** > **Email** > **Define Servers and Security** > **Webforms** > **Define Webform Templates**

This example illustrates the fields and controls on the Define Webform Templates page. You can find definitions for the fields and controls later on this page.

Field or Control	Description
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.

Field or Control	Description
Default Category	Select the category that the AMP rules engine uses to derive a rule and associated actions to apply to structured emails that are generated from this webform. This category is used if the webform is set to always use the default category to apply rules, or when PeopleSoft Search is unable to identify for an email a category with a threshold value that exceeds the category's confidence level.
Always use Default Category to apply Rules	Select for the system to always use the default category to identify associated AMP rules and performs actions of the rule on structured emails that are generated from this webform.
Application Service Input type	Select the format of the input that the email process passes to the application class. *Rowset* is normally the easiest format for application classes to work with. Other options are *Custom* and *XMLDoc*.
Inbound Service Operation	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 Saveas page to create a new webform using the current webform definition.

Identify E-mail Workspace Fields for Mapping Page

Use the Identify E-mail Workspace Fields for Mapping page (RB_ERMS_FLDS) to specify email workspace fields that are used for mapping with webform fields.

Navigation:

Set Up CRM > **Product Related** > **Multichannel Definitions** > **Email** > **System Installation** > **Identify E-mail Workspace Fields for Mapping**

This example illustrates the fields and controls on the Identify E-mail Workspace Fields for Mapping page. You can find definitions for the fields and controls later on this page.

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

Field or Control	Description
Email Property	Select an email workspace field to be mapped with a webform field on the Map Email Fields page. 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.
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.

Map Email Fields Page

Use the Map Email Fields page (RB_WEBFORM_FLDS) to enter field labels for webform fields and map them to identified email workspace fields.

Navigation:

Set Up CRM > **Product Related** > **Multichannel Definitions** > **Email** > **Define Servers and Security** > **Webforms** > **Map Email Fields**

This example illustrates the fields and controls on the Map Email Fields page. You can find definitions for the fields and controls later on this page.

This page identifies the field data (from XML) to be displayed on the email workspace. 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

Field or Control	Description
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 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.

Field or Control	Description
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 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.
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

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.

These topics discuss:

- Routing methods.

- Content-based routing using PeopleSoft Search.

Note: Throughout these topics, 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.

Related Links

"Defining Worklists" (Automation and Configuration Tools)
Understanding Multichannel Applications Supported by PeopleSoft CRM
ERMS Processes

Routing Methods

The unstructured email process analyzes emails to determine the group worklist whose members are most qualified to reply. The process that determines the appropriate worklist consists of several routing methods, as shown in the following graphic:
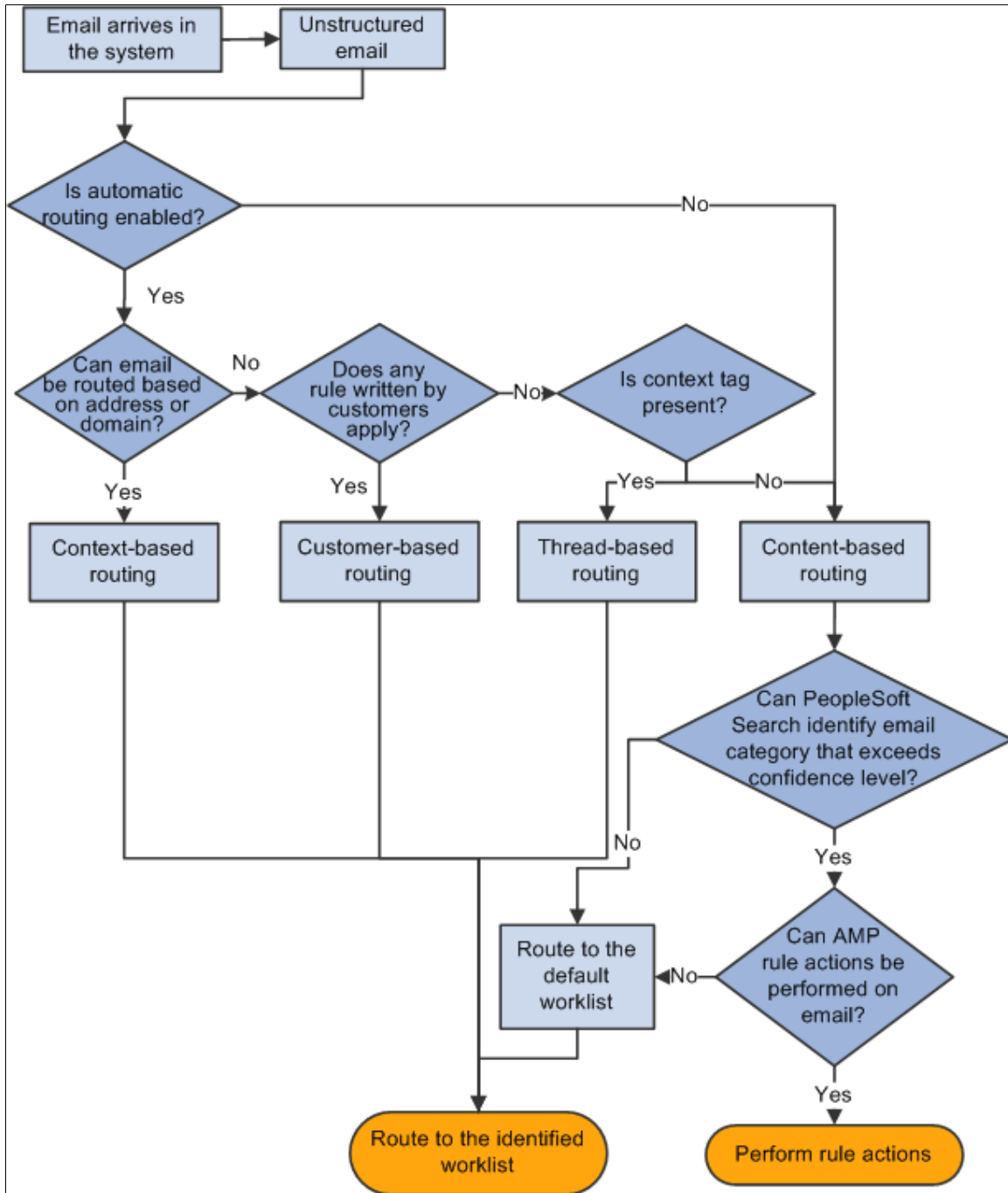
When the routing process starts, it loops through each email, attempting to route each one to the appropriate worklist.

Note: The order of context-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.

The **Process customer response as new email** system option determines how threaded emails are routed —group worklist of the previous inbound email, group worklist of the sender of the previous outbound email, or group worklist of the provider group (if the email is associated with a case).

See <u>System Installations Page</u>.

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.

Content-based routing uses PeopleSoft Search 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.

Note: When automatic routing is disabled, the AMP rules engine uses PeopleSoft Search to identify the email category and threshold value of unstructured emails. The information is then used by the AMP rules engine to identify the matching rule and hence rule actions to perform on emails.

See The Mail Route Process.

The routing process runs as part of a job that also includes a process to build the XML feed to be crawled and indexed for content analysis. The feed includes all emails in the email queue.

Each instance of the feed generation process overwrites the XML feed previous 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 feed generation process.

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

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.

Related Links
"Understanding PeopleSoft Search Framework Implementation for CRM" (Automation and Configuration Tools)
"Understanding Global Search for CRM" (Automation and Configuration Tools)
"Understanding PeopleSoft Search Framework Definitions for CRM" (Automation and Configuration Tools)
"Understanding Runtime Search Options" (Automation and Configuration Tools)
Defining System Settings for Email Processing

Content-Based Routing

This topic describes the content-based routing process using PeopleSoft Search 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. 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 query statement based on the keywords in all the associated queries. Executing the query statement yields a score that indicates how well the email matches the keywords in that query group.

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

Typically, you create queries and have the system create the query for you. If, however, you prefer to write your own query, you do not need to create queries. If you create queries and write your own query, remember that the system does not use the queries when the user-defined query is in use. Also, remember to validate your query; the routing process does not use custom query 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 query statement that includes keywords from the queries that are associated with the query group.

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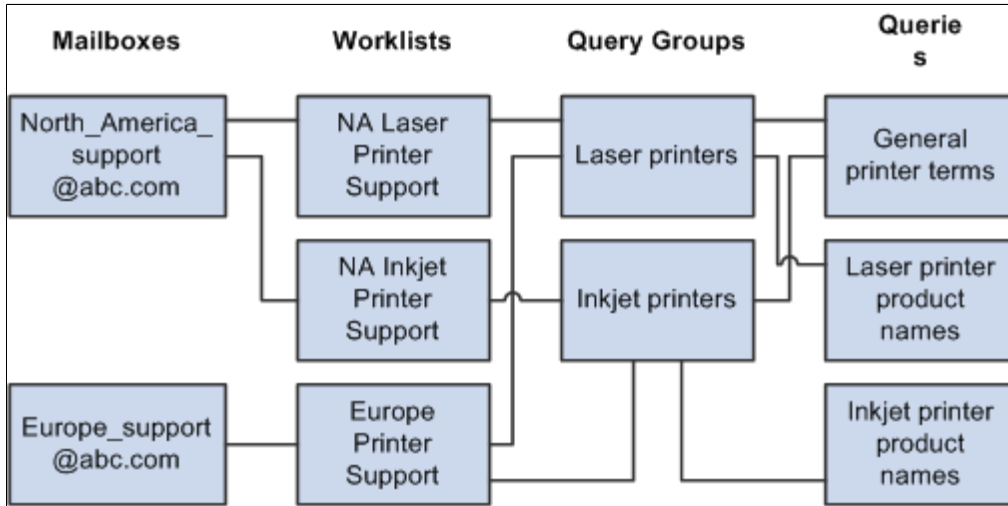
In this diagram, an organization is using separate mailboxes for its North American and European support operations. In North America, the organization has separate group worklists to support laser printers and inkjet printers; in Europe, there is one group worklist for all printer types.

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 contain keywords in several language, the associated query group definition contains query for each language. During content analysis, the system applies the query that corresponds to the language code from the mailbox-specific run control for the Build Search Index 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 query 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 ERMS Processes.

   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

These topics discuss how to define customer-based routing rules.

Page Used to Define Customer-Based Routing Rules

Page Name	Definition Name	Usage
Mailbox Definition Page	RB_MAILBOX_DEFN	Associate a mailbox with the application class that performs customer-based routing. 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.

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;
```

Mailbox Definition Page

Use the Mailbox Definition page (RB_MAILBOX_DEFN) to associate a mailbox with the application class that performs customer-based routing.

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.

Navigation:

Set Up CRM > Product Related > Multichannel Definitions > Email > Define Servers and Security > Mailbox Details > Mailbox Definition

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

See Defining Mailboxes.

Defining Context-Based Routing Rules

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

Page Used to Define Context-Based Routing Rules

Page Name	Definition Name	Usage
Exception Routing Page	RB_EXCP_ROUTE	Define routing rules based on the email address from which an email was sent.

Exception Routing Page

Use the Exception Routing page (RB_EXCP_ROUTE) to define routing rules based on the email address from which an email was sent.

Navigation:

Set Up CRM > Product Related > Multichannel Definitions > Email > Define Servers and Security > Mailbox Details > Exception Routing

This example illustrates the fields and controls on the Exception Routing page. You can find definitions for the fields and controls later on this page.

Field or Control	Description
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

To define queries, query groups, and associate query groups with a worklists, use the Query/Keyword Details (RB_QUERY) and the Query Grp/System Associations (RB_QUERY_GROUP), and the Query Grp/Wrklist Associations (RB_WL_ROUTING) components.

Note: These topics only apply to content-based routing using PeopleSoft Search.

Pages Used to Define Content-Based Routing Rules

Page Name	Definition Name	Usage
Query/Keyword Details Page	RB_QUERY	Define queries and their keywords and phrases.
Query Groups Page	RB_QUERY_GROUP	Define query groups and their associated queries.
Query Group/Worklist Associations Page	RB_WL_QG_ASSOC	Associate query groups with a worklist.

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.

Related Links

"Understanding CRM Worklists" (Automation and Configuration Tools)

Defining Mailboxes

Query/Keyword Details Page

Use the Query/Keyword Details page (RB_QUERY) to define queries and their keywords and phrases.

Navigation:

Set Up CRM > Product Related > Multichannel Definitions > Email > Add Queries and Routings > Query/Keyword Details > Query/Keyword Details

This example illustrates the fields and controls on the Query/Keyword Details page. You can find definitions for the fields and controls later on this page.

Field or Control	Description
Status	Select *Active* (the default) or *Inactive.* When the system creates the query for a query group, any inactive queries are ignored.
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 between *0.01* to *10.00.* (for example, 2.1, 4.6, and so on) that corresponds to the relative importance of the word. When the system creates the query 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 query statements in all query groups that reference the modified query.

Query Groups Page

Use the Query Groups page (RB_QUERY_GROUP) to define query groups and their associated queries.

Navigation:

Set Up CRM > **Product Related** > **Multichannel Definitions** > **Email** > **Add Queries and Routings** > **Query Group for ERMS Routing** > **Query Groups**

This example illustrates the fields and controls on the Query Groups page. You can find definitions for the fields and controls later on this page.

Main Query Group Setup

Field or Control	Description
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.
Query Operator	Select the query operator used to generate the Query Group VQL (RB_QUERY_GROUP.QUERY_VQL). Available options are: • Accumulate • OR
Status	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.

Query Text

Field or Control	Description
System Default	Select to use the query that the system generates based on the queries that you associate with the query group. The text of the query appears in the corresponding edit box. The system-generated query is not editable. It is refreshed when you save the component. 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. Within the query, keywords or phrases that do not have **Exact Match** selected are automatically set in uppercase. Phrases are enclosed in quotation marks.
User Defined	Select to write your own query instead of using the system-generated query. The text of the custom query appears in the corresponding edit box. The user defined query text is editable only if this option is selected.
Copy System Query Text	If you select the **User Defined** option, click this button to copy the system-generated query into the user defined edit box, where you can modify it to create custom query.
Check Query Text Syntax and **Query Validated**	If you select the **User Defined** option, click this button to validate the query syntax. If the user query passes the syntax validation, the system selects the read-only **Query Validated** check box. If you change the user query after it has been validated, the system clears the **Query Validated** check box and you must validate the user query syntax again. If the user query doesn't pass the syntax validation, the system displays a message that describes all syntax errors. System-generated query does not require syntax validation. If a query group uses custom query and the query is not validated, the system does not use the query group during the content analysis process.

Queries

Field or Control	Description
Query ID	Select the queries to associate with the query group. These are used to build the system query and are not required if you write your own user query. You can select only active queries. Queries can be associated with multiple query groups.
Query Name	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 query for all query groups that reference the query.

Query Group/Worklist Associations Page

Use the Query Group/Worklist Associations page (RB_WL_QG_ASSOC) to associate query groups with a worklist.

Navigation:

Set Up CRM > **Product Related** > **Multichannel Definitions** > **Email** > **Add Queries and Routings** > **Associate Query Group/Worklist** > **Query Group/Worklist Associations**

This example illustrates the fields and controls on the Query Group/Worklist Associations page. You can find definitions for the fields and controls later on this page.

Field or Control	Description
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.

Field or Control	Description
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

These topics discuss 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	Usage
Associate Rules and Worklist Page	RB_MB_WL_ASSOC	Associate worklists with a mailbox and prioritize worklists for that mailbox.
Worklist Routing Efficiency Page	RB_WL_EFFICIENCY	Review worklist statistics for a mailbox.

Page Name	Definition Name	Usage
Content Routing Page	RB_ROUTING_MAPPING	Review worklists, query groups, and queries used for a mailbox's content-based routing.

Associate Rules and Worklist Page

Use the Associate Rules and Worklist page (RB_MB_WL_ASSOC) to associate worklists with a mailbox and prioritize worklists for that mailbox.

Navigation:

Set Up CRM > **Product Related** > **Multichannel Definitions** > **Email** > **Define Servers and Security** > **Mailbox Details** > **Associate Rules and Worklist**

This example illustrates the fields and controls on the Associate Rules and Worklist page. You can find definitions for the fields and controls later on this 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 that is returned for structured email and the predefined rule that is set up for that category.

See Understanding Automated Mail Processing.

Associated Worklists

Field or Control	Description
Worklist 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* has a 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.

Worklist Routing Efficiency Page

Use the Worklist Routing Efficiency page (RB_WL_EFFICIENCY) to review worklist statistics for a mailbox.

Navigation:

Click the **Efficiency** link on the Associate Rules and Worklist page.

This example illustrates the fields and controls on the Worklist Routing Efficiency page. You can find definitions for the fields and controls later on this page.

Email Routing Statistics

Field or Control	Description
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.

Field or Control	Description
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.

Content Routing Page

Use the Content Routing page (RB_ROUTING_MAPPING) to review worklists, query groups, and queries used for a mailbox's content-based routing.

Navigation:

Set Up CRM > **Product Related** > **Multichannel Definitions** > **Email** > **Define Servers and Security** > **Mailbox Details** > **Content Routing**

This example illustrates the fields and controls on the Content Routing page. You can find definitions for the fields and controls later on this page.
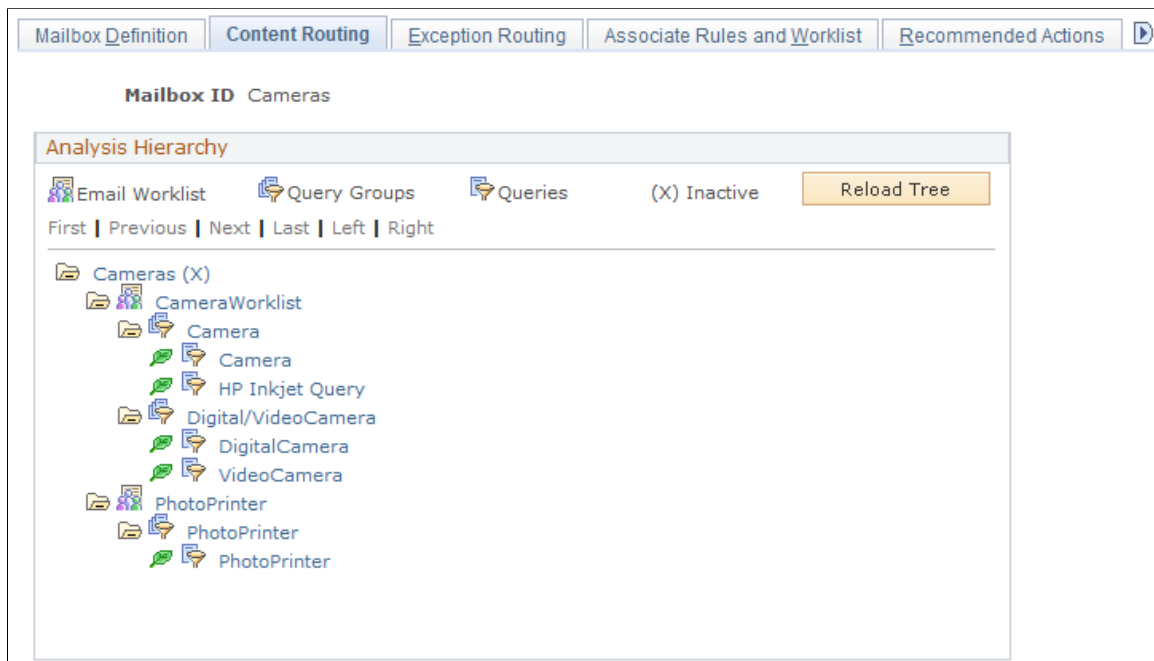
Field or Control	Description
Reload Tree	Click to update the information in the analysis hierarchy tree based on the most current content-based routing definitions.

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 query, 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.

Field or Control	Description
Email Worklist	The **Email Worklist** icon appears next to each worklist in the analysis hierarchy.
Query Groups	The **Query Group** icon appears next to each query group in the analysis hierarchy.

Field or Control	Description
Queries	The **Query** icon appears next to each query in the analysis hierarchy.
Inactive	This notation appears next to a mailbox, query, or query group whose status is *Inactive.*

Chapter 9

Setting Up Chat

Understanding Chat

These topics discuss:

- Chat and PeopleSoft MultiChannel Framework.

- 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.

Self-service users can initiate live chat sessions from self-service pages that are configured to support the chat functionality. When chat is enabled in a self-service page, the **Live Chat with Agent** section appears where a user selects a subject and enters a question for the chat request. When the user submits the chat request, the system routes it to the queue that is associated with the user-selected subject. The mapping is defined in the chat profile setup, which is then specified in the self-service page during setup. Meanwhile, a customer chat window is displayed on the customer side awaiting agent response, and the queue server is notified that a customer chat is waiting to be assigned. The server determines the appropriate agent for assignment according to workload, cost, agent availability, skill level, and language. When the agent accepts the chat session, the agent chat window appears on the agent side and the live chat session begins.

The CRM system creates an interaction for the chat session if the self-service user is registered in the CRM system.

This diagram summarizes the process for sending chat requests from self-service pages:
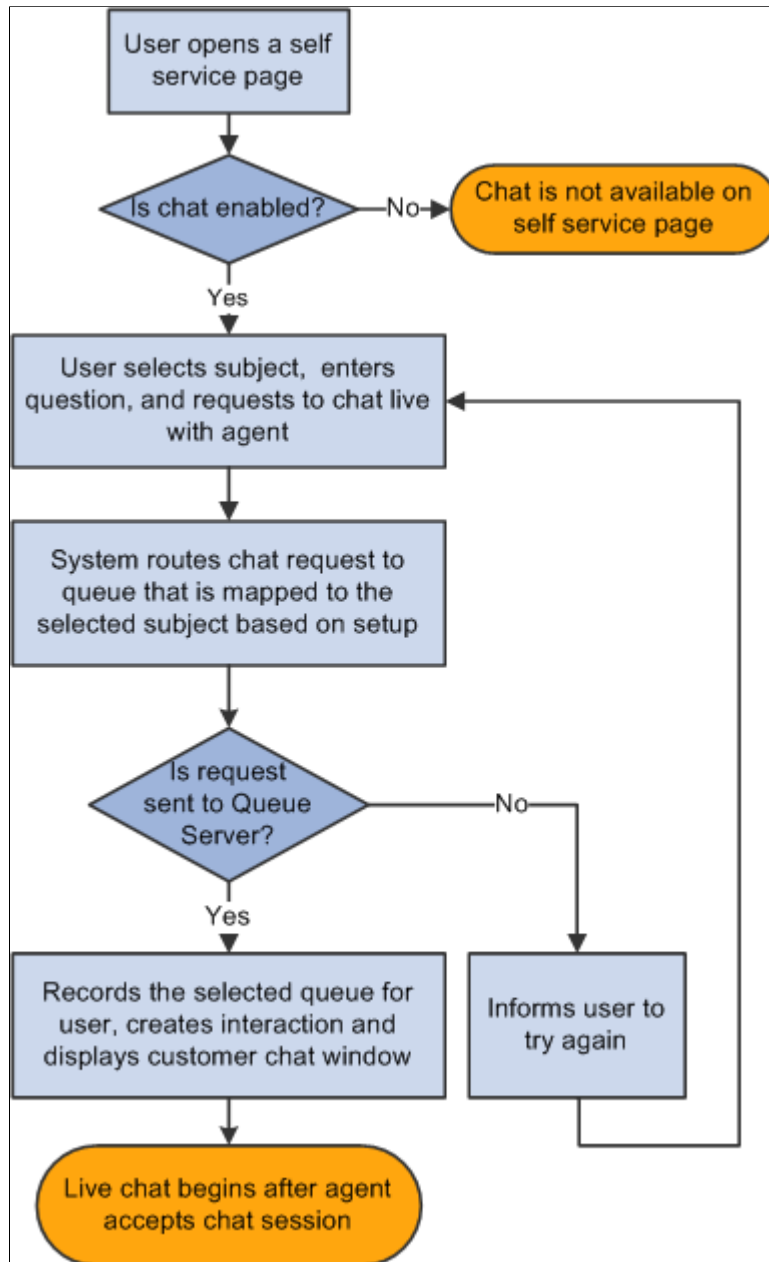
As mentioned, chat requests are routed by the universal queue to the first available agent with the skills to handle that request. Agents receive the request through the Multichannel Toolbar, which enables them to manage multiple simultaneous chat sessions. Accepting a chat request opens the chat workspace, 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 queues for other agents. 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 PeopleToolsdocumentation.

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 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.

Related Links
Chat Enabled Page Setup Page
Agent Popup Page Definition Page

Chat Profiles

A chat profile specifies options and values that are used to process chat requests, which include 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 cancel the sessions before agents can respond. If a chat session is linked to a specific transaction, that transaction automatically becomes a sub-interaction of the chat interaction that the system creates. For example, if a customer initiates a chat session from the self-service page about a particular order, that order becomes an associated sub-interaction of the chat session. Both the chat interaction and its sub-interactions can be accessed from the 360-Degree View and the Interaction List of the corresponding customer.

The system creates chat-related sub-interactions for two types of transactions: case and order.

Also available in the interaction is the category that was selected when the chat session was closed.

The chat interaction history is available for viewing from its corresponding 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).

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, and the names of agents and queues for the sessions. 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 the product documentation for *PeopleTools: PeopleSoft MultiChannel Framework*.

Related Links
Emailing Chat Logs
PeopleSoft CRM Multichannel Communications Reports: General Description

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 documentation 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.

See the product documentation for *PeopleTools: PeopleSoft MultiChannel Framework*.

Related Links
Configuring Agents for Unified Agent Desktop
Setting Up Universal Queuing

Setting Up Chat Options

These topics discuss how to set up chat options.

Pages Used to Set Up Chat Options

Page Name	Definition Name	Usage
Chat Profile Setup Page	RB_CHAT_PROFILE	Define general options and routing rules for chat profiles. You specify a chat profile for each self-service page used for chat.

Page Name	Definition Name	Usage
Agent Popup Page Definition Page	RB_CHAT_POPUP	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 Page	RB_CHAT_ADMIN	Specify the chat profile and agent pop-up page for each self-service page to support the chat feature.
Service Page Mapping Page	RB_CHAT_MAP	Specify self-service pages that can be pushed to customers.

Chat Profile Setup Page

Use the Chat Profile Setup page (RB_CHAT_PROFILE) to define general options and routing rules for chat profiles.

You specify a chat profile for each self-service page used for chat.

Navigation:

Set Up CRM > **Product Related** > **Multichannel Definitions** > **Chat** > **Chat Profile Setup** > **Chat Profile Setup**

This example illustrates the fields and controls on the Chat Profile Setup page. You can find definitions for the fields and controls later on this page.

Chat General

Field or Control	Description
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 Routing

Field or Control	Description
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.

Agent Popup Page Definition Page

Use the Agent Popup Page Definition page (RB_CHAT_POPUP) to 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.

Navigation:

Set Up CRM > Product Related > Multichannel Definitions > Chat > Agent Popup > Agent Popup Page Definition

This example illustrates the fields and controls on the Agent Popup Page Definition page. You can find definitions for the fields and controls later on this page.

```
Agent Popup Page Definition

            Page ID  MiniNav                      Page Name  RB_CHAT_MINI_NAV
         Component  RB_CHAT_MINI_NAV                  Menu   RB_ERMS_CHAT
                                                     Name
       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
Self Service Page

RBT_FAQ_SOL_HD_SS
RBT_FAQ_SOL_SS
RBT_TGUIDE_HD_SS
RBT_TGUIDE_SS
RB_CATALOG
RB_CHAT
RB_PROD_DTL
RC_BS_SELF_CONFIG
RC_CASE_HD_SS

   Add Page

        Modify System Data

   This object is maintained by PeopleSoft.

Modified 02/04/2004 5:00PM PST     QXIE
```

Field or Control	Description
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.

Field or Control	Description
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.

Chat Enabled Page Setup Page

Use the Chat Enabled Page Setup page (RB_CHAT_ADMIN) to specify the chat profile and agent pop-up page for each self-service page to support the chat feature.

Navigation:

Set Up CRM > **Product Related** > **Multichannel Definitions** > **Chat** > **Chat Page Setup** > **Chat Enabled Page Setup**

This example illustrates the fields and controls on the Chat Enabled Page Setup page. You can find definitions for the fields and controls later on this page.

Field or Control	Description
Self Service Page	Displays the CRM self-service page that has implemented the chat feature.
Enable Chat Automation	Select to activate the corresponding page for users to start live chat.
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	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 the selected agent popup page on the Agent Popup Page Definition page.

Service Page Mapping Page

Use the Self-Service Page Mapping page (RB_CHAT_MAP) to specify self-service pages that can be pushed to customers.

Navigation:

Set Up CRM > **Product Related** > **Multichannel Definitions** > **Chat** > **Page Mapping** > **Self-Service Page Mapping**

This example illustrates the fields and controls on the Self-Service Page Mapping page. You can find definitions for the fields and controls later on this page.

Field or Control	Description
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

Field or Control	Description
Page	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 Name**	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

Understanding CTI

These topics discuss:

- The PeopleSoft CTI solution.

- CTI configuration.

- The Multichannel Toolbar.

- Third party CTI system definitions.

- CTI transactions and page mapping.

Note: Please refer to the PeopleTools documentation for more information on the PeopleSoft CTI solution.

See the product documentation for *PeopleTools: PeopleSoft MultiChannel Framework*.

The PeopleSoft CTI Solution

Oracle's PeopleSoft 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 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 graphic illustrates the CTI process flow, which includes accepting external customer calls from the IVR system, mapping call data to CRM transactions, and displaying corresponding application pages for agents to handle customer requests:
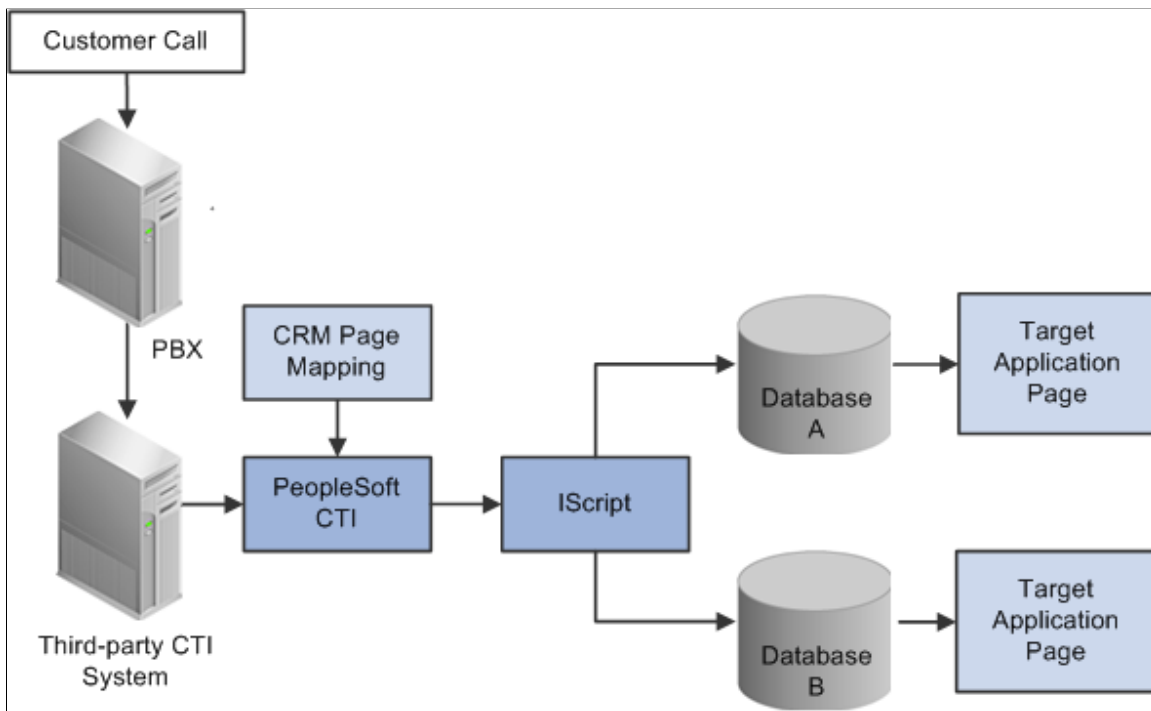
For a list of partners that offer CTI middleware integrations, refer to the link in the See Also section.

Note: PeopleSoft CTI Integration is a licensed product.

See Oracle Validated Application Integrations - Find a Partner Solution.

Related Links
Monitoring Real-Time Information
Understanding Multichannel Toolbar Functionality

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 *PeopleTools: 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 these topics. Refer to PeopleSoft PeopleTools documentation for additional information about all other aspects of CTI configuration.

See the product documentation for *PeopleTools: 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.

Related Links
Understanding Multichannel Toolbar Functionality

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.

Related Links
Setting Up CTI System Definitions

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 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 PeopleSoft Applications 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)	-
9: Customer Lookup	360-Degree View Search (RB_TD_AGT_SRCH_GBL)	Customer ID.
11: Quote or Order Lookup	Quote or Order (RO_FORM)	External Order ID.
17: Help Desk Employee ID Lookup	360-Degree View for Employees (RC_ HD360_SRH)	Employee ID.
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.

Transaction ID and Description	*Target Page*	*Required Fields*
27: Phone Number Lookup	360-Degree View Search (RB_TD_AGT_SRCH_GBL)	Phone number.
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.

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.

Related Links
Mapping CTI Transactions to Application Pages
"Setting Up Automatic Numbering" (Application Fundamentals)

Understanding PeopleSoft and Siebel CRM Call Center On Demand Integration

These topics discuss:

- Integration overview.

- CCOD setup considerations.

- PeopleSoft setup considerations.

- Supported transaction components for screen pops.

- Logic for determining PeopleSoft pages for screen pops.

Integration Overview

Siebel CRM Call Center On Demand (CCOD) is a hosted CRM solution that delivers voice, voicemail, email, and web communications to customers at a monthly charge. Customers who subscribe to the service can run their call center operations without the need to invest intensively in hardware, software and CTI resources, which are traditionally required to build a call center. The integration between PeopleSoft CRM and CCOD provides CTI capabilities for PeopleSoft customers without the need to install any CTI-specific equipments at customers' premises.

Important! The PeopleSoft and Siebel CRM Call Center On Demand integration is an alternative to the PeopleTools CTI functionality that is currently offered in PeopleSoft CRM. Both are designed to co-exist in the PeopleSoft system; select either functionality this is best fitted to implement in your environment.

This integrated solution utilizes the CCOD infrastructure to receive incoming phone calls, route them to agents, and formulate URLs that pop PeopleSoft component pages on agents' screens. When the PeopleSoft system receives the URL from CCOD, the URL is processed by a CTI iScript (*WEBLIB_RB.GETINFO.FieldFormula.IScript_CTIdirect*), which parses the URL and identifies the appropriate PeopleSoft page to pop on the agent's screen.

This diagram illustrates the integration between PeopleSoft and CCOD:
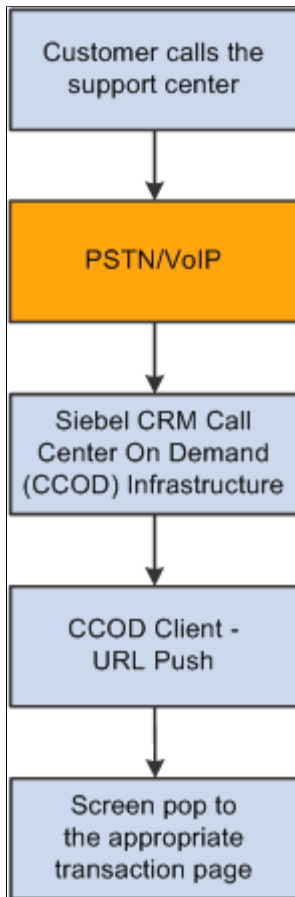
Agent and queue setup is not needed for this integration.

CCOD Setup Considerations

The CTI iScript parses the key/value pairs in the CCOD-formulated URL to determine the PeopleSoft component page to pop on the agent's screen. In order to have the proper key/value pairs in the URL, the setup on CCOD must be completed successfully on the hosted environment in these areas:

• CRM Integration URL

This is the URL of the PeopleSoft system where agents use the CRM application to service their customers. When a phone call comes in and is processed by CCOD, screen pop to this URL appears on the agent's screen. To do so, the *WEBLIB_RB.GETINFO.FieldFormula.IScript_CTIdirect* iScript needs to be included in the URL to ensure that the screen pops go to right PeopleSoft CTI entry point.

Here's a sample URL:

```
http://adas0102.peoplesoft.com/psp/cr900dvl/EMPLOYEE/CRM/s/WEBLIB_RB.GETINFO.F⇒

ieldFormula.IScript_CTIdirect?COD=true
```

At runtime, the URL has additional parameters appended to it that are related to the incoming call.

You can associate one CCOD setup with one PeopleSoft domain only, because each CCOD setup points to only one PeopleSoft URL for screen pops. However, you can associate one PeopleSoft domain with multiple CCODs.

- Company prompts

  They are the voice recordings that callers hear when they call the support center. Each prompt is an individual recording informing users what they need to do, for example, entering case IDs from their touch tone phones.

- Menus

  They are used to create the tree structure for routing phone calls. For example, if a user selects option 1, the menu presents other options that pertain to option 1; another set of options are available if the user selects option 2, and so on. This is the routing structure a company would use to direct a phone call to the proper department.

- Project

  It tells the system where to begin the menu structure. For example, start with the menu that contains the *Are you a Customer or an Employee?* prompt.

Please refer to Siebel CRM Call Center On Demand documentation for further information on CCOD setup.

PeopleSoft Setup Considerations

Make sure that the target portal URL for the *CRM* content provider is updated to point to the correct site URL. CTI configurations are established on the CTI Configuration page under **Set Up CRM** > **Common Definitions** > **Integration Rules** > **CTI** > **CTI Configuration.**

Related Links
CTI Configuration Page

Supported Transaction Components for Screen Pops

As delivered, the integration supports screen pops for these components:

- Customer 360-Degree View.

- Employee 360-Degree View.

- Customer Support Case.

- HR HelpDesk Case.

- IT HelpDesk Case.

Agents must have access to all these components to accept screen pops. They are required to log in at the initial screen pop.

This table lists the CRM transactions that the integration supports for screen pops.

Component Target Page	Transaction ID
Customer 360 Search Page	9
Employee (Worker) 360 Search Page	17
Customer Support Case Search Page	2
Employee HR Helpdesk Search Page	22
Employee IT Helpdesk Search Page	3

As part of the existing CRM CTI setup, each supported transaction is associated with an ID. At runtime, the system uses the transaction ID, which is derived from the option selected by the caller through the IVR system, to identify the appropriate component page for screen pops. The PeopleSoft and CCOD integration leverages this configuration for its supported components. This is how the transaction IDs are used. Suppose that an implementer is defining a menu on the CCOD side, and has decided that one action of this menu should be popping the Customer 360-Degree View search page when callers press the *3* key on the phone. In this scenario, the implementer needs to set the CTI_TRANSACTION variable (for the touch tone key *3,*) to equal *9*, which is the transaction ID for the Customer 360-Degree View search page. At runtime, if a caller presses *3* in that same menu, CCOD appends the key/value pair *CTI_TRANSACTION=9* to the URL and sends it to the PeopleSoft system. From the mapping, the PeopleSoft system knows exactly which component page to pop on the agent's screen.

Note: If you want to modify transaction IDs, you must update the RB_COD_CONFIG.COMPONENT_NAME.FieldChange event to accommodate the changes.

Related Links
CTI Transactions and Page Mapping

Logic for Determining PeopleSoft Pages for Screen Pops

When a phone call comes in, the system determines the PeopleSoft component page to display for call center agents based on customer input that the IVR system captures and the CTI setup on the CCOD side. Then, certain logic applies in an effort to select the appropriate page to display on the agent's screen. The rules are similar for customer calls and employee calls.

Customer

These rules apply to calls from customers.

- 360-Degree View.

  The 360-Degree View search page is displayed, if the phone number of the incoming call is associated with either more than one contact or no contacts in the CRM system. If the phone number matches the number of a single contact, the 360-Degree View page for that contact appears.

- Support Case.

If a match is found for the case ID that is supplied, the Case page for that case ID is displayed; otherwise, the Case search page appears and the agent needs to speak with the customer to gather more information about the case.

Employee

These rules apply to calls from employees:

*   360-Degree View.

    The 360-Degree View search page always appears because of:

    *   Security concern. Agents must collect confidential information from employees verbally when they call.

    *   Alphabetic employee IDs. CCOD can only send numeric data that is collected from touch tone phones.

*   HelpDesk Case.

    If a match is found for the case ID that is collected, the Case page for that case ID is displayed; otherwise, the Case search page appears.

Setting Up CTI System Definitions

These topics discuss how to set up CTI system definitions.

Pages Used to Set Up CTI System Definitions

Page Name	Definition Name	Usage
CTI System Definition Page	RB_CTI_SYS_DEFN	Set up definitions for CTI vendor products.
CTI System Function Page	RB_CTI_DEF_FUNC	View system functions for CTI definitions.
CTI System Function Page	RB_CTI_SYS_FUNC	Register system functions for CTI definitions.
CTI Function Parameters Page	RB_CTIDEF_JFUNC	Specify parameters for use in CTI system functions.

CTI System Definition Page

Use the CTI System Definition page (RB_CTI_SYS_DEFN) to set up definitions for CTI vendor products.

Navigation:

Set Up CRM > **Common Definitions** > **Integration Rules** > **CTI** > **CTI Definitions** > **CTI System Definition**

This example illustrates the fields and controls on the CTI System Definition page. You can find definitions for the fields and controls later on this page.

The CRM system delivers two CTI definitions, *ASPT* and *PSFT.* Customers can add new definitions for their own CTI vendor products.

Field or Control	Description
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.

CTI System Function Page

Use the CTI System Function page (RB_CTI_DEF_FUNC) to view system functions for CTI definitions.

Navigation:

- **Set Up CRM** > **Common Definitions** > **Integration Rules** > **CTI** > **CTI System Function** > **CTI System Function**

- Click the **Configure** link on the CTI System Definition page.

This example illustrates the fields and controls on the CTI System Function page (RB_CTI_DEF_FUNC). You can find definitions for the fields and controls later on this page.

This page lists all registered system functions that are associated with the specified CTI definition.

Field or Control	Description
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.

CTI System Function Page

Use the CTI System Function page (RB_CTI_SYS_FUNC) to register system functions for CTI definitions.

Navigation:

Set Up CRM > **Common Definitions** > **Integration Rules** > **CTI** > **System Function** > **CTI System Function**

This example illustrates the fields and controls on the CTI System Function page (RB_CTI_SYS_FUNC). You can find definitions for the fields and controls later on this page.

CTI System Function

Function Details

System Function Name	DialPhoneNumber ☑ Active
Description	Dial a telephone number
Application Class ID	CTIFunctions
Application Class Path	RB_CTI Package Tree Viewer
Method Name	OutboundDial

Function Parameters

Required	Sequence	Parameter Name	Parameter Type	Length	Delete
☑	1	Number	Character	14	🗑
☐	2	Param1	Character	5	🗑
☐	3	Param2	Character	20	🗑

[Add Parameter]   [Refresh Order]

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.

Field or Control	Description
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 Parameters	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.

CTI Function Parameters Page

Use the CTI Function Parameters page (RB_CTIDEF_JFUNC) to specify parameters for use in CTI system functions.

Navigation:

- **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).

This example illustrates the fields and controls on the CTI Function Parameters page. You can find definitions for the fields and controls later on this page.

CTI Function Parameters

Function Details

CTI Definition ID	PSFT Peoplesoft Multichannel Communications Deafult Definitions
Function Name	OutboundDial
CTI Script Name	phone.js
JavaScript Function	dialout

Function Parameters

Select	Sequence	Parameter Name	Parameter Type	Length
☑	1	Number	Character	14
☐	2	Param1	Character	5
☐	3	Param2	Character	20

This page associates a CTI function with a Javascript function for any given CTI definition.

Field or Control	*Description*
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

To map transaction IDs to PeopleSoft CRM application pages, use the CTI Mapping (CTI_MAPPING) component. To identify transactions for each content provider, use the CTI Configuration (CTI_CONFIG) component.

Pages Used to Map to Application Pages

Page Name	Definition Name	Usage
CTI Mapping Page	CTI_PS_MAPPING	Map transaction IDs to target application pages.
CTI Configuration Page	CTI_CONFIG	Identify the transactions associated with each content provider.
CTI Transaction Page	DERIVED_CTI	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 Page	CTI_TEST	Test your CTI application.

CTI Mapping Page

Use the CTI Mapping page (CTI_PS_MAPPING) to map transaction IDs to target application pages.

Navigation:

Set Up CRM > Common Definitions > Integration Rules > CTI > CTI Mapping > CTI Mapping

This example illustrates the fields and controls on the CTI Mapping page. You can find definitions for the fields and controls later on this page.

Field or Control	*Description*
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.

CTI Configuration Page

Use the CTI Configuration page (CTI_CONFIG) to identify the transactions associated with each content provider.

Navigation:

Set Up CRM > **Common Definitions** > **Integration Rules** > **CTI** > **CTI Configuration** > **CTI Configuration**

This example illustrates the fields and controls on the CTI Configuration page. You can find definitions for the fields and controls later on this page.

Field or Control	Description
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.

CTI Test Page

Use the CTI Test page (CTI_TEST) to test your CTI application.

Navigation:

Set Up CRM > **Common Definitions** > **Integration Rules** > **CTI** > **CTI Test** > **CTI Test**

This example illustrates the fields and controls on the CTI Test Page page. You can find definitions for the fields and controls later on this 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.

Configuring the Siebel CRM Call Center On Demand Integration

These topics discuss how to configure the call center on demand integration.

Note: These topics apply to PeopleSoft and Siebel CRM Call Center On Demand integration only.

Pages Used to Configure the Siebel CRM Call Center On Demand Integration

Page Name	Definition Name	Usage
Configuration Page	RB_COD_CONFIG	Set up URL mapping parameters and activate the Siebel CRM Call Center On Demand integration.
Exception Mapping Page	RB_COD_MAPPING	Set up options for handling exceptions.

Configuration Page

Use the Configuration page (RB_COD_CONFIG) to set up URL mapping parameters and activate the Siebel CRM Call Center On Demand integration.

Navigation:

Set Up CRM > **Common Definitions** > **Integration Rules** > **CTI** > **Call Center On Demand Setup** > **Configuration**

This example illustrates the fields and controls on the Configuration page. You can find definitions for the fields and controls later on this page.

Field or Control	Description
Call Center On Demand Active	Select to activate the integration between PeopleSoft and Siebel CRM Call Center On Demand. When this check box is selected, the system uses the appropriate code in the *WEBLIB_RB.GETINFO.FieldFormula.IScript_CTIdirect* iScript to look for and populate the correct parameters on the incoming URL for screen popping purposes.

Field or Control	Description
Call Center OnDemand Parameter and **PeopleSoft Parameter**	Specify the mapping of parameters that are needed in the integration and are named differently in the PeopleSoft and the CCOD systems. The integration delivers the mapping of *ANI* and *otherDN*. PeopleSoft uses the value of the otherDN variable to identify the customer (360-Degree View) for the incoming call. While CCOD does not use this variable, it uses the *ANI* variable and this variable is sent to PeopleSoft system as part of the incoming URL. The *ANI* variable holds the same value as the *otherDN* variable. With this delivered mapping, PeopleSoft populates the *otherDN* variable with the value of the *ANI* variable and appends the *otherDN* key/value pair to the URL.

Exception Mapping Page

Use the Exception Mapping page (RB_COD_MAPPING) to set up options for handling exceptions.

Navigation:

Set Up CRM > **Common Definitions** > **Integration Rules** > **CTI** > **Call Center On Demand Setup** > **Exception Mapping**

This example illustrates the fields and controls on the Exception Mapping page. You can find definitions for the fields and controls later on this page.

Copyright © 1988, 2023, Oracle and/or its affiliates.

Field or Control	Description
Default Component Name	Specify the default transaction page to display if the DNIS (dialed number identification service) number is not recognized by the system. It is recommended that you use a 360 search page as the default mapping component, because agents can perform any action for callers from a 360 search page.
DNIS Number and **Component Name**	Enter the DNIS number and the corresponding transaction page that appears if an exception occurs. DNIS is a telephone service that identifies the phone number that the caller dialed. Here it refers to a number that callers dial to access your call center. For example, a customer calls the support center at 1-800-222-3333. But for some reason, the URL that is sent to the agent for that call has an invalid CTI transaction ID, which causes the system not to be able to identify the right transaction page to display for the agent. In this case, the system displays the transaction page that is specified here for that 1-800 number. Typically, you have different DNIS numbers for different areas in the call center operation and so you can have multiple mapping entries. Note that you cannot associate one DNIS number with more than one component transaction page.

Chapter 11

Setting Up Supervisor Desktop

Understanding Supervisor Desktop

These topics discuss:

- 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.

- 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 Monitoring Real-Time Information.

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 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.

Related Links
Application Dispatcher

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.

See the following topics within the product documentation for *PeopleTools: PeopleSoft MultiChannel Framework*:

"Configuring PeopleSoft CTI"

"Configuring REN Servers"

"Configuring PeopleSoft MCF Servers and Clusters"

"Configuring PeopleSoft MCF Queues and Tasks"

Related Links
Understanding CTI

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.

Related Links

"Understanding the Interactive Services Repository" (Application Fundamentals)

"Understanding PeopleSoft CRM Integration Points" (Application Fundamentals)

Defining System-Level Settings for Supervisor Desktop

These topics discuss how to define system-level settings for supervisor desktop. Typically, a system administrator performs these tasks.

Pages Used to Define System-Level Settings for Supervisor Desktop

Page Name	Definition Name	Usage
General Page	RB_SDADM_MAIN	Define default monitoring type and filter to be used for the real-time monitor when Supervisor Desktop launches.
Images and Text Page	RB_SDADM_IMAGE	Specify icons and texts to be used for displaying alerts, queue types, and agent states on Supervisor Desktop.
Reports Page	RB_SDADM_REPORT	Specify multichannel reports and links that administrators can execute from Supervisor Desktop.

General Page

Use the General page (RB_SDADM_MAIN) to define default monitoring type and filter to be used for the real-time monitor when Supervisor Desktop launches.

Navigation:

Set Up CRM > **Product Related** > **Multichannel Definitions** > **Supervisor Desktop** > **Administration** > **General**

This example illustrates the fields and controls on the General page. You can find definitions for the fields and controls later on this page.

These defaults control the initial monitor settings of Supervisor Desktop when the user has not overridden these values through Supervisor Desktop user preferences.

Field or Control	Description
Initial Monitor Type	Select the default statistics type by which real-time information appears on Supervisor Desktop. Options are *Queue Statistics* and *Agent Statistics.*
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 *Assigned Queues*, *Queue List* and *Team*. The *Assigned Queues* option is always available.

Related Links

Personalizing Supervisor Desktop

Images and Text Page

Use the Images and Text page (RB_SDADM_IMAGE) to specify icons and texts to be used for displaying alerts, queue types, and agent states on Supervisor Desktop.

Navigation:

Set Up CRM > **Product Related** > **Multichannel Definitions** > **Supervisor Desktop** > **Administration** > **Images and Text**

This example illustrates the fields and controls on the Images and Text page. You can find definitions for the fields and controls later on this 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

Field or Control	Description
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.

Field or Control	Description
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

Field or Control	Description
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

Field or Control	Description
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.

Reports Page

Use the Reports page (RB_SDADM_REPORT) to specify multichannel reports and links that administrators can execute from Supervisor Desktop.

Navigation:

Set Up CRM > **Product Related** > **Multichannel Definitions** > **Supervisor Desktop** > **Administration** > **Reports**

This example illustrates the fields and controls on the Reports page (1 of 2). You can find definitions for the fields and controls later on this page.

This example illustrates the fields and controls on the Reports page (2 of 2). You can find definitions for the fields and controls later on this page.

Performance Report List

This grid lists all the reports that are built for ERMS and Chat.

Field or Control	Description
Enabled	Select to allow this report to appear on Supervisor Desktop and to be executable by users.
Report Navigation	Select the name of the report to be enabled. You cannot select the same report in more than one row. 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 *RBP_*. The component navigation can be configured by navigating to **Set Up CRM** > **Common Definitions** > **Component Configuration** > **Component Navigation**. See "Defining Component Transfer Navigation" (Business Object Management).

Field or Control	Description
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

Field or Control	Description
Section Heading Label	Enter text to use as the heading of the links section within Supervisor Desktop. The section heading label appears on the Performance Reports page, below the **Run a Performance Report** section.

Links

Field or Control	Description
URL (uniform resource locator)	Select the URL that users (supervisors) can access on the Performance Reports page. It is a pointer to the PeopleTools URL library; it defines how to access the specified 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:** As long as a URL is defined using the PeopleTools URL Library, any URL can be specified to be accessible via Supervisor Desktop. Define URLs that can be selected here on the URL Maintenance page under **PeopleTools** > **Utilities** > **Administration** > **URLs.** See *PeopleTools: System and Server Administration*.
Order	Enter the sequence for rendering the enabled links. You cannot enter duplicate numbers.

Field or Control	Description
Label	Enter the text to use as the link for the corresponding link within the link section of Supervisor Desktop. Label names must be unique.

Related Links

Running Performance Reports

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 the product documentation *PeopleTools: System and Server Administration*.

Chapter 12

Setting Up Unified Agent Desktop

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). These topics discusses:

• Multichannel Toolbar.

• Application dispatcher.

• Channel-specific workspaces.

• Task management.

• Presence and status codes.

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.

Important! UAD is certified with the PSSTYLEDEF_SWAN style sheet only.

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 based on the pagelet content and layout setup. 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.

Related Links
Using Multichannel Toolbar

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 Mapping CTI Transactions to Application Pages.

Email Tasks

The system launches the email workspace when agents accept inbound email.

See Understanding Email Management.

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.

The the topics for the following product documentation for *PeopleTools: PeopleSoft MultiChannel Framework*.

"Understanding PeopleSoft MultiChannel Framework," PeopleSoft MultiChannel Framework

"Configuring MCF Queues and Tasks," Configuring Tasks

"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.

Presence and Status Codes

For each channel (voice and multichannel) that UAD supports, the system delivers a list of presence codes and status codes that are used for maintaining agent statuses on the Multichannel Toolbar.

Presence codes are a set of simple, predefined states that are used to represent agents' presence (for example, *ready* and *not ready* for the voice channel). *Status codes* provide a further refinement of presence codes. For example, an agent can be unavailable on the multichannel queue for a number of reasons (away from desk, meeting, lunch break, and so on). Therefore, the system provides a list of status codes that supplement their associated presence code, so that when agents update their status code on the Queue Status window, the code can reflect their status more accurately on the Multichannel Toolbar for other agents.

Presence and status codes work together. When an agent changes status on the Queue Status window, it triggers an event (specified for the status on the Status Codes page) that is responsible for updating the presence state for the agent in the system. The CRM system delivers presence codes and status codes, and they can be modified by administrators if necessary.

This table lists the delivered presence codes and associated status codes for the *voice* channel:

Presence State	Applicable Status Code	Applicable Reason Code	Can State be modified by Administrator?
Not Ready	• At Lunch • Away • Busy • Do Not Disturb • In Wrap-Up Mode **Note:** This status is automatically updated by the system when agents enter the wrap-up mode. Agents cannot change themselves to this status manually. • On Break • Unavailable	• At Lunch • Away • Busy • Do Not Disturb • In Wrap-Up Mode • On Break • Unavailable	Yes
Ready	Available	N/A	Yes

Presence State	Applicable Status Code	Applicable Reason Code	Can State be modified by Administrator?
Work Not Ready	N/A	N/A	No (CTI switch dependent)
Work Ready	N/A	N/A	No (CTI switch dependent)

This table lists the delivered presence codes and associated status codes for the *multichannel* channel:

Presence State	Applicable Status Code	Applicable Reason Code	Can State be modified by Administrator?
Unavailable	• Unavailable • Do Not Disturb • Busy • At Lunch • On Break • Away The In Wrap-Up mode does not apply.	N/A	Yes
Available	Available	N/A	Yes
Assumed Unavailable	N/A	N/A	No

Related Links

Presence Codes Page

Status Codes Page

Configuring Agents for Unified Agent Desktop

These topics discuss how to configure agents for unified agent desktop.

Pages Used to Configure Agents for Unified Agent Desktop

Page Name	Definition Name	Usage
Unified Agent Desktop Agent Configuration Page	RB_UAD_AGENT_CFG	Define general settings.

Page Name	Definition Name	Usage
Presence Codes Page	RB_UAD_PRESENCE_CD	Define presence states for agents.

Unified Agent Desktop Agent Configuration Page

Use the Unified Agent Desktop Agent Configuration page (RB_UAD_AGENT_CFG) to define general settings.

Navigation:

Set Up CRM > **Product Related** > **Multichannel Definitions** > **Unified Agent Desktop** > **Agent Configuration** > **Unified Agent Desktop Agent Configuration**

This example illustrates the fields and controls on the Unified Agent Desktop Agent Configuration page. You can find definitions for the fields and controls later on this page.

Warning and Expired

Field or Control	Description
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 alerts: a warning alert that appears after 5 minutes (default value) of inactivity, and an expiration alert that appears after 10 minutes (default value) of inactivity.
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

Field or Control	Description
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

Field or Control	Description
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.

Reason Code Page

Use 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.

Note: Reason codes are defined in the PS_RB_UAD_SYSRSNCD prompt table and are applicable only when you are setting up the *Not Ready* presence state. Again, codes can be modified as customer implementation requires.

See *PeopleTools: PeopleSoft MultiChannel Framework*

Presence Codes Page

Use the Presence Codes page (RB_UAD_PRESENCE_CD) to define presence states for agents.

Navigation:

Set Up CRM > **Product Related** > **Multichannel Definitions** > **Unified Agent Desktop** > **Agent Configuration** > **Presence Codes**

This example illustrates the fields and controls on the Presence Codes page. You can find definitions for the fields and controls later on this 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 that in some cases, certain status codes on the Status Codes page are being used even though system defaults already exist. This is possible because status codes are expanded set of presence codes.

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.

Related Links

Switching Agent Status

Defining Multichannel Toolbar Settings

To define multichannel toolbar settings, use the Console Definition (RB_UAD_CODE_DEFN) component.

Pages Used to Define Multichannel Toolbar Settings

Page Name	Definition Name	Usage
Unified Agent Desktop Action Button Definition Page	RB_UAD_BTN_DEFN	Specify icons and labels that are used for voice tasks.
Category Codes Page	RB_UAD_CATEGORY	Define categories that are used to group tasks when they are closed.
Status Codes Page	RB_UAD_CHANL_STAT	Define sets of statuses for voice and multichannel queue tasks.

Unified Agent Desktop Action Button Definition Page

Use the Unified Agent Desktop Action Button Definition page (RB_UAD_BTN_DEFN) to specify icons and labels that are used for voice tasks.

Navigation:

Set Up CRM > **Product Related** > **Multichannel Definitions** > **Unified Agent Desktop** > **Console Definition** > **Unified Agent Desktop Action Button Definition**

This example illustrates the fields and controls on the Unified Agent Desktop Action Button Definition page. You can find definitions for the fields and controls later on this page.

Field or Control	Description
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.

Category Codes Page

Use the Category Codes page (RB_UAD_CATEGORY) to define categories that are used to group tasks when they are closed.

Navigation:

Set Up CRM > **Product Related** > **Multichannel Definitions** > **Unified Agent Desktop** > **Console Definition** > **Category Codes**

This example illustrates the fields and controls on the Category Codes page. You can find definitions for the fields and controls later on this 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.

Status Codes Page

Use the Status Codes page (RB_UAD_CHANL_STAT) to define sets of statuses for voice and multichannel queue tasks.

Navigation:

Set Up CRM > **Product Related** > **Multichannel Definitions** > **Unified Agent Desktop** > **Console Definition** > **Status Codes**

This example illustrates the fields and controls on the Status Codes page (1 of 2). You can find definitions for the fields and controls later on this page.

This example illustrates the fields and controls on the Status Codes page (2 of 2). You can find definitions for the fields and controls later on this page.

Use this page to define status codes that are used to represent agent states in the Queue Status window for voice and multichannel queues.

Field or Control	Description
Order	Enter the sequence in which the status appears in the corresponding status pop-up window.

Field or Control	Description
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 at runtime by agents. Events are defined as translate values for the EVENT_CODE field in the RB_UAD_VSTATUS table (voice status) and the RB_UAD_MQSTATUS table (multichannel status). These codes can be added (customization) by the administrator for additional implementation. When an agent selects a status code, its associated event triggers a change in the presence code accordingly.
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.

Related Links

Reason Code Page
Presence Codes Page

Chapter 13

Managing Email

Understanding Email Management

These topics discuss:

- 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.

Note: Throughout these topics, the term *group worklist* refers to both regular group worklists and MultiChannel Framework (MCF) queues.

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 Accessing Inbound Email.

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. Agents can enter the value manually as they set fit. 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.

    •   Specify values to categorize the email.

        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.

   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 Understanding Automated Mail Processing.

See Email Workspace User Preferences Page.

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 these topics. 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 Email Status Tracking.

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 Defining System Settings for Email Processing.

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 topic 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:

Term	*Definition*
Sender	Identifies the person who sent the email.

Term	Definition
Representing	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: • If the sender's role is contact and the mailbox type is *external,* the representing value can be a consumer or company. • If the sender's role is contact and the mailbox type is *partner,* 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. This field does not apply to *internal* mailboxes.
Role	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. 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 Email Page.

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 anonymous user that is specified on the Anonymous Object page of the Installation Options component 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 "Understanding the Business Object Search and Quick Create Process" (Business Object Management).

See "BO Searches on Configurable Search Pages" (Automation and Configuration Tools).

- 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 "Understanding BO Search and Quick Create Setup" (Business Object Management).

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.

In an example where the system creates a case for an inbound email routed to a group worklist that has enabled the Create Case for Every Inbound Email option, the system uses the business unit that is specified in the group worklist definition as the business unit of the case. If this default value is not available, the system accesses the mailbox definition to identify an email business unit using the setID of the case customer, who is also the email sender (for external mailbox type), or use the default business unit that is specified in the definition as the email business unit (for internal mailbox types). Using the email business unit, the system identifies the business unit to use for creating support cases

(for external and partner mailbox types), as well as the business unit to use for creating helpdesk cases (for internal mailbox types).

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.

See "Group Worklist Page" (Automation and Configuration Tools), <u>Defining Email Business Units</u>.

- 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.

An agent can change the business unit of an email , and the change is limited to business units that belong to the same setID as the current business unit. The also value changes 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 topic 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 requeues.

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, if the **Process customer response as new email** option is selected at the system level. 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.

Suppose that the **Process customer response as new email option** is selected, and the inbound email is associated with a case that is currently assigned to a provider group, the email process routes the email to the group worklist of that provider group.

If the option is not selected, the system routes the inbound email to the group worklist of the sender (an agent) of the previous outbound email.

See Understanding Unstructured Email Routing.

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 handle 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 **Reassign**button 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 Worklist Routing Efficiency Page.

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.

• *Requeued:* 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 important when it comes to providing accurate recommendation of actions 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. The email owner can enter classification values as they see fit. Classification data is not required, but it helps the system to perform more effective searches on correspondence templates or recommend actions.

See Understanding Automated Mail Processing.

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.

- Searching for correspondence templates on the Response page based on the available classification data.

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. 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. 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.*

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.

Related Links

Understanding Automated Mail Processing
Defining Mailboxes

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 keyword search on solutions or documents, only one repository is searched at a time. The agent can set up email workspace preference to specify the default repository, default search mode (basic, advanced, or advanced with options) and additional search options (for example, word variation and number of search results to display) for document and solution search.

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.

Related Links

Email Page

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, and service orders. 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.

  - 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.

- Orders and quotes in PeopleSoft Order Capture.

- 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 Notification 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). If the **Use Email Workspace while responding to an existing notification** option is not selected at the system level, the Outbound Notification page is used for responding to existing email from a transaction as well.

  The Outbound Notification 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.

Related Links

Approving Emails
"Understanding Manual Notifications" (Automation and Configuration Tools)
Replying to Inbound Email

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 Email Process States and Incompletely Processed Email.

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.
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.

You can close an email (as completed or canceled) whether or not any replies are sent. Normally, however, an email is closed after one reply is sent. If you suspect that additional correspondence maybe necessary to resolve an issue, you can create an appropriate related transaction (such as a case) from the email prior to closing it out. The same set of values are used in interactions to represent email statuses.

See Message Details Page.

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 is 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.

Related Links

"Worklists and Queues" (Automation and Configuration Tools)
The Email Alert Process
"Understanding CRM Worklists" (Automation and Configuration Tools)

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.

Related Links
Message Details Page

Accessing Inbound Email

To access inbound emails from the main navigation, use the Search Inbound Emails (RB_EM_IB and RB_EM_IB_SRCH) components.

Note: You can also access an inbound email from the Interaction List, the 360-Degree View, a transactional component's interaction history page and on the Thread page of another email that belongs to the same thread.

Pages Used to Access Inbound Email

Page Name	Definition Name	Usage
My Worklist Page	RB_WF_WORKLISTS	View emails that belong to either an individual worklist or a group worklist that is associated with the user.
Search Inbound Email Page	RB_EM_IB_SRCH	Search for an inbound email and access detailed information about it.

See the product documentation for *PeopleTools: PeopleSoft MultiChannel Framework*.

Related Links
"Understanding Interactions" (Application Fundamentals)

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.

My Worklist Page

Use the My Worklist page (RB_WF_WORKLISTS) to view emails that belong to either an individual worklist or a group worklist that is associated with the user.

Navigation:

My Worklist > **Worklist**

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.*

Related Links
"Understanding CRM Worklists" (Automation and Configuration Tools)

Search Inbound Email Page

Use the Search Inbound Email page (RB_EM_IB_SRCH) to search for an inbound email and access detailed information about it.

Navigation:

Correspondence > **Search Inbound Emails** > **Search Inbound Email**

This example illustrates the fields and controls on the Search Inbound Email page (1 of 2). You can find definitions for the fields and controls later on this page.

This example illustrates the fields and controls on the Search Inbound Email page (2 of 2). You can find definitions for the fields and controls later on this page.

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
16	02/16/2006 2:22PM	Jimmy Jacobson	Media Mogule Assoc		02/18/2006 2:22:28PM

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.

Note: When emails appear in the Search Results section initially, they are displayed on the list by email ID in ascending order. If you click the **Email ID** column name to sort emails in the list, the system reorders them (in ascending or descending order) by email ID one character at a time. Suppose that there are three emails in the search result grid and their IDs are 2, 18 and 19 respectively. If you click the column name to sort them by email ID in ascending order, they appear in this order: 18, 19 and 2.

Related Links

"Configuring Searches" (Automation and Configuration Tools)

Working with Inbound Email

These topics provide an overview of the email workspace toolbar and discuss how to work with inbound email.

Pages Used to Work with Inbound Email

Page Name	Definition Name	Usage
Email Page	RB_EM_IB89	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 Page	RB_EM_DOC_VIEWER	Preview document content, add a document to the proposed list, and reply to the email with the document as an attachment.
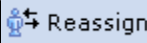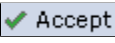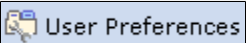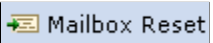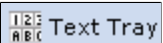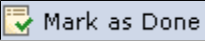
Page Name	Definition Name	Usage
Solution Viewer Page	RB_EM_SOL_VIEWER	View solutions, add a solution to the proposed list, and reply to the email with the solution. If the solution is associated with notes, attachments, or other solutions, the system uses the Solution component to display complete solution information.
Search Solutions/Documents Page	RB_EM_IB_SEARCH	Search for solutions and documents to help resolve an email.
History: Actions Taken Page	RB_EM_IB_HIST	Review an email's event history, routing history, audit trail, and content analysis scores.
Message Details Page	RB_EM_IB_MESSAGE	Review email message properties.
Thread Page	RB_EM_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.
Note Page	RB_EMAIL_NOTE	Enter and view email notes.
Email Workspace User Preferences Page	RB_EW_PREFERENCE	Personalize the email workspace.
Mailbox Reset Page	RB_EM_MBXFORW_SBP	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 Page	RB_EM_IB_RAS_SEC	Reassign an email to a another group or individual worklist.
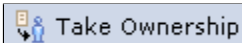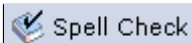
Understanding the Email Workspace Toolbar

Toolbars are configurable and customizable. In addition, you can give end-users the ability to personalize their toolbars.

See "Understanding the Configurable Toolbar" (Automation and Configuration Tools).

PeopleSoft CRM delivers these buttons for the email workspace:

Term	*Definition*
Reassign	Click the **Reassign** button to access the Select Worklist page and select a group or individual worklist to which the email reassigns.
Requeue	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.
Accept	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.
360-Degree View	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 HR, or partner) and the role of the person who accesses the 360-degree view.
User Preferences	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.
Mailbox Reset	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).
Text Tray	Click the **Text Tray** button to create personal quick keys or use available public quick keys.
Mark as Done	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.

Term	Definition
Take Ownership	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).
Spell Check	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 "Delivered Common Toolbar Buttons" (Automation and Configuration Tools).

See "Understanding the Text Tray" (Automation and Configuration Tools).

Common Element Used in Working with Inbound Email

Field or Control	Description
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.

Field or Control	Description
Add Selection(s) and Reply	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. 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. 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. If no preselected documents or solutions are available, clicking this button transfers agents to the Response page.
Add and Reply	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. 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.
Add Selection(s) to Proposed List	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.
Add to Proposed List	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. The viewed item is not yet part of the email response.
View Selection(s)	Click to view selected solutions or documents on the corresponding preview page. 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.
Return to Email	Click to close the solution or document preview page and transfer to the Email page.

Related Links

Email Page

Document Viewer Page

Solution Viewer Page

Search Solutions/Documents Page

Email Page

Use the Email page (RB_EM_IB89) to 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.

Navigation:

- **Correspondence** > **Search Inbound Emails** > **Email**

- **My Worklist** > **My Worklist**

    Click the email ID link for a worklist entry of type *Email Alert.*

- Click the node for an inbound email interaction on any 360-Degree View or pages where interactions are listed.

This example illustrates the fields and controls on the Email page. You can find definitions for the fields and controls later on this 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.

Field or Control	Description
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 *attachment*.

Email Information - Main

This group box contains two tabs: **Main** and **More.**

The **Main** tab displays the email's status that agents work with. 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.

Field or Control	*Description*
Status	Displays the status of the email: *Open, Closed - Auto Response, Closed - Canceled, Closed - Duplicate,* and *Closed - Response.*
Priority	Specify an appropriate priority for the email. You can define priorities on the Priority Setup page.
Category and **Type**	Specify a appropriate category and a type within that category for the email. You can define categories on the Category Setup page; establish types on the Associate Types page.
Product Group	Specify an appropriate product group for the email. Product groups that are available for selection belong to the same setID as the email, which is determined using one of these options: • If the business unit of the email is derived from the **Default Business Unit** field the associated mailbox definition, the system derives the setID using the tableset control mapping. This option applies to email that are sent to mailboxes of types *internal* and *internal H.* • If the business unit of the email is derived from the customer setID of the email, then the same setID is used to filter product groups for the email. This option applies to email that are sent to mailboxes of types *external* and *partner.* Establish product groups on the Product Group page.
Product	Specify an appropriate product for the email. If a product group is selected, only products that are associated with the product group are available for selection. Establish products on the Product Definition page.
Mood	Specify an appropriate mood for the email if applicable. You can define moods on the Mood Setup page.

Field or Control	*Description*
Reply, Reply All, and **Forward**	Click to access the Response page to send a reply or forward the inbound email to others. The operations of these buttons are the same, with several exceptions: • The Reply operation populates only the **To** field with the email address of the inbound email sender. The email subject includes the prefix *RE:*. • 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 *RE:*. The **Reply All** button appears if the incoming email has a Cc list. • 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>	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. 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.

See "Defining Products" (PeopleSoft Product and Item Management), "Defining Template Categories and Types" (Automation and Configuration Tools), Defining Priorities and Moods.

Email Information - 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.

Field or Control	*Description*
Business Unit	Displays the email business unit that is specified in the mailbox definition. The email business unit can be updated, and the change is limited to business units that belong to the same setID as the current business unit 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. **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).
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. 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 *successful resolution.* If the solution doesn't solve the issue, change the status to *failed resolution* instead.

See <u>Defining System Settings for Email Processing</u>, <u>Email Sender Identification</u>, <u>Quick Action Buttons</u>.

Assistance

This group box provides recommended actions that the agent can choose to perform on the email and search capability on recent activities and transactions that relate to the email.

The **Recommended Actions** tab contains a list of recommended actions for the agent to perform. You can define a list of recommended actions based on category in the mailbox definition.

Field or Control	*Description*
Select	Click to perform the corresponding activity. The list is short, and most recommended actions are related to replying email.

Recent Activities

This section contains a list of most recent activities that are associated with the sender of the email.

Field or Control	Description
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

Field or Control	Description
	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.

Related Links

Assistance
Content Sources
Solution and Document Search

Document Viewer Page

Use the Document Viewer page (RB_EM_DOC_VIEWER) to preview document content, add a document to the proposed list, and reply to the email with the document as an attachment.

Navigation:

Click a document link on the Email page, the Response page, or the Search Solutions/Documents page.

In addition to viewing the current document and navigate to other documents in the document list, you can also choose to add it to the proposed list, add it to the proposed list and reply the email with it.

See Common Element Used in Working with Inbound Email.

Solution Viewer Page

Use the Solution Viewer page (RB_EM_SOL_VIEWER) to 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.

Navigation:

Click a solution link on the Email page, the Response page, or the Search Solutions/Documents page.

See Common Element Used in Working with Inbound Email, "Case - Solution Page, Service Order - Solution Page or Quality Management - Solutions Page" (PeopleSoft Services Foundation).

Search Solutions/Documents Page

Use the Search Solutions/Documents page (RB_EM_IB_SEARCH) to search for solutions and documents to help resolve an email.

Navigation:

Correspondence > **Search Inbound Emails** > **Search Solutions/Documents**

This example illustrates the fields and controls on the Search Solutions/Documents page. You can find definitions for the fields and controls later on this page.

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

This section allows you to perform keyword search against the selected repository (solutions or documents) using PeopleSoft Search.

Field or Control	Description
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.
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.
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.

See Common Element Used in Working with Inbound Email.

Related Links

Solution and Document Search
Email Workspace User Preferences Page

History: Actions Taken Page

Use the History: Actions Taken page (RB_EM_IB_HIST) to review an email's event history, routing history, audit trail, and content analysis scores.

Navigation:

Correspondence > **Search Inbound Emails** > **History**

This example illustrates the fields and controls on the History: Actions Taken page. You can find definitions for the fields and controls later on this page.

Actions Taken

This grid displays email history events that the system captures.

Field or Control	Description
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: • 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.

Field or Control	Description
By	Displays the user ID of the user who triggered the event.

Interaction Category

This section displays information of interaction category that is associated with this email, when it was processed and closed through the Multichannel Toolbar. If more than one entry is available, they are listed chronologically (the most recent appears first). If the email is not associated with a category, the *No Interaction Category* message is displayed.

Related Links

Understanding ERMS Setup

History: Routing History Page

Use the History: Routing History page (RB_EM_IB_HIST) to route history.

Navigation:

Correspondence > **Search Inbound Emails** > **History**

Click the **Routing History** link on the History page.

This example illustrates the fields and controls on the History: Routing History page. You can find definitions for the fields and controls later on this page.

Worklist Scores

This grid displays the worklist routing score for the email. Based on the content analysis of the email that is performed by PeopleSoft Search, a routing score is computed for each worklist that is associated with the email's mailbox. The system then assigns the email to the worklist with the highest score. The email is assigned to the default worklist of the mailbox if no scoring information is available, for example, if none of the returned worklist scores meets the minimum threshold value that is set, or the mailbox is not associated with any worklists.

Routing History

This 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.

Field or Control	Description
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 *Manual.* 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.*

Related Links
Understanding Unstructured Email Routing

History: Audit History Page

Use the History: Audit History page (RB_EM_IB_HIST) to review an audit trail.

Navigation:

Correspondence > **Search Inbound Emails** > **History**

Click the **Audit History** link on the History page.

This example illustrates the fields and controls on the History: Audit History page. You can find definitions for the fields and controls later on this page.
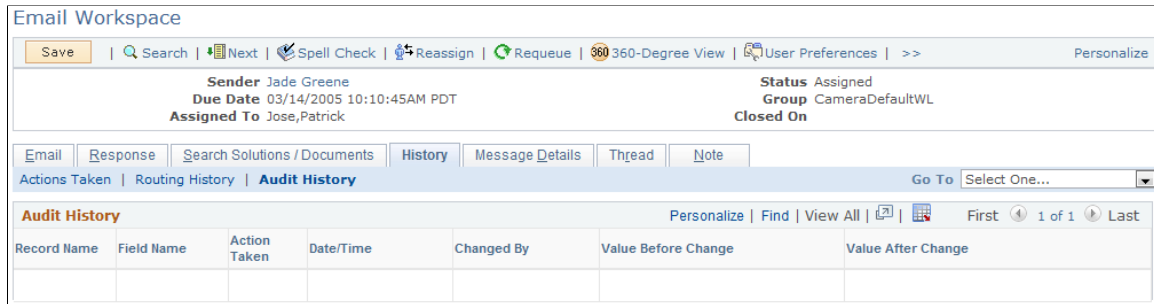
The **Audit History** grid displays record level and field level audit information, including the type of change performed (add, update, or delete), field values before and after the change, the user ID of the person who made the change, and the date and time of the change.

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.

Related Links
"Understanding Audit Information" (Application Fundamentals)

Message Details Page

Use the Message Details page (RB_EM_IB_MESSAGE) to review email message properties.

Navigation:

Correspondence > **Search Inbound Emails** > **Message Details**

This example illustrates the fields and controls on the Message Details page (1 of 2). You can find definitions for the fields and controls later on this page.

System Disposition			
Email Status	Assigned	Process State	Email Routed
Group	CameraDefaultWL	Routed On	03/09/2005 9:42:29AM PST
Assigned To	Jose,Patrick	Date Assigned	03/09/2005 9:42:29AM PST
Closed By		Date Closed	
Last Modified By	ERMSMGR	Last Modified	03/09/2005 11:22AM PST
Internal Warning	03/12/2005 9:12:21AM PST	Internal Due	03/13/2005 10:12:21AM PDT
External Warning	03/12/2005 9:10:45AM PST	External Due	03/14/2005 10:10:45AM PDT

This example illustrates the fields and controls on the Message Details page (2 of 2). You can find definitions for the fields and controls later on this page.

Message Header			
Date Sent	03/09/2005 9:49:35AM PST -480	Date Received	03/09/2005 9:49:47AM PST
To	printers@rt.peoplesoft.com	Mailbox ID	Tools User
From	ermstest@yahoo.com	Reply To	ermstest@yahoo.com
Subject	Re: RE: test 3		
UID List	3086-1030149506		
Email Message Id	<20050309174935.51001.QMAIL@WEB51603.MAIL.YAHOO.COM>		
Reference ID List			
Reply To Ids	<6667@dsi-ims.peoplesoft.com>		
Language	ENG		
Email Size	3450		
Attachment List			
Attach Sizes			
Custom Headers	X-Server-Uuid: 97E61B0B-31B1-4572-AFF6-48F591B43C57; X-WSS-ID: 6E31E8BB1D84742815-01-01;		

Multichannel Message Parts	First ◀ 1-2 of 2 ▶ Last
File Name or Text Preview	Content Type
Replying… printers@rt.peoplesoft.com wrote:Dear Jade Gr	text/plain; charset=us-ascii
Attachment	text/html; charset=us-ascii

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.

Field or Control	Description
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.

Field or Control	*Description*
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 *PeopleTools: PeopleSoft MultiChannel Framework* contains more information on time zone offsets.

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 *PeopleTools: 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.

Thread Page

Use the Thread page (RB_EM_THREAD) to 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.

Navigation:

- **Correspondence** > **Search Inbound Emails** > **Thread**

- **Correspondence** > **Search Outbound Emails** > **Thread**

This example illustrates the fields and controls on the Thread page. You can find definitions for the fields and controls later on this page.
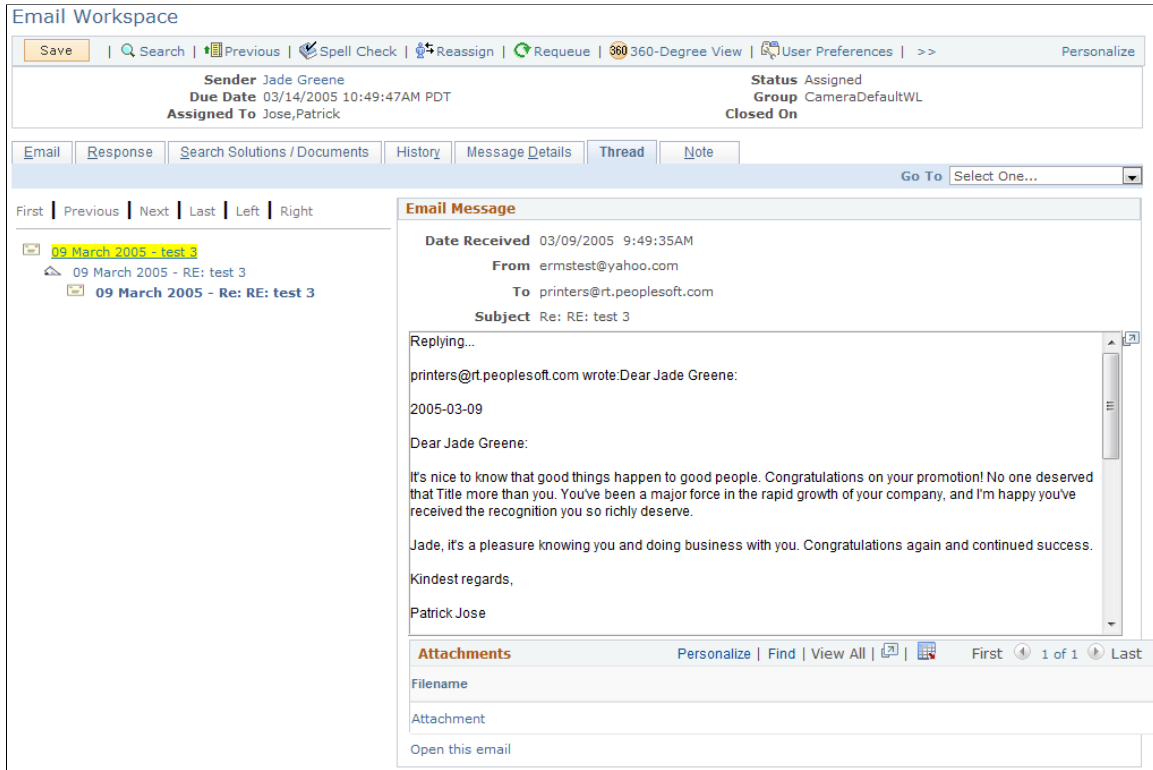
The construction of the thread tree on the left is based on the interaction thread information that is stored as part of a conversation. When you click an email link, the email content shows in the message area on the right. If you want to change the association of the current email (change email threading), perform the action on the Recent Activities tab on the Email page by relating the current email to another email as the new parent.

Field or Control	Description
	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.

Select Worklist Page

Use the Select Worklist page (RB_EM_IB_RAS_SEC) to reassign an email to a another group or individual worklist.

Navigation:

Click the **Reassign** button on the toolbar.

This example illustrates the fields and controls on the Select Worklist page. You can find definitions for the fields and controls later on this page.

Select Worklist

Reassignment Details

*Group Worklist Name [   ] 🔍

Individual (optional) [▼]

*Reason [▼]

Comments [   ] ↗

254 characters remaining

[OK]   [Cancel]

Field or Control	Description
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	Select a routing reason. Use the following values for manual rerouting: *Escalated, Misrouted, Overridden Reassigned,* or *Other.* Other values that are used during automatic rerouting are also available. These values are *Accepted, Bypassed, Encoding, Oversized, Requeued,* and *Routed.*
Comments	Enter a comment that provides information about the reassignment. This is required if the routing reason is *Other.*
OK	Click to reassign the email to the selected worklist.

Note: Similar functionality is available from My Worklist.

Reassign Email Item to Selected Worklist

This section appears if the system returns worklists in the Worklist Scores grid of the History: Routing History page. 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.

Related Links

"Forwarding and Reassigning Worklist Entries" (Automation and Configuration Tools)

Note Page

Use the Note page (RB_EMAIL_NOTE) to enter and view email notes.

Navigation:

- **Correspondence** > **Search Inbound Emails** > **Note**

- **Correspondence** > **Search Outbound Emails** > **Note**

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 "Understanding Notes and Attachments" (Application Fundamentals).

Email Workspace User Preferences Page

Use the Email Workspace User Preferences page (RB_EW_PREFERENCE) to personalize the email workspace.

Navigation:

Click the **User Preferences** toolbar button on the email workspace.

This example illustrates the fields and controls on the Email Workspace User Preferences page (1 of 2). You can find definitions for the fields and controls later on this page.

This example illustrates the fields and controls on the Email Workspace User Preferences page (2 of 2). You can find definitions for the fields and controls later on this page.

Message Action

Field or Control	Description
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 the email workspace.

General Setting

Field or Control	Description
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.

Field or Control	Description
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

Field or Control	Description
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

Field or Control	Description
Search Mode	Select the default search mode that is used to perform PeopleSoft Search keyword search. Options are *basic search, advanced search,* and *advanced search - more search options.*

Field or Control	Description
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

Field or Control	Description
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 phase. • 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. • Stemmings.
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

Field or Control	Description
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.

Search Domains

Select the template package and solution specific fields as well as solution libraries that you want the system to use to search for documents and solutions.

Related Links

"Understanding Global Search for CRM" (Automation and Configuration Tools)

"Understanding PeopleSoft Search Framework Definitions for CRM" (Automation and Configuration Tools)

"Understanding PeopleSoft Search Framework Implementation for CRM" (Automation and Configuration Tools)

Mailbox Reset Page

Use the Mailbox Reset page (RB_EM_MBXFORW_SBP) to submit emails to another mailbox.

This functionality resets most data of the email before sending it back to the ERMS system for reprocessing.

Navigation:

Click the **Mailbox Reset** toolbar button on the email workspace.

This example illustrates the fields and controls on the Mailbox Reset page. You can find definitions for the fields and controls later on this page.

Replying to Inbound Email

These topics discuss how to handle inbound emails. 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	Usage
Response Page	RB_EM_IB_RESP	Reply to an inbound email.
Email Reply or Start New Thread Page	RB_EM_OPERATE_SEC	Start a new email thread from the CRM transaction or reply to an email of that transaction.
Outbound Email Page	RB_EM_OB_VIEW	Review outbound email and process approval (RB_EM_OB_VIEW).

Response Page

Use the Response page (RB_EM_IB_RESP) to reply to an inbound email.

Navigation:

- **Correspondence** > **Search Inbound Emails** > **Response**

- Click the **Reply** button on the Email page.

- Click the **Notification** 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.

This example illustrates the fields and controls on the Response page (1 of 2). You can find definitions for the fields and controls later on this page.

This example illustrates the fields and controls on the Response page (2 of 2). You can find definitions for the fields and controls later on this page.

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.

Field or Control	Description
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. **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.
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, if applicable. This grid displays only proposed solutions that are available.
Category, Type, Product Group, Product, and **Keywords**	Enter values in these fields as criteria the system uses to perform the template search for the email. 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.
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.

Field or Control	Description
Preview	Click to access the Template Text Viewer page (RB_EM_TEXT_VIEWER) to view the email response that is formatted with the selected template.
Apply Template	Click to populate the email response to which a template is applied in the Message Area group box. 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.
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 **Notification** button on the toolbar from a transaction to send an email, the system either transfers you directly to the Outbound Notification 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 Notification page appears where you compose the new message. If the **Use Email Workspace while responding to an existing notification** option is selected, the Response page is used 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.**

Related Links

"Sending Manual Notifications From CRM Transactions" (Automation and Configuration Tools)

Email Reply or Start New Thread Page

Use the Email Reply or Start New Thread page (RB_EM_OPERATE_SEC) to start a new email thread from the CRM transaction or reply to an email of that transaction.

Navigation:

Click the **Notification** button from the toolbar of a transaction (for example, case), which you navigated to from another email.

This example illustrates the fields and controls on the Email Reply or Start New Thread page. You can find definitions for the fields and controls later on this page.
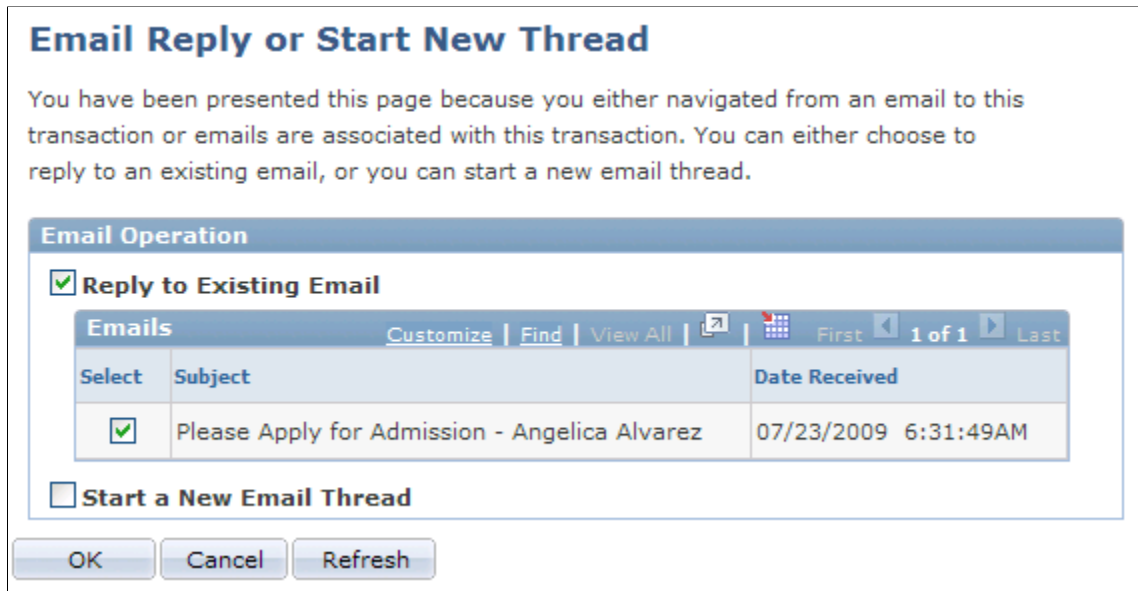
Email Operation

When you click the **Notification** 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 page 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 directly to the Outbound Notification page to start new email thread.

Field or Control	Description
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 Notification page appears if the **Use Email Workspace while responding to an existing notification** option is not selected. If the option is selected, the Response page is used.

Outbound Email Page

Use the Outbound Email page (RB_EM_OB_VIEW) to review outbound email and process approval (RB_EM_OB_VIEW).

Navigation:

Correspondence > **Search Outbound Emails** > **Outbound Email**

This example illustrates the fields and controls on the Outbound Email page (1 of 2). You can find definitions for the fields and controls later on this page.
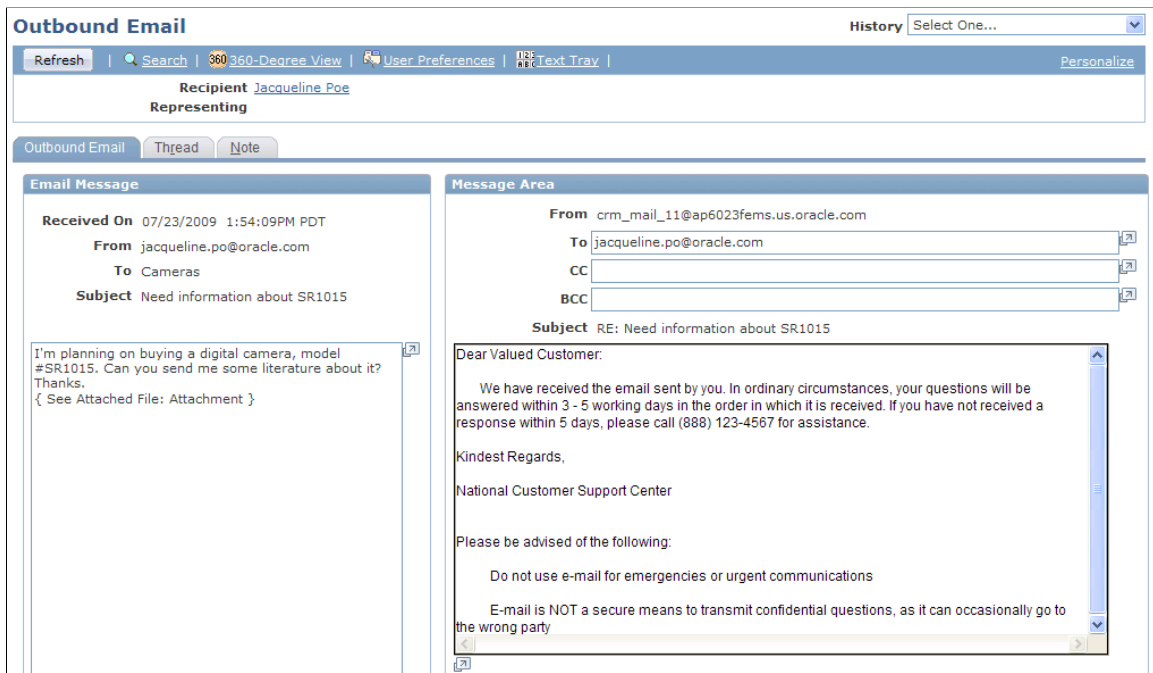
This example illustrates the fields and controls on the Outbound Email page (2 of 2). You can find definitions for the fields and controls later on this page.
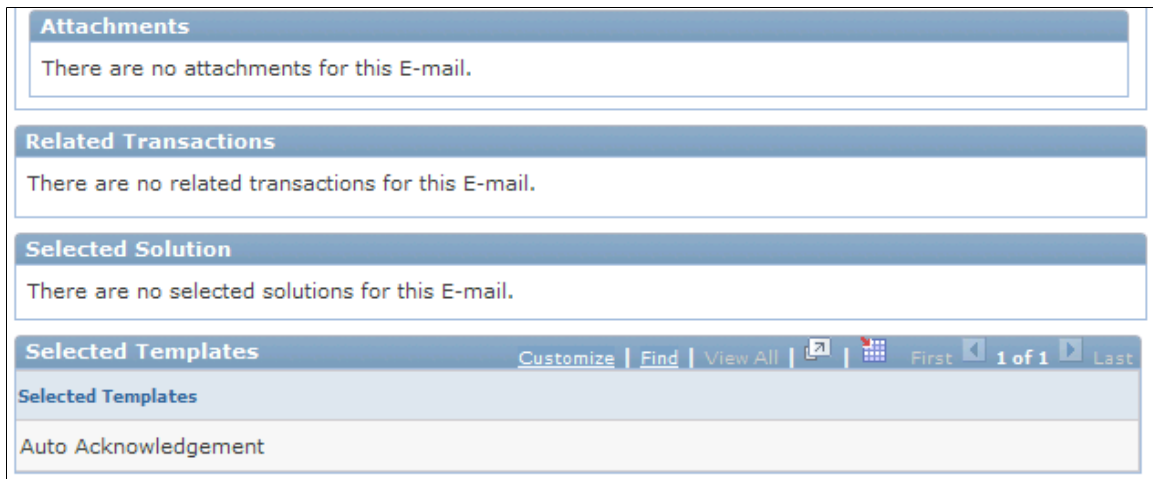
The Outbound Email component is in read-only mode when you access it from the menu navigation. The interface is similar to the Response page of the email workspace. You can review the content of the outbound email and the corresponding inbound email. The interface also lists any related transactions 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 (Correspondence, Search Outbound Emails, Thread).

The system uses the same Thread page for inbound and outbound emails.

See Thread Page.

Reviewing Outbound Email Notes

Access the Note page (Correspondence, Search Outbound Emails, Note).

The system uses the same Note page for inbound and outbound emails.

See "Entering and Viewing Notes" (Application Fundamentals).

Chapter 14

Working with Chat in PeopleSoft CRM

Understanding the Chat Workspace

These topics discuss:

- 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 Understanding Multichannel Toolbar Functionality.

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 "Understanding the Text Tray" (Automation and Configuration Tools).

Quick Actions

The agent chat window provides a list of actions that the agent can perform for customers while interacting with them. PeopleSoft 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 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 agent popup page on the right side of the chat workspace.

    This is useful after the agent navigates in different pages for a while and wants to returns 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 scroll the agent chat window to view the agent popup page while researching information for the customer.

Related Links
Application Data in the Chat Workspace
Configuring Agents for Unified Agent Desktop

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 can categorize the session on the toolbar before closing the chat workspace browser window. The selected category is available for viewing in the interaction created for the chat session, as well as on reports.

CRM delivers a chat-specific category set that you can use to categorize chat sessions.

Agent-to-agent chat sessions are not subject to categorization.

Related Links
Category Codes Page

Working with the Customer Chat Window
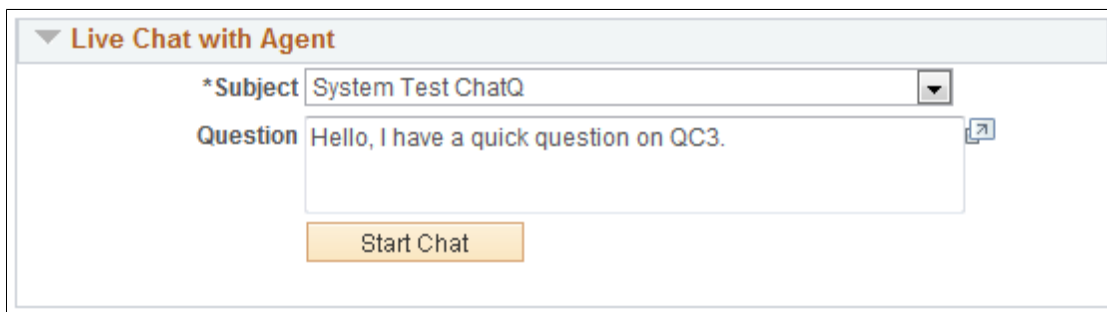
These topics discuss how self-service customers:

- Send chat requests.

- Use the customer chat window.

Sending Chat Requests

Access any CRM self-service page that is enabled for the chat feature.

This example illustrates the fields and controls on the Chat portion of a self-service page. You can find definitions for the fields and controls later on this page.

This chat portion appears on a self-service page if ERMS (Email Response Management System) is licensed *AND* the chat feature is enabled.

Field or Control	Description
Your Name	Enter the name that the system and agent can use to address the self-service user during the chat session. This field appears if the **Allow guest user to enter name** option is selected in the chat profile that is associated with the self-service page.
Subject	Select the subject of the question from values that are defined in the associated chat profile. The CRM system uses the subject information for routing chat requests to corresponding queues.
Question	Enter the specific customer question. Users must enter questions in chat requests, if such option is specified in the associated chat profile.
Start Chat	Click to submit a chat session to the queue server. Once completed, the CRM system displays a message to inform customers that the chat request is submitted to the queue server automatically. 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.

Related Links
"Contact Us Page" (Application Fundamentals)

Using the Customer Chat Window

Access the customer chat window (click the **Start Chat** button on a chat-enabled self service page).

This example illustrates the fields and controls on the Customer chat window. You can find definitions for the fields and controls later on this page.

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.

Field or Control	Description
Send	Click to send the chat message you entered in the **Input Text** field to the agent.
Exit Dialog	Click to close and leave the chat session.

See *PeopleTools: PeopleSoft MultiChannel Framework*

Working with the Agent Chat Workspace

These topics discuss how to work with agent chat workspace.

Page Used to Work with the Agent Chat Workspace

Page Name	Definition Name	Usage
Push Web Page Page	RB_CHAT_WIZARD	Display 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.

Chat Workspace

Access the chat workspace (click to accept an incoming chat request).

This example illustrates the fields and controls on the Chat workspace. You can find definitions for the fields and controls later on this page.
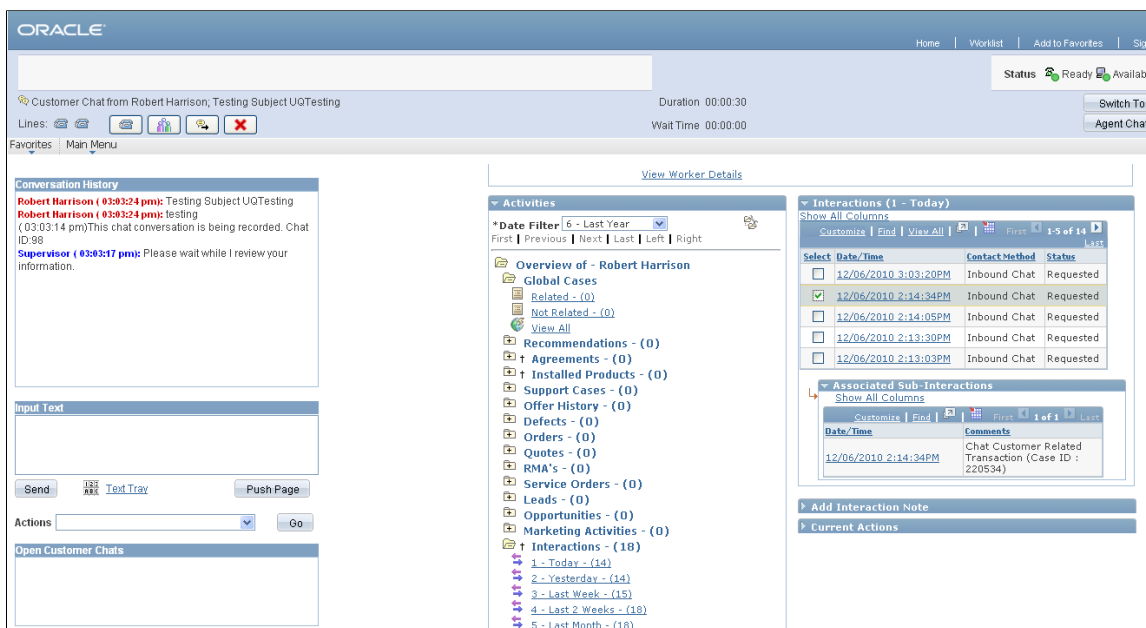
Depending on the accept and popup modes that are selected for agent-to-agent and agent-to-customer chat window types in the agent configuration, the agent may not be required to click the chat task notification that appears on the Multichannel Toolbar to accept the chat request. Typically, if both modes 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

Field or Control	*Description*
Conversation History	Displays the ongoing chat dialog. Each response has a time stamp and is color-coded by participant for easy recognition. 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.
Input Text	Enter the agent's response. 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.
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 side of the chat workspace 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	Select an action to perform on the chat session. Options are: • Email password. • Email chat log. • Push web page. • Display initial screen.
Open Customer Chats	Displays all active chat sessions that the agent is currently processing. If any one of the sessions receives a response, a visual cue appears to alert the agent of the activity.

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).

Push Web Page Page

Use the Push Web Page page (RB_CHAT_WIZARD) to display 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.

Navigation:

Select the Push web page action on the chat workspace.

When the agent selects the action to push a web page to the customer, the Push Web Page page appears:

This example illustrates the fields and controls on the Push Web Page page . You can find definitions for the fields and controls later on this page.
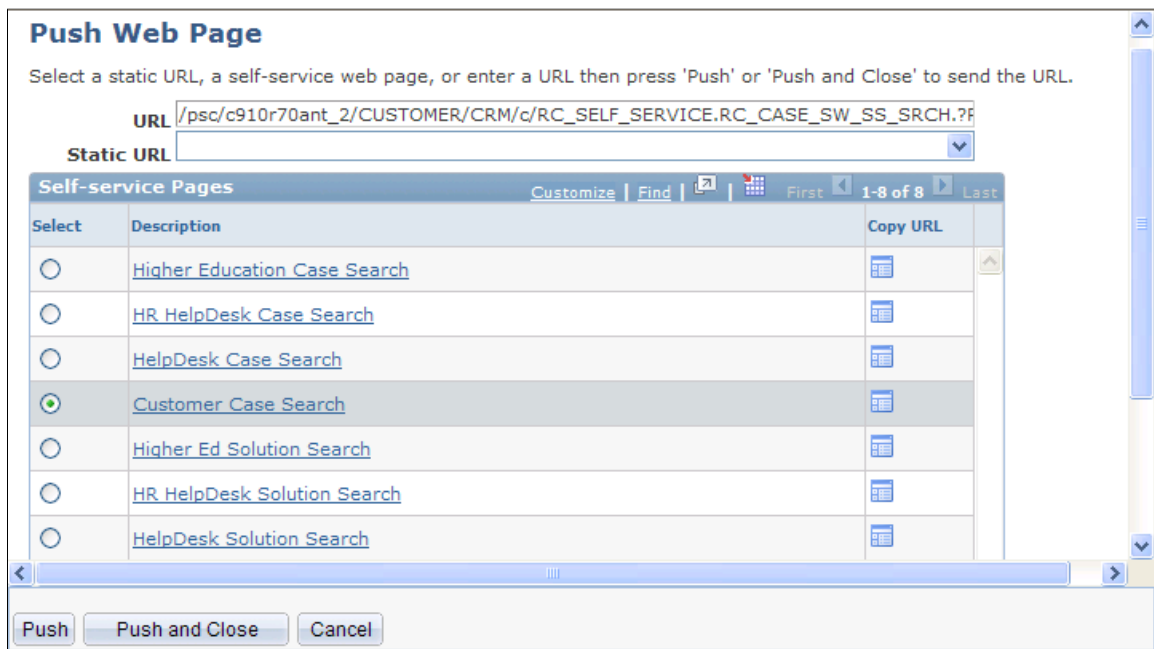
In addition to performing the push web page action, agents can also push a transactional page to customers by clicking the **Push <transaction>** button that's available (if agents are navigating transactions on the agent popup page section, for example, order). Currently, CRM supports the pushing of case and order pages using buttons.

After the URL has been pushed to the customer, a confirmation message appears in the **Conversation History** field.

Field or Control	Description
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.

Field or Control	Description
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 Configuring Agents.
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:

This example illustrates the fields and controls on the Enter user ID window.
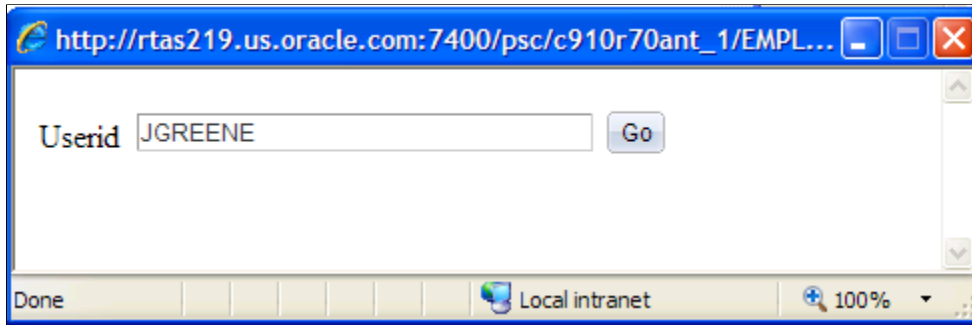
The Send Password window then appears:

This example illustrates the fields and controls on the Send Password window.
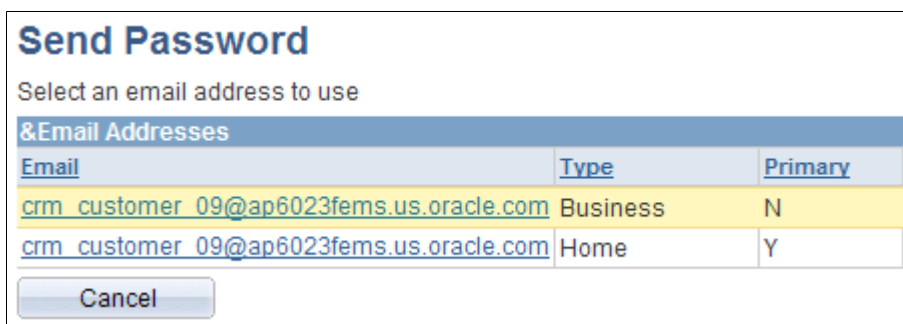
Click the customer email address to which the password is sent. This action resets the user's password to *password.* After the password has been mailed to the customer, a confirmation message appears in the **Conversation History** field.

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 Agent Chat Window.

Emailing Chat Logs

When the agent selects the action to send the chat transcript to the customer, the Email Chat Log window appears:

This example illustrates the fields and controls on the 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.

Important! Sometimes, chat logs cannot be mailed to customers successfully because their line lengths exceed the default maximum line length that the mail server can accept. Check the text line setting of your mail server configuration and increase the number by the use of SMTP Service Extensions if needed.

Transferring Chat Sessions to Other Queues

When the agent clicks the **Forward Chat** button, the Transfer Chat to Queue window appears:

This example illustrates the fields and controls on the Transfer Chat to Queue window.

Field or Control	Description
Name	Displays the list of queues to which the chat session can be transferred. Click the name of the queue that the chat session should go to start the transfer. When the transfer is completed, the current session ends automatically. The agent can categorize the chat session on the Multichannel Toolbar before closing the chat workspace browser window.
Agents Logged In	Displays the number of agents who are currently logged on for the corresponding queue. This information is displayed after the agent availability check is performed.
Agent Available	Displays the number of agents who are currently set to be available for the corresponding queue. This information is displayed after the agent availability check is performed.
Check Availability	Click the **Availability** button to check for agent availability for the corresponding queue. The button label is changed to *Checking* while the check is in progress. When it is finished, the system displays the number of agents who are logged in and the number of agents who are marked as ready for the queue. If no statistics can be retrieved after the check process times out (30 seconds), a dialog box appears and relays the message back to the agent. The numbers are not updated automatically; when needed, click the button to refresh the data. --- **Note:** The Check Availability feature provides information on agent availability in queues so that when an agent thinks about forwarding a chat session to another queue, he or she can decide what to do based on the current state of the queue. Agents can, but do not have to, check for agent availability before they transfer chat sessions. Here is an example. Suppose that an agent is chatting with a customer and he thinks that he should forward the chat session a different queue so another agent from a specialized team can review the customer's request. After he checks for agent availability for that queue, he realizes that there is an agent currently logged on but the agent is not set to be available. With this information in hand, he can inform the customer of the situation and make recommendations. For instance, create a case for the customer and assign it to the target group, or continue forward the chat session on just in case someone becomes available momentarily (if the customer can wait). --- The system allows the transfer of chat sessions to queues that do not have logged-in or available agents currently. It provides flexibility because either agents are in the process of logging in or making themselves available, or managers who monitor queues can adjust staffing resources dynamically based on the real-time information they receive—have agents log into queues with tasks waiting to be reviewed.

Conferencing with Other Agents

When the agent clicks the **Conference** button, the Conference Chat window appears:

This example illustrates the fields and controls on the Conference Chat window.
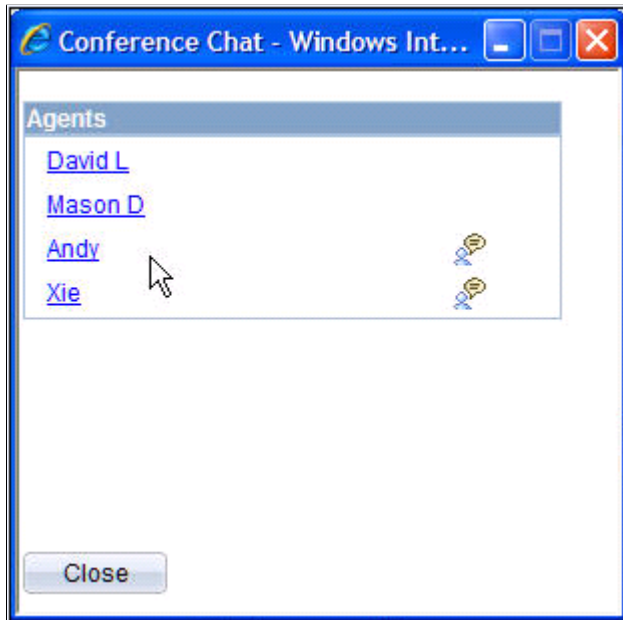
During a chat session, the agent can invite another agent to join the chat. The invited agent can interact with all participants to exchange ideas and discuss issues.

Click the agent's name to initiate the conference chat.

When the chat session is displayed to the invited agent, the chat history between the first agent and the customer appears as reference.

Chatting with Other Agents

When the agent clicks the **Agent Chat** button, the Agent to Agent Chat window appears:

This example illustrates the fields and controls on the Agent to Agent Chat window.
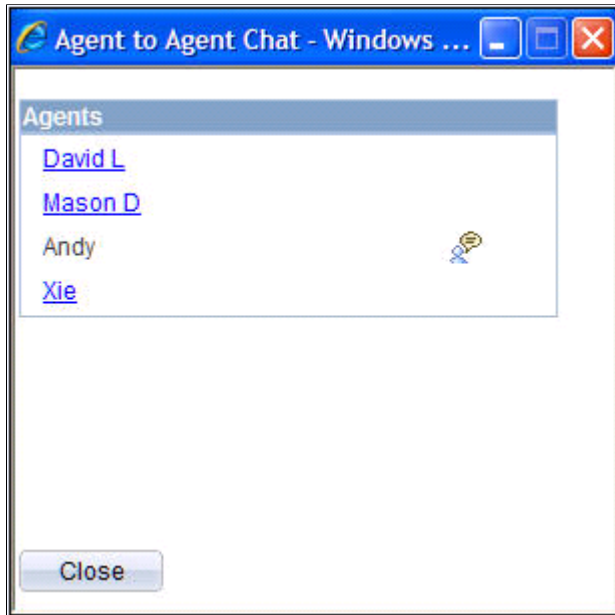
In addition to inviting an agent to start a three-way conferencing chat, the agent can initiate a chat session with another agent without the customer knowledge. The agents can discuss the customer's issue and later relay the information back to the customer.

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 can categorize the session in the **Category** field that appears on the toolbar.

The selected category is available for viewing in the interaction created for the chat session.

See the product documentation for *PeopleTools: PeopleSoft MultiChannel Framework*.

Related Links
Configuring Agents for Unified Agent Desktop

Viewing Chat Logs and Reports

To view chat details, use the Chat Detail (RB_CHAT_DETAIL) component.

Pages Used to View Chat Logs and Reports

Page Name	Definition Name	Usage
Chat Log Page	RB_CHAT_LOG	View chat transcripts and related transactions.

Page Name	Definition Name	Usage
Chat Details Page	RB_CHAT_DETAIL	View system information about the chat session.
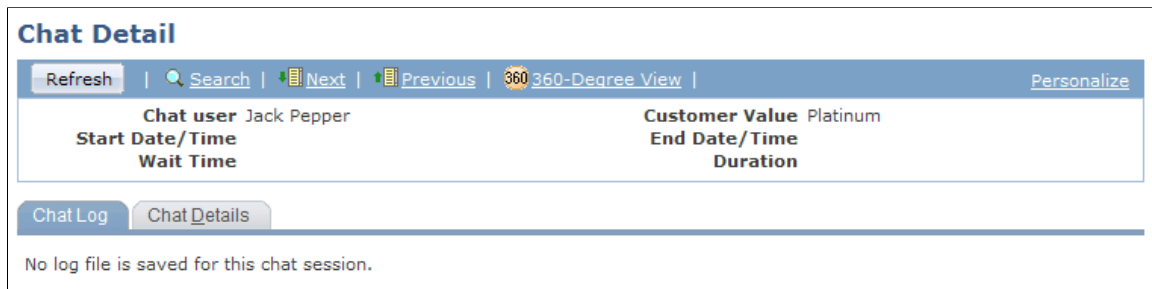
Chat Log Page

Use the Chat Log page (RB_CHAT_LOG) to view chat transcripts and related transactions.

Navigation:

Correspondence > **Chat Detail** > **Chat Log**

This example illustrates the fields and controls on the Chat Log page. You can find definitions for the fields and controls later on this 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.

Related Links
Chat Logs and Reports

Chat Details Page

Use the Chat Details page (RB_CHAT_DETAIL) to view system information about the chat session.

Navigation:

Correspondence > **Chat Detail** > **Chat Details**

This example illustrates the fields and controls on the Chat Details page. You can find definitions for the fields and controls later on this page.
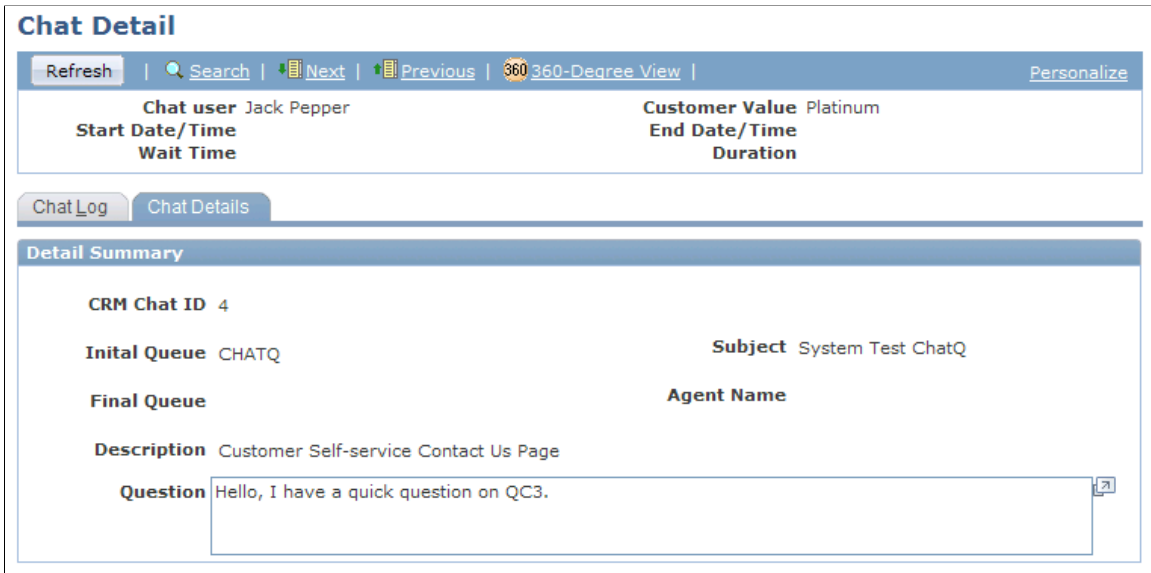
Detail Summary

Field or Control	Description
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.

Interaction Category

This section displays information of interaction category that is associated with this chat session. If more than one entry is available, they are listed chronologically (the most recent appears first). You can click the Refresh toolbar button to refresh the list as needed. If the category information does not exist, the *No Interaction Category* message is displayed.

Field or Control	Description
Description	Displays the category of the chat session.

Viewing Chat Reports

See PeopleSoft CRM Multichannel Communications Reports: General Description.

Chapter 15

Working with Supervisor Desktop

Monitoring Real-Time Information

These topics discuss how to monitor real-time information.

Important! It is recommended that you run Supervisor Desktop on Internet Explorer version 7 or later.

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 Defining System-Level Settings for Supervisor Desktop.

Pages Used to Monitor Real-Time Information

Page Name	*Definition Name*	*Usage*
Realtime Monitoring Page	RB_SD_MONITOR	Monitor real-time information.
Realtime Monitoring - Details for <agent name> Page	RB_SD_MONITOR	View agent details.
Realtime Monitoring - Details for <queue name> Page	RB_SD_MONITOR	View queue details.

Realtime Monitoring Page

Use the Realtime Monitoring page (RB_SD_MONITOR) to monitor real-time information.

Navigation:

MultiChannel > **Supervisor Desktop** > **Real-time Monitoring**

This example illustrates the fields and controls on the Realtime Monitoring page showing agent statistics by assigned queues. You can find definitions for the fields and controls later on this page.

This example illustrates the fields and controls on the Realtime Monitoring page showing agent statistics by team. You can find definitions for the fields and controls later on this page.

This example illustrates the fields and controls on the Realtime Monitoring page showing agent statistics by queue list. You can find definitions for the fields and controls later on this page.

This example illustrates the fields and controls on the Realtime Monitoring page showing queue statistics by assigned queues. You can find definitions for the fields and controls later on this page.

This example illustrates the fields and controls on the Realtime Monitoring page showing queue statistics by team. You can find definitions for the fields and controls later on this page.

This example illustrates the fields and controls on the Realtime Monitoring page showing queue statistics by queue list. You can find definitions for the fields and controls later on this page.

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 Realtime Monitoring - Details for <agent name> Page.

- 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 Realtime Monitoring - Details for <queue name> Page.

- 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.

Important! Data for abandoned tasks is only supported for the voice channel only (that is, CTI queues), in which case a numerical value is displayed. For other queues, this piece of information is not supported by the REN server and therefore, the field shows a "-" symbol, indicating unavailability.

- The average wait time to accept tasks and the average duration to finish tasks. The average duration is available to multichannel queues only.

Realtime Monitoring - Details for <agent name> Page

Use the Realtime Monitoring - Details for <agent name> page (RB_SD_MONITOR) to view agent details.

Navigation:

Click an agent link on the Realtime Monitoring page while the **Monitor Type** is set to *Agent Statistics*.

This example illustrates the fields and controls on the Realtime Monitoring - Details for <agent name> page. You can find definitions for the fields and controls later on this page.

Monitor Settings

Field or Control	Description
Return to Summary View	Click to return to the previous page where summary agent statistics are displayed.

Field or Control	Description
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.

Field or Control	Description
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 *unavailable* 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.

Field or Control	Description
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.

Field or Control	Description
Average Hold Time	Displays the average time that calls are put on hold by the agent.

Task Totals (Multichannel only)

Field or Control	Description
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.

Realtime Monitoring - Details for <queue name> Page

Use the Realtime Monitoring - Details for <queue name> page (RB_SD_MONITOR) to view queue details.

Navigation:

Click a queue link on the Realtime Monitoring page while the **Monitor Type** is set to *Queue Statistics*.

Note: Details for a voice queue are not available. For this reason, voice queues are not shown as links in the queue summary display.

This example illustrates the fields and controls on the Realtime Monitoring - Details for <queue name> page (1 of 2). You can find definitions for the fields and controls later on this page.

This example illustrates the fields and controls on the Realtime Monitoring - Details for <queue name> page (2 of 2). You can find definitions for the fields and controls later on this page.

Multichannel Detail Statistics				
Statistic	Aggregate	Chat	Email	Generic
Tasks In Queue	0	0	0	0
Tasks Accepted	1	1	0	0
Tasks Done	6	6	0	0
Tasks Escalated	256	256	0	0
Tasks Overflowed	1	1	0	0
Most Recent Task Time	22:33:24	22:33:24	00:00:00	00:00:00
Oldest Task Time	22:33:24	22:33:24	00:00:00	00:00:00
Average Wait Time	00:00:04	00:00:04	00:00:00	00:00:00
Average Duration	00:08:39	00:08:39	00:00:00	00:00:00
Time Since Queue Start	34:40:12			

Multichannel Detail Statistics

Field or Control	Description
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.

Field or Control	Description
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

This topic discusses how to run performance reports.

Page Used to Run Performance Reports

Page Name	Definition Name	Usage
Performance Reports Page	RB_SD_REPORT	Run multichannel communications reports that are configured in Supervisor Desktop.

Performance Reports Page

Use the Performance Reports page (RB_SD_REPORT) to run multichannel communications reports that are configured in Supervisor Desktop.

Navigation:

MultiChannel > **Supervisor Desktop** > **Performance Reports**

This example illustrates the fields and controls on the Performance Reports page. You can find definitions for the fields and controls later on this page.

Run a Performance Report

Field or Control	*Description*
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 <u>PeopleSoft CRM Multichannel Communications Reports: General Description</u>.

<Link section>

This section displays the links (URLs that are established in the PeopleTools URL library) that are specified on the Reports page of the setup component for Supervisor Desktop.

Related Links
<u>Images and Text Page</u>

Approving Emails

This topic discusses how to approve emails.

Page Used to Approve Emails

Page Name	*Definition Name*	*Usage*
<u>Email Approval Page</u>	RB_SD_APPROVAL	Approve emails This page lists email (currently pending approval) for this agent to perform individual review or mass approval.

Email Approval Page

Use the Email Approval page (RB_SD_APPROVAL) to approve emails.

This page lists email (currently pending approval) for this agent to perform individual review or mass approval.

Navigation:

MultiChannel > **Supervisor Desktop** > **Email Approval**

This example illustrates the fields and controls on the Email Approval page. You can find definitions for the fields and controls later on this page.
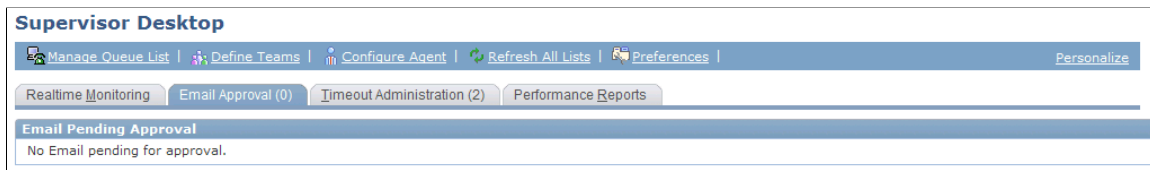
Next to the page name is the number of email that is pending approval for the signed-in user, who is the email approver defined in the agent's configuration. Select from the list of email to give approval.

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

Field or Control	Description
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. 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.
Approve Selected	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

These topics discuss how to manage timeout entries.

Pages Used to Manage Timeout Entries

Page Name	Definition Name	Usage
Timeout Administration Page	RB_SD_TIMEOUT	Manage timeout entries.
Supervisor Desktop - Timeout Entry Details page	RB_SD_TIMEOUT_SEC	View timeout entries.

Timeout Administration Page

Use the Timeout Administration page (RB_SD_TIMEOUT) to manage timeout entries.

Navigation:

MultiChannel > **Supervisor Desktop** > **Timeout Administration**

This example illustrates the fields and controls on the Timeout Administration page. You can find definitions for the fields and controls later on this 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

Field or Control	Description
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.

Supervisor Desktop - Timeout Entry Details page

Use the Supervisor Desktop - Timeout Entry Details page (RB_SD_TIMEOUT_SEC) to view timeout entries.

Navigation:

Click the timeout date and time link of an entry on the Timeout Administration page.

This example illustrates the fields and controls on the Supervisor Desktop - Timeout Entry Details page. You can find definitions for the fields and controls later on this 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.

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.

Pages Used to Configure Agents

Page Name	Definition Name	Usage
Configure Agent - Voice Configuration Page	RB_AGT_CFG_VOICE	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 Page	RB_AGT_CFG_MCF	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.
Configure Agent - Email Configuration Page	RB_AGT_CFG_ERMS	Specify default reply to addresses and email approval settings for agents' outgoing emails.
Configure Agent - Miscellaneous Configuration Page	RB_AGT_CFG_MISC	Specify warning settings to be used on the Multichannel Toolbar.
Agent Configuration - Copy Agent Settings Page	RB_AGT_CFG_COPY	Copy settings of the current agent and apply them to another agent.

Common Elements Used in Configuring Agents

Field or Control	Description
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.

Field or Control	Description
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.

Configure Agent - Voice Configuration Page

Use the Configure Agent - Voice Configuration page (RB_AGT_CFG_VOICE) to specify agent properties for supporting voice tasks, including agent and CTI configuration IDs, window preferences, phone book entries, and status codes.

Navigation:

- **MultiChannel** > **Supervisor Desktop**

   Click the **Configure Agent** toolbar button, find an agent to be configured or click the **Configure this Agent** link while monitoring agent details, and access the Configure Agent - Voice Configuration page.

- **Set Up CRM** > **Product Related** > **Multichannel Definitions** > **Agent Configuration** > **Search for Agent**

   Find an agent to be configured, and access the Configure Agent - Voice Configuration page.

This example illustrates the fields and controls on the Configure Agent - Voice Configuration page: Agent Detail. You can find definitions for the fields and controls later on this page.

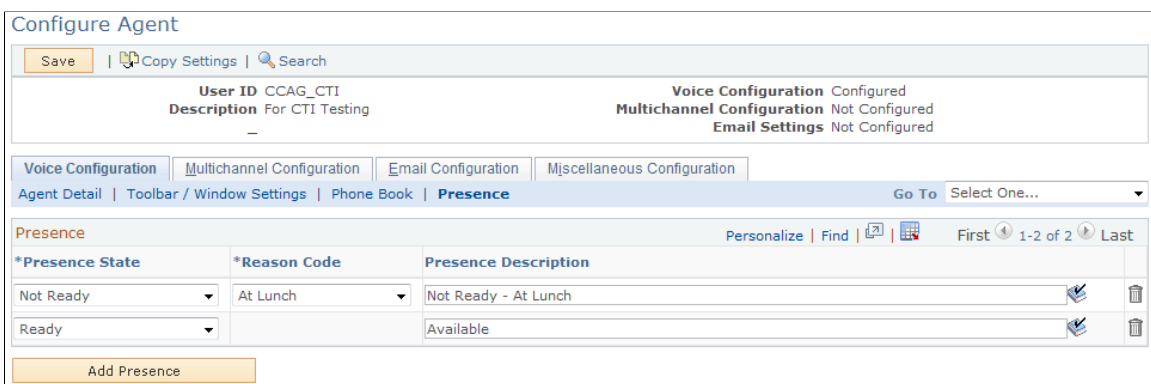**Note:** An agent cannot be configured if the HR status (which changes based on the selected employee status) of the corresponding worker is *Inactive*. HR and employee statuses are considered sensitive worker information and is accessible only to users with roles that are specified in the Secured Worker Role page.

Field or Control	Description
Voice Agent ID and Password	Enter the ID and password to be used by the agent when handling voice tasks.
Configuration ID	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. See *PeopleTools: PeopleSoft MultiChannel Framework*, "Configuring PeopleSoft CTI"
Queue	Select the name of the queue that you want to assign to an agent. See *PeopleTools: PeopleSoft MultiChannel Framework*, "Configuring PeopleSoft CTI"
Toolbar Tracing	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*. Note that the higher the level of tracing, the more it affects system performance. **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.
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.

This example illustrates the fields and controls on the Configure Agent - Voice Configuration page: Toolbar/Window Settings . You can find definitions for the fields and controls later on this page.

Field or Control	Description
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. Values are: *0 - Popup when incoming:*(automatic mode) the window pops up while the system accepts the incoming phone call automatically for the agent. *1 - Popup after answer:* (manual mode) the window pops up after the agent clicks phone line icon to answer the call. See Common Elements Used in Configuring Agents.

This example illustrates the fields and controls on the Configure Agent - Voice Configuration page: Phone Book. You can find definitions for the fields and controls later on this page.

Field or Control	Description
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.

This example illustrates the fields and controls on the Configure Agent - Voice Configuration page: Presence. You can find definitions for the fields and controls later on this page.

Field or Control	Description
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.

Configure Agent - Multichannel Configuration Page

Use the Configure Agent - Multichannel Configuration page (RB_AGT_CFG_MCF) to 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.

Navigation:

- **MultiChannel** > **Supervisor Desktop**

  Click the **Configure Agent** toolbar button, find an agent to be configured or click the **Configure this Agent** link while monitoring agent details, and access the Configure Agent - Multichannel Configuration page.

- **Set Up CRM** > **Product Related** > **Multichannel Definitions** > **Agent Configuration** > **Search for Agent**

  Look up an agent to be configured and access the Configure Agent - Multichannel Configuration page.

This example illustrates the fields and controls on the Configure Agent - Multichannel Configuration page: Agent Detail . You can find definitions for the fields and controls later on this page.


Field or Control	Description
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.

Field or Control	Description
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.

This example illustrates the fields and controls on the Configure Agent - Multichannel Configuration page: Window Preferences. You can find definitions for the fields and controls later on this page.
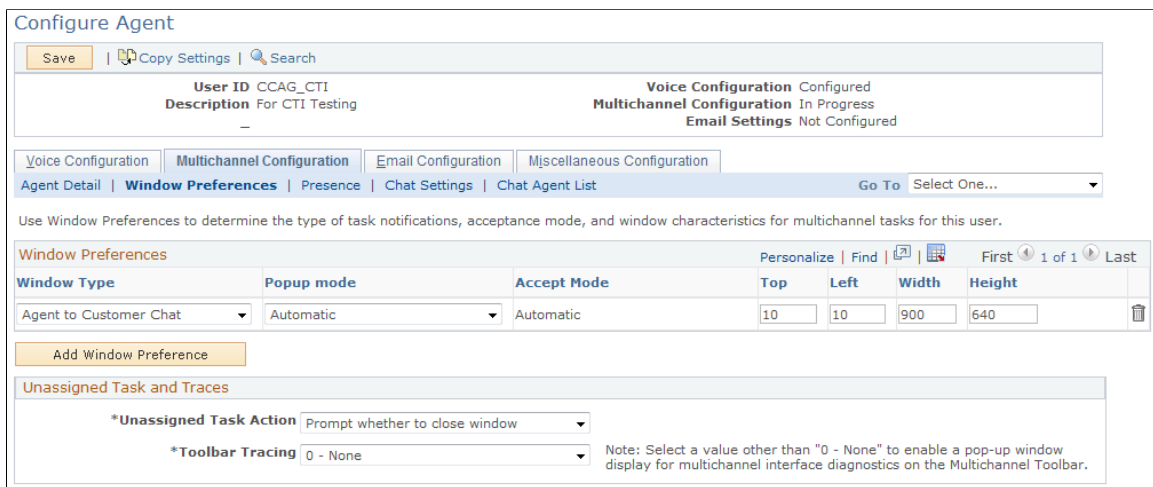
Set up preferences for the types of window that agents use to perform their tasks. For example, set up *Agent to Agent Chat* and *Agent to Customer Chat* windows if agents need to chat with other agents and customers or set up the *E-mail* window if agents process emails.

See Common Elements Used in Configuring Agents.

Field or Control	Description
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.* • *Grab URL.*
Accept Mode	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.

Field or Control	Description
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.

This example illustrates the fields and controls on the Configure Agent - Multichannel Configuration: Presence page. You can find definitions for the fields and controls later on this page.
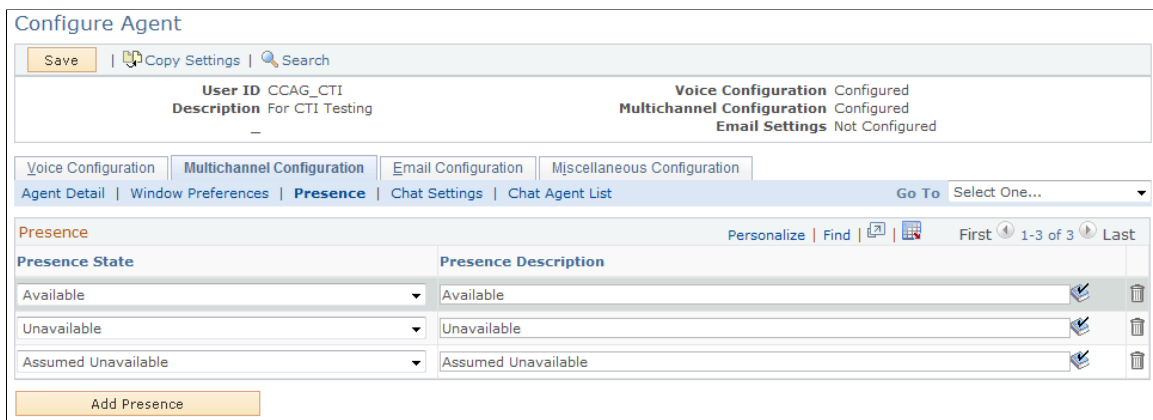
You specify the set of presence states that the selected agent uses for the multichannel queue. Options are **Available, Unavailable,** and **Assumed Unavailable.**

Do not enter duplicate presence states.

This example illustrates the fields and controls on the Configure Agent - Multichannel Configuration: Chat Settings page. You can find definitions for the fields and controls later on this page.

Field or Control	Description
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.

Field or Control	Description
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.

This example illustrates the fields and controls on the Configure Agent - Multichannel Configuration: Chat Agent List page. You can find definitions for the fields and controls later on this page.
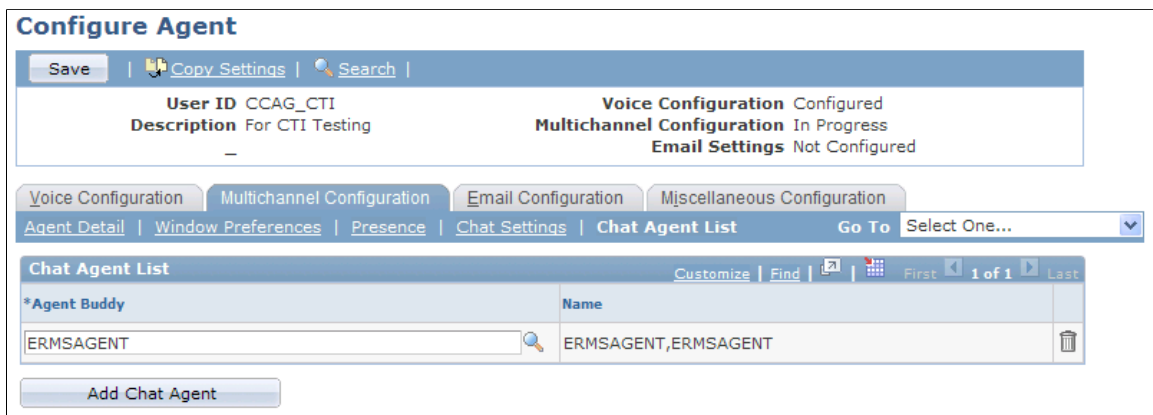
Field or Control	Description
Agent Buddy	Enter the user ID of an agent with whom this agent can have a chat session or can ask to conference onto another chat. Refer to the Configuring MCF Agents topics in the *PeopleTools: PeopleSoft MultiChannel Framework* documentation for more information on agent definition.

Configure Agent - Email Configuration Page

Use the Configure Agent - Email Configuration page (RB_AGT_CFG_ERMS) to specify default reply to addresses and email approval settings for agents' outgoing emails.

Navigation:

- **MultiChannel** > **Supervisor Desktop**

  Click the **Configure Agent** toolbar button, find an agent to be configured, and access the Configure Agent - Email Configuration page.

- **Set Up CRM** > **Product Related** > **Multichannel Definitions** > **Agent Configuration** > **Search for Agent**

Find an agent to be configured, and access the Configure Agent - Email Configuration page.

This example illustrates the fields and controls on the Configure Agent - Email Configuration page. You can find definitions for the fields and controls later on this 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.**

Field or Control	Description
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

Field or Control	Description
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 "Defining User Settings" (Automation and Configuration Tools).

Configure Agent - Miscellaneous Configuration Page

Use the Configure Agent - Miscellaneous Configuration page (RB_AGT_CFG_MISC) to specify warning settings to be used on the Multichannel Toolbar.

Navigation:

- **MultiChannel** > **Supervisor Desktop**

  Click the **Configure Agent** toolbar button, look up an agent to be configured or click the **Configure this Agent** link while monitoring agent details, and access the Configure Agent - Miscellaneous Configuration page.

- **Set Up CRM** > **Product Related** > **Multichannel Definitions** > **Agent Configuration** > **Search for Agent**

  Look up an agent to be configured, and access the Configure Agent - Miscellaneous Configuration page.

This example illustrates the fields and controls on the Configure Agent - Miscellaneous Configuration page. You can find definitions for the fields and controls later on this page.

The information that you specify on this page for agents can also be defined on the Unified Agent Desktop Agent Configuration page.

See Configuring Agents for Unified Agent Desktop.

Agent Configuration - Copy Agent Settings Page

Use the Agent Configuration - Copy Agent Settings page (RB_AGT_CFG_COPY) to copy settings of the current agent and apply them to another agent.

Navigation:

Click the **Copy Settings** toolbar button.

This example illustrates the fields and controls on the Agent Configuration - Copy Agent Settings page. You can find definitions for the fields and controls later on this page.

Field or Control	Description
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

These topics discuss how to manage teams and queues.

Pages Used to Manage Teams and Queues

Page Name	Definition Name	Usage
Supervisor Desktop - Team Definition Page	RB_SD_TEAM_DFN	Define teams and add team members to be used as filters in real-time monitoring.
Supervisor Desktop - Queue List Page	RB_SD_QUEUE_LIST	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.

Supervisor Desktop - Team Definition Page

Use the Supervisor Desktop - Team Definition page (RB_SD_TEAM_DFN) to define teams and add team members to be used as filters in real-time monitoring.

Navigation:

MultiChannel > **Supervisor Desktop**

Click the **Define Teams** toolbar button.

This example illustrates the fields and controls on the Supervisor Desktop - Team Definition page. You can find definitions for the fields and controls later on this page.

Team List

Field or Control	*Description*
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

Field or Control	Description
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.

Supervisor Desktop - Queue List Page

Use the Supervisor Desktop - Queue List page (RB_SD_QUEUE_LIST) to 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.

Navigation:

MultiChannel > **Supervisor Desktop**

Click the **Manage Queue List** toolbar button.

This example illustrates the fields and controls on the Supervisor Desktop - Queue List page. You can find definitions for the fields and controls later on this page.

The queue list becomes read-only after you save this page.

Field or Control	Description
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 topic discusses how to personalize supervisor desktop.

Page Used to Personalize Supervisor Desktop

Page Name	Definition Name	Usage
Supervisor Desktop - Preferences Page	RB_SD_USER_PREF	Define default monitor settings and different service level alerts for real-time monitoring.

Supervisor Desktop - Preferences Page

Use the Supervisor Desktop - Preferences page (RB_SD_USER_PREF) to define default monitor settings and different service level alerts for real-time monitoring.

Navigation:

Click the **Preferences** button on Supervisor Desktop.

This example illustrates the fields and controls on the Supervisor Desktop - Preferences page. You can find definitions for the fields and controls later on this page.

Field or Control	Description
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

Field or Control	Description
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

Field or Control	Description
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.

Field or Control	*Description*
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

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.

Important! Unified Agent Desktop is certified on Internet Explorer (versions 7 and 8) or Firefox (version 3.6.13).

Related Links
Understanding Unified Agent Desktop

Using Multichannel Toolbar

These topics discuss 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:
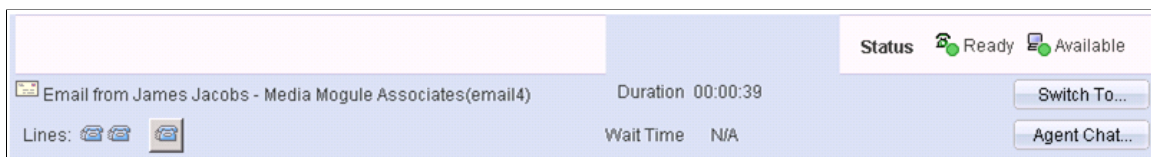
This example illustrates the an example of a voice call notification on Multichannel Toolbar before acceptance.
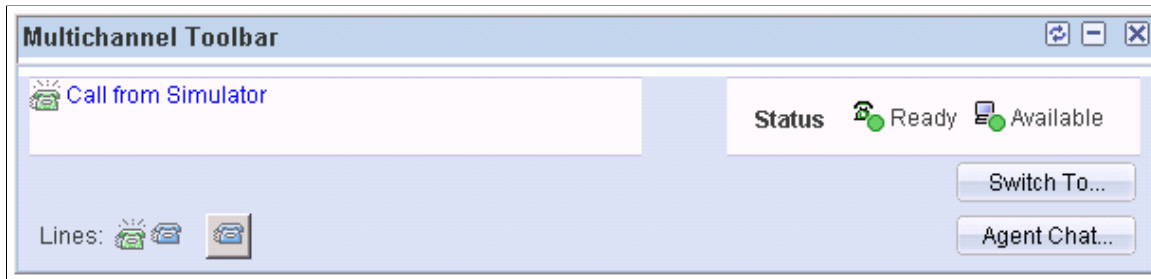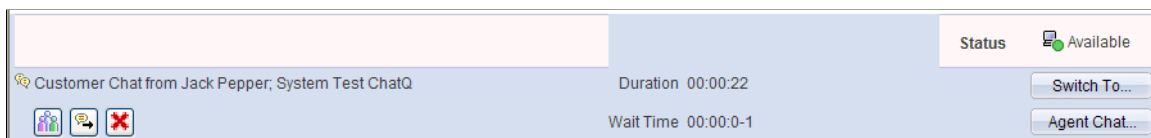

This example illustrates an example display of Multichannel Toolbar after voice call acceptance.
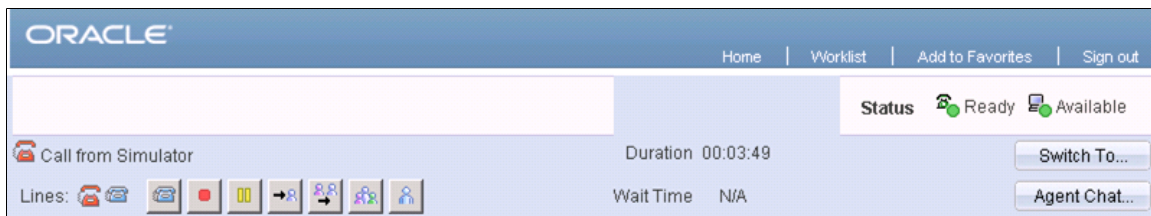
This example illustrates an example display of Multichannel Toolbar after email acceptance.

This example illustrates an 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:

This example illustrates an example of the Queue Status window. .
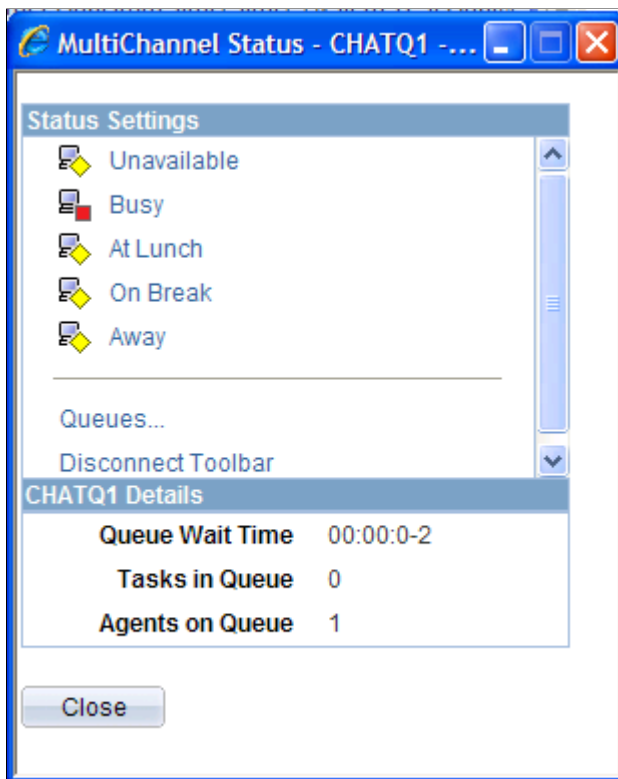
Note: For voice queues only, the **Resynchronize Queue** option is available in the Queue Status window. Agents use this option to synchronize the CRM CTI system with the CTI switch manually. A resynchronization restores the correct CTI state from the CTI system and updates it on the Multichannel Toolbar.

Navigating to Different Tasks

Click the **Switch To** button on the Multichannel Toolbar to access the task navigation window.

This example illustrates the fields and controls on the Task navigation window.
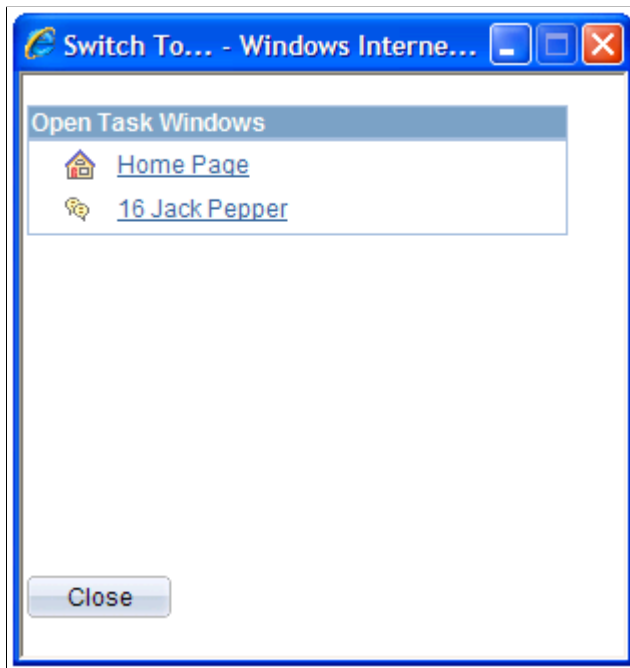
If the agent works on multiple task windows concurrently, use this window to navigate to another open task or the initial browser session (indicated by the house icon) by clicking the appropriate icon or text description.

Processing Phone Calls

Access the call-related transaction page that appears after you accept a call on the Multichannel Toolbar.

This example illustrates the fields and controls on the Display of the call-related transaction after accepting a call.
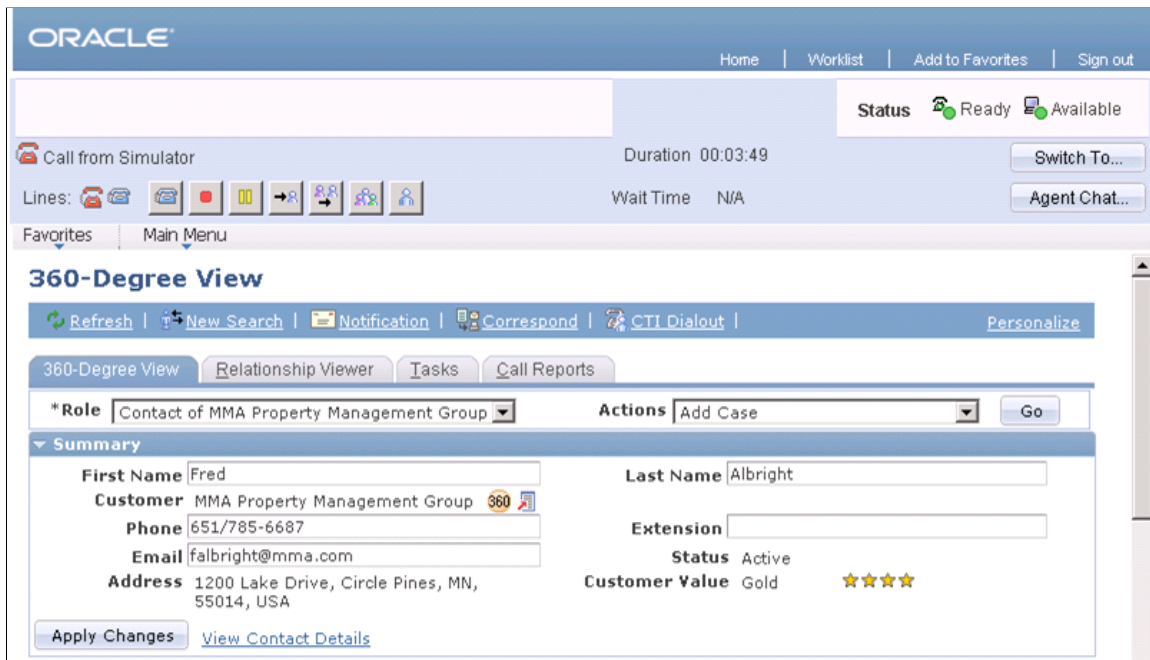
When a call arrives, it carries call details to the CRM system. Call details contain a transaction ID that is used to identify the CRM transaction that appears on the agent's desktop when the call is accepted. For example, if the customer call is an inquiry to case number 116, its call details contain 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:

Field or Control	Description
(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.

Field or Control	*Description*
(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. |
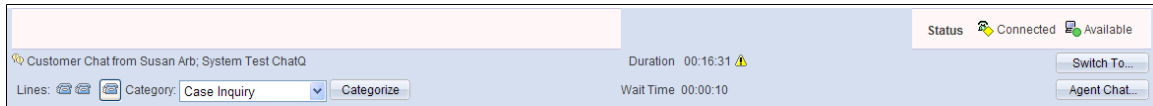| (complete) | Click to end the customer call when it is in a hold state, to complete a transfer to an internal agent, or to join another voice agent to a conference. |

Categorization

The agent needs to categorize the call after it is released or completed.

Note: In addition to phone calls, categorization also applies when agents finish working on chat sessions and email messages through the Multichannel Toolbar. The selected category value is displayed in the interaction that is created for the associated phone call, chat session or email message, as well as on the Chat Details page (for chat) and the History: Actions Taken page (for email).

This example shows the **Category** field on the Multichannel Toolbar:

This example illustrates the fields and controls on the Example of categorizing a call on the Multichannel Toolbar after the call is ended. You can find definitions for the fields and controls later on this page.

Field or Control	Description
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. Category codes are defined on the Category Codes page. See Category Codes Page.

Related Links

Unified Agent Desktop Action Button Definition Page
CTI Configuration Page

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:

This example illustrates the fields and controls on the Phone Directory page. You can find definitions for the fields and controls later on this page.

The Phone Directory grid lists phone number entries that are defined in the agent's phone book.

| Field or Control	Description
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.
Phone Directory	Displays the phone book entries that you set up on the Voice Configuration page of the Configure Agent component.

Related Links
Configure Agent - Voice Configuration Page

Processing Emails

Access the email workspace to process email after accepting (manually or automatically) an email notification on the Multichannel Toolbar.

This example illustrates the fields and controls on the Email workspace. You can find definitions for the fields and controls later on this page.
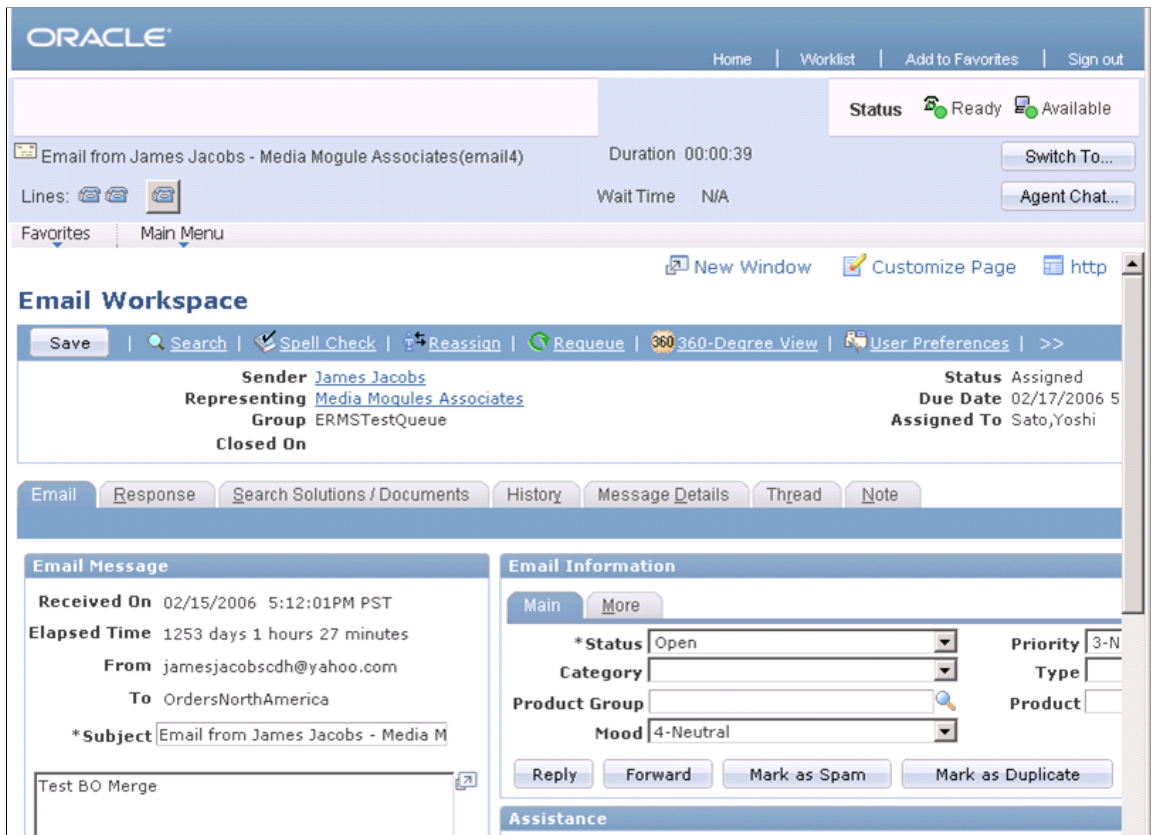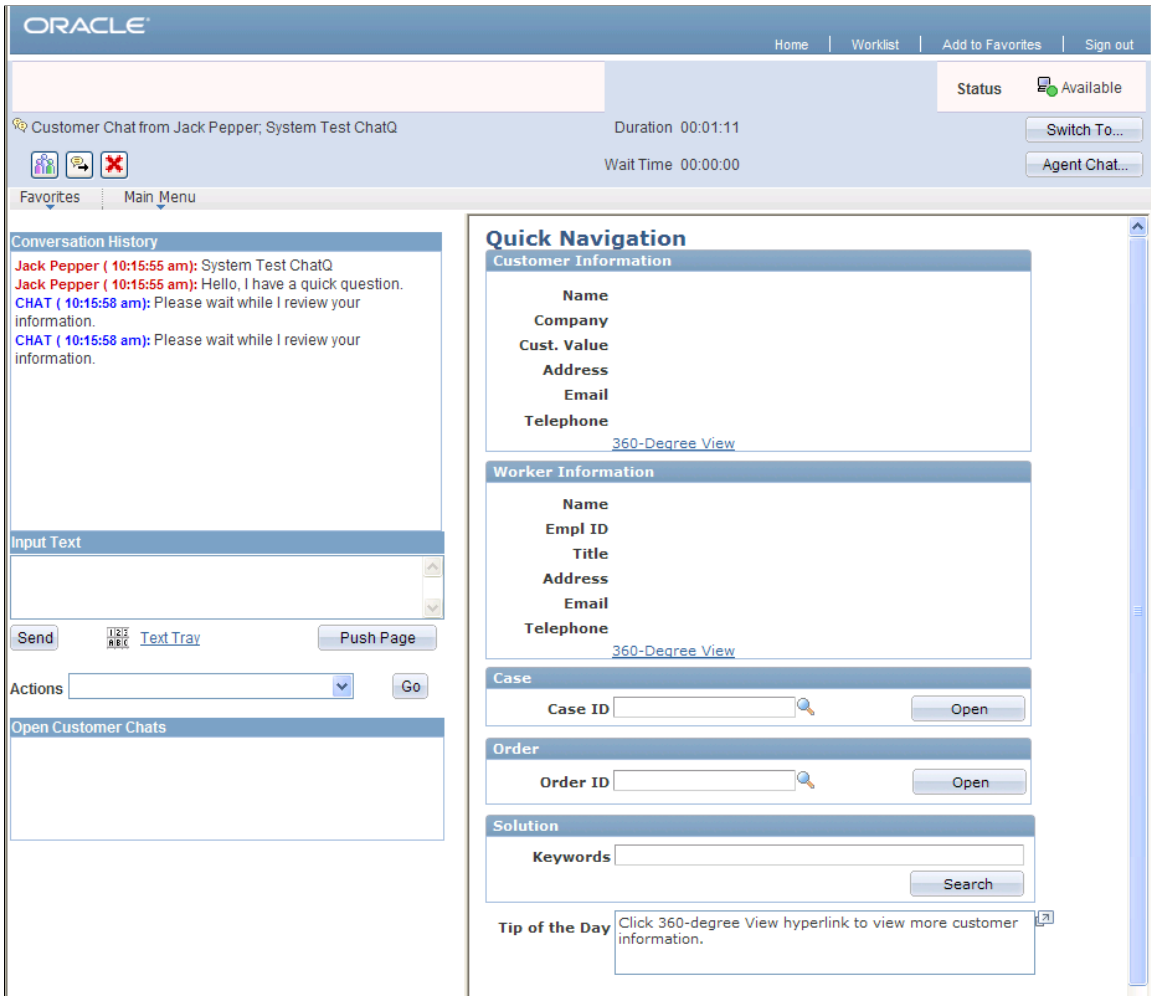

See Working with Inbound Email.

Processing Chat Requests

Access the chat workspace to process a chat request after accepting (manually or automatically) a chat notification on the Multichannel Toolbar.

This example illustrates the fields and controls on the Customer to Agent Chat window. You can find definitions for the fields and controls later on this page.

Field or Control	Description
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

Field or Control	Description
(conference chat)	Click to access the Conference Chat dialog box to select an agent with whom to discuss the customer issue.

| Field or Control	Description
(forward 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 Working with the Customer Chat Window.

Switching Agent Status

Click the queue status to switch agent status in the Queue Status window.

This example illustrates the fields and controls on the Queue Status window. You can find definitions for the fields and controls later on this page.
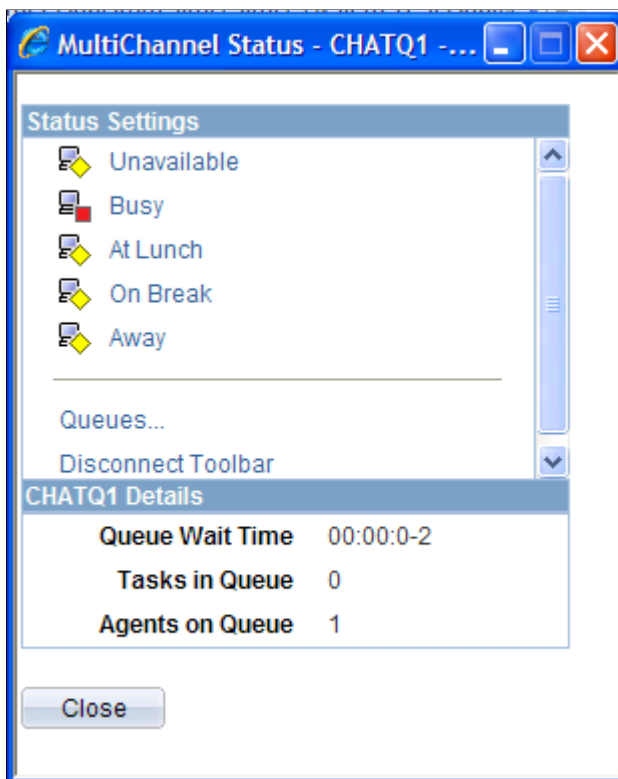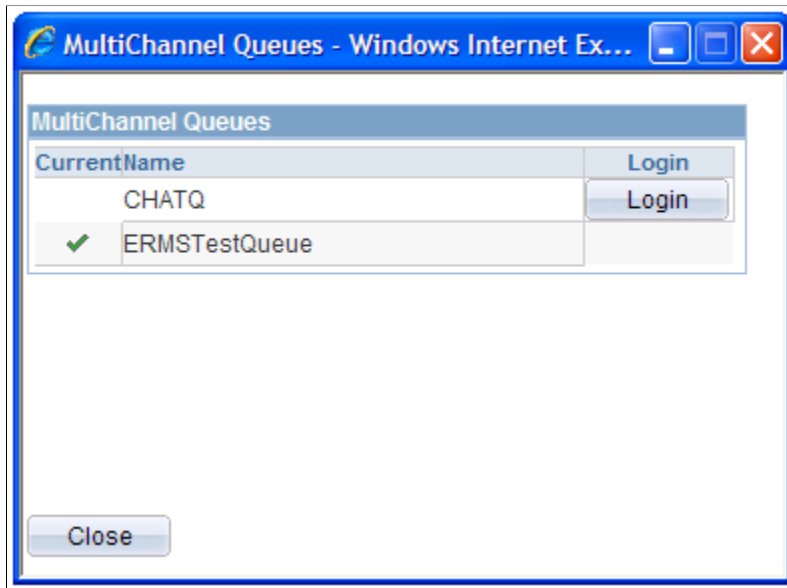

The agent uses this window to switch to another status by clicking the appropriate icon or text description.

Switching to Another Queue

Access the Switch Queues window by clicking **Queues...** in the Queue Status window.

This example illustrates the fields and controls on the Switch Queues window. You can find definitions for the fields and controls later on this page.

This window lists all the available queues for the logon user. The queue onto which the agent currently logs is marked by a green check mark. To switch to another available 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.

Chapter 17

PeopleSoft Multichannel Communications Reports

PeopleSoft CRM Multichannel Communications Reports: General Description

These topics provide 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 User ID, by worklist or queue, by category, or by mailbox.

This table lists the PeopleSoft CRM Multichannel Communications reports.

For more information about running these reports, refer to:

*   The corresponding topics in the product documentation.

*   *PeopleTools: PeopleSoft Process Scheduler*

*   *PeopleTools: BI Publisher for PeopleSoft*

*   *PeopleTools: PeopleSoft MultiChannel Framework*

- *PeopleTools: SQR Language Reference for PeopleSoft*

For samples of these reports, see the <u>Report Samples</u> that are published with this online documentation.

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 Agent Effectiveness	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 **User ID** field blank, the report includes statistics of all agents in the system.	**MultiChannel** > **Reports** > **ERMS Agent Effectiveness** > **ERMS Agent Effectiveness**	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 **User ID** 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