Infor® Epiphany Sales and Service

Administrator's Guide

v.10.0.0

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Table of Contents

List of Tables

Chapter 1
Introduction

1

About Infor

Infor delivers business-specific software to enterprising organizations.With experience built-in, Infor's solutions enable businesses of all sizes to be more enterprising and adapt to the rapid changes of a global marketplace. With more than 70,000 customers, Infor is changing what businesses expect from an enterprise software provider. For additional information, visit www.infor.com.

Purpose of this Guide

This Infor ***Sales and Service Administrators Guide*** you are currently reading is intended for Infor CRM powered by Epiphany Sales Force Automation and Customer Service application administrators and managers who have permission to use the Admin Console application, the Admin menus in Sales Force Automation and Customer Service, or the managerial functions of the Navigation menu.

Since the applications were probably customized for your organization, you may find some differences between the functionality described in this-guide and the functionality of your company's specific application. If you find that some functions for which you are responsible are not included in this guide, please consult the other documentation described in the following section.

Product Documentation

The Infor Sales and Service product documentation includes the manuals and online help systems described in this section. For a summary of features that are new for this release, late-breaking information about installation and upgrade, and information on fixed or outstanding product issues, see the Infor Sales and Service Release Notes. For information on supported platforms, see the Documentation section of the Infor Support Portal, http://www.inforxtreme.com.

Installation and Configuration Guide

The Infor ***Sales and Service Installation and Configuration Guide*** includes all of the Infor-specific information required to get the Infor Sales and Service applications running. When special configuration is required or recommended for other platform-support software (such as WebLogic, WebSphere, JBoss, SQL Server, Oracle, DB2 etc.), it is also included. The audience for this book should be familiar with installing and configuring sophisticated enterprise software. They are expected to be experts in their own corporate network configurations and knowledgeable about security topics such as proxy servers and firewalls. General familiarity with database management and maintenance is also assumed.

Implementation Guides

The Infor ***Sales and Service Implementation Guide*** provides procedural information relevant to individuals involved in implementing and customizing the Infor Open Architecture and the Infor Sales and Service applications built on it. Implementers typically possess expertise in lightweight Java development, HTML, DHTML, JavaScript, and SQL. They primarily work with the Infor Studio configuration tool (and to some extent with the Designer tools). The Infor ***Sales and Service Mobile Wireless Implementation Guide*** provides additional procedural information relevant to individuals involved in implementing and customizing the Sales and Service Mobile Wireless application.

Reference Guides

The Infor ***Sales and Service Architecture Reference Guide*** and the Infor *Sales and Service Application Reference Guide* contain technical reference information relevant to implementors involved in implementing

and customizing Infor CRM Sales and Service at customer sites. These books provide the reference context for the procedural information available in the Infor *Sales and Service Implementation Guide* . The Infor ***Sales and Service Mobile Wireless Architecture Reference Guide*** provides additional technical information relevant to individuals involved in implementing the Sales and Service Mobile Wireless application.

Administrator's Guides

The Infor ***Sales and Service Administrator's Guide*** provides supervisors, managers, and executives with the information to use the Customer Service and Sales Force Automation and Admin Console functionality to manage the work of their agents and salespeople. Instructions for day-today maintenance of the system are included in this book.

Computer Telephony Guide

The Infor ***Sales and Service Computer Telephony Guide*** (CTI) provides the overview and configuration information needed to implement and customize an Infor CTI-enabled product. Its target audience is the implementors who deploy Infor Sales and Service at the enterprise.

Integration Guide

The Infor ***Sales and Service Integration Guide*** provides overview and configuration information for the set of tools used to exchange data with a variety of back-end data sources, including generic SQL sources, Java and EJB-based sources, Web services, and other database types (using Infor Enterprise Application Integration, or EAI).

Online Help

Online help documentation for Infor Sales and Service is:

- Admin Console
- Sales
- Self-service
- Service
- IBRDesigner
- WorkflowDesigner
- DialogDesigner

- Studio
- Logviewer

These are available for users of the Infor Contact Center, Infor Sales, Infor Service, Infor Workflow Designer, and Infor Dialog Designer.

Viewing Release Notes and Manuals

Product release notes and manuals are part of the Sales and Service package. To view product documentation open the document of interest in Acrobat Reader.

Printing This Document

To print this document at the highest quality resolution, print to a PostScript driver. Other drivers may not reproduce the screen shots as accurately. This document is designed to be printed on two sides of the page. If your printer is not configured for duplex printing, you may find a blank page at the end of some chapters. This is normal.

Contacting Customer Support

You may contact the Infor Customer Support center by submitting your incident via the web 24x7 at http://www.inforxtreme.com, or by placing a call during our scheduled business hours. For a complete listing of our support centers with web addresses and phone numbers, access our support site at http://www.inforxtreme.com.

Location of the Platform Support Matrix

For more information on platform support, including hardware and software requirements, see the http://www.inforxtreme.com web site.

Chapter 2
Overview and Getting Started

2

This guide provides information about how to use administrative functions that you can access from:

- The **Admin** menu of the Infor CRM Customer Service and Sales Force Automation (SFA) applications
- The managerial functions available from the **Navigation** menu of the applications
- The Admin Console application

Administration Menus

The **Administration** menus (also referred to as Admin) appear in the navigation bar. They are visible only to those with the appropriate permissions.

The following table shows the items in the application **Admin** menus. Items specific to either Sales Force Automation (SFA) or Customer Service (CS) are noted.

Administration menu items (Sheet 1 of 2)

Function	Description
Global Settings	Enables you to edit the property values of settings that apply to the entire application. Global settings may also be set in the Admin Console. See Chapter 12, "Global Settings."
Business Calendar Administration (CS)	Provides a method to define working days and hours (hours of operation), shifts, and holidays. It is used to calculate due dates for work items under service level objectives (SLO). See Chapter 6, "Managing Service Level Objectives."
User Administration	Enables you to manage some peripheral information about users such as Group Queues and Preferences. You now create and manage Sales Force Automation and Customer Service users and manage them (for the most part) using the Open Architecture User Management Service (UMS). For more information, see Chapter 3, "User Administration."
Group Queue Admin (CS)	Enables you to set up and manage group queues. See Chapter 5, "Group Queue Administration."
Lookup Admin	Enables you to add and delete items in drop-down lists (lookups). See Chapter 7, "General Application Management."
Currency Conversion Rate Management	Enables you to set conversion rates and the date range between which conversion rates are valid for the monetary fields in your applications. See Chapter 7, "General Application Management."
Internal Organization (SFA)	Enables you to create and manage information about your organization. See Chapter 9, "Sales Administration."

Administration menu items (Continued) (Sheet 2 of 2)

Function	Description
Competitors (SFA)	Enables you to create and manage information about your company's competitors. See Chapter 9, "Sales Administration."
Partners (SFA)	Enables you to create and manage information about your company's partners. See Chapter 9, "Sales Administration."
Task Templates (SFA)	Enables you to create and manage task templates (sets of individual tasks grouped together for a common purpose) that users can use to facilitate the creation of their own tasks. See Chapter 9, "Sales Administration."
My Views Admin	Enables you to create views and apply them globally. See Chapter 7, "General Application Management."
Corporate Dictionary	Enables you to maintain a dictionary of words specific to your organization for spell checking. See Chapter 7, "General Application Management."
Manage Service Level Objectives (CS)	Specifies the time thresholds under which a particular group queue is expected to operate. All time calculations for an SLO work item are based on the SLO's business calendar. See Chapter 6, "Managing Service Level Objectives."

Managerial Functions

The following table shows administration items that are embedded in the **Navigation** menu.

Navigation menu items for administrators

Function	Description
Balance Workload (CS)	Enables you to balance the workload of your agents by modifying the properties of either agents or group queues. See Chapter 8, “Service Administration.”
Manage Work Items (CS)	Enables you to reassign and reprioritize work items. See Chapter 8, “Service Administration.”
Offer Activity (CS)	Enables you to view the number of Real-Time offers extended to customers by agents. See Chapter 8, “Service Administration.”
Territories (SFA)	Enables you to create and manage geographical and logical territories to divide the work of your sales force. See Chapter 4, “Territory Management.”
Monitor Service Level Objectives (CS)	Enables you to check the status of SLO work items in their group queues. See Chapter 6, “Managing Service Level Objectives.”

Admin Console

The Admin Console application is accessible only to those who have been assigned a user role that includes the **Admin Console Login** profile in Infor Studio. Its functionality serves both CS and SFA applications, as well as core functions such as logging and service framework monitoring.

This following table shows items in the **Admin Console** menu when the user role includes both the **Administrator Tools** profile and the **Admin Console Login** profile.

Admin Console functions (Sheet 1 of 2)

Function	Description
Service Framework Monitoring	Enables you to view information about the services running on your system. See Chapter 17, “Services and Service Monitoring.”
Logging Maintenance	Provides information on creating and editing logs in your system. See Chapter 13, “Admin Console Functions.”
Job Scheduler	Enables you to create and schedule jobs, such as importing for your system. See Chapter 15, “Job Scheduler.”
Workflow Designer	Enables you to create and manage workflows, which are sets of business activities connected by transitions. For information, see the online help system available within the Workflow Designer.
KMS Management	See Chapter 13, “Admin Console Functions.”
Dialog Designer	Enables you to create and manage dialogs, which are scripts for customer interaction. Dialogs are controlled by responses from the customer, internally calculated values, and external data. Clicking this menu item opens the Dialog Designer. For information, see the online help system available within the Dialog Designer.
Lookup Admin	Enables you to add and delete items in drop-down lists (lookups). See Chapter 7, “General Application Management.”
Service Configuration	Enables you to view configuration information about the services on your system. See Chapter 17, “Services and Service Monitoring.”

Admin Console functions (Continued) (Sheet 2 of 2)

Function	Description
Global Settings	Enables you to edit the property values of settings that apply to the entire application. See Chapter 12, “Global Settings.”
Deployment Units	Enables you to monitor the deployment units created for your applications. Deployment units are packages of files that can be moved from one system to another in single units. See Chapter 16, “Deployment Units.”
Alert Management	Enables you to define and manage alerts and subscriptions that are applied globally in your system. See Chapter 14, “Alert Management.”
Topic Profiles Management	Synchronize and manage filters (Topic Profiles) for social media. See Chapter 18, “Topic Profiles Management.”

Business Processes

The following table shows items in the **Business Process** menus. These functions can be accessed from the applications, but since they all contain online help, they are not covered in this guide.

Business processes

Function	Description
IBR Designer	Enables you to define rules that govern the behavior of your applications. For information, see the online help system available within the IBR Designer
Workflow Designer	Enables you to create and manage workflows, which are sets of business activities connected by transitions. For information, see the online help system available within the Workflow Designer.
Dialog Designer	Enables you to create and manage dialogs, which are scripts for customer interaction. Dialogs are controlled by responses from the customer, internally calculated values, and external data. For information, see the online help system available within the Dialog Designer

Chapter 3
User Administration

3

Overview

Sales personnel and contact center agents are registered using the User Administration module. These two groups are the end users of these applications. User administration is essentially the same for both applications.

This chapter describes how to create users and manage information about them.

Sales and Service Users versus SSO Users

An important distinction needs to be made regarding users registered in Sales and Service versus users on an SSO server. An SSO server (such as LDAP or NTLM) is used to manage users, passwords, and their roles across an enterprise. Sales and Service will use the SSO server to authenticate the user during login. In addition to passing authentication, the user must also be registered as “active” in Sales and Service before the user is allowed to login to the application.

Registering a user in Sales and Service is the process of binding the SSO user to the Sales and Service application such that appropriate authorization credentials are given to the user to login to the application. Registration can be performed by the administrator manually by creating each user and mapping each user to an existing SSO user. Alternatively, users can be registered automatically using the ‘self-registration’ facility. Although self-registration will bind the user to the SSO user, the SSO user must still exist and be authenticated appropriately given a user name and password.

Under the covers, a registered Sales and Service user is defined as one who has an instance of ‘user_data’ Bio. The ‘user_data’ Bio stores user attributes and preferences for that user as well as a reference to the SSO user unique ID.

User Administration List

When you click on ‘User Administration’ menu item in the Admin Console, you will see a list view of all currently registered users. (i.e. a list of ‘user_data’ Bio entries).

The “name” field is a display name used to describe the user. Typically this will be a user’s full name.

The “Login ID” field is a fully-qualified unique identifier of that user registered on the SSO server that Sales and Service uses to authenticate the user. It must point to an existing entry on your SSO server at all times.

The “Status” can be either “Active” or “Inactive”. Only “Active” users can login into the system:

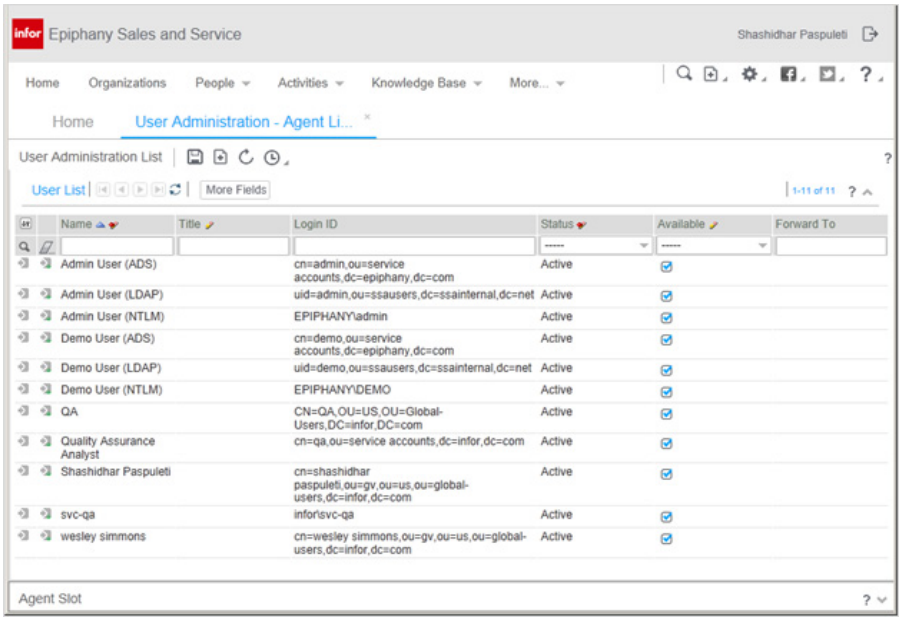


Figure 3-1: Sales and Service Users versus SSO Users

Registering New Users and Self-Registration

The process of registering Sales and Service users can be either performed manually or can be done through self-registration. Note that regardless of which mode is used, the user must already exist on your SSO server, with appropriate roles mapped, such that permission is granted to the user to be able to login to the application.

Sales and Service allows users to self-register the first time they log into the application or Admin console, provided they belong to a network group that has been linked a user role for that application. (See the “Defining User Roles and Profiles” chapter of the *Installation Guide* for information about associating network groups with user roles.) Users cannot self-register, if the system already contains user data for them. This prevents users who have been inactivated in the system from getting back into it on their own.

Once the user is successfully registered, he/she can login into the application (without needing to re-register for subsequent logins).

Self-registration is configured using the “SelfRegisterMode” global setting.

The permitted values for this setting are:

- **prompt** (default) — Prompts new valid users to change their name and locale if appropriate before they access the application

- **automatic** — Allows valid users to access the application based solely on their login credentials
- **restricted** — Disables self-registration and requires a manager or administrator to set up the users in the system before they can login.

Note: Self-Registration supports LDAP, NTLM, ADS, DB SSO Authentication Stores. It does not support Netegrity.

Once all the self-register-related settings are completed correctly, when the user tries to log into the application, he/she will be prompted with a window asking to them to register. This user should see this screen prompting for input:

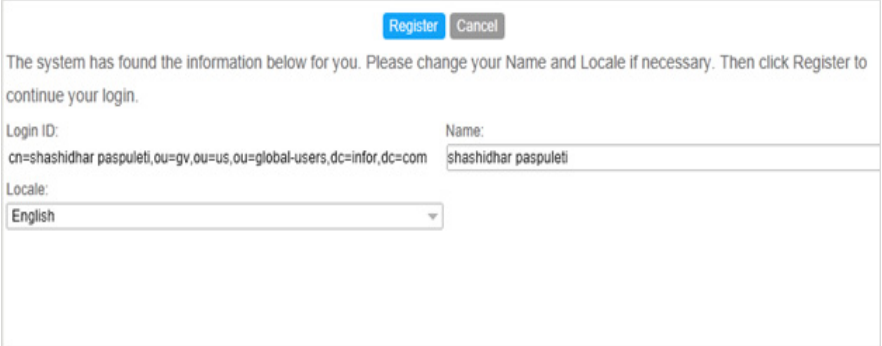


Figure 3-2: Self-Registration

The “Name” attribute is normally downloaded from the SSO Server during the registration process. Sales and Service requires this attribute to be unique (which may not be the case on the SSO Server). If there is a conflict, an error message will be displayed and the user must type in a unique name before he/she can register.

Manual Registration

1. Click New on the User Administration List toolbar to open the User Administration Detail screen.
2. Enter information in the User Administration Detail as described in the following table. (The required information is created for users during self-registration.)

Field	Description
Name	Required: A display name used to describe the user. Typically this will be a user's full name. The name field must be unique.
Login ID	The fully qualified login ID the user will use to log into the application. The system verifies the login ID if provided. If you are entering users in advance of their arrival, leave this field blank. Likewise, if you are setting a user to Inactive and his or her login ID will be removed from the directory, clear this field.
Status	Required: Active or Inactive. Active means that the agent is associated with the enterprise whether or not he or she is currently available. Agents are still active when they're on vacation, for example, though they are not available (see Available). Inactive agents are no longer associated with the enterprise Generally they are former employees; assigning them inactive status makes it impossible for them to log into Contact Center.
Locale	Required: The country and language used by the agent. Select from the drop-down list.
Available	When checked, the agent is available to receive work items (compare to Status).
Title	The user's title
Yrs. of Experience	The number of years of experience this user has
Forward To	The agent to whom work items are sent if this agent is not available
Start Date	The date the user started in this position
Months Employed	A read-only field generated based on the date entered in Start Date
Manager	The manager of this user. Click the binoculars to find a name.
E-mail Address	The user's e-mail address
End Date	The final date the user was in this position, if applicable
Sales Rank	The numerical rank of the user
Alias	A user who has complete access to this user's records. Click the binoculars and select a user from the popup list.

3. Enter any other application specific information in subsequent tabs.
4. Click on "Save" at the top of the User Administration toolbar
5. Enter optional user preference information in the General Regional Detail below the detail view. The user preferences can be left as defaults as each user can change any of these values when they login.

6 Click on “Set Preferences” to save the changes.

A screenshot of a new user registration detail view is shown below:

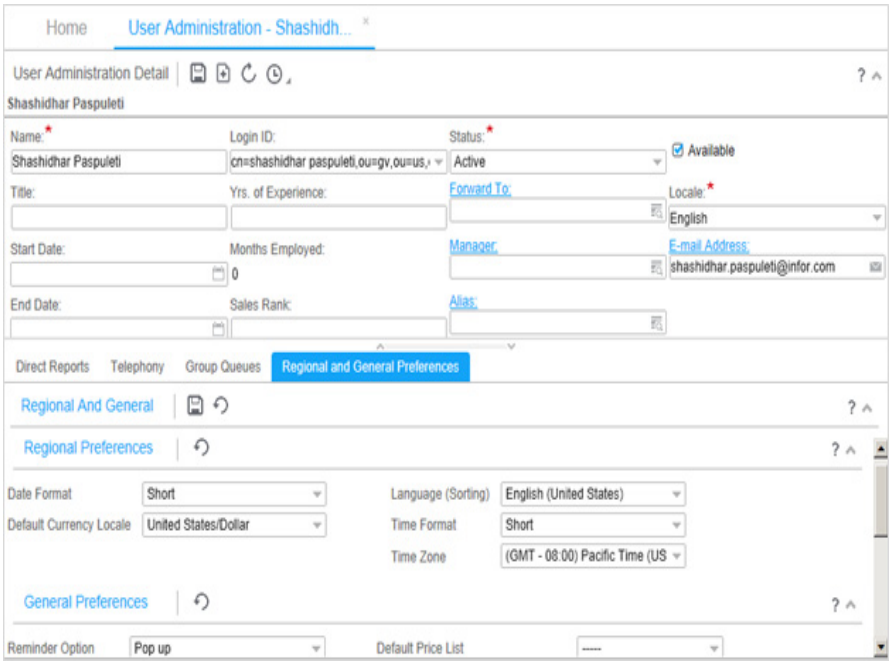


Figure 3-3: New User Registration Detail View

Deleting a User

Sales and Service users cannot be deleted. Doing so would cause foreign key violations from many historical records relating to the user_data records linked to it. Instead of deleting, consider marking the status of the user to “inactive”. Inactive users are forbidden to login to the application.

1 Go to **Admin > User Administration**, and search for the user.

2 In the search results list, change the value in the Status column from “**Active**” to “**Inactive**”.

3 **Save** your change.

Chapter 4
Territory Management

4

Territories in Infor Sales Force Automation provide a method to divide and organize your sales force resources for maximum control. When a work item is created, it is assigned to one of the salespeople for that territory according to routing rules created in the IBR Designer. Territory routing covers only the initial assignment. The following are work item types that can be assigned.

- Customers — both individuals and organizations
- Leads
- Opportunities

Once a work item is routed to a territory, the dispatcher distributes the work item to one of the salespeople assigned to that territory according to the distribution method specified in the Territory detail screen. The work item is accessible initially only to that territory user, his or her upline, and members of the user's template team. (See "Template Teams" on page 4–5.) Team members may also be added directly to the work item using the work item's **Team** tab.

This chapter describes how to create and manage territories, and how to assign salespeople and work items. For information on working with the user interface, see the *Application Reference Guide*. This chapter covers the following major topics:

Setting Up Territories

Before you set up territories in your system, you need to have a clear understanding of how territories are designed in your company; how organizations, individuals, leads, and opportunities are assigned in your company; and how territory assignment works in the application. The first rule of territory assignment in the Infor Sales Force Automation system is that each organization, lead, individual, and opportunity can belong to only one territory at a time. Simply creating a territory and assigning users to it does nothing unless the proper routing rules have been created in the IBR Designer. As shipped, the application has three default routing rules for territories. These are **Default Lead Routing**, **Default Opportunity Routing**, and **Default Customer Routing**. These defaults send the work items to the Unknown Territory.

Territory Design

The three most common territory designs are based on geography, product, and customer. Geographical territories use cities, countries, states, area codes, or zip codes to determine the territory boundaries. Product-based territories align the sales force by their product expertise, and customer-based territories generally assign account managers and sales people to strategic customers or accounts. The latter two territory alignments are most common in business-to-business sales. All three basic designs can be, and often are, used in combination.

Distribution Methods

As shipped, Infor Sales Force Automation supports the two most common methods of assigning leads and opportunities within territories: round robin and lowest backlog.

Round robin is a continuously repeating series of turns among the users who belong to the territory and have the appropriate user profile. It uses the elapsed time since a user's last assignment within the territory. The user with the greatest elapsed time gets the next assignment. When you add a new user to the territory, the new user gets the first new assignment.

Lowest backlog checks territory users' current assignments before assigning a new one. The logic applied varies depending on the type of assignment.

- An organization or individual is assigned to the user who is the assigned sales representative on the fewest other organizations or individuals.
- A lead is assigned to the user who is the assigned sales representative on the fewest active leads.
- An opportunity goes to the user with the fewest active opportunities. An opportunity is active only if its status is **New**, **Working**, or **Qualified**.

Creating a Territory

1 Go to **Sales > Territories** to open a **Territories** tab.

2 Click **New** to open the Territory Detail screen.

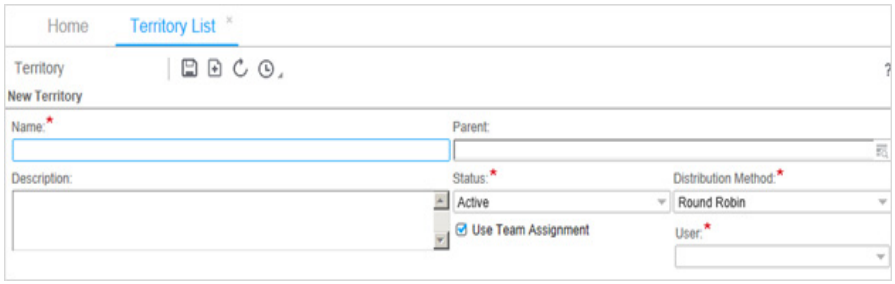


Figure 4-1: Territory Detail Screen

3 Enter information as described in the table that follows. Required territory fields are indicated in bold.

Field	Description
Name	Required: Enter a name for the territory.
Parent	Select the territory of which this territory is a member, if applicable. Click the binoculars to search for available parent territories.
Description	Enter a description of the territory.
Status	Required: Select the territory's initial status. The options are *Active* and *Inactive*.
Distribution Method	Required: Select a distribution method for the territory. The options are *Round Robin* and *Lowest Backlog*. See "Distribution Methods" on page 4–2 for descriptions of these methods. The distribution method determines which of the pool of users for the territory will receive the next work item.

Field	Description
Use Team Assignment	If selected, when a user is assigned to a work item, so is that user's template team. (See "Template Teams" on page 4–5 for more information.) This option affects only items routed to the territory after the option is selected or cleared. It does not function retroactively.
User	Required: Select an initial user for the territory. The pool of users cannot be empty. Additional users may be added to the pool in the Users tab.

4. Click **Save**. After you save a new territory and when you open an existing territory for editing, tabs appear below the detail form.
5. Use the tabs to make assignments to the territory as described in the next section.

Territory Assignments

The tabs of the Territory Detail screen are described below.

Territory Detail tabs

Tab	Description
Member Territories	A list of all territories contained in this territory, if any. If a territory has members, it is a parent.
Users	A pool of users for this territory. Add users by clicking *Add Existing* and selecting one or more users from the pop-up *User* list. To remove a user from the territory, select the box next to the user's name and click *Delete*. Work items are dispatched to the territory users according to the distribution method you selected for the territory.
Organizations Individuals Leads Opportunities	These tabs represent work items and contain lists of the work items of the respective type that are assigned to the territory. Work items may also be assigned to users or territories manually from the work item modules, and they can be assigned to a territory here by clicking *New* and entering the appropriate information. To remove a work item from the territory, check the box next to the work item in the list and click *Delete*. To reassign multiple work items to another territory, check the boxes next to the items you want to reassign. Then click *Actions* on the work item tab and select *Reassign Selected*.

Template Teams

When you select the **Use Team Assignment** option for a territory, each territory user may also have a template team. Members of a territory user's template team also receive access to work items for which that user is the assigned sales person, and become regular members of the team for that work item. A template team is specific to a territory-agent combination.

Creating a Template Team

1. Go to the **Users** tab for the Territory Detail, and click the **Template Team** link for the user whose team you are creating.

   This opens a Territory Agent form in the upper pane. The form has a single tab called **Template Team**.

2. In the **Template Team** tool bar, click **Add Existing** to open a lookup pop-up window listing the available users. The list includes all users not already assigned to the template team.

3. Select the users to add, and click **OK**.

Reassignment

You can change the territory of a single organization, individual, lead, and opportunity from the territory detail screen or the detail screen of the work item that you are reassigning. When using the work item detail screen, any change to the territory results in a re-evaluation of the sales person as well.

Mass Reassignment

To reassign many work items at once, use the **Actions** menu on the list of any of these work items.

The **Actions** menu includes a **Reassign** submenu with two options: **Selected** and **All**. Use **Reassign > Selected** to reassign all of the records you select. To reassign all of the records returned in a search, use **Reassign > All**. The records are reassigned to territories based on the routing rules you have established using the IBR Designer.

Note: If you go to **Actions > Reassign**, and select **All** without limiting your search, all of the records for that object will be reassigned.

If any changes have been made to the territory, they are applied when you use **Actions > Reassign**.

Chapter 5
Group Queue Administration

5

This chapter describes how to create and delete group queues, add and remove members from group queues, and define and edit distribution rules.

For information on working with the user interface, see the *Application Reference Guide*.

The major topics in this chapter are as follows:

Overview

Group Queues are composed of member agent queues and are used to store work items before they are distributed to individual agents for completion. When a work item (request, task, or interaction) comes in to your customer service center, it is first sent to a group queue according to routing rules created in the IBR Designer. The work item is then sent from the group queue to an agent based on **distribution rules**.

You create a group queue by assigning to it a set of users for a particular purpose. Group queues are often based on the skill set of their member users, but you can base them on product, location, language or other criterion. You could have a product group queue, a San Francisco group queue, a Spanish language group queue, and any other that meets your company's needs. Keep in mind, though, that since incoming work items are routed to group queues according to defined rules, it is important that all members of the queue can perform the work items routed to the queue

Group Queue Administration

You perform all Group Queue administrative functions on the Group Queues screen available by selecting **Group Queue Admin** from the **Admin** menu in the Customer Service application.

Creating a Group Queue

1 Go to **Admin > Group Queue Admin** to open a Group Queues tab.

2 Click **New** to open the **New Group Queue** form.

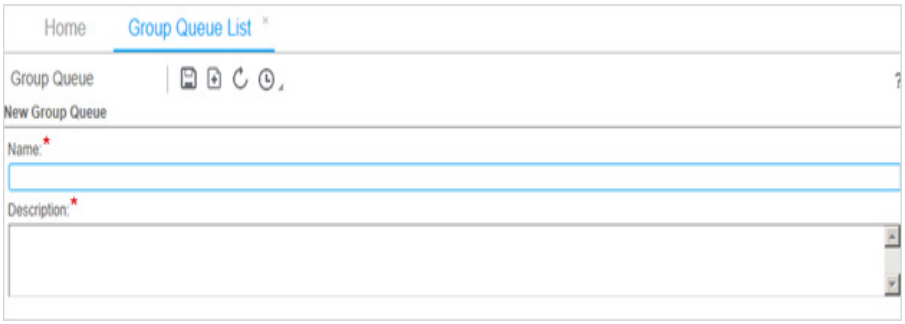


Figure 5-1: New Group Queue Detail

3 Enter a **Name** and **Description** for the new group queue.

4 Click **Save**.

After you save, and whenever you open a Group Queue for editing, tabs appear at the bottom of the form. These tabs are where you assign users and define distribution rules for the queue.

Adding Users to a Group Queue

1 Click the **Users** tab to display a list of the current users.

2 Click **Add Existing** on the Users tool bar to open the User List pop-up window.

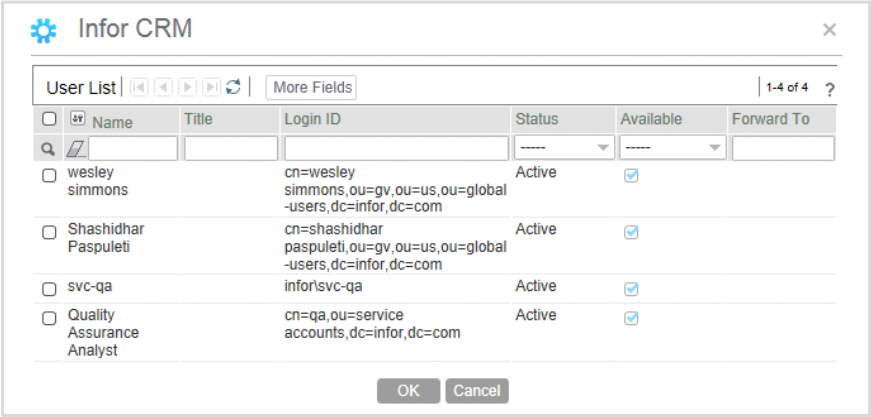


Figure 5-2: User List Pop-up Window

This window displays all users by default, but it also includes a filter row to help you restrict the list.

3 Select the box in front of the Name column of the user or users to add to the group queue, and click **OK**.

4 Click **Save** on the Group Queue tool bar.

Deleting Users From a Group Queue

1 Select the box in front of the user's name in the **User** tab.

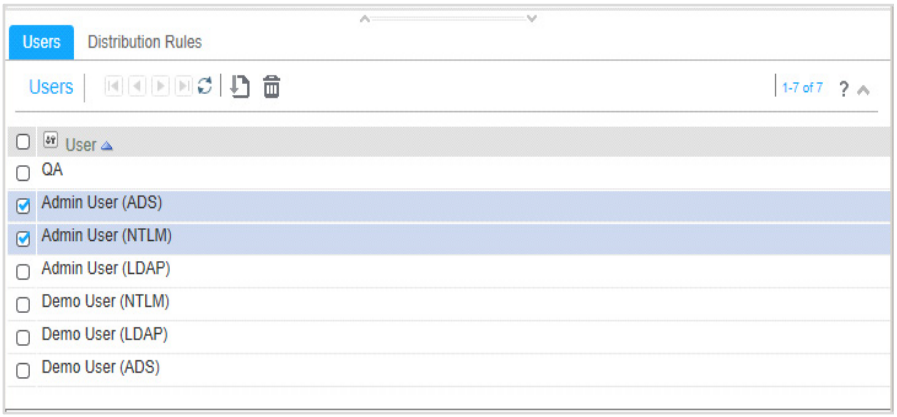


Figure 5-3: Deleting a Selected User

2 Click **Delete**.

3 Click **OK** to confirm deletion.

Group Queue Distribution Rules

After a work item has been routed to a group queue, distribution rules govern how the item is sent to a member of that group queue. You determine which rules apply to the group queue in the **Distribution Rules** tab.

Modifying a Distribution Rule

1 Click the **Distribution Rules** tab for the group queue to bring it to the top.

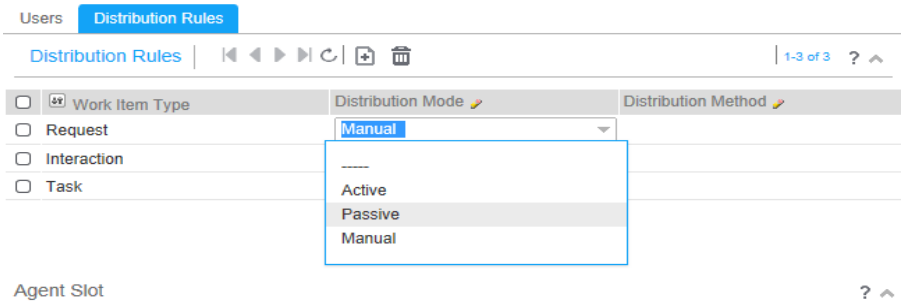


Figure 5-4: Distribution Rules Tab

By default, new group queues include a distribution rule for each type of work item. You may define only one rule for each work item type.

2 Click in the **Distribution Mode** or **Distribution Method** column of the work item and select a new setting from the drop-down list.

Field	Description
Work Item Type	*Interaction, Request,* or *Task*.

Field	Description
Distribution Mode	The mode in which the work item is dispatched from the group queue to the personal queue of an agent. *Active*: for items that must be done as soon as possible. This mode uses the least busy or round robin distribution method (see below) and sends items only to logged-in agents. *Passive:* for items that can be done now or later. Agents do not need to be logged in to receive work items. You can use either least busy or round robin distribution methods. *Manual*: the item remains in the group queue until the supervisor designates which agent gets the item. Distribution methods are not applicable.
Distribution Method	The distribution method that governs the rule. *Round Robin:* assigns a work item to each logged-in agent in the group queue in turn. *Least Busy* used with *Passive* mode: assigns a work item to the agent who has the fewest items assigned to him or her. *Least Busy* used with *Active* mode: assigns a work item to the agent who has spent the least time working since logging in.

3 Save your changes.

Personal Queue Limits

You may set a maximum for the number of work items in an agent's personal queue, above which no new work items are dispatched from the group queue to the agents' queues. To do this, use the **MaximumInteractionsInQueue**, **MaximumRequestsInQueue**, and **MaximumTasksInQueue** global settings described in Chapter 12, "Global Settings."

Chapter 6
Managing Service Level Objectives

6

This chapter covers the areas in the **Administration** menus that are used by the Customer Service application to manage service level objectives (SLOs). These are **Business Calendar Administration** and **Managing Service Level Objectives**. In order to use SLOs, you must also enable its related services in Infor Studio. The major topics in this chapter are as follows:

For information on working with the user interface, see the *Application Reference Guide*.

About Service Level Objectives (SLOs)

SLOs specify the performance expectations under which a particular group queue should operate. When a group queue has an SLO associated with it, all of the work items in that queue are expected to conform to the due dates or times of the SLO. A group queue may be associated with only one SLO, but an SLO may affect more than one group queue. Information about group queue administration is included in chapter 5, “Group Queue Administration.” All time calculations for SLO work items are based on the SLO’s business calendar. An SLO may have only one business calendar at a time.

An SLO applies only to a work item that is first assigned to a group queue. Any work item routed from an SLO group queue to a personal queue keeps the SLO due times. An item that is moved from one group queue to another uses the SLO for the new group queue (if any) to recalculate the due times for the item.

The SLO does not enforce the performance expectations or actively alert anyone when a work item is approaching overdue status. Managers and agents should use the **Monitor Service Level Objectives** menu item on the **Navigation** guide bar regularly. Only active work items are monitored. When an item is closed, its closure time is recorded with the work item, and it is removed from the group queue.

By default the SLO status updates every 10 minutes. However, the update global setting may be changed by an administrator. The global setting for this is called **SloStatusUpdateFrequency**. See Chapter 12, “Global Settings,” for information about changing global settings. To avoid performance issues, five minutes is the lowest setting supported. Lower values may be entered, but they are disregarded.

In order to set up and maintain SLOs, you must have at least one business calendar. Customer Service ships with a generic calendar called “Hours of Operation,” which is based on a five-day 9:00 AM to 5:00 PM shift called “Basic Hours of Operation.”

About Business Calendar Administration

The only purpose of the business calendar is to provide a method to define working days and hours (hours of operation), shifts, and holidays in order to calculate due dates for work items under SLOs. For example, if request is opened on a Friday and allotted two business days under a standard SLO, it would be due on Sunday in a seven-day week, but on Tuesday if only Monday through Friday are work days.

A business calendar consists of days of the week and shifts. Each shift includes a start time and an end time. Each instance of a business calendar is associated with a time zone so that the shift start and end times are for that time zone. Holidays may be associated with the business calendar in order to exclude them when calculating SLO commitments.

Before you set up your business calendar, you need to identify the shifts you will need, the days of the week that they run, and the starting and ending times for each. You cannot edit the starting and ending names after you enter them, but you can always change the days and shifts in your calendar. You may have multiple shifts each day. A **Basic Hours of Operation** shift for each day of the week is included with the application.

Setting up SLOs

In order to create an SLO, you must have a business calendar. And in order to complete the setup of your business calendar, you must have shifts and holidays. Finally, you must enable the SloMonitorService and SloService that run SLO. Therefore, the workflow to set up an SLO is as follows:

1. Create a business calendar (See “Create a Business Calendar” on page 6-4.)
2. Create a shift (See “Creating a Shift” on page 6-4.)
3. Create holidays (See “Creating Holidays” on page 6-5.)
4. Add days of the week and holidays to the calendar (See “Adding Days of The Week and Holidays to the Calendar” on page 6-5.)
5. Create a service level objective (See “Creating a Service Level Objective” on page 6-6.)
6. Enable the SLO services (See “Enabling the SLO Services” on page 6-6.)

Create a Business Calendar

1. Go to **Admin > Business Calendar Administration** to open the module.
2. Click **New** to open the Business Calendar detail.
3. Enter a **Calendar Instance Name** and select a **Timezone**.

   Unique business calendars are identified by the combination of **Calendar Instance Name** and **Timezone**. The time zone applies to the hours in shifts and holidays.
4. Click **Save**.

Creating a Shift

1. Go to **Admin > Business Calendar Administration**, and open a business calendar for editing.
2. On the Days of the Week tool bar, click **Add Existing** and select a day of the week to open a pop-up window with a listing of the existing shifts for that day.
3. On the Shifts tool bar, click **New** to open a shift detail form in the same window.

4 Enter a **Shift Name**.

For example, Customer Service ships with a shift called Basic Hours of Operation. You may need an Early Shift and a Late Shift for your business.

5 Select a **Start Time** and **End Time** from the hour, minute, and AM/PM drop-down lists.

Note: A shift cannot cross the boundary between days. If you have a swing shift that runs from 8:00 PM to 2:00 AM, for example, you must create two shifts to cover it: one on the first day for the PM portion to 11:59 and the other on the next day for the AM from 12:00 AM.

6 Click **Save**.

7 Repeat step 3 through step 6 for each day of the week in the shift and for each shift your company runs for that day of the week.

Creating Holidays

1 Go to **Admin > Business Calendar Administration**, and open a business calendar for editing.

2 On the Holidays tab tool bar, click **New** to open a Holiday detail form.

3 Enter a **Holiday Name**.

4 Select a **Start Date** and **End Date** from the calendar pop-up window.

Be sure that the time on the start date is 12:00 AM and on the end date that it is 11:59 PM in order to get a full day holiday.

5 Click **OK**.

6 Click **Save**.

Adding Days of The Week and Holidays to the Calendar

1 Go to **Admin > Business Calendar Administration**, and open a business calendar for editing.

2 On the Days of the Week tool bar, click **Add Existing** and select a day of the week to open a pop-up window with a listing of the existing shifts for that day.

The shifts that are listed are those that have not yet been added to the current calendar.

3 Select one or more shifts, and click OK.

4 Repeat step 2 and step 3 for each day of the week that belongs in the current calendar.

5 Click the Holidays tab, and then click **Add Existing** to open the Holiday list.

   The holidays that are listed are those that have not yet been added to the current calendar.

6 Select the holidays to add to the calendar, and click **OK**.

7 Click **Save**.

Creating a Service Level Objective

1 Go to **Admin > Manage Service Level Objectives**.

2 Click **New** on the tool bar to open the New Service Level Objective detail.

3 Enter a **Name** and **Description** for the SLO.

4 For the **Due Time Offset**, enter a positive integer. This is the amount of time after the creation of the SLO work item before it becomes due.

5 For the **Threshold Time Offset**, enter a positive integer less than the due time offset value. This is the amount of time after creation of the work item until the item reaches a warning level.

6 For **Time Unit**, select the unit in which the offsets are measured. The options are **Minutes**, **Hours**, and **Days**.

7 For **Business Calendar**, click the binoculars to open a pop-up window and select the business calendar to use for the SLO.

   The business calendar includes the time zone and working hours, exclusive of holidays, that are used to calculate the actual SLO due date and time.

8 Click **Save**. After you save, the Group Queues tab appears below the record.

9 Click **Add Existing** on the Group Queues tool bar to open a pop-up window and select one or more group queues to use the SLO.

10 Save again.

Enabling the SLO Services

1 In the Infor Studio guide bars, go to **Admin > Services** and click **SLOMonitorService** to open its service instance form.

2 Select **Enabled** and save.

3 In the guide bar, click **SloService** to open its service instance form.

4 Select **Enabled** and save.

Monitoring Service Level Objectives

Once you have set up your SLOs and linked them to group queues, you and other users may monitor them from the Navigation menu. Go to **Service Operations > Monitor Service Level Objectives**, and search for a specific group queue or use blank criteria to view a list of all of the group queues that are linked to SLOs.

This screen lists the service level objectives (SLOs) in your system and their current status. The status updates regularly based on the **SloStatusUpdateFrequency** global setting. The default is every 10 minutes, but you may adjust the frequency to as often as every five minutes.

The SLO monitor columns are listed in the following table. They display a count of the SLO records that meet the given criteria.

Column	Criteria
Under Threshold	Not yet at the warning threshold
Over Threshold	In the warning period but not yet overdue
Past SLO	Overdue according to the SLO guidelines
Oldest Item	Age of oldest item in the queue

When you click the view icon for an SLO, a Work Items list opens in the Manage Work Items module so that you can view the individual records and their SLO due dates. You may reassign the work items or change the SLO due date and time from the area below the list. See “Manage Work Items” on page 8–6 for more information about this module.

Chapter 7
General Application Management

7

This chapter covers the areas in the **Administration** menus that are common to both Infor Sales Force Automation and Customer Service. These areas are **Lookup Admin**, **Currency Conversion Rate Management**, **My Views Admin**, and **Corporate Dictionary**. For information on working with the user interface, see the *Application Reference Guide*.

Additionally, the **Administration** guide bar in Infor Studio includes **User Preference Templates** that you should be aware of although you will probably use them rarely, if at all, after your initial implementation. The time zone preference is covered in this chapter beginning on page 10. A complete listing of user preference templates is included in the *Sales and Service Architecture Reference Guide*.

This chapter includes the following major topics:

Lookup Admin

Lookup categories are the drop-down lists in your Infor applications. The lookup categories themselves may be edited only in Infor Studio. However, the items on the drop-down lists — the lookup values — may be edited from the **Lookup Admin** module on the **Administration** guide bar.

Modifying Drop-down List Items

1. Go to **Admin > Lookup Admin** to open the Lookup Categories list.
2. Click a **Lookup Category Name** to open an editable list of its Lookup Values below the Lookup Categories list.
3. Click **New** to open a detail and add a lookup value, or edit the fields of existing values directly in the Lookup Values list.

   You may safely edit the **Text String** and **List Order** for any lookup value. These fields affect only the appearance of the drop-down list items in your application.

   Caution: Use extreme caution and coordinate closely with your application developers if you modify the Code String, Code Int, or Parent Lookup Value fields or delete existing lookup values in which these fields are populated.

Field	Description
Text String	The drop-down list item as it appears in the list
Code String	A unique alternate value for the lookup value that is used only in code. The convention is to use the English version of the Text String in lower case, replacing spaces with underscores. Coordinate with your application developer before modifying this field.
Code Int	A unique alternate integer value for the lookup value that is used internally. The convention is to use the next integer in the series. Coordinate with your application developer before modifying this field.

Field	Description
List Order	The order in which the item appears in the list with 1 being the top of the list. The sort order here may be overridden when defining attribute domains in Infor Studio.
Parent Lookup Value	The value from another lookup that must be specified in order for this lookup value to be displayed. This is used for what application developers call “dependent drop-downs.” Coordinate with your application developer before modifying this field.

4 Click **Save** on the Lookup Categories tool bar to save your changes.

5 Click **Hot Deploy** to update your applications.

Currency Conversion Rate Management

Users of Infor Sales Force Automation and Customer Service can select which currency they want their application to use in their User Preferences. The selection they make is reflected in all monetary fields of their application. This allows employees in your European offices to view their monetary fields in Euros, in your Japanese offices to view them in yen, and so on.

Currency conversion is usually accomplished in one of two ways:

- Using the **Currency Conversion Rate Management** module available from the **Administration** guide bar in the applications to enter manually the conversion rates and the date range between which conversion rates are valid.
- Using an import job in the Job Scheduler (see Chapter 15, “Job Scheduler”) to import conversion rates from an external source. This method is set up by the application implemented. See the *Sales and Service Architecture Reference Guide* for information about the bulk import service.

Setting Currency Conversion Rates

1. Go to **Admin > Currency Conversion Rate Management** to display a list of currencies.

   The applications ship with more than 60 currencies pre-defined. However, if you use a currency that is not included, you may add it by clicking **New**.

2. Browse the currencies or use the filter row to find a particular currency.
3. Click the preview icon to open the detail form below the list. The fields of the currency rate detail are described in the table that follows the screen shot below.

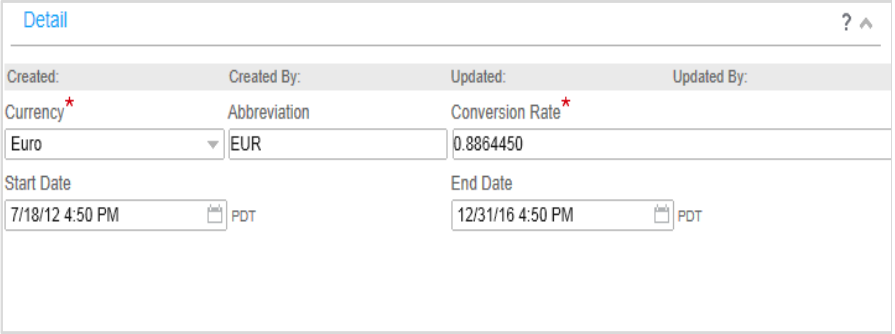


Figure 7-1: Currency Rates and Detail

Field	Description
Currency	The name of the currency
Abbreviation	The ISO 4217 abbreviation for the currency
Conversion Rate	Enter the currency conversion rate here. This rate is relative to the base currency set for your system. The default base currency is U.S. dollars. So, for example, if the conversion rate for euros shows 0.88 in this field, that means that 0.88 euros is equal to $1.00. If you want to change the base currency, you can do so by changing the *baseCurrencyLocale* global setting to the currency of choice as described in chapter 12, “Global Settings.”
Start Date	Used with the *End Date*, sets the dates between which the conversion rate is valid. If you do not specify a date range, the conversion rate is valid until you change it.
End Date	Used with the *Start Date*, sets the dates between which the conversion rate is valid. If you do not specify a date range, the conversion rate is valid until you change it.

My Views Admin

Users can create and save views for their own use on their own computers. **My Views Admin** on the **Administration** menu lets you make views global or available to users with specified user profiles. You may also create new views or modify the filters in existing views.

To use this functionality, click **My Views Admin** on the Administration menu.

Creating a View

1 Go to **Admin > My Views Admin** to open a **View Admin** tab.

2 Click **New** to open a New View form.

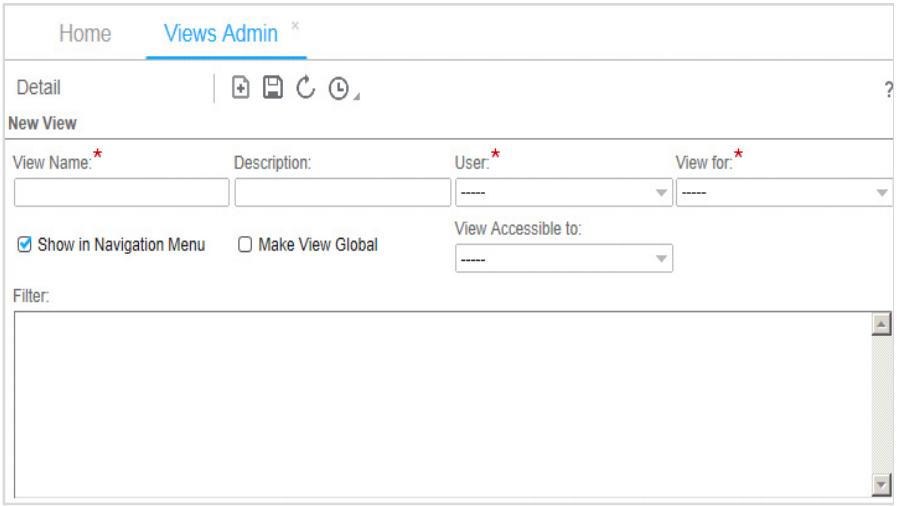


Figure 7-2: New View Detail Form

3 Enter information as described in the table that follows.

Field	Description
View Name	Required: Enter a name for the view. The name you enter is added to the *My Views* menu when you save.
Description	Enter a description of the view. This appears in the list in the *View Admin* tab, but not in the *My Views* menu.

Field	Description
User	Required: Select a user to whom the view applies. The options are the current user or *Global*. To make the view global, select *Global*.
View for	Required: Select an area or category for the view.
Show in Navigation Menu	If checked, the view is shown under *My Views* menu of users to whom it is accessible.
Make Global	If checked, the *View Accessible To* list becomes unavailable when you save. If *Show in Navigation Menu* is also selected, the view appears to all users in the *Global* submenu of their *My Views* menu.
View Accessible To	Select the user profile of users who will have access to this view.
Filter	Enter a filter definition of the view using BIO query language. See the “BIO Programming” chapter of the *Sales and Service Architecture Reference Guide* for more information.

4 Save the new view.

Note: If you are uncomfortable with query languages, you may create many views by using the search row for the object, saving the results as a view, and then editing the view in **My Views Admin**.

The Corporate Dictionary

The corporate dictionary enables you to enter and manage words related to your organization for use with the spell checker. You can have multiple corporate dictionaries based on different languages. The applications initially provide two: English (U.S.) and English (U.K).

Corporate spell checker changes are applied globally to all users.

Editing the Corporate Dictionary

1. Go to **Admin > Corporate Dictionary** to open the **Corporate Dictionary** tab.
2. Click the search icon to return the list of available dictionaries.
3. Click a preview icon to open its dictionary detail in the lower pane.

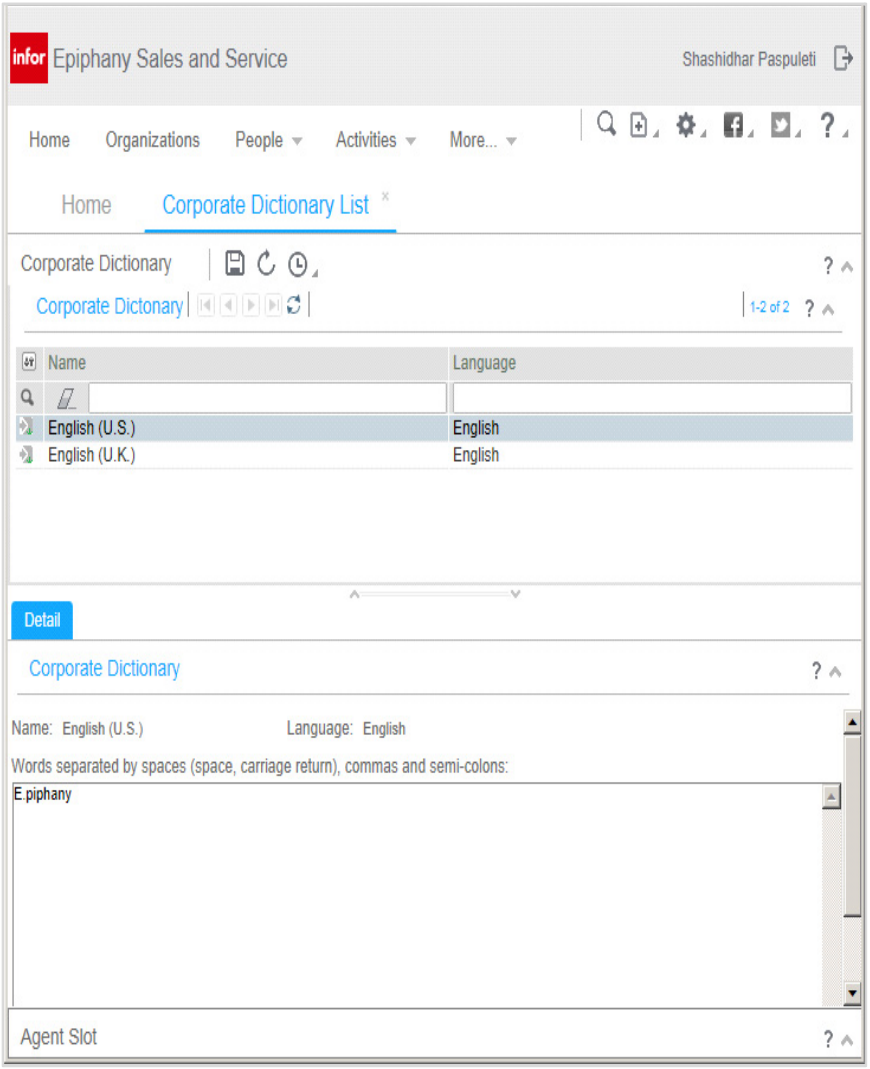


Figure 7-3: Corporate Dictionary List And Detail Forms

4 Enter, delete or modify words in the text box. Separate words with spaces, carriage returns, commas, or semicolons.

5 Save your changes.

System Time Zone

The time_zone user preference template in Infor Studio determines the default time zone for the regional preferences **Time Zone** drop-down list. Users may set their own time zones in the applications by going to **User Preferences > Regional and General**. As shipped, the default is “GMT - 8:00, U.S. Pacific time”.

To change the default time zone, in Infor Studio go to **Administration > User Preference Templates**, and find the row whose **Preference Name** value is **time_zone**. Enter a new Default Value from those in the following table.

Variance from GMT	Default Value	Other Cities
Greenwich Mean Time	GMT	
(GMT) Casablanca	Africa/Casablanca	Monrovia
(GMT) Greenwich Mean Time: Dublin	Europe/Dublin	Edinburgh, Lisbon, London
(GMT - 01:00) Azores	Atlantic/Cape_Verde	Cape Verde Is.
(GMT - 02:00) Mid-Atlantic	Atlantic/ South_Georgia	
(GMT - 03:00) Brasilia	America/Sao_Paulo	
(GMT - 03:00) Buenos Aires	America/ Buenos_Aires	Georgetown
(GMT - 03:30) Newfoundland	America/St_Johns	
(GMT - 04:00) Atlantic Time (Canada)	America/Halifax	
(GMT - 04:00) Caracas	America/La_Paz	La Paz
(GMT - 04:00) Santiago	America/Santiago	
(GMT - 05:00) Bogota	America/Bogota	Lima, Quito
(GMT - 05:00) Eastern Time (US & Canada)	America/New_York	
(GMT - 05:00) Indiana (East)	America/Indianapolis	
(GMT - 06:00) Central Time (US & Canada)	America/Chicago	
(GMT - 06:00) Mexico City	America/Mexico_City	Tegucigalpa

Variance from GMT	Default Value	Other Cities
(GMT - 06:00) Saskatchewan	America/Regina	
(GMT - 07:00) Arizona	America/Phoenix	
(GMT - 07:00) Mountain Time (US & Canada)	America/Denver	
(GMT - 08:00) Pacific Time (US & Canada) Tijuana	America/Los_Angeles	
(GMT - 09:00) Alaska	America/Anchorage	
(GMT - 10:00) Hawaii	Pacific/Honolulu	
(GMT - 11:00) Midway Island	Pacific/Apia	Samoa
(GMT - 12:00) Eniwetok	Asia/Kamchatka	Kwajalein
(GMT +01:00) Amsterdam	Europe/Berlin	Bern, Rome, Stockholm, Vienna
(GMT +01:00) Belgrade	Europe/Belgrade	Bratislava, Budapest, Ljubljana, Prague
(GMT +01:00) Brussels	Europe/Paris	Copenhagen, Madrid, Vilnius
(GMT +01:00) Sarajevo	Europe/Warsaw	Skopje, Sofija, Zagreb
(GMT +02:00) Athens	Europe/Athens	Istanbul, Minsk
(GMT +02:00) Bucharest	Europe/Bucharest	
(GMT +02:00) Cairo	Africa/Cairo	
(GMT +02:00) Harare	Africa/Harare	Pretoria
(GMT +02:00) Helsinki	Europe/Helsinki	Riga, Tallinn
(GMT +02:00) Jerusalem	Asia/Jerusalem	
(GMT +03:00) Baghdad	Asia/Baghdad	Kuwait, Riyadh
(GMT +03:00) Moscow	Europe/Moscow	St. Petersburg, Volgograd
(GMT +03:00) Nairobi	Africa/Nairobi	
(GMT +03:30) Tehran	Asia/Tehran	
(GMT +04:00) Abu Dhabi	Asia/Muscat	
(GMT +04:00) Baku	Asia/Baku	Tbilisi

Variance from GMT	Default Value	Other Cities
(GMT +04:30) Kabul	Asia/Kabul	
(GMT +05:00) Ekaterinburg	Asia/Yekaterinburg	
(GMT +05:00) Islamabad	Asia/Karachi	Tashkent
(GMT +05:30) Bombay	Asia/Calcutta	Madras, New Delhi
(GMT +06:00) Astana	Asia/Almaty	Dhaka
(GMT +06:00) Colombo	Asia/Colombo	
(GMT +07:00) Bangkok	Asia/Bangkok	Hanoi, Jakarta
(GMT +08:00) Beijing	Asia/Hong_Kong	Chongqing, Urumqi
(GMT +08:00) Perth	Australia/Perth	
(GMT +08:00) Singapore	Asia/Singapore	
(GMT +08:00) Taipei	Asia/Taipei	
(GMT +09:00) Osaka	Asia/Tokyo	Sapporo
(GMT +09:00) Seoul	Asia/Seoul	
(GMT +09:00) Yakutsk	Asia/Yakutsk	
(GMT +09:30) Adelaide	Australia/Adelaide	
(GMT +09:30) Darwin	Australia/Darwin	
(GMT +10:00) Brisbane	Australia/Brisbane	
(GMT +10:00) Canberra	Australia/Sydney	Melbourne
(GMT +10:00) Guam	Pacific/Guam	Port Moresby
(GMT +10:00) Hobart	Australia/Hobart	
(GMT +10:00) Vladivostok	Asia/Vladivostok	
(GMT +11:00) Magadan	Asia/Magadan	Solomon Is., New Caledonia
(GMT +12:00) Auckland	Pacific/Auckland	Wellington
(GMT +12:00) Fiji	Pacific/Fiji	Kamchatka, Marshall Is.

Chapter 8
Service Administration

8

This chapter describes the managerial functions available in the Service application: **Balance Workload**, **Manage Work Items**, and **Offer Activity**.

For information on working with the user interface, see the *Application Reference Guide*.

The major topics in this chapter are as follows:

Internal Organization

The internal organization is your company, and thus you may create only one internal organization. As part of social media integration, an internal organization has to be created first before you can post to social media network.

Creating the Internal Organization

1 Go to **Admin > Internal Organization** to open the Internal Organization detail form. All fields are required.

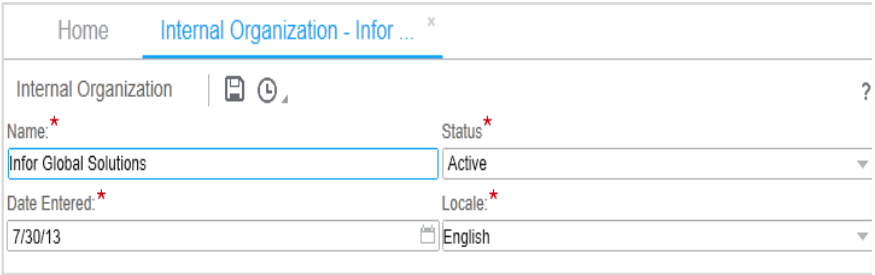


Figure 8-1: Internal Organization Detail Form

2 Enter your organization's **Name**, and select the **Locale**.

3 Change the **Status** and **Date Entered** if appropriate.

4 Save the record.

Work Reassignment

Balance Workload reassigns agents from one group queue to another. **Manage Work Items** reassigns work items from one group queue or agent to another and also manages their status and priority.

Use the Balance Workload and Manage Work Items reassignment functions to optimize the efficiency and effectiveness of your customer service center. You may use these functions in response to the immediate needs of the center or as a long-term strategy.

Balance Workload

Agents are assigned to group queues on the **Group Queues** tab of the **User Administration** module or the **Users** tab of the **Group Queue Admin** module. (See chapter 5, “Group Queue Administration,” for more information.) On the Balance Workload screen you may modify an agent’s set of group queues for operational purposes. Such modifications are not reflected in the Group Queue List of the User Administration screen until you change them there, but they do remain in effect and govern group queue assignments until you modify them again.

Modifications to group queue assignments are reflected on the agent’s Home screen after the screen is refreshed.

You can balance your workload in two ways:

- **Balancing by agent**: modifies the set of group queues to which an agent is assigned.
- **Balancing by group queue**: modifies the membership of a group queue.

Balancing by Agent

1. Go to **Service Operations > Manage Workload > Balance Workload** to open a **Balance Workload** tab. Balance Workload opens with the **By Agent** tab on top.

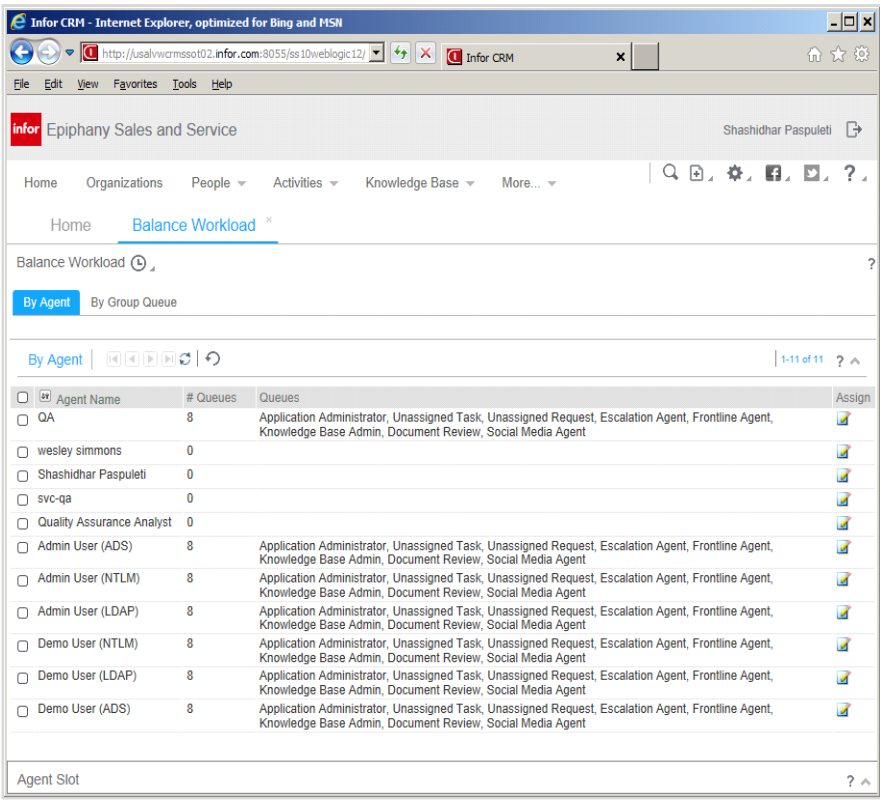


Figure 8-2: By Agent Tab

This tab displays a list of all agents in your team along with the number and names of their queues. The **Agent Name** column is sortable.

2 Click the edit icon in the **Assign** column to open that agent's Queues window.

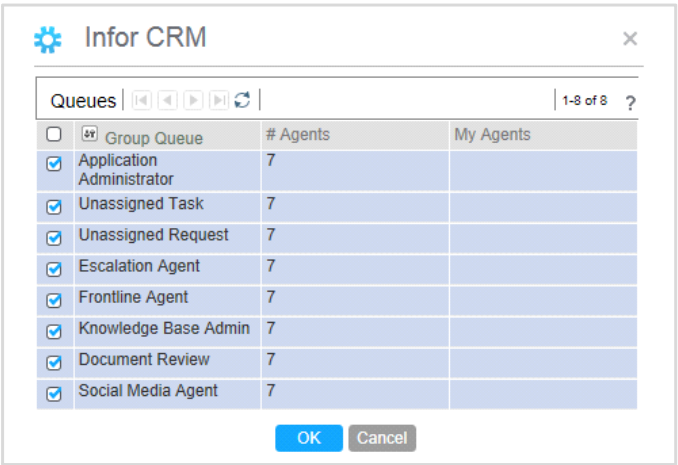


Figure 8-3: Agent's Queue Window

This window contains a list of all available queues along with the number of member agents. **My Agents** are the agents in your team. The **Group Queue** column is sortable.

3 Select or clear the boxes in front of the **Group Queue** column to indicate the operational group queues to which this agent belongs. A check means the queue is assigned.

4 Click **OK.** Your changes are reflected on the **By Agent** tab**.**

Balancing by Group Queue

1 Click the **By Group Queue** tab on the Workload Balance screen.

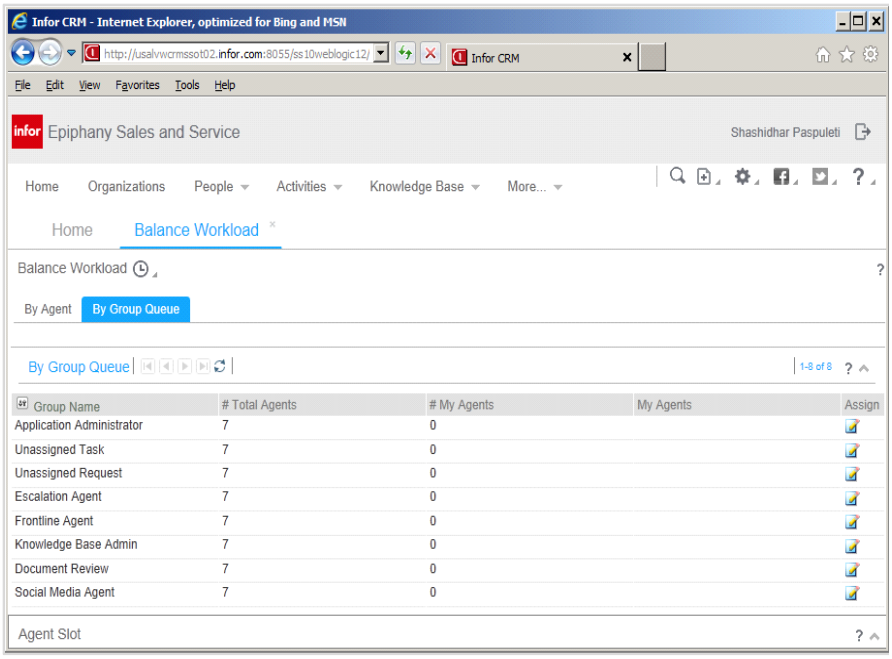


Figure 8-4: By Group Queue Tab

The tab displays a list of all group queues along with the number of total agents and the number and names of agents in your team. The **Group Name** column is sortable.

2 Click the edit icon in the **Assign** column of a queue to open its Agents window.

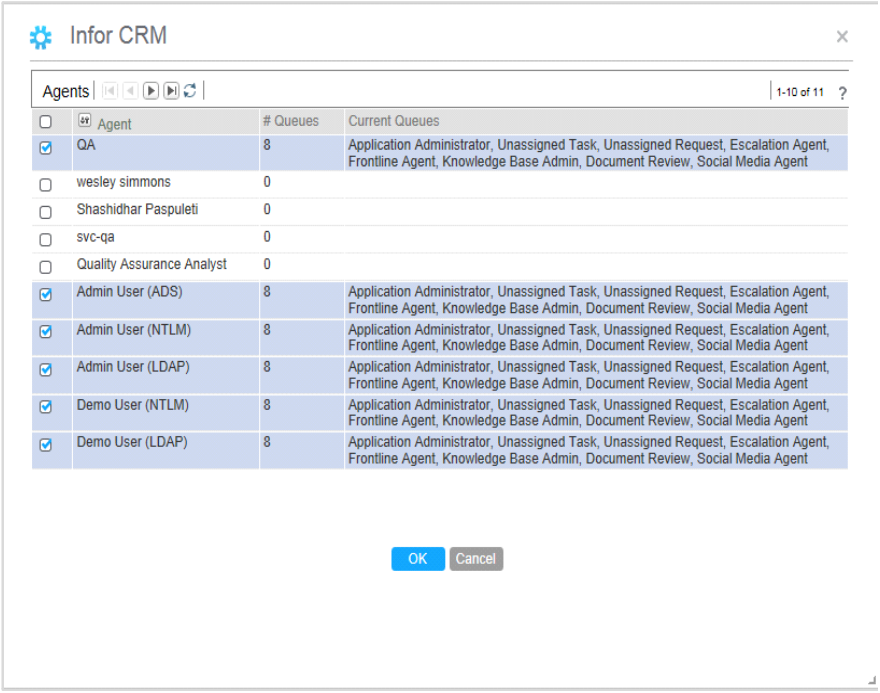


Figure 8-5: Group Queue's Agent Window

3 Select or clear the boxes in front of the **Agent** column to assign or remove agents. Checked boxes indicate agents who are assigned to this group.

4 Click **OK.** Your changes update the totals in the **# Total Agent**s column of the **By Group Queue** and are reflected on the **By Agent** tab.

Manage Work Items

The Manage Work Items function enables you to reassign work items from one agent or group queue to another. You can also change the status and priority of work items as you reassign them.

Reassigning work Items

1 Go to **Service Operations > Manage Workload > Manage Work Items** to open a **Manage Work Items** tab.

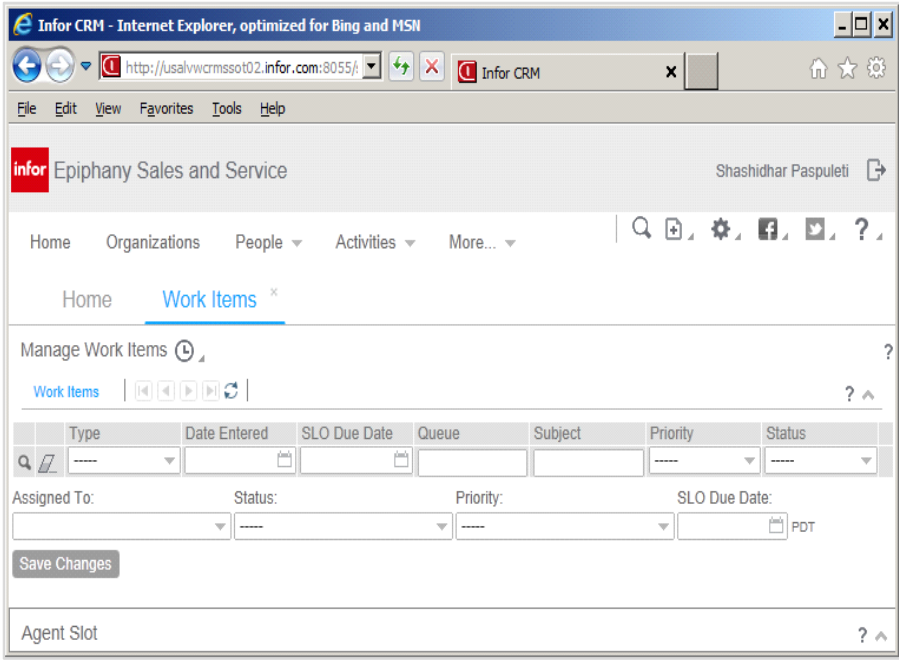


Figure 8-6: Manage Work Items Tab

2 Display a full or filtered list of work items.

3 Select the box in front of the **Type** column of the work items that you want to reassign.

4 In the **Assign To** box below the list, enter the name of the agent or group queue you want to receive the work items.

This is a type-ahead box. Press Alt+Enter after you enter a few characters to retrieve a list of possible matches.

5 To change the **Status** or **Priority** of the work items you reassign, select options in the drop-down menus. The selections apply to all work items reassigned.

6 To change the SLO Due Date, click the calendar icon and select

7 Click **Save Changes**. Your changes are reflected in the list.

Offer Activity

If your Contact Center application is configured with Real-Time Offer Delivery, your agents receive your company's current special offers and push them to customers during interactions. To review the success rate of both agents and the offers they have made, use the Offer Activity functionality.

Note: If your Real-Time Offer Delivery is not properly configured, you get a server error when you use the Offer Activity function. The error does not affect other parts of the application.

Viewing Offers Extended And Accepted

1. Go to **Products > Offer Activity** to open the **Offer Summary by Agent** tab.

   Note: Offer Activity is available only when the Customer Service application is integrated with the Interaction Advisor component of Outbound Marketing. An offer is a product or service marketing offer that a call center agent can use.

2. Click the search icon to display the list of agents. For each agent, the total number of offers he or she has extended to customers is shown along with the number of offers that were accepted and the acceptance percentage.

3. Select an agent in the Offer Summary by Agent tab to display a list of offers extended by that agent to customers. This screen displays the number of times each offer was extended and accepted, and the acceptance percentage.

Chapter 9
Sales Administration

9

This chapter describes the managerial functions available in the Sales application: **Internal Organization**, **Competitors**, **Partners** and **Task Templates**. For information on working with the user interface, see the *Application Reference Guide*.

Additionally, the **Administration** guide bar in Infor Studio includes some modules that you should be aware of, although you will probably use them rarely, if at all, after your initial implementation. One of these, **Time Periods**, is also covered in this chapter because, as shipped, it is used only to create sales periods in Sales Force Automation. The others are covered in Chapter 7, “General Application Management.”

Internal Organization

The internal organization is your company, and thus you may create only one internal organization. You must create this organization before you can create competitors or partners.

Creating the Internal Organization

1 Go to **Admin > Internal Organization** to open the Internal Organization detail form. All fields are required.

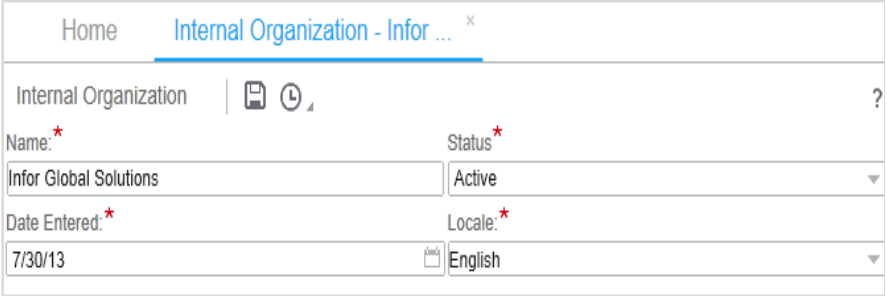


Figure 9-1: Internal Organization Detail Form

2 Enter your organization's **Name**, and select the **Locale**.

3 Change the **Status** and **Date Entered** if appropriate.

4 Save the record.

Competitors

Information about a competitor may be as important in making a sale as information about a contact. Enter and update information about your competitors; this information is then available to users of Sales Force Automation. Competitors may also be associated with opportunities and, by means of their products, with your products.

Creating Competitor Records

1 Go to **Admin > Competitors** to open the Competitors list.

2 Click **New** to open the New Competitor detail form.

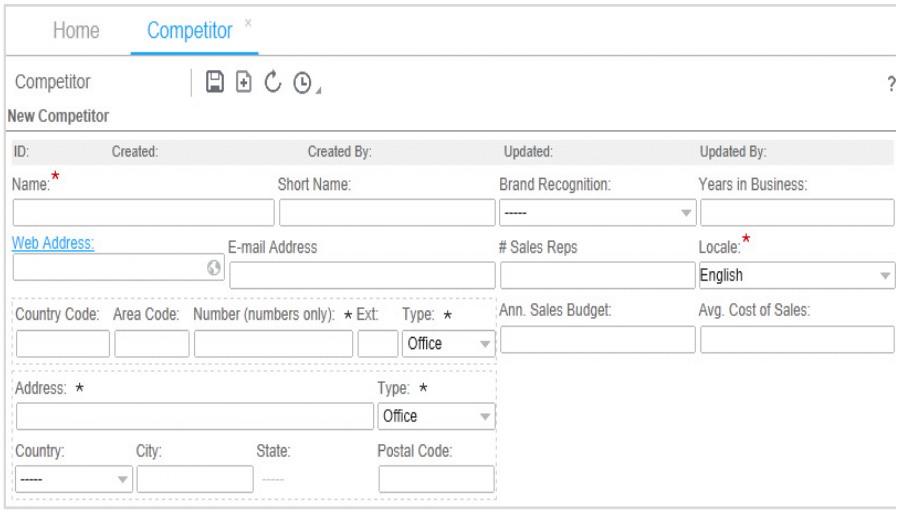


Figure 9-2: New Competitor Detail Form

3 Enter the **Name**, and select the **Locale**. The other fields are optional but useful. If the information is available, it's good practice to enter it.

4 Save the record.

When the save process is complete, and whenever you select a competitor record from your search results, a series of tabs appear below the Competitor detail form. As shipped, the tabs for competitor records are **Opportunities**, **Notes**, and **Audit Trails**. Salespeople may also link opportunities to competitors from the Opportunity form. Online help is available for each of these tabs.

Partners

You may enter and maintain information about your company's partners in order to make it available to your users. Like competitors, partners may be associated with opportunities.

Creating Partner Records

1 Go to **Admin > Partner** to open the Partners list.

2 Click **New** to open the New Partner detail form.

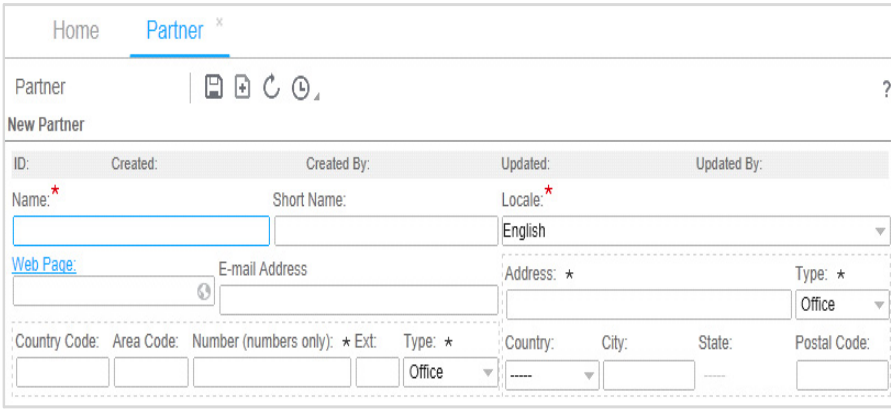


Figure 9-3: New Partner Detail Form

3 Enter the **Name**, and select the **Locale**. The other fields are optional but useful. If the information is available, it's good practice to enter it.

4 Save the record.

When the save process is complete, and whenever you select a partner record from your search results, a series of tabs appear below the Partner detail form. As shipped, the tabs for partner records are **Opportunities**, **Notes**, and **Audit Trails**. Salespeople may also link opportunities to partners from the Opportunity form. Online help is available for each of these tabs.

Task Templates

A task template is a set of individual tasks grouped together to share a common purpose. For example, you might have a task template for initial contacts that contains such tasks as sending a brochure, making a follow-up call, setting up a demonstration meeting, and so forth. Task templates are defined in the Workflow Designer and published for use in Sales Force Automation.

Task templates are available to Sales Force Automation users from the **Actions** menu on various forms. When a user selects a task template for an opportunity, a lead, a request or the like, the system automatically generates the set of tasks specified by the task template. These tasks are linked to the parent object and routed to the logged-in user. Go to **Admin > Task Templates** to view the existing task templates and their task items.

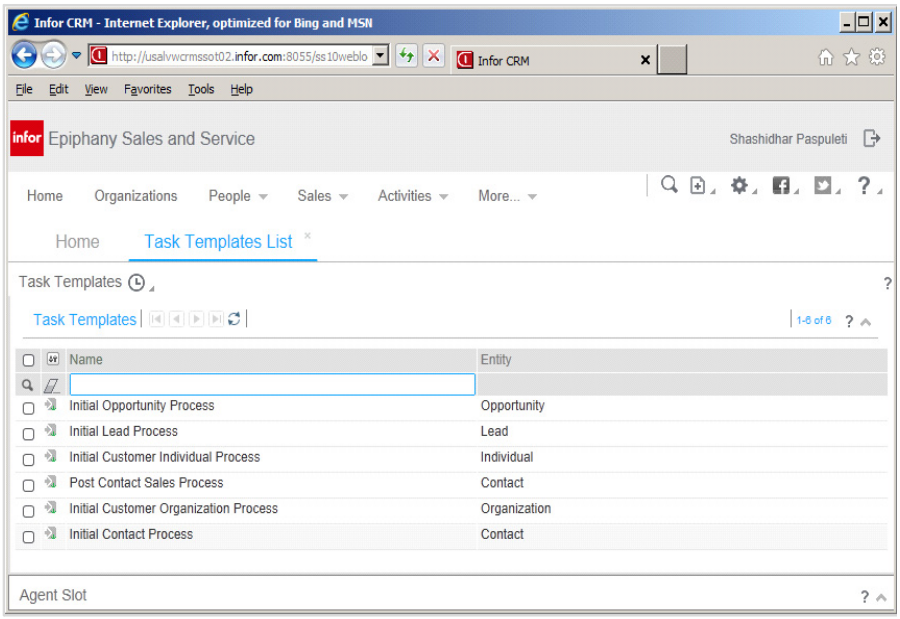


Figure 9-4: Task Templates

Sales Periods

The sales periods that are used in forecasts and quotas are a special subclass of Infor CRM system time periods. Typically, sales periods coincide with the quarters of your company's fiscal year. You should, however, follow your company's practice regarding sales periods.

In order to add or modify sales periods, you need to have access to Infor Studio. Instructions for installing it are included in the *Sales and Service Installation and Configuration Guide*. When you add sales periods, the new sales periods are immediately available. If you modify the name or date range of an existing sales period, however, the server needs to be restarted for the changes to take effect.

The following are all of the fields in time period records.

Field	Description
Time Period	A unique, localized name for the time period
Start Date	Start date for this time period
End Date	End date for this time period
Sales Time Period	When selected, the time period appears as a sales period in the Sales Force Automation application.
Obsolete	When selected, the time period is no longer available to applications.
Revision Number	Used in record locking. This field updates automatically when you save.

Adding Sales Periods

1 In Infor Studio, go to **Administration > Time Periods** to open the Time Periods list.

Time Periods (Show All) [4 Records]

Time Period*	Start Date*	End Date*	Sales Time Period*	Obsolete*	Revision Number
			☒	☐	
2005_Q1	1/1/2005	3/31/2005	☒	☐	1
2004_Q4	10/1/2004	12/31/2004	☒	☐	3
2005_Q2	4/1/2005	6/30/2005	☒	☐	1
2004_Q3	7/1/2004	9/30/2004	☒	☐	3
*			☐	☐	

Figure 9-5: Time Periods List

In Infor Studio lists, you create new records directly in the list. The row for new records is the one with the asterisk (*). Required fields are indicated

by an asterisk in the column title. Infor Studio has its own context-sensitive online help.

2. Enter a unique name for the new sales period in the **Time Period** field of the new row. The drop-down list includes the existing time periods.
3. Use the calendar tools to select the **Start Date** and **End Date** for the sales period.
4. Select the **Sales Time Period** check box, and save.

Chapter 10
Knowledge Base Management

10

The items in the **Knowledge Base** menu include **Search**, **Manage Repositories**, **Manage Templates**, and **Manage Documents**. Only **Search** is generally available to all users. The other items require the Knowledge Base Tools user profile. As shipped, both the Administrator and Knowledge Worker user roles include this profile. This chapter covers only the functions that require the Knowledge Base Tools profile. The **Search** function is documented in the online help.

Repositories

Repositories are where your e-mail templates and documents are stored. Repositories may have subdirectories called categories. You must create at least one **Email Template** or **Knowledge Document** repository before you can use **Manage Templates** or **Manage Documents**.

Creating Repositories

1 Go to **Knowledge Base > Manage Repositories**, and click **New** to open the New Repository form.

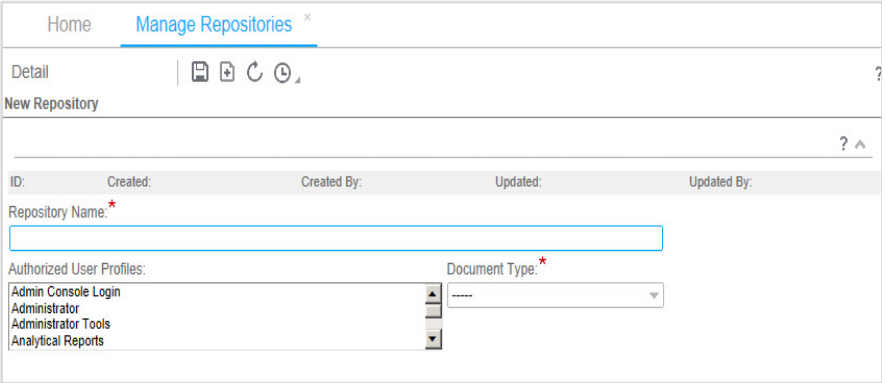


Figure 10-1: New Repository form

2 Enter a **Repository Name**, and select a **Document Type**.

3 In the **Authorized User Profiles** list, select the profiles of users who can access documents stored in this repository. The **Administrator** and **Knowledge Base Tools** profiles always have full access and do not need to be selected. The default authorized user profiles are **Knowledge Base Search** for **Knowledge Documents** and **Email** for **Email Templates**.

   The **Sales Application Login**, **Service Application Login**, **Admin Console Login,** and **Self-Service Application Login** profiles are for permissions on applications only. Avoid using them for permissions on knowledge objects unless you intend to grant access to any user who logs into an application.

   The profiles you select here are inherited as the defaults for categories and knowledge documents or e-mail templates you add to this repository.

   To select multiple profiles, press and hold Ctrl or Shift as you make your selections.

4 Save your changes.

Categories

Like subdirectories in a file system, categories allow you to organize your templates and documents for easier maintenance.

Creating Categories

1 In the **Knowledge Base** menu, select either **Manage Templates** or **Manage Documents** to open the split screen for templates or documents.

If you have several repositories and categories, select a parent for the new category in the **Templates Tree** or **Documents Tree**.

2 Click **New** and select **Category** from the drop-down menu.

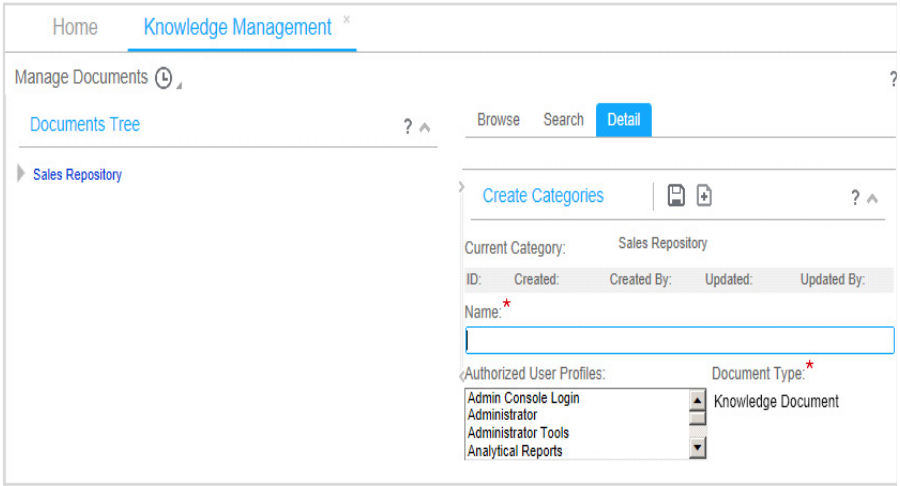


Figure 10-2: Category Detail tab

3 Enter the required **Name** of the category. The **Document Type** is automatically determined by the menu item you selected in step 1.

4 In the **Authorized User Profiles** list, select the profiles of users who can access documents stored in this category.

The **Administrator** and **Knowledge Base Tools** profiles always have full access and do not need to be selected. The **Sales Application Login**, **Service Application Login**, **Admin Console Login,** and **Self-Service Application Login** profiles are for permissions on applications only. Avoid using them for permissions on knowledge objects unless you intend to grant access to any user who logs into an application. The default authorized user profiles are those that were set for the repository to which this category belongs.

The profiles you select here are inherited as the defaults for knowledge documents (or e-mail templates) you add to this category.

5 Save your changes.

Templates

Templates are patterns that agents and salespeople can use and reuse for quick and consistent composition of outbound e-mail messages. E-mail templates may be in HTML, plain text, or both. They may also be language-specific.

You create e-mail templates from the **Manage Templates** menu item on the **Knowledge Base** menu. In order to create a template, you must first have a repository. See "Creating Repositories" on page 10–2 for instructions. You edit or delete templates the same way as any other records in Infor CRM Sales and Service .

Templates become available to users only when they are published and only when E-Mail Response is enabled. See the *Installation and Configuration Guide* for instructions to enable E-Mail Response.

Creating Email Templates

1 Go to **Knowledge Base** > **Manage Templates** to open the Manage Templates split screen.

If you have several repositories and categories, select a parent for the new template in the **Templates Tree**.

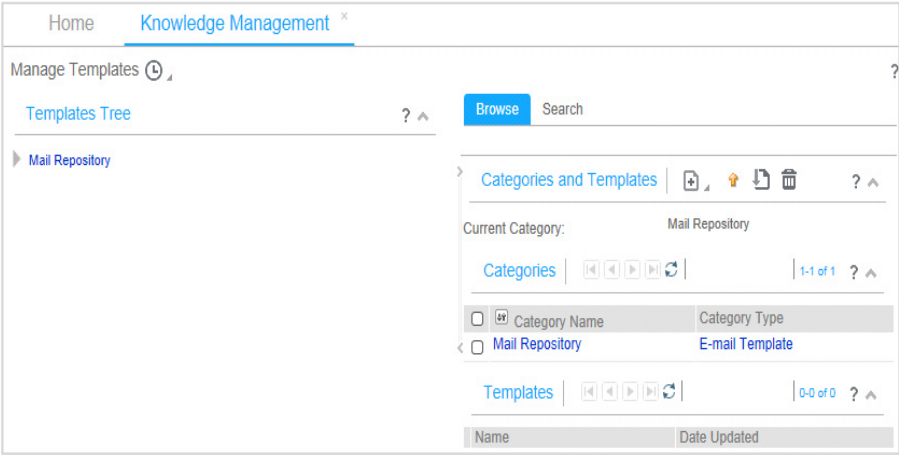


Figure 10-3: Manage Templates Screen

2 Click **New** and select **Template** from the drop-down menu to open the Email Template form.

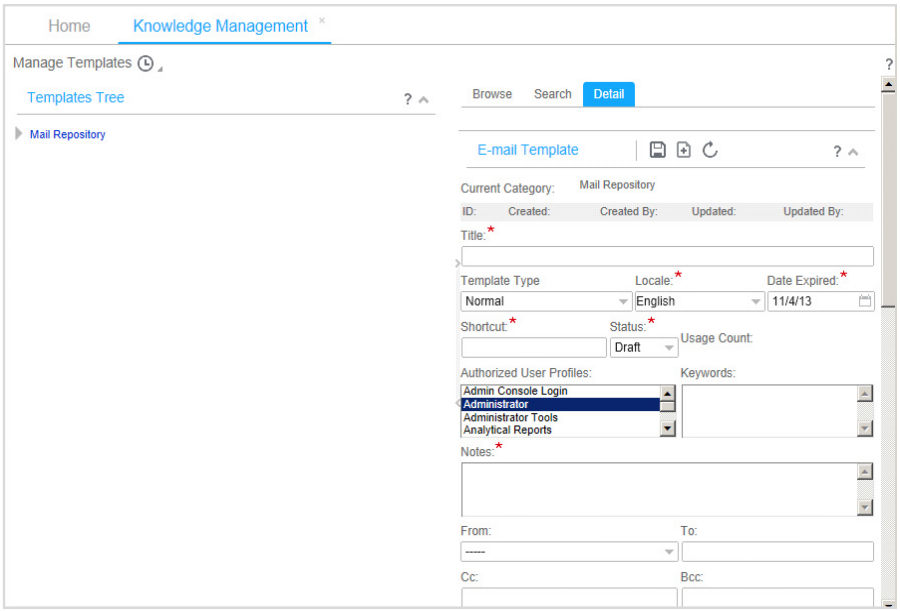


Figure 10-4: Email Template Detail Form

3 Enter the following information:

Field	Description
Title	Required: Enter a name for the template.
Template Type	Select the type of e-mail template from the drop-down list. *Normal* templates are available to users for any outbound message. *Greeting*, *Body*, and *Closing* templates may be suggested in e-mail responses to inbound messages. See "Auto-suggest and Template Snippets" on page 10–12 for more information.
Locale	Required: Select the locale from the type-ahead drop-down list.
Date Expired	Required: Select the date on which the template will expire. When a template has expired, it is no longer presented to agents as an option. Those with access to *Manage Templates* can still view the expired template.

Field	Description
Shortcut	Enter a word or string that can be used to insert the template into an outbound message without having to search for it. To insert the template, users surround the shortcut with double pound signs (##). For example, if you have an introductory paragraph with which agents should begin their e-mails to customers, create a template containing the paragraph and enter **intro** in the shortcut field. To insert the paragraph into an e-mail, an agent may then enter ##intro## in the body of the message.
Status	Select the current status of the template from the drop-down list. The options are *Draft*, *In Review*, and *Published*. Only *Published* templates are available for use with outbound messages.
Usage Count	A read-only counter that indicates how many times a suggested template has been used. *Greeting*, *Body*, and *Closing* templates are automatically counted. *Normal* template usage is recorded only when the *TrackMessageTemplateUsage* global setting is set to true. See chapter 12, "Global Settings," for more information.
Redirect	Select or clear this option. If selected, the following fields become read-only when you save the template: *Locale*, *Subject*, *Importance*, *HTML Template*, and *Text Template.*
Authorized User Profiles	Select the profiles of users who may use this template. New templates default to the user profiles of their repository or category. The *Administrator* and *Knowledge Base Tools* profiles always have full access and do not need to be selected. The *Sales Application Login*, *Service Application Login*, *Admin Console Login*, and *Self-Service Application Login* profiles are for permissions on applications only. Avoid using them for permissions on templates unless you intend to grant access to any user who logs into an application.
Keywords	Enter words that can be used in searches by keyword.
Notes	Required: Enter notes or comments about the purpose of the e-mail template.

Field	Description
From	Select the e-mail address from which e-mail messages created with this template will always be sent.
To	Enter an e-mail address for a recipient that will always be included in e-mail messages created with this template. Most outbound messages are automatically populated with the appropriate address. Any address you add here is in addition to other e-mail addresses in the *To* field and may be deleted by the agent or salesperson.
Cc	Enter an outgoing e-mail address to always copy in e-mails created with this template. Any address you add here is in addition to other e-mail addresses in the *Cc* field and may be deleted by the agent or salesperson.
Bcc	Enter an outgoing e-mail address to always blind copy in e-mails created with this template. Any address you add here is in addition to other e-mail addresses in the *Bcc* field and may be deleted by the agent or salesperson.
Subject	Enter subject line of the e-mail. If the subject field on the Email Response screen has “Re:” or “[INTR:”, the subject from an invoked e-mail template is ignored.
Importance	Select the importance level that e-mails created with this template will always have. The options are *High*, *Low*, and *Normal*.
HTML Template	Use this area for the body of HTML messages. You may include form field shortcuts here to be resolved by the agent or salesperson before the message is sent. See “Form Field Shortcuts” on page 10–9.
Text Template	Use this area for the body of text messages. You may include form field shortcuts here to be resolved by the agent or salesperson before the message is sent. See “Form Field Shortcuts” on page 10–9.

Note: You must enter both HTML and text contents in order for the template to be available to your users. You can copy from one to the other.

4 Click **Save**.

Form Field Shortcuts

Form field shortcuts allow you to specify the current content of a field in a form so that, when your agents or salespeople resolve the shortcut in their e-mail message, the content is pasted into their message. (Your developers and implementors may refer to these as dynamic variables or BIO attribute shortcuts.) For example, instead of starting a message with “Dear Customer,” you can use a shortcut that resolves to the customer’s name. The syntax for these shortcuts is %%form.field%%. These shortcuts may also be used by agents and salespeople creating their messages without the help of a template.

The form you use in these shortcuts is the form that is active when the e-mail message itself is originated. That means that you must consider when your agents or salespeople will use the template. For example, is it intended for use when initiating a message to a customer from the organization form? Is it a reply to an inbound message?

Note: If a record has incomplete fields, the shortcut may not resolve correctly. For example, if the salutation field is empty for a customer, `%%individual_customer.salutation_lkp%%` becomes null rather than Mr., Ms., and so on.

In order to determine the name of the form and field, you need to understand something about BIO’s and the database fields available in each. The form in the syntax for these shortcuts is actually the name of the BIO that supports the form. In most cases, the BIO name is the same as the name of the form you see in the application, but their are some exceptions.

The following table provides the form (BIO name) and some available fields for the forms from which e-mail is most commonly initiated:

Common Form Field Shortcuts (Sheet 1 of 3)

Module	Form	Fields
Contact	individual	assistant_name first_name full_name last_name parent_organization_name salutation_lkp
Customer	individual_customer	customer_name first_name full_name household_name last_name salutation_lkp

Common Form Field Shortcuts (Continued) (Sheet 2 of 3)

Module	Form	Fields
Interaction	interaction	customer_name date_first_contacted individual_name progress_status_lkp slo_status_lkp
Lead	e_lead	contact_full_name currency customer_full_name lead_name lead_source owner_agent_name
Opportunity	e_opportunity	currency customer_name date_actual_close date_expected_close e_price_list_name individual_name opportunity_name
Order	order_quote	bill_to_address1 bill_to_city bill_to_postal_code bill_to_state_lkp confirmation_number customer_full_name date_ship_expected individual_name order_number ship_to_address1 ship_to_city ship_to_postal_code ship_to_state_lkp
Organization	organization	full_name num_years_in_business primary_contact_individual_name

Common Form Field Shortcuts (Continued) (Sheet 3 of 3)

Module	Form	Fields
Product	product	description part_number product_name reference_code version_number
Request	request	customer_full_name date_created date_sla_commit individual_contact_full_name priority product_name progress_status_lkp request_id

Workflow Macros

You may also create e-mail templates to be called by workflows. Workflows use the same template shortcuts to call templates as other users, ##templatename##. Workflows are created in the Workflow Designer, which has its own online help.

Each workflow is a process composed of workflow activities. Workflow designers may add new variables both to workflow processes and to workflow activities. These variables may, in turn, be used in a workflow e-mail template by inserting either $$workflow_process.var_name$$ or $$workflow_activity.var_name$$. The variables added to workflow processes have wider scope than those added to workflow activities.

Workflows support many types of activities, such as manual activity, script activity, e-mail activity, subworkflow activity, and others. Each activity in a workflow process must specify its type. If a workflow activity is of the type **Email**, an e-mail template must also be specified. Whoever creates the workflow should preview the e-mail template to see if it includes workflow macros. If it does, then the workflow designer must define the variables used in the macros.

This is easiest to understand by looking at an example. The following is a sample e-mail template with workflow macros.

> Dear Customer:
>
> We received your order to purchase $$workflow_process.product_name$$. This item is in stock and available for shipment within two business days.

Our records show that you have purchased products from us $$workflow_activity.times_purchasing$$ times. Thank you for your continuing business.

Sincerely,

Joe Smith

In reality, of course, you would probably use a workflow macro for the customer name as well. The point is that the person who creates the workflow that calls this template also needs to create a workflow process variable called `product_name` and a workflow activity variable called `times_purchasing` in order for this template to resolve as intended.

Auto-suggest and Template Snippets

The template types **Greeting**, **Body**, and **Closing** indicate pieces of content that may be combined and suggested to agents or salespeople to create a complete message. The use of these templates is tracked automatically by the application. Unlike normal templates, which appear below the body area of any outbound message, these template snippets are available only in response to inbound messages and appear in drop-down lists above the message body, as shown in the following screen shot.

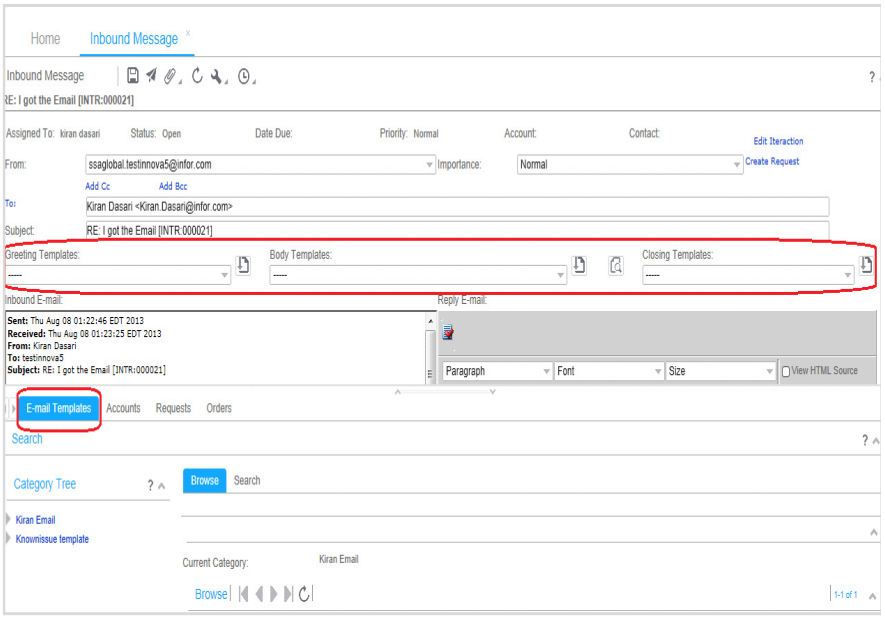


Figure 10-5: Portions of Inbound Message Screen

Template snippets are designed to be suggested in response to messages. You create the rules to suggest template snippets using the IBR

Designer or the EPI Extension Editor in Studio. The IBR Designer has its own online help, but some basic requirements for this kind of rule are as follows:

- The **Status** of the template snippet must be **Published**.
- The BIO against which the IBR rule is written must have a **message** attribute, although the **Bio Class** on the IBR rule does not have to be **message**.
- You should use one of your custom modules as the **Application Module**.
- For your **Condition**, start with **Message** and choose a field such as Subject, HTML Body, or Text Body. Basically you can write the linking IBR against Interaction and Message. The condition can be any valid IBR condition, but you should check that the interaction is of type **email** and that it is inbound (or similar).
- For the **Node Action**, choose **Invoke service** and then **Email** and **Relate Template to Email**.

Documents

Knowledge base documents store information that agents and salespeople can use to deal with various kinds of customer requests. They may include FAQ's, product brochures, specifications, catalog pages, or almost any other kind of document in electronic form that needs to be readily available. You may create documents within the application or, more commonly, upload files from your local computer or network to the application.

One special type of knowledge base document is the mail merge template. Information about mail merge templates and Microsoft Office integration in general is contained in the *Application Reference Guide*, "Microsoft Office Integration" chapter.

You create knowledge base documents from the **Manage Documents** menu item on the **Knowledge Base** menu. In order to create a document, you must first have a repository. See "Creating Repositories" on page 10–2 for instructions. You may also create categories to store your documents. See "Creating Categories" on page 10–3 for instructions. You edit or delete documents the same way as any other records in Infor CRM Sales and Service .

Documents become available to users only when they are published. Like the other knowledge base objects, e-mail templates, you limit access to documents by selecting user profiles for access. Knowledge base searches support full-text search of text, HTML, Word, PDF, and Excel files.

Creating Knowledge Base Documents

1. Go to **Knowledge Base** > **Manage Documents** to open the Manage Documents split screen.

   If you have several repositories and categories, select a parent for the new document in the **Documents Tree**.

2. Click **New** and select **Document** from the drop-down menu to open the Document form.

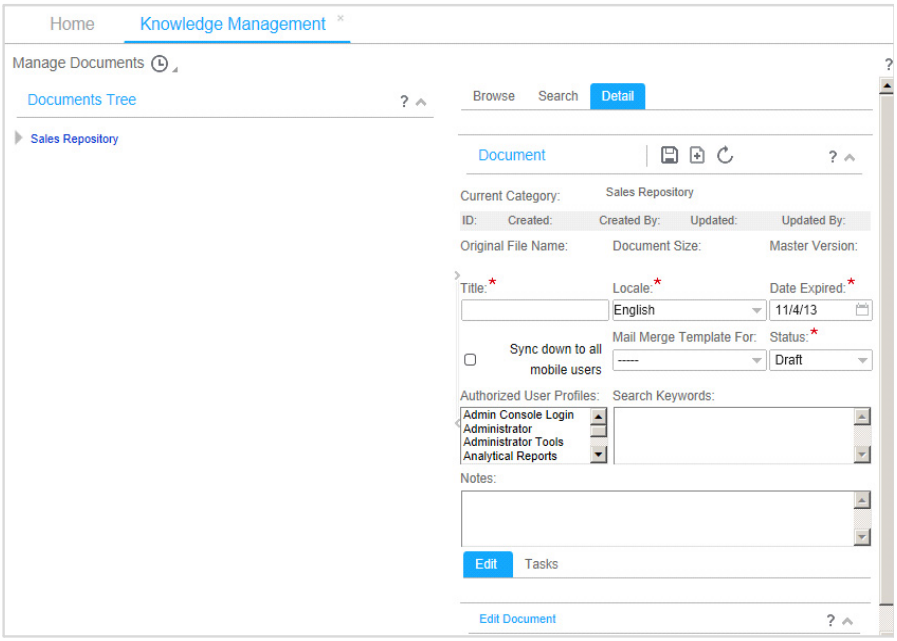


Figure 10-6: Document detail tab

3 Enter the following information:

Field	Description
Title	Required: Enter a name for the document.
Locale	Required: Select the locale from the type-ahead drop-down list.
Date Expired	Required: Select the date on which the document will expire. When a document has expired, it is no longer presented to agents. Those with access to *Manage Documents* can still view the expired document.
Mail Merge Template For:	Select a type of record from the drop-down list if the document is to be used as a mail merge template.
Status	Required: Select the current status of the document from the drop-down list. The options are *Draft*, *In Review*, and *Published*. Unless a document is *Published*, it is available only from the *Manage Documents* module and regular agents and salespeople cannot access it.

Field	Description
Authorized User Profiles	Select the profiles of users who may use this document. New documents default to the user profiles of their repository or category. The *Administrator* and *Knowledge Base Tools* profiles always have full access and do not need to be selected. The *Sales Application Login*, *Service Application Login*, *Admin Console Login*, and *Self-Service Application Login* profiles are for permissions on applications only. Avoid using them for permissions on documents unless you intend to grant access to any user who logs into an application.
Search Keywords	Enter words that can be used in searches by keyword.
Notes	Enter notes or comments about the purpose and content of the document.
Edit/Select Document Type	Select a document type from the drop-down list. The options are *HTML Document*, *Text Document*, and *Upload File*. HTML and text options open editors similar to those for e-mail templates. The upload option allows you to add an existing file from your local computer or network as the content of the document. See "Supported File Types" on page 10–17 for more information.

4 If you selected **HTML Document** or **Text Document**, enter the document content in the editor provided in the **Edit** tab, and go to step 7.

If you selected **Upload File**, an area opens in the **Edit** tab similar to the one shown below.

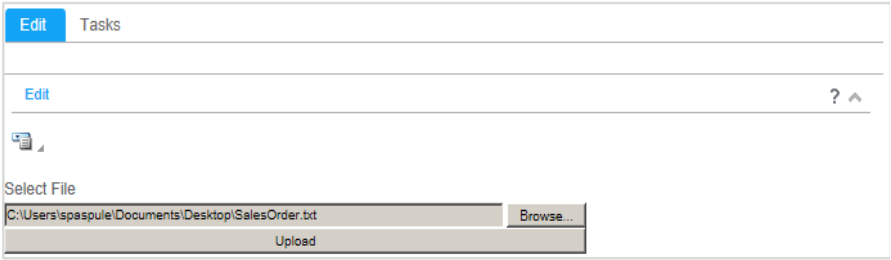


Figure 10-7: File Upload Area

5 Enter the path to the file you want to upload, or click **Browse** and select it.

6 Click **Upload**.

The uploaded file is not added to the system until you save, but you can preview many types of files at this point. PDF files, such as the one in the example, cannot be previewed until after you save.

7 Click **Save**.

An uploaded file looks something like the one in the following example.

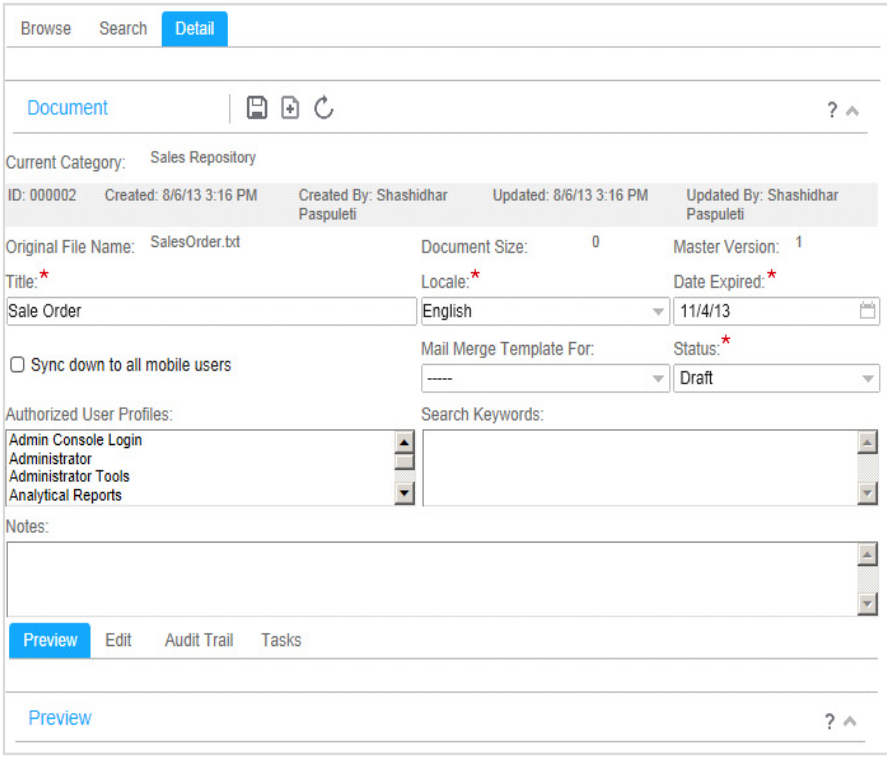


Figure 10-8: Sample Uloaded Document

Supported File Types

The follow file types (by file extension) are supported for upload:

abs	docx	jpg	mpd	qti	tar	pot	xld
aif	dv	js	mpe	qtif	text	ppa	xll
art	eml	jpeg	mpa	qif	tgz	stm	xla
asp	fdf	ls	mpeg	ra	tif	pps	xlc
au	gif	m1v	mpega	ram	pct	ppt	xlm
avi	gz	mda	mpegv	rm	pdf	pptx	xls

bmp	hqx	mdb	mpg	rmi	pic	psd	xlsx
cdf	htm	mde	mpp	rpm	pict	tiff	xlt
cer	html	mht	mpt	rtf	pjp	txt	xlw
cfm	htx	mhtml	mpv	sc2	pjpeg	vbs	xml
crt	ins	mid	nsc	scd	plg	vcf	z
css	isp	mocha	nws	sch	png	vdo	zip
der	jfif	mov	p7c	sd2	pnt	wav	
doc	jpe	mp2	pwz	snd	pntg	xbm	

Knowledge Document Authoring Workflow

A basic knowledge document authoring workflow is shipped with Customer Service and Sales Force Automation. When you open the workflow in the Workflow Designer, it appears as shown in the following screen shot.

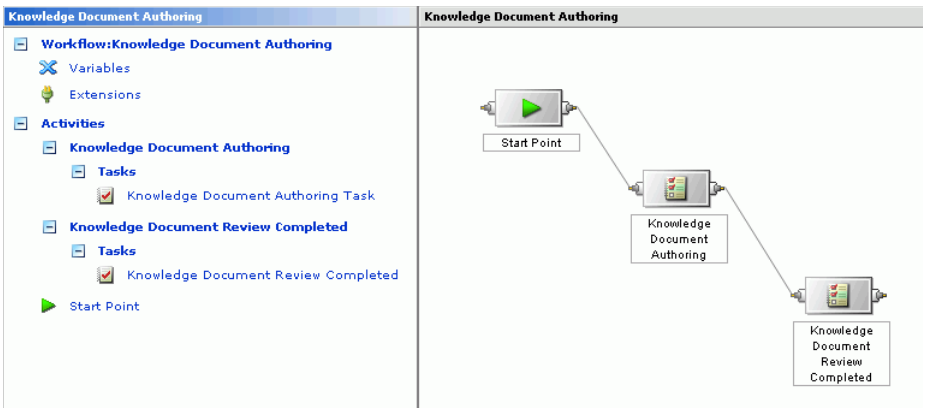


Figure 10-9: Sample Document Authoring Workflow

This workflow works as follows:

- When the status of a knowledge document is set to **In Review**, a task is sent to the Document Review group queue to review the new document.
- When this review task is closed, a new task is sent to the Knowledge Base Admin group queue.
- When a knowledge base administrator changes the status of the knowledge document to **Published** and saves, the second task is automatically closed.

These tasks appear in the **Tasks** tab below the knowledge document itself, as well in other tasks lists.

Chapter 11
Operational Reports

11

As shipped, the **Reports** menu of the **Navigation** bar includes only **Operational** reports. If your applications have been customized, reports of other types may also be available. This chapter covers only the operational reports that ship with Infor CRM Customer Service and Sales Force Automation.

Access to **Reports > Operational** requires the Operational Reports user profile. This role is linked to the following default user roles: Administrator, Contract Center Manager, Customer Support Manager, Sales Standard Manager, TeleSales Manager, TeleSales User. The appropriate application login profile is also required.

This chapter includes the following major topics:

For information on working with the application user interface, see the *Application Reference Guide*.

About Reports

Operational reports give you real-time and historical statistics about your customer service center performance, sales progress, and service quality levels. Most reports include parameters that you can adjust to tailor the report to your needs.

Note: You must be connected to a Crystal Reports server to view and work with reports. If you receive a **Server Error** message when you attempt to run a report, consult your system administrator.

Generating Reports

1. Go to **Navigation > Reports > Operational** to open a list of report categories.
2. Click a report category to open a list of the report titles available in that category.
3. Click a report in the Report Title list.

   Many reports require parameters. If the report you select does not, the report is displayed after you select it.

   If the report you select, requires parameters, a list of parameters opens where you can view the default values of the parameters and change them to meet your needs.

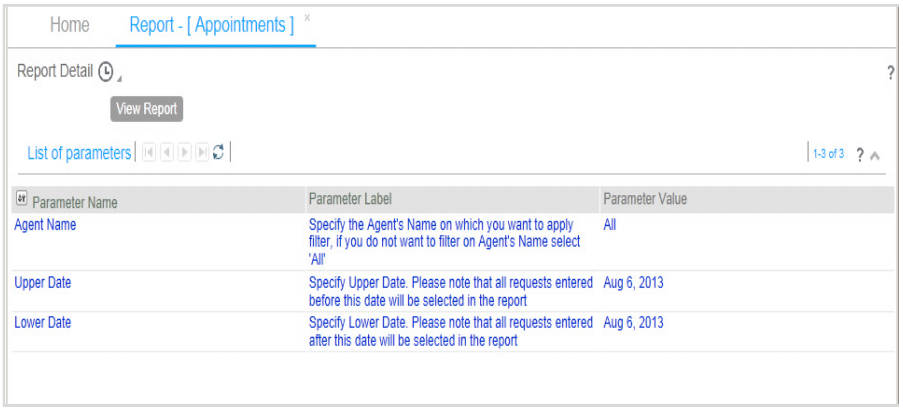


Figure 11-1: Report parameters screen

All report parameters default to **All**, except date parameters. Date parameters default to the current date.

Changing Report Parameters

1. Click the parameter to open its form below the parameter list.
2. Enter or select a new value for the parameter.
3. Click **Save**.

   The value you specify appears in the **Parameter Value** column.
4. Click **View Report** to display the specified report.

Report Categories and Titles

Reports are organized by various categories, and the categories are different for Sales Force Automation and Customer Service. The following tables list the categories and report titles for each application.

Sales Force Automation Reports (Sheet 1 of 3)

Category	Report Title	Description
Appointments	Appointments	Lists all appointments for the agent you select for the dates you specify. It includes the subject and location of the appointment and any notes that have been entered for it.
Customer Analysis	Opportunity by Geography	Provides an overview of the opportunities in territories and geographical regions.
	Customer (Organization) Analysis, Sales Team by Territory	Displays information about the organizations that are active opportunities within a territory, including their status in the sales cycle.
	Customer (Individual) Analysis, Sales Team by Territory	Displays information about the individuals who are active opportunities within a territory, including their status in the sales cycle.
	Timeline by Month by Territory	Provides an overview of the opportunities that are expected to close over a period of time, grouped by territory and month.
Forecast Analysis	Forecast Territory by Opportunity	Displays a forecast for each territory based on opportunities that have been identified for a specific sales period.

Sales Force Automation Reports (Continued) (Sheet 2 of 3)

Category	Report Title	Description
Interactions	Count of Interactions in Agent Queue	Shows in tabular form the names of agents in your team and the number of incoming interactions in each of their queues, with totals shown at the bottom. Click an agent name to view the following information for all interactions in the agent's queue: interaction ID, the duration of the interaction, and the group queue that contains the interaction.
	Count of Incoming Interactions in Queue (Generic)	Shows the total number of incoming interactions for the date you select. Results are shown by time of day and channel.
	Average time in Queue	Shows the average time an interaction stays in the queue for the date you select.
Lead	Lead Management by Territory	Displays the lead count by lead status for each territory in tabular form.
	Lead Management by Sales Rep	Displays the lead count by lead status for each sales representative.

Sales Force Automation Reports (Continued) (Sheet 3 of 3)

Category	Report Title	Description
Opportunity	Pipeline by Probability by Territory	Shows the opportunity pipeline by probability to close and territory.
	Won Lost by Opportunity Type	Shows opportunities won and lost by opportunity type.
	Pipeline by Probability by Month	Shows opportunity pipeline by probability to close and date.
	Pipeline by Sales Stage by Month	Shows opportunity pipeline by stage and date.
	Pipeline by Opportunity Type by Territory Report	Shows opportunity pipeline by type of opportunity and territory.
	Pipeline by Sales Stage by Territory	Shows opportunity pipeline by stage and territory.
	Won Lost Opportunity Type by Month	Shows opportunities won and lost by type and date.
Quota Management	Quota by Sales Rep by Fiscal Quarter	Shows sales representatives and status of quota progress by quarter.
Tasks	Count of Tasks in Agent Queue	Shows tasks by sales representative with the progress status and the date work was started on each.

Customer Service Reports (Sheet 1 of 5)

Category	Report Title	Description
E-mail Response	Response Time Histogram	Displays a histogram view of the response time for all messages responded to within the period specified. Each bar of the histogram represents a one-hour slice.
	E-mail Volume	Displays a line graph indicating the number of e-mail messages received for the period specified. May be viewed by month, day, or hour.
	Messages by Customer	Provides information on the volume of e-mail traffic received from customers for the period specified.
	Total Performance	Provides information on the extent to which service level agreements (SLOs) have been met across the contact center for the period specified. May be summarized by month, week, or day.
	Message Contents by Response Template	Provides the contents of the messages that have been associated with each suggested message template during the specified period, grouped by response template. *Normal* templates are not included unless the *TrackMessageTemplateUsage* global setting is set to true.

Customer Service Reports (Continued) (Sheet 2 of 5)

Category	Report Title	Description
Interactions	Count of Interactions in Agent Queue	Shows in tabular form the names of agents in your team and the number of incoming interactions in each of their queues, with totals shown at the bottom. Click an agent name to view the following information for all interactions in the agent's queue: interaction ID, the duration of the interaction, and the group queue that contains the interaction.
	Count of Incoming Interactions in Queue (Generic)	Shows the total number of incoming interactions for the date you select. Results are shown by time of day and channel.
	Average Time in Queue	Shows the average time an interaction stays in the queue for the date you select.

Customer Service Reports (Continued) (Sheet 3 of 5)

Category	Report Title	Description
Requests	Number of Escalated Requests (Agent x Priority)	Shows a list of agents in your team and the number of escalated requests for each priority level in their queues during a set date range. The parameters are agent, request status, and priority.
	Count of Closed Requests	Cartesian graph based on the parameters you select for each axis for column and row measures. The discrete values of the parameters appear as values along the axes. The numerical results are the coordinate points in the graph. For example, if you select *Priority of Request* for ColMeasure and *Agent Name* for RowMeasure, the priority values *High*, *Normal*, and *Low* appear along the y-axis and the names of your agents appear along the x-axis. The results show how many requests of each priority level were closed by each agent during the specified range of time.
	Number of Requests Currently in Queue with No Action Taken - Brand New and Untouched	Shows the number of untouched requests of each priority level in the queues of the agents, limited by the values you set for the parameters.

Customer Service Reports (Continued) (Sheet 4 of 5)

Category	Report Title	Description
Requests (continued)	Number of Escalated Requests	Shows the number of requests escalated during the specified time range by customer name or tier, limited by the values you set for the parameters.
	Count of Requests in Agent Queue	Shows in tabular form the names of agents in your team and the number of incoming requests in each of their queues, with totals shown at the bottom. Click an agent's name to display a list of individual requests and the progress status and date work was started on each.
	Number of Open Requests (Channel, Customer Tier, Agent, Priority and Request Type	Cartesian graph based on the parameters you select for each axis for column and row measures. The discrete values of those parameters appear as values along the axes. The numbers of open requests appear as coordinate points for each set of values in the graph.
	Average Request Resolution Time	Cartesian graph based on the parameters you select for each axis for column and row measures. The discrete values of those parameters appear as values along the axes. The average resolution times appear as coordinate points for each set of values in the graph.
	Count of Backlogged Requests (for Agent, Priority, and Request Type)	Cartesian graph based on the parameters you select for each axis for column and row measures. The discrete values of those parameters appear as values along the axes. The numbers of backlogged requests for each set of values appear as coordinate points in the graph.

Customer Service Reports (Continued) (Sheet 5 of 5)

Category	Report Title	Description
Requests (continued)	Number of Requests	Cartesian graph based on the parameters you select for each axis for column and row measures.
	Number of Requests Currently in Queue Agent x Priority	Shows a list of agents and the number of requests for each priority level in their queues during a set date range. Parameters are agent name, request status, and priority.
	Open and Closed Requests by Customer	Shows details of all requests opened and closed between the dates you specify and provides the information described by the parameters. The requests may be grouped by the customer who submitted them, the agent assigned, or the request priority.
Tasks	Count of Tasks in Agent Queue	Shows in tabular form the names of agents in your team and the number of tasks in each of their queues, with totals shown at the bottom. Click an agent's name to display a list of his or her individual tasks along with the progress status and the date work was started on each.

Report Design Information

Although Sales Force Automation and Customer Service include the sets of standard reports previously described, custom reports may also be created using Crystal Reports. (See the Platform Support Matrix for supported versions of Crystal Reports.) When you are working with a report writer to create custom reports, it is helpful to know where the data in the standard reports originates. This section provides basic mapping information from the data fields in the standard reports to your operational database.

The reports for Customer Service are based on tables or views. (Views are combinations of tables.) Because access to data in Sales Force Automation is restricted based on assignments, whether by territory or directly, the Sales Force Automation reports use stored procedures to access the operational schema. The scripts for the stored procedures are installed on your application server in the *Infor_Global_Dir*/shared/schema/scripts/business_data directory, where *Infor_Global_Dir* represents the drive and path for your installation. There are separate scripts for each supported type of database as shown in the following table:

Database Type	Script File Name
DB2	business_customsp_db2.sql
Microsoft SQL Server	business_customsp.sql
Oracle	business_customsp_ora.sql

For each report title, the remainder of this section indicates whether the report is based on a stored procedure or tables and views and provides a screen shot of the report layout followed by the mapping of report database fields to operational database tables and columns.

Appointments

This report uses the stored procedure APPOINTMENT_REPORT.

Database Field	Table.Column
enddt	e_cal_occur.date_end (date)
endtime	e_cal_occur.date_end (time)
fname	agent.agent_name

Database Field	Table.Column
location	e_appointment.location
notes	e_appointment.notes
sttime	e_cal_occur.date_start
subject	e_appointment.subject

Average Request Resolution Time

This report uses the views op_InteractionChannelInfo, op_InteractionDurationInfo, and op_requestReportsInfo.

Database Fields	Table.Column
agent_name	agent.agent_name
channel	op_InteractionChannel.channel > lookup.text_string
cust_tier	op_CustomerTier.tier > lookup.text_string
customer_type	op_CustomerType.type > lookup.text_string
date_closed	request.date_closed
date_entered	request.date_entered
date_entered	request.date_entered
household_name	household.household_name
indv_full_name	individual.full_name
organization_name	organization.full_name
priority	op_RequestPriority.priority > lookup.text_string
request_type	op_RequestType.request_type > lookup.text_string

Average Time in Queue

This report uses the op_InteractionReportsInfo view.

Database Fields	Table.Column
channel	op_InteractionChannel.channel > lookup.text_string
date_entered	interaction.date_entered
date_first_assigned	interaction.date_first_assigned
date_first_contacted	interaction.date_first_contacted

Count of Backlogged Requests

This report uses the op_RequestReportsInfo view.

Database Fields	Table.Column
agent_name	agent.agent_name
date_sla_commit	request.date_sla_commit
priority	op_RequestPriority.priority > lookup.text_string
request_id	request.request_id
request_progress_ status	op_RequestProgressStatus.progress_status > lookup.text_string
request_type	op_RequestType.request_type > lookup.text_string

Count of Closed Requests

This report uses the op_RequestReportsInfo view.

Database Fields	Table.Column
agent_name	agent.agent_name
date_closed	request.date_closed
priority	op_RequestPriority.priority '>lookup.text_string
request_id	request.request_id

Database Fields	Table.Column
request_progress_status	op_RequestProgressStatus.progress_status > lookup.text_string
request_type	op_RequestType.request_type > lookup.text_string

Count Incoming Interactions in Queue

This report uses the op_InteractionReportsInfo view.

Database Fields	Table.Column
channel	op_InteractionChannel.channel > lookup.text_string
date_entered	interaction.date_entered
date_first_assigned	interaction.date_first_assigned
interaction_id	interaction.interaction_id

Count Interactions in Agent Queue

This report uses the op_InteractionReportsInfo view.

Database Fields	Table.Column
agent_name	agent.agent_name
date_first_contacted	interaction.date_first_contacted
interaction_duration	interaction.duration
interaction_id	interaction.interaction_id
queue_name	group_queue.group_queue_name

Count Requests in Agent Queue

This report uses the op_RequestReportsInfo view.

Database Fields	Table.Column
agent_name	agent.agent_name
date_closed	request.date_closed
date_entered	request.date_entered
description	request.description
reference_code	request.reference_code
request_progress_status	op_RequestProgressStatus.progress_status > lookup.text_string
request_type	op_RequestType.request_type > lookup.text_string

Count of Tasks in Agent Queue

This report uses the op_TaskReportsInfo view.

Database Fields	Table.Column
agent_name	agent.agent_name
date_completed	task_instance.date_completed
date_started	task_instance.date_started
progress_status	op_TaskProgressStatus.progress_status > lookup.text_string
reference_code	task_instance.reference_code
task_instance_id	task_instance.task_instance_id

Customer (Individual) Analysis - Sales Team by Territory

This report uses the SALES_TEAM_REPORT stored procedure.

Database Fields	Table.Column
agent	agent.agent_name
cust_name	individual.full_name
cust_type	op_customer_category.type > lookup.text_string
industry	op_industry_lookup.industry > lookup.text_string
indv_status	op_indiv_status_lookup.status > lookup.text_string
revenue	organization.revenue
territory	e_territory.territory_name
url	organization.web_address

Customer (Organization) Analysis - Sales Team by Territory

This report uses the SALES_TEAM_REPORT stored procedure.

Database Fields	Table.Column
agent	agent.agent_name
cust_type	op_customer_category.type > lookup.text_string
industry	op_industry_lookup.industry > lookup.text_string
org_name	organization.full_name
org_status	op_org_status_lookup > lookup.text_string
revenue	organization.revenue
territory	e_territory.territory_name
url	organization.web_address

Email Volume

This report uses the op_response_time view.

Database Fields	Table.Column
m1_subject	message.subject
m1_sender_address	message.sender_address
m1_date_sent	message.date_sent

Forecast Territory by Opportunity

This report uses the FORECAST_TERRITORY_REPORT stored procedure.

Database Fields	Table.Column
opp_close_date	e_forecast_opportunity.date_expected_close
opp_name	e_opportunity.opportunity_name
opp_status	op_OpportunityStatus.status > lookup.text_string
potential	e_forecast_opportunity.potential_revenue
probability	e_forecast_opportunity.probability
stage	activity_instance.activity_name
territory	e_territory.territory_name
weighted	e_forecast_opportunity.weighted_revenue

Lead Management by Sales Rep

This report uses the LEAD_REPORT stored procedure.

Database Fields	Table.Column
lead_id	e_lead.e_lead_id
lead_status	op_lead_lookup.status ' lookup.text_string
sales_rep	agent.agent_name

Lead Management by Territory

This report uses the LEAD_REPORT stored procedure.

Database Fields	Table.Column
lead_id	e_lead.e_lead_id
lead_status	op_lead_lookup.status > lookup.text_string
territory	e_territory.territory_name

Message Contents By Response Template

This report uses the op_messages_by_templates view.

Database Fields	Table.Column
title	message.title
message_id	message.message_id
subject	message.subject
date_sent	message.date_sent
text_body	message.text_body
recipient_address	message.recipient_address
file_name	content.file_name

Messages By Customer

This report uses the customer, interaction, and message tables.

Database Fields	Table.Column
customer_full_name	customer.customer_full_name
message_id	message.message_id
sender_address	message.sender_address
date_sent	message.date_sent
outbound_flag	message.outbound_flag

Number of Escalated Requests

This report uses the op_RequestReportsInfo view.

Database Fields	Table.Column
cust_tier	op_CustomerTier.tier > lookup.text_string
customer_type	op_CustomerType.type > lookup.text_string
date_entered	request.date_entered
escalated_flag	request.escalated_flag
indv_full_name	individual.full_name
organization_name	organization.full_name
priority	op_RequestPriority.priority > lookup.text_string
request_id	request.request_id
request_progress_ status	op_RequestProgressStatus.progress_status > lookup.text_string

Number of Escalated Requests (Agent X Priority)

This report uses the op_RequestReportsInfo view.

Database Fields	Table.Column
agent_name	agent.agent_name
date_entered	request.date_entered
escalated_flag	request.escalated_flag
priority	op_RequestPriority.priority > lookup.text_string
request_id	request.request_id
request_progress_ status	op_RequestProgressStatus.progress_status > lookup.text_string

Number of Requests (Customer, Customer Tier, Agent, Priority and Request Type)

This report uses the op_RequestReportsInfo view.

Database Fields	Table.Column
agent_name	agent.agent_name
cust_tier	op_CustomerTier.tier > lookup.text_string
customer_type	op_CustomerType.type > lookup.text_string
date_entered	request.date_entered
indv_full_name	individual.full_name
organization_name	organization.full_name
priority	op_RequestPriority.priority > lookup.text_string
request_id	request.request_id
request_progress_ status	op_RequestProgressStatus.progress_status > lookup.text_string
request_type	op_RequestType.request_type > lookup.text_string

Number of Requests (Customer, Customer Type, Product Category, Status, and Priority)

This report uses the op_RequestReportsInfo view.

Database Fields	Table.Column
cust_tier	op_CustomerTier.tier > lookup.text_string
customer_type	op_CustomerType.type > lookup.text_string
date_entered	request.date_entered
indv_full_name	individual.full_name
organization_name	organization.full_name
priority	op_RequestPriority.priority > lookup.text_string
product_category	op_ProductCategory.product_category > lookup.text_string

Database Fields	Table.Column
request_id	request.request_id
request_progress_status	op_RequestProgressStatus.progress_status > lookup.text_string

Number of Requests Currently in Queue Agent X Priority

This report uses the op_RequestReportsInfo view.

Database Fields	Table.Column
agent_name	agent.agent_name
assigned_group_queue_id	request.assigned_group_queue_id
customer_type	op_CustomerType.type > lookup.text_string
indv_full_name	individual.full_name
organization_name	organization.full_name
priority	op_RequestPriority.priority > lookup.text_string
request_id	request.request_id
request_progress_status	op_RequestProgressStatus.progress_status > lookup.text_string

Number of Requests Currently in Queue with no Action Taken - Brand New and Untouched

This report uses the op_BrandNewRequests and op_RequestReportsInfo views.

Database Fields	Table.Column
agent_name	agent.agent_name
customer_type	op_CustomerType.type > lookup.text_string
indv_full_name	individual.full_name
organization_name	organization.full_name
priority	op_RequestPriority.priority > lookup.text_string

Database Fields	Table.Column
request_id	request.request_id WHERE request.revision_number=2
request_progress_status	op_RequestProgressStatus.progress_status > lookup.text_string

Open and Closed Requests by Customer

This report uses the op_RequestReportsInfo view.

Database Fields	Table.Column
agent_name	agent.agent_name
customer_type	op_CustomerType.type ' lookup.text_string
date_closed	request.date_closed
date_entered	request.date_entered
description	request.description
escalated_flag	request.escalated_flag
indv_full_name	individual.full_name
organization_name	organization.full_name
priority	op_RequestPriority.priority ' lookup.text_string
reference_code	request.reference_code
request_id	request.request_id
request_progress_status	op_RequestProgressStatus.progress_status ' lookup.text_string

Opportunity by Geography

This report uses the CUSTOMER_ANALYSIS_REPORT stored procedure.

Database Fields	Table.Column
city	e_opportunity_address.admin_city
country	op_country_lookup.country > lookup.text_string

Database Fields	Table.Column
cust_name	customer.customer_full_name
description	e_opportunity.notes
opp_expected_close_dt	e_opportunity.date_expected_close
opp_potential_revenue	e_opportunity.revenue
opp_status	op_OpportunityStatus.status > lookup.text_string
opp_weighted	e_opportunity.weighted_revenue
probability	e_opportunity.probability
state	op_state_lookup.state
territory	e_territory.territory_name

Pipeline by Opportunity Type by Territory Report

This report uses the OPPORTUNITY_REPORT stored procedure.

Database Fields	Table.Column
full_name	customer.customer_full_name
opp_expected_close_dt	e_opportunity.date_expected_close
opp_name	e_opportunity.opportunity_name
opp_potential_revenue	e_opportunity.revenue
opp_status	op_OpportunityStatus.status > lookup.text_string
opp_type	op_OpportunityType.type > lookup.text_string
opp_weighted	e_opportunity.weighted_revenue
probability	e_opportunity.probability
stage	activity_instance.activity_name
territory	e_territory.territory_name

Pipeline by Probability by Month

This report uses the OPPORTUNITY_REPORT stored procedure.

Database Fields	Table.Column
description	e_opportunity.notes
full_name	customer.customer_full_name
opp_expected_close_dt	e_opportunity.date_expected_close
opp_potential_revenue	e_opportunity.revenue
opp_status	op_OpportunityStatus.status ' lookup.text_string
opp_weighted	e_opportunity.weighted_revenue
opps_type	op_OpportunityType.type ' lookup.text_string
probability	e_opportunity.probability
stage	activity_instance.activity_name

Pipeline by Probability by Territory

This report uses the OPPORTUNITY_REPORT stored procedure.

Database Fields	Table.Column
description	e_opportunity.notes
full_name	customer.customer_full_name
opp_expected_close_dt	e_opportunity.date_expected_close
opp_potential_revenue	e_opportunity.revenue
opp_status	op_OpportunityStatus.status > lookup.text_string
opp_weighted	e_opportunity.weighted_revenue
opps_type	op_OpportunityType.type > lookup.text_string
probability	e_opportunity.probability
stage	activity_instance.activity_name
territory	e_territory.territory_name

Pipeline by Sales Stage by Month

This report uses the OPPORTUNITY_REPORT stored procedure.

Database Fields	Table.Column
full_name	customer.customer_full_name
opp_expected_close_dt	e_opportunity.date_expected_close
opp_name	e_opportunity.opportunity_name
opp_potential_revenue	e_opportunity.revenue
opp_status	op_OpportunityStatus.status ' lookup.text_string
opp_weighted	e_opportunity.weighted_revenue
opps_type	op_OpportunityType.type ' lookup.text_string
probability	e_opportunity.probability
stage	activity_instance.activity_name
territory	e_territory.territory_name

Pipeline by Sales Stage by Territory

This report uses the OPPORTUNITY_REPORT stored procedure.

Database Fields	Table.Column
full_name	customer.customer_full_name
opp_expected_close_dt	e_opportunity.date_expected_close
opp_name	e_opportunity.opportunity_name
opp_potential_revenue	e_opportunity.revenue
opp_status	op_OpportunityStatus.status > lookup.text_string
opp_weighted	e_opportunity.weighted_revenue
opps_type	op_OpportunityType.type > lookup.text_string
stage	activity_instance.activity_name
territory	e_territory.territory_name

Quota by Sales Rep by Fiscal Quarter

This report uses the QUOTA_REPORT stored procedure.

Database Fields	Table.Column
agent_name	agent.agent_name
exp_revenue	e_opportunity.revenue
percentage_quota	100*SUM(exp_revenue)/personal_quota
personal_quota	e_quota.personal_quota
Sales_Period	lookup.code_string

Response Time Histogram

This report uses the op_response_time view.

Database Fields	Table.Column
response_id	message_rel.message_rel_id
response_time	(difference of two) message.date_sent
m1_subject	message.subject
m1_date_sent	message.date_sent
m2_date_sent	message.date_sent

Revenue by Customer for Sales Person (Home Screen Chart)

This report uses the agent, customer, and e_opportunity tables.

Database Fields	Table.Column
agent_name	agent.agent_name
customer_full_name	customer.customer_full_name
date_actual_close	e_opportunity.date_actual_close
date_expected_close	e_opportunity.date_expected_close
revenue	e_opportunity.revenue
weighted_revenue	e_opportunity.weighted_revenue

Timeline by Month by Territory

This report uses the CUSTOMER_ANALYSIS_REPORT stored procedure.

Database Fields	Table.Column
cust_name	customer.customer_full_name
description	e_opportunity.notes
opp_expected_close_dt	e_opportunity.date_expected_close
opp_potential_revenue	e_opportunity.revenue
opp_status	op_OpportunityStatus.status > lookup.text_string
opp_weighted	e_opportunity.weighted_revenue
probability	e_opportunity.probability
stage	activity_instance.activity_name
territory	e_territory.territory_name

Total Performance

This report uses the op_performance_slo view.

Database Fields	Table.Column
message_id	message.message_id
date_sent	message.date_sent
reply_message_id	message.message_id
reply_date_sent	message.date_sent
slo_due_time	interaction.slo_due_time
response_time	(difference of two) message.date_sent

Won/Lost by Opportunity Type

This report uses the WON_LOSS_REPORT stored procedure.

Database Fields	Table.Column
competitor	op_OpportunityStatus.status > lookup.text_string
customer_name	customer.customer_full_name
description	e_opportunity.notes
expect_close_date	e_opportunity.date_expected_close
opp_potential_revenue	e_opportunity.revenue
opp_status	op_OpportunityStatus.status > lookup.text_string
opp_type	op_OpportunityType.type '>lookup.text_string
territory	e_territory.territory_name
wl	op_won_loss_lookup.wl > lookup.text_string

Won/Lost Opportunity Type by Month

This report uses the WON_LOSS_REPORT stored procedure.

Database Fields	Table.Column
competitor	organization.full_name
customer_name	customer.customer_full_name
description	e_opportunity.notes
expect_close_date	e_opportunity.date_expected_close
opp_potential_revenue	e_opportunity.revenue
opp_status	op_OpportunityStatus.status > lookup.text_string
opp_type	op_OpportunityType.type > lookup.text_string
territory	e_territory.territory_name
wl	op_won_loss_lookup.wl > lookup.text_string

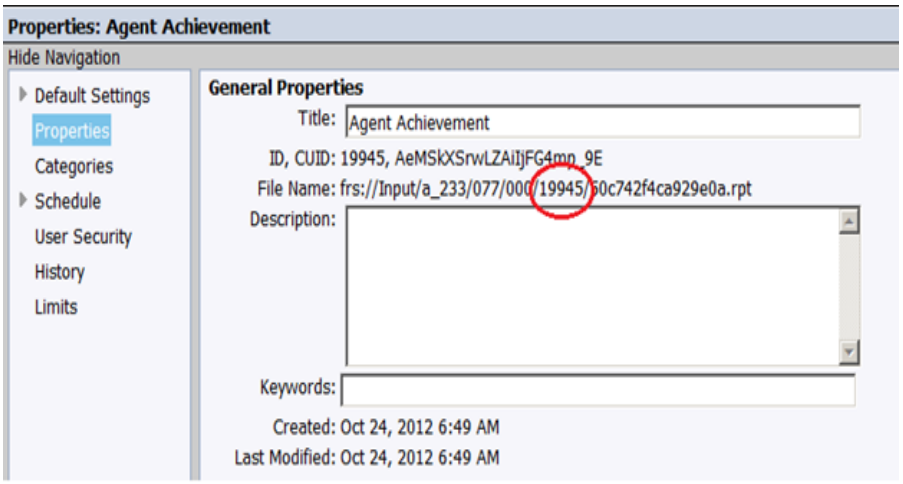
Integrate Custom Reports

Custom reports could be published directly on the Crystal Server and then integrate the same following below steps.

Note: When designing a report using Crystal Reports designer, you must select a database for the report. The More Data Sources > Oracle Server option is not supported. You must choose an ODBC DSN or create a new ODBC DSN.

1. In Infor Studio, go to User **Interface > Reports**.
2. Create a new report record for already published report, and specify a Crystal Report WCS ID, Category, and Locale for it.

   Note: The Crystal WCS ID for a published report can be located under the properties of the report as shown below:



3. Click **Save** to save your new report definitions.
4. Repeat step 2 through step 3 until you have created new records and loaded each of your new reports.

Chapter 12
Global Settings

12

Global settings are properties for which you can choose values to apply to your applications. For example, if you set the default currency locale global setting to US English, then US English becomes the default currency locale for your entire system.

You can view and edit the property type values of global settings from the **Admin** menu of your Customer Service (CS) or Sales Force Automation (SFA) applications or from the Admin Console. See "Editing Global Setting Values" on page 12–11 for instructions.

This chapter includes the following major topics:

List of Global Settings

A number of global settings along with pre-set values are provided. You can edit these values as described later in this chapter. Global settings are described in the following table.

Global Setting	Description
areOffersEnabled	If set to true, real-time special offers are enabled on agents' home screens. The realtime.ebm module must be loaded for this setting to function.
arePortalOffersEnabled	If true, Real-Time Offer Delivery offers are displayed to Customer Self-Service users. The default is false. See the *Sales and Service Installation and Configuration Guide* for information on configuring Real-Time Offer Delivery and Customer Self-Service.
baseCurrencyLocale	Sets the base currency for all currency conversion rates. All rates convert monetary amounts from the base currency to the currency of choice. The default value is U.S dollars. Change it only if the rates set in the **Currency Conversion Rate Management** module of the **Administration** guide bar are based on a different currency.
confirmScreenTabClose	If true, a message box prompts the user to confirm that the screen should be closed. The default is false.
CrystalEnterpriseVirtualDirectory	Controls the virtual directory for published reports: For Crystal 11, the value should be "/businessobjects" . This is the default. For Crystal 10, the value should be "/crystal". Set this value if you are using Crystal Enterprise 10.

Global Setting	Description
DatabaseEndYear	Sets the last year the system accepts as valid. The end year should be set to no later than the last year your database recognizes. See the *Sales and Service Installation and Configuration Guide* for database-specific settings.
DatabaseStartYear	Sets the first year the system accepts as valid. The start year should be set to no earlier than the first year your database recognizes. See the *Sales and Service Installation and Configuration Guide* for database-specific settings.
defaultCurrencyLocale	Sets the default currency locale. (See the "baseCurrencyLocale" description.)
DefaultNumOfRowsForPrintView	Defines the number of records to print per page. The default value is 30.
DefaultPriceListQuantity	Sets the default quantity used when adding related products using a price list (with opportunity, product bundle, quote, lead or orders)
DTDValidationEnabled	If set to true, the XML documents will be verified against the DTD specified within the document. If set to false, the XML parser will skip the DTD validation process when the XML document is being parsed.
dynamicTabLabelUsingFieldValue	If true, a caption for the saved record is added to the title of the tab. For example, an Organization tab for an existing organization includes the name of the organization.
ExpectedCallTime	The time in minutes a telephone call is expected to take.
ExportCancelThreshold	Maximum number of records that may be exported from a list. The default value is 10,000.
ExportThresholdWarningLimit	The number of export rows that triggers a message to the user to confirm the export. The default value is 5,000.

Global Setting	Description
isDefaultEmailFormatHTML	Sets HTML as the default format for outbound e-mail messages. When e-mail is sent from the organization, request, or order forms, the default is used. When the message is sent from the individual or contact forms, it uses that contact or individual's preferences. Inbound messages ignore this setting and display in the format in which the message is delivered.
isGuestAccessAlwaysEnabled-ForPortal	If set to true, guest users can log into Customer Self-Service.
isIISAuthenticationEnable	If true, IIS anonymous authentication is disabled. The default value is false.
isProductionDeployment	If true, your application will run in production mode (normally specified during application installation). Production mode enables your application to run faster than the alternative development mode.
keepCaseOwnership	Routes customer's e-mail reply to an agent's message back to the same agent
ListWindowSizeInDetailSlot	Defines the number of records that show up at a time for list view in the Detail Slot. The default value is 5. This value, once defined, will apply globally to all list views rendered in the Detail Slot. When the value is set to 0 or any negative number, it invalidates this setting and the number of records that show up will be based on the setting define in the list windows size property associated with individual list form.

Global Setting	Description
ListWindowSizeInMainSlot	Defines the number of records that show up at a time for list view in the Main Slot. The default value is 20. This value once defined will apply globally to all list views rendered in the Main Slot. When the value is set to 0 or any negative number, it invalidates this setting and the number of records that show up will be based on the setting define in the list windows size property associated with individual list form.
ListWindowSizeInTabSlot	Defines the number of records that show up at a time for list view in the Tab Slot. The default value is 10. This value once defined will apply globally to all list views rendered in the Tab Slot. When the value is set to 0 or any negative number, it invalidates this setting and the number of records that show up will be based on the setting define in the list windows size property associated with individual list form.
MaximumInteractionsInQueue	Sets the maximum number of interactions in an agent queue. This applies only to interactions that are passively dispatched from a group queue to the agent queue. If set to -1, there is no limit to the number of interactions that can be passively dispatched.
MaximumNoOfAutoResponses	Sets the maximum number of auto responses that can be sent in reply to incoming e-mails from a single e-mail address in a 24-hour period. The default is 100.
MaximumRequestsInQueue	Sets the maximum number of requests in an agent queue. This applies only to requests that are passively dispatched from a group queue to the agent queue. If set to -1, there is no limit to the number of requests that can be passively dispatched.

Global Setting	Description
maximumTasksInQueue	Limits the number of tasks that can be passively dispatched from a group to an individual agent queue by setting the maximum number of tasks that can be contained in an individual queue at a time. If this value is set to -1, the personal queue has no limit to the number of tasks that can be passively dispatched.
NewCallDetailLandingScreen	Specifies the type of detail screen that will be displayed for new CTI interaction tabs. If the CTI customer search screen is not being skipped, then this detail screen will not appear until a customer is selected from the search screen. Possible options are: “individual,” “organization,” “contact,” “order,” “product_instance,” “request,” “task,” and “interaction.” These options correspond to those detail screens where the account summary box is displayed. The CTI call-control buttons reside in the account summary box.
NewCallPopupAlert	If true, a notification pop-up window appears on the screen when a CTI-enabled agent receives a phone call. If false, a new tab rather than a popup appears.
NewCallSkipSearchScreenAlways	If true, the customer verification screen is skipped whether or not the customer is identified.
NewCallSkipSearchScreenWhenCustomerIdentified	If true, the customer verification screen for telephone interactions when one customer is identified is skipped.
NewDispatchedItemPopupAlert	If true, a notification pop-up window appears on the screen when an agent receives a new work item. If false, a new tab rather than a popup appears.
OptimizeTabGroup	If true, the server-side tabs feature is enabled. The server-side tabs feature postpones loading subform data until the user requests it by clicking the tab.

Global Setting	Description
portalAdminEmailAddress	E-mail address messages are sent to this address when users of Customer Self-Service register or forget their passwords.
portalForgotPassword	Subject displayed when e-mail sent for forgotten password. The default is “Password Forgotten.”
portalForgotPWHeader	Text displayed on the messages sent when users of Customer Self-Service send an e-mail due to forgetting their passwords.
portalRegistrationRequest	Used as a subject when e-mail is sent for registration request
portalRegRequestHeader	The body text of the e-mail sent to the portalAdminEmailAddress when a user fills out a registration form for access to Customer Self-Service
PrintListCancelThreshold	Maximum number of records that may be printed from a list Print View. The default value is 10,000.
relateContactToOrgInPopup	This global setting controls the runtime creation of a relationship between an organization and a contact, when the contact is created through the contact popup in a subform under an organization. When it is set to TRUE, it will create a relationship between the organization and contact. When it is set to FALSE, it will not create the relationship between organization and contact. The default value is FALSE.
ReservedSequenceBlockSize	Specifies the number of blocks of sequences that are reserved by the Sequence Generator at a time. Any unused sequence numbers that are reserved are lost if a server restart occurs.
ResolveShortcutAutomated	If set to true, automatically resolves shortcuts in outbound e-mail messages.

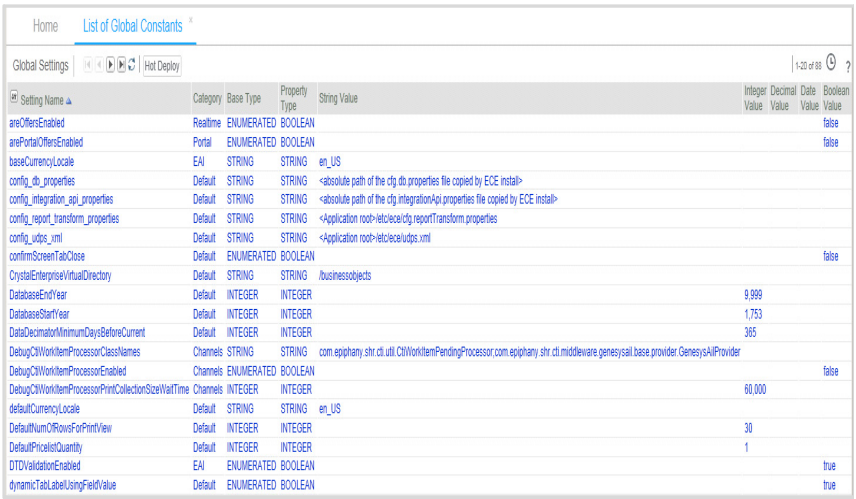
Global Setting	Description
ResultsCommitSize	Used for tuning sync performance. The number of database updates to include in one transaction (after which the transaction is committed). Used only while writing results of sync. Default value is 200. **Note**: Mobile Sync is deprecated as in 7.0.4 FP1. The documentation is left here for information purposes only.
SAXParser	The parser used to parse XML documents that are sent to and received from an external (EAI) system. This should be used only by those who are implementing integration with external systems. Incorrect use of this setting can affect system performance and stability. See the *Integration Guide* for more information.
SelfRegisterMode	Determines whether new users can create their own initial record upon login. Three settings are possible: *automatic*, *prompt*, and *restricted*. The default is *prompt*. See ""Manual Registration" on page 3–4, for more information.
SendAutoResponse	If true, the system sends an automatic response to incoming E-mail messages.
ServerEnvironmentName	The name of the server environment used for metadata targeting assigned to this cluster. As installed, this is set to DEFAULT, but it can be changed to one of the other server environments in the system: testing, stage, production, development, or a user-created server environment.
SharedMessage	If set to true, the default in an outbound message to multiple recipients is to share the same message object and display the multiple recipients in the message. The default is false.
ShowAggregatedPipeline	Displays the Aggregated Pipeline in the Sales menu. The aggregated pipeline allows you to combine all versions of a sales process in a common graphic or to specify a single version.

Global Setting	Description
ShowCharsetDropdown	If true, the CharSet drop-down list is displayed on the inbound message detail form. If a new e-mail message appears garbled (for example, because it was originally written in Chinese instead of a Latin-based language), the CharSet drop-down list allows a user to pick a different character set and review the mail content again.
ShowVersionPipeline	Displays the pipeline module in the Sales menu (in SFA). This standard pipeline displays the latest version of the sales process you select.
SloStatusUpdateFrequency	Determines the frequency in minutes of periodic updates to the statistics for every SLO and every group queue associated with an SLO. The default is 10, and the frequency should be set no lower than 5 to avoid performance issues.
TraceFullyQualifiedUsername	Logs information about incoming and outgoing work items for the user whose fully qualified user name is entered in the *String Value* field. This setting is provider-neutral. See the *CTI SDK Developer's Guide* for additional information.
TraceTelephonyExtension	Logs information about incoming and outgoing work items for the extension entered in the *String Value* field. This setting is specifically for the TServer provider. See the *CTI SDK Developer's Guide* for additional information.
TraceTelephonyPlace	Logs information about incoming and outgoing work items for the place entered in the *String Value* field. This setting is specifically for the AIL provider. See the *CTI SDK Developer's Guide* for additional information.

Global Setting	Description
TrackMessageTemplateUsage	Logs usage of manually selected e-mail templates and auto-reply e-mail templates in addition to suggested template usage. Suggested template usage is logged regardless of this setting.
useExactMatchInQBESearches	Determines whether the application uses “Exact match” search or “Starts With” search on query-by-example (QBE) forms. The default is an exact match search (true). When this setting is true, you must add a % operator to your search criteria in order to perform a “like” search.

Editing Global Setting Values

1 Select **Global Settings** to open the list of global settings, which displays their base types, property types, and pre-set values. Depending on the global setting, the data type of the property value can be integer, Boolean, or string.



Setting Name	Category	Base Type	Property Type	String Value	Integer Value	Decimal Value	Date Value	Boolean Value
areOffersEnabled	Realtime	ENUMERATED	BOOLEAN					false
arePortalOffersEnabled	Portal	ENUMERATED	BOOLEAN					false
baseCurrencyLocale	EAI	STRING	STRING	en_US				
config_db_properties	Default	STRING	STRING	<absolute path of the cfg.db.properties file copied by ECE install>				
config_integration_api_properties	Default	STRING	STRING	<absolute path of the cfg.integrationApi.properties file copied by ECE install>				
config_report_transform_properties	Default	STRING	STRING	<Application root>/etc/ece/cfg.reportTransform.properties				
config_udps_xml	Default	STRING	STRING	<Application root>/etc/ece/udps.xml				
confirmScreenTabClose	Default	ENUMERATED	BOOLEAN					false
CrystalEnterpriseVirtualDirectory	Default	STRING	STRING	/businessobjects				
DatabaseEndYear	Default	INTEGER	INTEGER		9,999			
DatabaseStartYear	Default	INTEGER	INTEGER		1,753			
DataDecimatorMinimumDaysBeforeCurrent	Default	INTEGER	INTEGER		365			
DebugCtiWorkItemProcessorClassNames	Channels	STRING	STRING	com.epiphany.shr.cti.util.CtiWorkItemPendingProcessor;com.epiphany.shr.cti.middleware.genesysail.base.provider.GenesysAilProvider				
DebugCtiWorkItemProcessorEnabled	Channels	ENUMERATED	BOOLEAN					false
DebugCtiWorkItemProcessorPrintCollectionSizeWaitTime	Channels	INTEGER	INTEGER		60,000			
defaultCurrencyLocale	Default	STRING	STRING	en_US				
DefaultNumOfRowsForPrintView	Default	INTEGER	INTEGER		30			
DefaultPricelistQuantity	Default	INTEGER	INTEGER		1			
DTDValidationEnabled	EAI	ENUMERATED	BOOLEAN					true
dynamicTabLabelUsingFieldValue	Default	ENUMERATED	BOOLEAN					true

Figure 12-1: Global Settings List

2 Click a global setting to open its Detail screen.

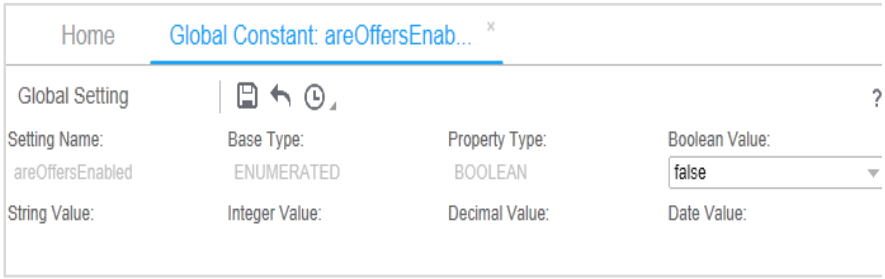


Figure 12-2: Global Setting Detail Screen

All property data types appear on this screen, but you can edit only the value that matches **Property Type**. If the property type is **INTEGER**, then you can edit only *Integer Value*. If the property type is **BOOLEAN**, then you can edit only *Boolean Value*, and so on.

3 Click **Hot Deploy**. This applies your changes to the system.

Chapter 13
Admin Console Functions

13

This chapter covers topics in the Admin Console. The following additional administrative and managerial functions are included here:

Additional Admin Console functions are covered in this book in the order in which you are most likely to use them as follows:

- Chapter 12, “Global Settings”
- Chapter 14, “Alert Management”
- Chapter 15, “Job Scheduler”
- Chapter 16, “Deployment Units”
- Chapter 17, “Services and Service Monitoring”

The Workflow Designer and Dialog Designer have their own online help systems that are available from the tool bar when you use the designers.

Logging Maintenance

Logging Maintenance enables you to manage information that appears in the logs in the system. These logs are helpful for troubleshooting and in cases where you need to contact Customer Support. You can create and delete log categories, and edit logging levels.

Note: The changes that you make on the Logging Maintenance screen are effective during runtime only; they last only until the next startup. You can make permanent changes only in the logj4configuration.xml file in your *Infor_Global_dir*/service/etc/logs directory, where *Infor_Global_dir* is the directory where you installed the system.

You are more likely to change the log level of an existing log to help troubleshoot issues in the system than to create a new log.

Creating log Categories

1 Go to **Logging Maintenance**, and click **New** to open a detail form.

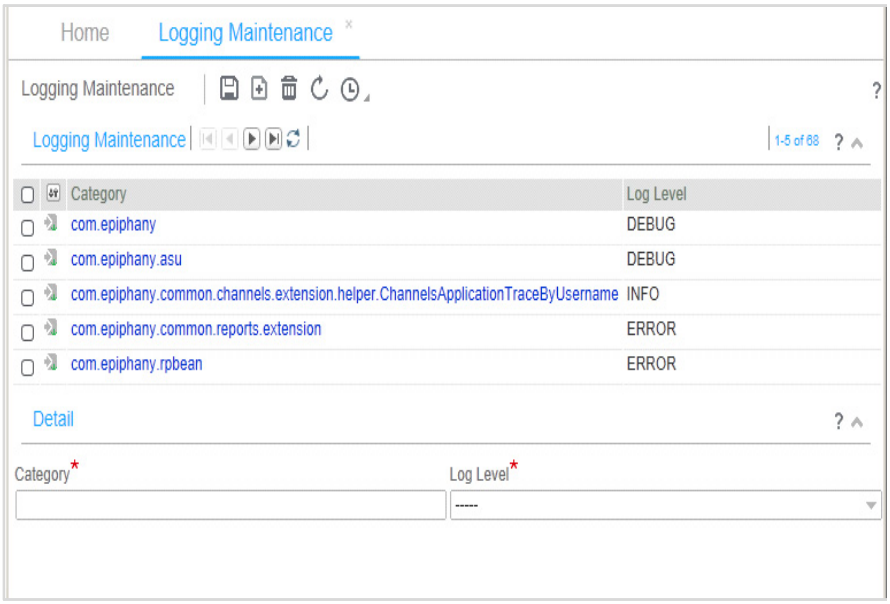


Figure 13-1: Logging Maintenance Screen With Detail

2 Enter a **Category** name.

Categories for logs correspond to Java Name Space. If you are unfamiliar with this concept, get a developer to assist you in creating a new log.

3 Select a **Log Level** as described in the following table. The table describes the available log level settings in order of severity. The log level you select determines the verbosity of the log. Each level includes messages at its own and all higher levels. For example, **WARN** (3) includes **WARN, ERROR**, and **FATAL**; **DEBUG** (1) includes all levels; and so on.

Level	Description
FATAL (5)	Very severe error events that will most likely lead the application or user request to abort.
ERROR (4)	Error events that might still allow the application or user request to continue running.
WARN (3)	Potentially harmful situations.
INFO (2)	Informational messages that highlight the progress of the application or user request. Typically INFO logging should be used to log every milestone or substantial event and every major decision-point.
DEBUG (1)	Designates fine-grained informational events that are most useful to debug an application or user request. DEBUG messages includes: All input and output to and from external systems Key items in memory Key branching points

4 Save your new record.

KMS Management

The **KMS Management** module in the Admin Console provides read-only information about the current number of indexed and pending documents in the KMS index. KMS stands for **k**nowledge **m**anagement and **s**earch. The KMS index enables full-text searching in the knowledge base. It also provides a means to rebuild the index. See the *Architecture Reference Guide* for more information on KMS.

Click **KMS Management** on the Admin Console menu to open the KMS Administration screen. Its fields are described below.

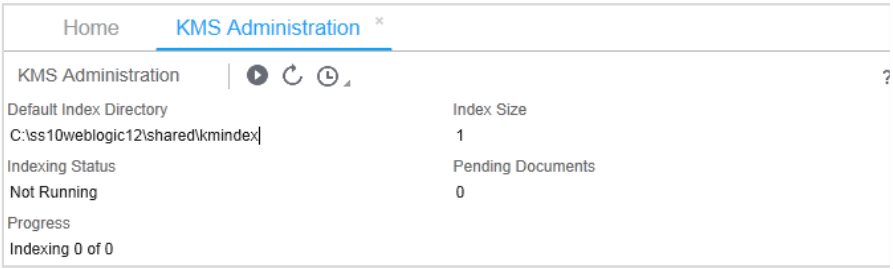


Figure 13-2: KMS Administration Screen

Field	Description
Default Index Directory	The directory path as configured in Infor Studio. This tells you where the index is located in your file system.
Index Size	The number of unique entries that are indexed and searchable.
Indexing Status	Indicates whether the index is currently being rebuilt. *Running* indicates that the index is rebuilding.
Pending Documents	The total number of documents that are any of the following: ■ new and waiting to be indexed ■ in the index and are waiting to be re-indexed ■ being indexed or re-indexed at the moment
Progress	Displays the progress of your current index rebuilding job

For example, suppose Document A was indexed previously, has been modified, and now needs to be re-indexed. Also, Document B has just been created. At this moment, **Index Size** is **1** and **Pending Documents** is **2**. After A and B have been processed, **Index Size** will be **2** and **Pending Documents** will be **0**.

You must rebuild the index periodically as part of ongoing maintenance, or else the full-text search function will not return the expected results for your users. During normal re-indexing, your users may continue to search. Until the re-indexing is complete, they will receive the same results they did before you started the rebuild.

However, if you rebuild after a disk failure or other loss or corruption, all search requests return zero results during the process is complete. Pending documents still accumulate and are included in the new index.

Rebuilding the KMS index

1. In the Admin Console, go to **KMS Management** to open the KMS Administration tab.
2. Click **Rebuild Index** on the tool bar.

Chapter 14
Alert Management

14

The **Manage Alert** function in the Admin Console enables you to set up and manage alert events and alert subscriptions.

- An alert event is a pre-defined event that triggers an alert.
- An alert subscription is created by a user in order to have notifications delivered. A subscription is assigned to one alert event only.

The alert events and subscriptions that you create in the Admin Console may apply to your entire organization or to a defined subset of the organization.

This chapter includes the following major topics:

For information on working with the user interface, see the *Application Reference Guide*.

Creating and Managing Alert Events

Create and configure alert events on a series of Alert Management screens that you access from the Admin Console menu.

Creating an Alert Event

1 Go to **Manage Alert > Create Alert Event** to start a series of forms that guide you through the process.

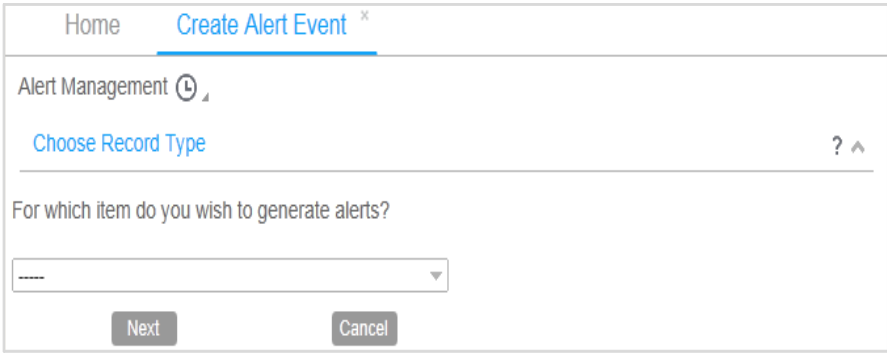


Figure 14-1: First Screen to Create a New Alert Event

2 On the **Choose Record Type** screen, select an object in the drop-down menu for which you want to set an alert, and click **Next.**

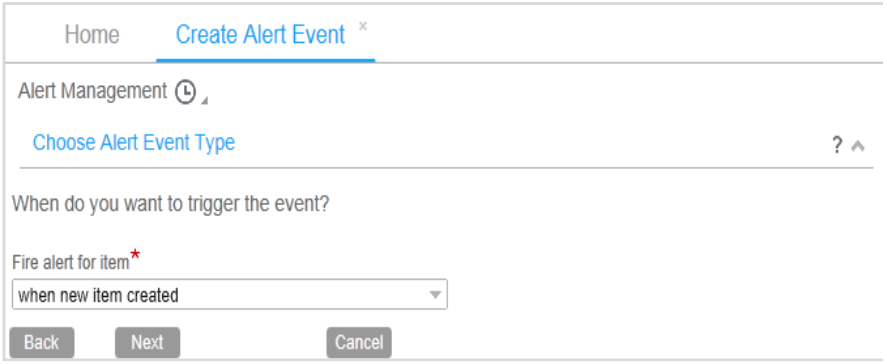


Figure 14-2: Event Type Screen

3 On the **Choose Alert Event Type** screen, select the appropriate events to trigger the alert, and click **Next**. The options are as follows:

- **when new item created**
- **when item changed**
- **when item created or changed**
- **never - just create a definition**

4 On the **Add Restriction?** screen, select **Yes** and continue with step a, or accept the default **No**, and skip to step 5.

   a On the next screen, select **Yes** to select a pre-defined restriction from a drop-down menu of available restrictions.

   Click **No** to open an IBR Editor, where you can write your own expression for restriction.

   b Click **Next**.

5 On the **Set Alert Event Name and Description** screen, enter a name and description for the alert event and click **Finish**.

   After you create an alert event, it appears on the **Alert Events** list on the Manage Alerts screen.

Managing Alert Events

To view and manage your system alerts, go to **Manage Alert > Manage Alert Events** to display a list of the alerts configured on your system. Then select and edit them as you do other objects in Infor CRM Sales and Service .

Creating an Alert Subscription

1 Go to **Manage Alert > Create Subscription** to open the Subscribe to Alert screen. This is the first in a series of forms that guide your through the process.

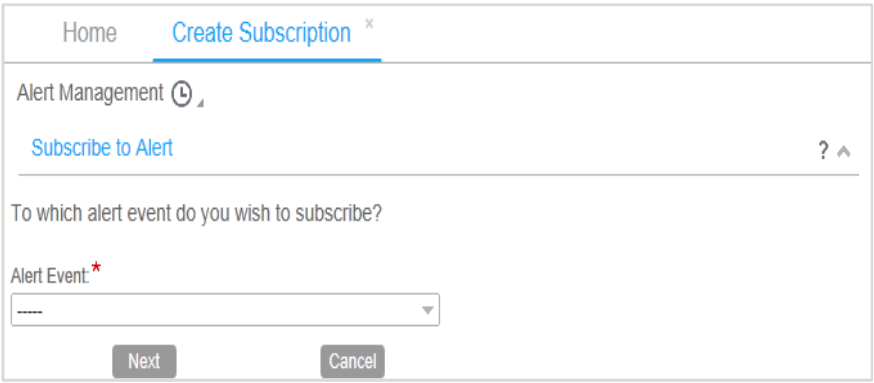


Figure 14-3: First Screen to Create a New Alert Subscription

2 Select an **Alert Event** from the drop-down list, and click **Next.**

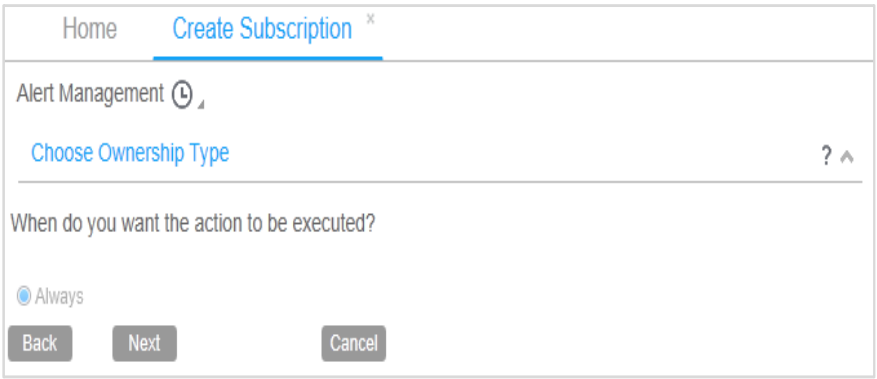


Figure 14-4: Ownership Type Screen

3 On the Choose Ownership Type screen, select when to execute the action, and click **Next**. The options are **Always** or **When I am the owner.**

4 On the Add Restriction? screen, if you want to set a restriction on the alert, select **Yes** and continue with step a.

If you select **No**, skip to step 5.

a On the **Create Restriction?** screen select either:

- **Yes** to select a pre-defined restriction from a drop-down menu of available restrictions
- **No** to open an IBR Editor where you can write your own expression for restriction

b Click **Next**.

5 On the Set Time Condition? screen, choose when you want the alert to fire, and click **Next**. The options are as follows:

- **As soon as possible.** If you select this, go to step 6**.**
- **This long after detected** to set a time condition on the alert. If you select this option, select a time condition from the drop-down menu. Then enter time information for the condition you selected.

6 On the Add Action screen, select an action to be performed. (You may set up more than one action. See step 7.)

- If you don't want an additional action, select **Just create an alert** and click **Next**.
- Click **Next** and follow instructions to set up the action.

7 On the Add Additional Action? screen, select whether to add an additional action.

8 On the Set Subscription Name and Description screen, enter a name and optional description. Click **Finish**.

Managing Alert Subscriptions

To view and manage your alert subscriptions, go to **Manage Alert > Manage Alert Subscriptions** to display a list of the alert subscriptions configured on your system. Then select and edit them as you do other objects in Infor CRM Sales and Service .

Chapter 15
Job Scheduler

15

The Job Scheduler lets you create and manage jobs for your system to run according to your schedule. You can set jobs to run once or on a recurring basis. Your jobs are stored in the system so that you can access and run them as needed.

The types of jobs that you can create are import jobs, PIM (Personal Information Management) synchronization jobs, command line jobs, and container jobs that let you group multiple jobs together. You can create multiple job instances for each job type.

The Admin Console contains three Job Scheduler screens:

- **Job List.** A list of all jobs created for your system. Here you create, edit, run, stop, and delete jobs, and view the history of each job.
- **Scheduled Jobs.** A list of all scheduled jobs. Here you create and edit the schedules for the jobs defined on the Job List screen. You can also pause and resume jobs here.
- **Configuration.** This screen allows you to change the maximum number of high-load jobs. The default setting is 2. Infor recommends that you not increase this number, but you may decrease it.

This chapter includes the following major topics:

Job Types

The job types that you can run are described in the following table. Specific requirements for creating jobs are covered in the procedure, "Data Decimator" on page 15-8.

Job Type	Description
Batch Replication Job	A job that uses the replication service to incrementally load data changes from a source to a target and from a target to a source using bi-directional Bio Transformation Maps. You can schedule a job of this type to run at specified intervals. See the chapters on *The Replication Service* and *BIO Transformation* in the *Sales and Service Implementation Guide* for more information.
Command Line Job	A job that runs operating system commands, for example, "ping."
Container Job	A job that acts a a container for other jobs and executes them together as a group. You select which jobs go in the container and set the order in which they are performed.
Import Job	A job that imports data from an external CSV file or directory of files into the system data store. A CSV file is a file format used as a portable representation of a database. You can use this job to import current currency rates for the currency conversion rate management function, for example. Import jobs are mapped from external files to the system data store according to import maps that are created in Infor Studio. Import maps must be created in Studio before an import job can run. Once defined, import maps are available in the Admin Console for the creation of import jobs. See "Import Jobs" on page 15–4 and "Troubleshooting Bulk Import" on page 15–12 for more information.

Job Type	Description
Initial Replication Job	A job that uses the replication service to bulk load data from a source to a target using Bio Transformation Maps. You can only run a job of this type once, and subsequent runs are not allowed. See the chapters on *The Replication Service* and *BIO Transformation* in the *Sales and Service Implementation Guide* for more information.
PIM Sync Job	A batch job on one computer in a cluster that allows the PIM synchronization workload for all users to be divided up among all computers in the cluster. PIM synchronization enables users to synchronize data such as appointments, tasks, and contacts between their Microsoft Exchange or Lotus Domino PIM server and their SFA and Customer Service applications.
Data Decimator Job	A job that selects data using a configured query expression and decimate the data if they exist longer than a specified number of days before the current date.

Creating a Job

1. Go to **Job Scheduler >** J**ob List**. Existing jobs are listed on this screen.
2. Click **New**.
3. On the **Create/Edit Jobs** lower pane, enter a name for the job and select the type of job. Depending of the job type you select, additional fields appear.
4. Enter information specific to the job types as described below.

Container Job

A container job acts as a container for other jobs and executes them together as a group. You select which jobs go in the container and set the order in which they are performed.

To configure a container job,

a. Select a job in the **All Jobs** list and click the **-->** button to move it to the **Jobs in Container** list.
b. Repeat for all jobs that you want to place in the container job.
c. Use the **move up** or **move down** buttons to set the order in which the jobs are performed.

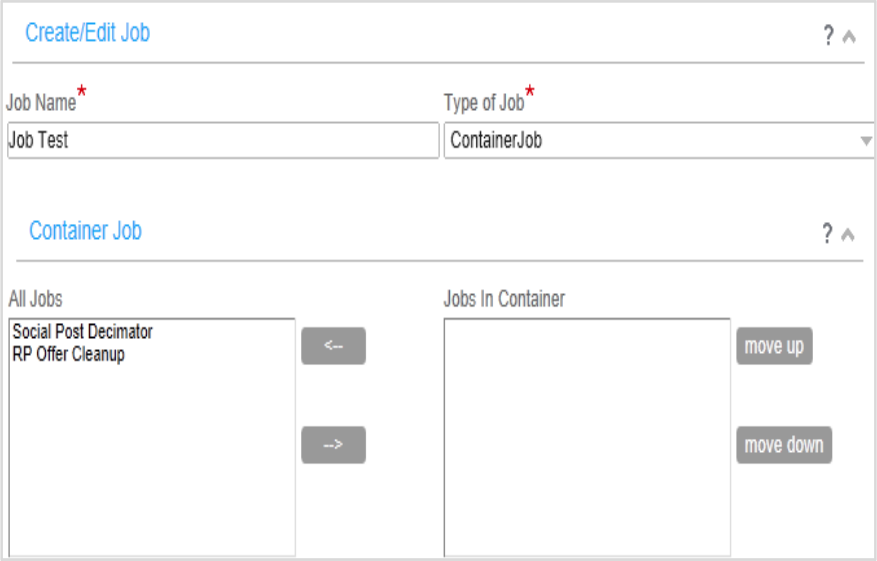


Figure 15-1: Container Job List Form

Command Line Job

A command line job runs operating system commands, for example, “ping.”

Command Line Job Fields

Field	Description
Directory	The directory where the executable program (command) resides.
Command	The command that you want the job scheduler to run.

Import Jobs

An import job imports data from an external CSV file or directory of files into the system data store. The external files must be in UTF-8 format or the import will fail. For Excel files, re-open the file in a text editor and then save as UTF-8. Excel does not support saving with UTF-8 encoding.

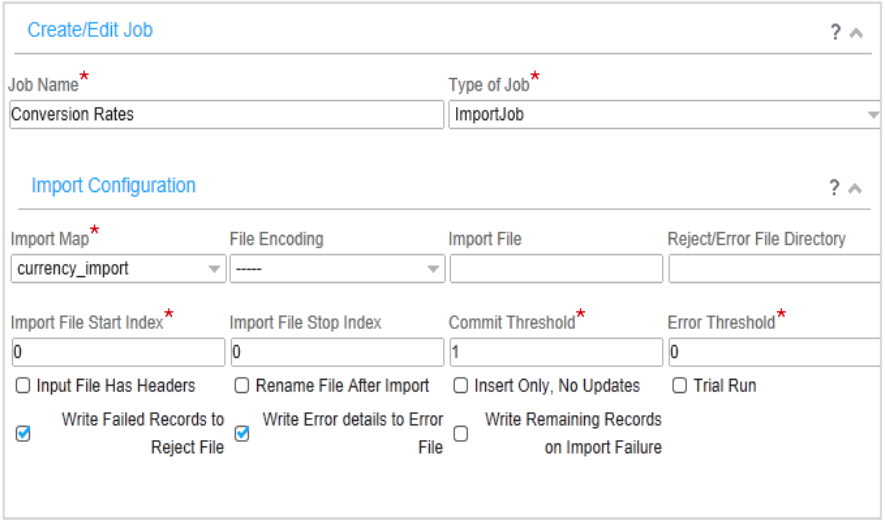


Figure 15-2: Import Job Detail

Import Job Fields (Sheet 1 of 2)

Field	Description
Import Map	The map that enables import of data from an external file to the Infor CRM data store. Import maps are defined in Studio and are available for selection in this drop-down list.
Import File	The full path and name of the CSV file containing the data to be imported. You must have read privileges for this file. This entry can be a single file, a directory of files and subdirectories, or a file name with wildcard characters (wildcard character = *).
Reject/Error File Directory	(Used only if *Write Failed Records to Reject File* or *Write Error Details to Error File* are checked.) The directory that holds error files and data that is rejected when a job is run. Rejected data is contained in an .rej file and error details are contained in an .err file. This directory requires write privileges.
Import File Start Index	The number of the record you want a job to start from. This is useful for restarting jobs after a failure: if, for example, record 50 failed, you could start the job at 51.
Import File Stop Index	The number of the record you want the import to stop after. If the value is greater than 0, the import stops after processing the stop index record count. Values 0 or less are ignored.

Import Job Fields (Continued) (Sheet 2 of 2)

Field	Description
Commit Threshold	The number of records to update in a single transaction. This setting affects performance.
Error Threshold	The maximum number of errors this job can tolerate before aborting.
Input File Has Headers	Check this box if the first row of your CSV is a header.
Rename File After Import	Check this box to rename the source file or files after importing their data. Use this option for convenience when importing all files from a directory on a periodic basis to avoid the need to manually remove files that have already been imported from the directory. This option requires write access on the import source file. There is no error if the files cannot be renamed.
Insert Only, No Updates	If checked, updates are treated as errors. Check this when data is fresh and updates are not applicable.
Trial Run	A means of troubleshooting import jobs. During a trial run, data is not committed to the database. If checked, a trial run is enabled to catch errors on new import maps. Metadata error messages are captured in the Epny.log4j file in the Infor installation directory and must be fixed in Infor Studio. You must reload metadata for corrections to take effect. Data error messages are shown in the .err file. Fix the data and re-import.
Write Failed Records to Reject File	When checked, failed records are written to reject files (.rej) in the *Reject/Error File Directory* you specify.
Write Error details to Error File	When checked, details about error encountered are written to error files (.err) in the *Reject/Error File Directory* you specify.
Write Remaining Records on Import Failure	When checked, if the job fails, records not imported are written to reject files. This may be time-consuming if the failed job is large.

PIM Sync

A PIM sync job is a batch job on one computer in a cluster that allows the PIM synchronization workload for all users to be divided among all computers in the cluster. For more information about PIM synchronization, see the Infor *Sales and Service Architectural Reference Guide*.

In order to reduce the workload and performance impact of synchronization, configure PIM sync jobs to use incremental synchronization. Incremental synchronization updates only changed items. Items that are deleted on Outlook or Lotus, however, are not flagged as changed. Therefore, the PIMSync configuration options also allow you to determine how often full synchronization should occur.

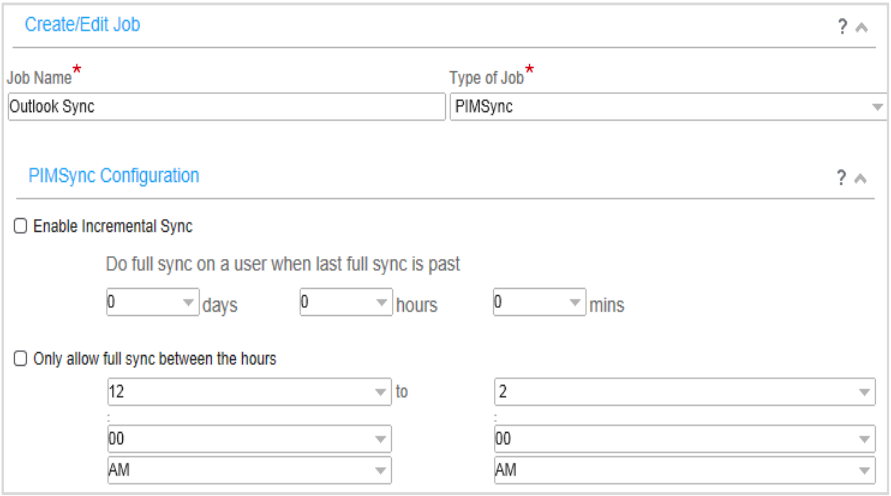


Figure 15-3: PIMSync job details

PIMSync configuration options

Option	Description
Enable Incremental Sync	Select this option to get and synchronize only updated items.
Do full sync on a user when last full sync is past	Set an interval after which a full synchronization is required. This is necessary because deletions in Outlook and Lotus do not appear as updates and, therefore, are not synchronized during an incremental sync.
Only allow full sync between the hours	Select this option to limit the hours during which full synchronization is permitted to off-peak hours.

5 Then save and define a schedule for the job as described in "Scheduling a Job" on page 15–10.

Data Decimator

A data decimator job's purpose is to limit the number of records kept in your op-db by deleting old entries from a filtered set of records. The determination of old entries can be configured as a filtering criteria based on a date value stored in the BIO that must be within a configured age.

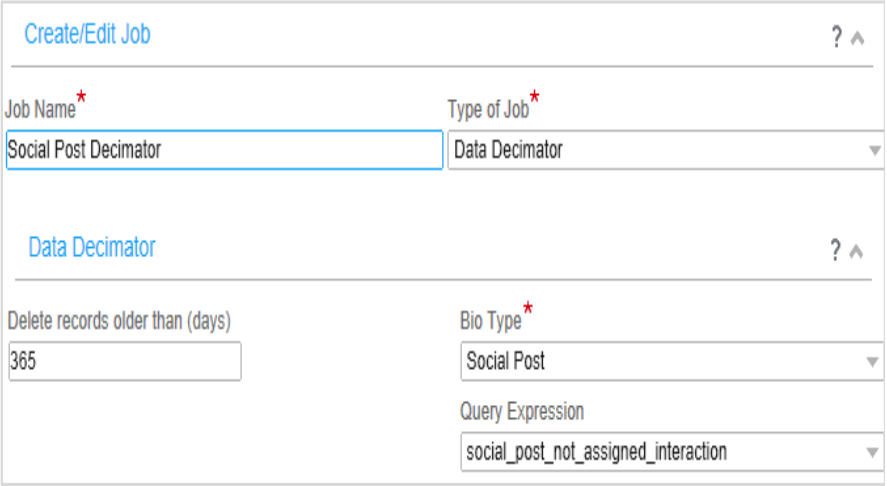


Figure 15-4: Data Decimator Job Details

Data Decimator configuration options:

Option	Description
Delete records older than (days)	The number of days before the current date. If the data is older than 'x' number of days before the current date, they will be decimated by the job. The number of days must not be less than the value configured in the global setting 'DataDecimatorMinimumDaysBeforeCurrent'. Out of the box, this global setting value is '365'. You will get a warning and not be able to save the job if you set the value lower than this global setting value.

BIO Type	The name of the BIO of which data associated with it should be decimated. In order for the BIO to show up in the drop down, the BIO needs to have an attribute 'date_decimator_cutoff' defined with a direct mapping to a date field of the recordset associated with the BIO. This means that if the selected data 'date_posted' field is older than the 'x' number of days configured in the 'Delete records older than (days)' field, they will be decimated by the job. In addition, if the recordset associated with the BIO supports logical delete, and has logical delete selected, the data will be marked as logically deleted by setting the logical delete flag (rather than physically deleted from the data source). It there are other related BIO(s) or a BioCollection associated with this BIO where cascade delete is enabled, all BIOs that are related to this BIO through this attribute are also deleted.
Query Expression	A query expression that you configure in Studio to be used as a filtering criteria for selecting data for decimation.

Out of the box the **Social Post Decimator** job is provided with preconfigured fields as shown below:

- *Delete records older than (days) = 365*
- *BIO Type = sm_post* (this BIO has the 'date_decimator_cutoff' attribute that has direct mapping to the 'date_posted' field)
- *Query Expression = social_post_not_assigned_interaction (query string configured as 'sm_post.interaction is null'*. This query expression will select all social posts with no assigned interaction)

This job will delete social posts older than 365 days with no assigned interaction.

Editing or Deleting a Job

- To edit a job, select the job in the upper pane list of the Jobs List screen to display its detail, make your changes using information in the Data Decimator procedure, and save.
- To delete a job, check the box next to its name in the list, and click **Delete**.

Note: It is very difficult to modify the recurrence pattern or interval for active scheduled jobs after they have run. Instead, delete the scheduled job and re-create it with the new recurrence pattern or interval.

Scheduling a Job

1. Expand **Job Scheduler** on the Admin Console menu and click **Scheduled Jobs**.
2. On the Create/Edit Job Schedule lower pane, select the job for which you want to create a schedule under **Job Name**.
3. Under **Reoccurrence Pattern**, select **One Time** or **Reoccurring**.
4. If you choose **One Time**, the **Date** field appears. If you choose **Reoccurring**, continue with step 5.
   a. Select a date and time for the job to run.
   b. Click **Save**. The schedule is complete.
5. Select a date and time of day for the **Start Time** and **End Time**.

   The **date** you select determines the dates between which the job runs. The **time** you select determines the time of day at which the job runs.
6. Select an option for **Interval**, and click **Save**.
   - If you choose **Reoccur Once Per Day**, the job runs daily at the beginning of the time range you selected in step 5.
   - If you choose **Reoccur Multiple Times Per Day,** enter a number in the **Minutes between reoccurrence** to specify the interval. If you select 30, for example, the job runs every 30 minutes starting at the beginning of the time range you selected in step 5.

   The job runs according to the schedule you defined.

Job History

To view the history of jobs shown on the **Job List**, click the view icon in the **History column**. This opens a pop-up window that shows a log of jobs run.

Running Jobs

You can start and stop jobs on the Job List screen, and pause and resume jobs on the Scheduled Jobs screen as follows:

Start	Starts the selected job immediately regardless of its defined schedule.
Stop	Stops a running job. The job stops after completing the current record in process. The last record count imported will be mentioned in the log. Stopped jobs cannot be resumed.
Pause	Pauses a running job. Paused jobs can be resumed.
Resume	Resumes a paused job.

Troubleshooting Bulk Import

In order to troubleshoot import jobs and avoid importing bad data, always select the **Trial Run** option the first time you use a new import map or work with new data.

Metadata Errors

Metadata error messages appear in the Admin Console and are captured in the Epny.log4j file in the /service/etc/logs folder of the Infor installation directory. Fix any issues by fixing its metadata in Infor Studio. When the metadata has been corrected, if you are running in development mode, reload the metadata. If you are running in production mode, you must restart the server after fixing metadata issues.

Data Errors

Use the following steps if you see errors in data.

Reviewing and Fixing Data Errors

1. Read the ImportFileName_timestamp.err file in the reject file directory for error details.
2. Fix the data that had the error in the import file.
3. Run the import job again.

Chapter 16
Deployment Units

16

This chapter covers information on importing and applying deployment units including viewing the history and contents of deployment units in the Admin Console. The *Sales and Service Architecture Reference Guide* contains information about creating deployment units in Infor Studio. For information on working with the user interface, see the *Application Reference Guide*.

This chapter includes the following major topics:

Deployment Units Overview

The deployment units module provides a means for you to transport and apply sets of data from one system to another in a single unit called a **deployment unit.** A deployment unit acts as a package containing a group of files, metadata, and operational data that are to be applied together. Deployment units are files created, exported, and managed in Infor Studio. They are imported and applied in the Admin Console.

As an example of how deployment units work, say your company wants to update its logo and have the new logo appear on the screens of its Infor applications. One way to do this is to implement a deployment unit containing all files necessary to update the logo on the screens. The implementer creates and exports the deployment unit in Infor Studio, and then you import it. After you import the deployment unit, you apply it to your system.

Importing a Deployment Unit

1. Go to **Deployment Units**, and click **Import** to open the Import Deployment Unit dialog box.
2. Enter or browse for a deployment unit and click **Upload**.

   When the upload is complete, a **Click here to download** link appears.
3. Click **Save**. The deployment unit appears on the list.

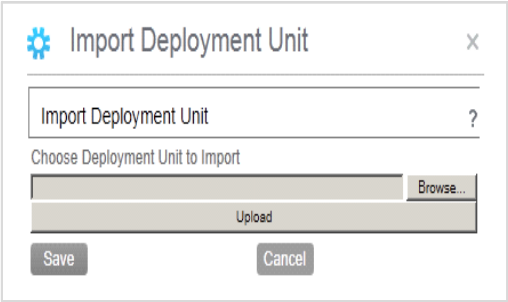


Figure 16-1: Deployment Units Overview

Applying a Deployment Unit

1. Go to **Deployment Units**, and find the deployment unit to apply.
2. Display the deployment unit's detail screen, and click **Apply**.
3. Check the **Deployment Status** box for information about the success of the application.

   If you need to take further action, such as running the ApplyDeployment command line tool or restarting your servers, it is indicated here. If action is required, follow the instructions in the **Deployment Status** column.

   For information on the ApplyDeployment command line tool, see the *Sales and Service Architecture Reference Guide*.

Deployment Unit Details

The Deployment Unit detail form provides read-only information on the selected deployment unit and enables you to **Apply** the deployment unit. It also provides the **Download Deployment Jar File** link, which lets you download the deployment jar file that you uploaded as part of the import.

Deployment Unit detail tabs

Tab	Purpose
Cluster-Wide History	This tab provides Export, Import, or Apply logs that contain historical information about the deployment unit on this cluster. Click the search icon to display a log.
Contents	This tab provides information on the files and export Business Information Objects (BIO) contained in the deployment unit.

Chapter 17
Services and Service Monitoring

17

Services are reusable core components that provide the business logic to Infor CRM Customer Service and Sales Force Automation (SFA). A brief description of the services that are provided is included in the table "Services" on page 17–3. Services are configured in and managed through Infor Studio, but you can monitor the services running on your system on the Admin Console.

The Service Framework Monitoring screen lets you view information about the services running on your system. The Service Configuration screen lets you view the details of the configuration of the services on your system. Both are available as items in the Admin Console menu.

This chapter includes the following major topics:

For information on working with the user interface, see the *Application Reference Guide*.

Service Framework Monitoring

To view information about the services used by your system, use the Service Framework Monitoring screen. This screen displays a lists of all services that are enabled, as shown on the Service Configuration screen (page 17–3) along with the information described in the following table:

Column Name	Description
Service Name	The name of the service. These are described in the table “Services” on page 17–3.
CWS Host	The computer that runs the services.
Status	The status of the service: *STARTING, READY, READY WITH WARNINGS*, or *FAILED*.
Critical	If true, this service causes the application to abort if the service cannot be started.
EJB	If true, the service is an EJB (Enterprise Java Bean) service.

Service Configuration

The Service Configuration screen lists the services on your system. You can click a service in the list to view its parameters. Parameters are specified in Infor Studio. Information about them is included in the Studio online help.

Services are described in the following table.The same services appear in the Service Framework Monitoring screen, but only if they are running.

Services (Sheet 1 of 5)

Service	Description
AEFLocalSetup	Part of the AEF (asynchronous event framework) service used to setup the JMS destinations.
AlertsService	A service that facilitates alerts. Users and services can subscribe to alert events.They can attach actions and specify delivery mechanisms for notifications. Subscriptions have the full power of IBR to write complex or simple filters. The service also allows time-based conditions for subscriptions.
BioService	An internal service that defines a unit of work. This service can be accessed by any object on the local machine.
BioServiceExtended	An internal service that defines a unit of work. This service is defined as an EJB (Enterprise Java Bean) that can only be acquired and used by remote objects.
BioTransformService	A service that provides the following capabilities: transformation of a BIO of any type to a BIO of another or same type, traverse path(s) on a BIO or BIOCollection with filtering of Collections along the path, and search for BIO or BIOCollection, given a BIO or BIOCollection and search criteria.
CalendarService	An EJB service responsible for the creation of recurring and non-recurring appointments
CMService	Stores and retrieves documents or content references, such as URL's, for content management

Services (Continued) (Sheet 2 of 5)

Service	Description
CtiManager	Tracks agents and phone connections, communicates with the CTI (Computer Telephony Integration) provider and CTI service, sends Asynchronous Event Framework (AEF) events to the application, and allows for extensions and customizations using rules and behaviors.
CtiService	The gateway to the Computer Telephony Integration (CTI) system, consisting of the CTIServiceStartup and the CTIServiceEJB service.
CtiServiceStartup	Performs the bulk of the Computer Telephony Integration (CTI) work by forwarding requests to the CTIService EJBs on other machines, processing complex requests, and sending requests to the CTIManager
CurrencyConversion RateService	Provides the ability to set conversion rates in currency conversion functionality.
CurrencyConversion Service	Provides the ability to convert monetary amounts in currency conversion functionality.
DeploymentService	Creates and maintains deployment units
DeploymentStartup Service	Deploys pending deployment units at server startup
DialogService	Instantiates dialogs that are defined within the Dialog Designer. A dialog is a scripted interaction with a customer. The flow of control through a dialog is controlled by responses from the customer, internally calculated values, and external data.
Dispatcher	Delivers work items from group queues to the personal queues of individual agents. This service receives instructions from the Router.
DominoECSConnector	Provides basic connector information for synchronization with Domino Server.
DominoECSConnector - HTTP	Properties of the ECS connector for Lotus Domino referenced by DominoECSConnector.
EmailInboundService	Handles inbound e-mail processing; allows the partitioning of e-mail processing to the batch partition.
EmailService	Sends and receives e-mail messages.

Services (Continued) (Sheet 3 of 5)

Service	Description
EventScheduler	Accepts and cancels event scheduling requests and raises extension events.
ExchangeECS Connector	Provides basic connector information for synchronization with Exchange Server.
ExchangeECS Connector - Security	Provides security-related connector information for synchronization with Exchange Server.
ExchangeECSProp - WEBDAV	An ECS connector instance used by PIMSyncService to connect to an Exchange Server.
IBRService	Launches trees defined in the IBR Designer.
ImportService	Imports data from a CSV file or database to the operational database
JobSchedulerService	Schedules jobs such as Import and PIM Sync.
KMCategoryService	Maintains knowledge base categories
KMSearchEngine Service	Stores parameters for the full text search feature. The path in the index_dir property must be available from all servers in a cluster.
KMSearchLog	Logs full-text searches.
KMSearchService	Provides full-text search capabilities.
MasterJMSServer Monitor	Manages the JMS clustering solution, including AEF (asynchronous event framework) fault-tolerance.
MessageConsumer Service	Processes data received from an external system through EAI.
MessagePublisher Service	Sends data to external systems as part of EAI.
MessagingService	An AEF (asynchronous event framework) service responsible for handling all incoming events.
PerfAggregator	Collects and analyzes the performance information that is stored on each PerfServer.
PerfAggregatorMonitor	An EJB service that provides an interface for accessing performance information processed by PerfAggregator.
PerfAggregatorWrapper	An EJB wrapper around PerfAggregator the makes PerfAggregator remotely accessible.

Services (Continued) (Sheet 4 of 5)

Service	Description
PerfServer	An internal service used by other services for registering performance information.
PerfServerWrapper	An EJB wrapper around PerfServer that makes PerfServer remotely accessible.
PIMSyncService	Provides the basic interface to enable synchronization with Exchange Server or Domino Server.
PushService	Sends data to an agent's web browser asynchronously.
QueuingService	Implements methods to create queues, puts items into and takes items off a queue, changes the attributes of queue items, searches queues based on attributes, and moves items from one queue to another.
ReminderService	Facilitates the creation of time delayed e-mail and popup notifications to specified users.
RouterService	Determines where a particular work item should be delivered. This service then sends its instructions to the Dispatcher.
RPIService	Integrates the Customer Service (CS) application and Open Architecture with Infor Interaction Advisor.
SessionStateService	Maintains records of session states. Administrators can customize where and how session state is persisted, as well as the frequency at which session states are deleted.
SliceCreatorService (deprecated)	Creates the database slices for mobile clients (only enabled on master servers in a sync topology).
SLO MonitorService	A cluster-wide singleton that monitors all SLOs in the system and periodically updates statistics for every SLO and every group queue associated with an SLO
SloService	Manages the SLO for a record and sends notifications and obtains statistics from the SLO Monitor
SubscriptionService	Manages AEF (asynchronous event framework) subscriptions.

Services (Continued) (Sheet 5 of 5)

Service	Description
SyncClientService (deprecated)	Coordinates sync-up and sync-down from the mobile client; invoked on the mobile client when the user performs a connected login and then logs out from the connected mode; never invoked on the master server. Assumes one master server and multiple mobile clients.
SyncPurgeService (deprecated)	On mobile client, purges transactions successfully synced up to the master server; on the master, purges transactions successfully synced down to all mobile clients.Assumes one master server and multiple mobile clients
SyncReplayService (deprecated)	On mobile client, receives instructions from master and replays transactions done at the master since the last sync; on the master, receives instructions from a mobile client and replays transactions done on the mobile client since the last sync. Assumes one master server and multiple mobile clients.
SyncStartupService (deprecated)	On mobile client, determines if application changes need to be performed during sync startup, and if so, shuts down the mobile client to deploy the changes. Assumes one master server and multiple mobile clients.
SyncTransaction Manager (deprecated)	Logs sync transactions as they happen to be replayed at other servers as part of synchronization. Assumes one master server and multiple mobile clients.
SyncTransaction ManagerProxyService (deprecated)	Proxy service for the SyncTransactionManager. Assumes one master server and multiple mobile clients.
ThreadPoolService	An internal service used by other services to manage thread pools. Every thread pool has its own name and set of properties.
WorkflowService	Instantiates activities and tasks that are defined in the Workflow Designer when a workflow process begins. Workflow processes provide task management in a business process, including the creation and assignment of tasks to people and automated processes.

Chapter 18
Topic Profiles Management

18

For Social Media Integration, we have partnered with the platform provided by Radian6, performing the function of a social media aggregator which provides the source for all incoming social posts. ‘Topic Profile’ is a term defined by Radian6 as a grouping of configuration details about how the customer wants to filter and categorize a social media subscription to a particular brand. Topic Profiles are dynamic and the customer may add/remove/edit Topic Profiles over time as they see fit. Therefore, as part of the social media integration, our application needs to be able to synchronize these changes with the Radian6 platform.

This chapter includes the following major topics:

Topic Profiles Management User Interface

The Topic Profiles Management screen in the Admin Console enables you to synchronize and modify Topic Profile attributes. It also provides additional information about each topic profile (status, metrics, etc.).

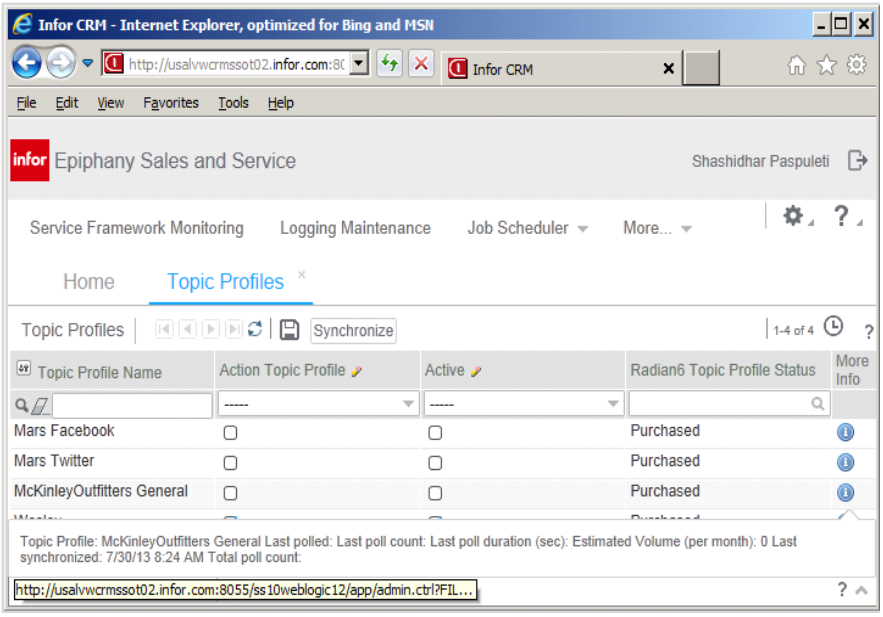


Figure 18-1: Topic Profiles Management User Interface

Topic Profiles must exist in the application in order for social media integration to work.

Click on the **'Sync Topic Profiles'** Toolbar button to initiate synchronization of Topic Profiles with Radian6. After a successful synchronization, the Topic Profile Management list view displays a listing of all Topic Profiles that are publicly available to the account.

The list view shows the following attributes for each Topic Profile:

Attribute Name	Description
Topic Profile Name	Name of the Topic Profile defined in Radian6.

Action Topic Profile	An editable checkbox to tag a Topic Profile as an '**Action**' or '**Normal**' Topic Profile. If the checkbox is checked for the Topic Profile, it marks the Topic Profile as an 'Action' Topic Profile. This means that the application will create an Interaction for any social post arriving from this Topic Profile. If not checked, i.e. this is a 'Normal' Topic Profile, no interaction will be created for the social post arriving from this Topic Profile.
Active	An editable checkbox to activate or deactivate a Topic Profile. When the checkbox is checked, the Topic Profile is enabled and becomes active. Consequently, a background scheduled job will be created for this Topic Profile to start polling social posts from Radian6 for this Topic Profile. If the checkbox is unchecked, the Topic Profile is disabled and becomes inactive. The scheduled job for polling the social posts for this Topic Profile will be terminated. All new Topic Profiles synchronized from Radian6 are by default set as inactive. If you wish to initiate polling of social posts for this Topic Profile, you will have to check the checkbox to enable it.
Radian6 Topic Profile Status	The status of the Topic Profile in Radian6. Possible values are: **Disabled**, **Purchased**, **Trial** and **Expired**. If the status is 'Disabled' or 'Expired', you will not be allowed to check/uncheck any checkboxes to modify the settings of the Topic Profile.
More Info	An image icon that shows a tooltip to display more information about the Topic Profile. For example: the last polled date, the last poll count, last poll duration, estimated monthly volume, last synchronized date and total poll count.

Index

I

A

B

C

D

E

F

G

H

I

J

K

L

M

N

O

P

Q

R

S

T

U

V

W

X

Z