# Oracle® Common Application Components

Implementation Guide

Release 11*i*

**Part No. B12394-01**

August 2004

ORACLE®

Oracle Common Application Components Implementation Guide, Release 11*i*

Part No. B12394-01

Copyright © 2000, 2004, Oracle. All rights reserved.

Primary Author: Charles Colt, Melody Yang

Contributing Author: Kellie Briesach, Carol Fager-Higgins, Robert Geiwitz

The Programs (which include both the software and documentation) contain proprietary information; they are provided under a license agreement containing restrictions on use and disclosure and are also protected by copyright, patent, and other intellectual and industrial property laws. Reverse engineering, disassembly, or decompilation of the Programs, except to the extent required to obtain interoperability with other independently created software or as specified by law, is prohibited.

The information contained in this document is subject to change without notice. If you find any problems in the documentation, please report them to us in writing. This document is not warranted to be error-free. Except as may be expressly permitted in your license agreement for these Programs, no part of these Programs may be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose.

If the Programs are delivered to the United States Government or anyone licensing or using the Programs on behalf of the United States Government, the following notice is applicable:

U.S. GOVERNMENT RIGHTS Programs, software, databases, and related documentation and technical data delivered to U.S. Government customers are "commercial computer software" or "commercial technical data" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the Programs, including documentation and technical data, shall be subject to the licensing restrictions set forth in the applicable Oracle license agreement, and, to the extent applicable, the additional rights set forth in FAR 52.227-19, Commercial Computer Software--Restricted Rights (June 1987). Oracle Corporation, 500 Oracle Parkway, Redwood City, CA 94065.

The Programs are not intended for use in any nuclear, aviation, mass transit, medical, or other inherently dangerous applications. It shall be the licensee's responsibility to take all appropriate fail-safe, backup, redundancy and other measures to ensure the safe use of such applications if the Programs are used for such purposes, and we disclaim liability for any damages caused by such use of the Programs.

The Programs may provide links to Web sites and access to content, products, and services from third parties. Oracle is not responsible for the availability of, or any content provided on, third-party Web sites. You bear all risks associated with the use of such content. If you choose to purchase any products or services from a third party, the relationship is directly between you and the third party. Oracle is not responsible for: (a) the quality of third-party products or services; or (b) fulfilling any of the terms of the agreement with the third party, including delivery of products or services and warranty obligations related to purchased products or services. Oracle is not responsible for any loss or damage of any sort that you may incur from dealing with any third party.

Oracle is a registered trademark of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.

# Contents


## Send Us Your Comments

## Preface

## 1 Introduction

Oracle E-Business Suite Overview . . . . . 1- 1
Oracle Common Application Components Overview . . . . . 1- 4

## 2 Before You Begin

Related Documentation . . . . . 2- 1
Installation Verification . . . . . 2- 1
Application Procedures . . . . . 2- 3
Oracle Common Application Components Dependencies . . . . . 2-17

## 3 Resource Manager Implementation Overview

Overview . . . . . 3- 1
Phase I: Setting Up Resource Manager . . . . . 3- 5
Phase II: Managing Resources with Resource Manager . . . . . 3- 9

## 4 Phase I: Setting Up Resource Manager

Overview of Setting Up Resource Manager . . . . . 4- 1
Mass Importing Resources From Other Applications in the E-Business Suite . . . . . 4- 3
Importing Resources From Legacy Applications Using APIs . . . . . 4- 4
Importing Individual Resources . . . . . 4- 4
Creating a Resource Manually . . . . . 4- 6
Creating a Salesperson Automatically . . . . . 4-10
Creating a Salesperson in Multiple Organizations . . . . . 4-15
Defining Role Types . . . . . 4-17
Defining Roles in Forms . . . . . 4-18
Defining Roles in HTML . . . . . 4-19
Specifying Role Attributes . . . . . 4-19
Defining Skill Levels in HTML . . . . . 4-21
Assigning a Numeric Value to a Skill Rating . . . . . 4-21
Changing the Name of a Skill Rating . . . . . 4-22

Publishing Workflow Business Events . . . . . 4-22

## 5 Phase II: Managing Resources

Overview of Managing Resources . . . . . 5- 2
Finding a Resource in Forms . . . . . 5- 4
Finding and Changing a Resource in HTML . . . . . 5- 5
Configuring Resource Fields for Updates . . . . . 5- 6
Assigning Additional Resource Attributes . . . . . 5- 7
Synchronizing End Dates for Partner and Employee Resources . . . . . 5- 8
Creating Groups in Forms . . . . . 5- 9
Creating Groups in HTML . . . . . 5-11
Defining Dynamic Groups in Forms . . . . . 5-13
Defining Dynamic Groups in HTML . . . . . 5-14
Viewing Group Hierarchy in Forms . . . . . 5-15
Viewing Role Details . . . . . 5-16
Assigning Roles to Resources . . . . . 5-16
Assigning Resources to Groups . . . . . 5-17
Defining Teams in Forms . . . . . 5-17
Defining Teams in HTML . . . . . 5-19
Configuring Group and Team Member Notifications . . . . . 5-20
Moving a Group of Salespersons from One Compensation Analyst to Another . . . . . 5-28
Running a Group Audit Report . . . . . 5-29
Viewing an Audit Report . . . . . 5-30
Running a Group Structure Report . . . . . 5-31
Viewing a Group Structure Report . . . . . 5-32
Running Resource Skills Report . . . . . 5-32
Viewing Resource Skills Report . . . . . 5-33

## 6 Troubleshooting Resource Manager

Common Implementation Errors . . . . . 6- 1
Error Messages . . . . . 6- 8
Frequently Asked Questions (FAQs) . . . . . 6-13

## 7 Oracle Common Application Calendar Implementation Overview

Overview of Implementing Oracle Common Application Calendar . . . . . 7- 1
Implementing Notes in Oracle Applications Framework . . . . . 7- 2
Implementing Tasks in Oracle Applications Framework . . . . . 7- 3
Implementing Calendar in Oracle Applications Framework . . . . . 7- 6

## 8 Implementing the Oracle Applications Framework Based Notes

Overview of Notes in Oracle Applications Framework . . . . . 8- 1
Implementation Steps . . . . . 8- 1
Setting Up Note Types . . . . . 8- 2
Mapping Note Types to a Source . . . . . 8- 2

Defining Notes Reference Mapping . . . 8- 2
Setting Up the Source Object Code and Context . . . 8- 2
Setting Profile Options . . . 8- 2
Customizing Notes Security . . . 8- 3

9 Implementing the Oracle Applications Framework Based Task Manager

Overview of Task Manager in Oracle Applications Framework . . . 9- 1
Implementing the Oracle Applications Framework Based Task Manager . . . 9- 2
Phase I: Setting Up Basic Task Features . . . 9- 2
Defining Task Types . . . 9- 2
Defining Task Statuses and Status Transition Rules . . . 9- 2
Defining Task Priorities . . . 9- 3
Mapping Task and Notes References to a Source . . . 9- 3
Setting Profile Options . . . 9- 3
Running the Task Manager Concurrent Program . . . 9- 4
Setting Up Metadata Objects . . . 9- 4
Publishing Task Business Events . . . 9- 4
Customizing Task Security . . . 9- 4
Phase II: Setting Up One Additional Step for Tasks in Oracle Applications Framework . . . 9- 5
Mapping Task Assignee Types to a Source . . . 9- 5

10 Implementing the Oracle Applications Framework Based Calendar

Overview of Calendar in Oracle Applications Framework . . . 10- 1
Implementing the Oracle Applications Framework Based Calendar . . . 10- 1
Creating a Calendar User . . . 10- 2
Integrating with Web Mail . . . 10- 2
Setting Profile Options . . . 10- 2
Starting Workflow Processes . . . 10- 2
Publishing Business Events for Appointments . . . 10- 3

11 Notes Implementation Overview

Overview . . . 11- 1
Steps . . . 11- 2

12 Setting Up Notes

Setting Up Note Types . . . 12- 1
Mapping Note Types to a Source . . . 12- 2
Defining Notes Reference Mapping . . . 12- 3
Setting Up the Source Object Code and Context . . . 12- 4
Setting Profile Options . . . 12- 5

13 Customizing HTML Notes Security

HTML Notes Security Overview . . . 13- 1

Terms and Definitions . . . 13- 2
Steps for Customizing HTML Notes Security . . . 13- 5

14 Troubleshooting Notes

Errors Messages . . . 14- 1
Answers to Frequently Asked Questions (FAQs) . . . 14- 2

15 Spreadtable Implementation Overview

Overview . . . 15- 1
Steps . . . 15- 3

16 Implementation Tasks for Spreadtable

Creating a New Spreadtable . . . 16- 1
Setting Profile Options . . . 16- 5

17 Assignment Manager Implementation Overview

Overview . . . 17- 1
Steps . . . 17- 4

18 Implementation Tasks for Assignment Manager

Setting Up the TCF Servers for Gantt . . . 18- 1
Setting Profile Options . . . 18-11
Setting Up Other Dependencies . . . 18-13
Configuring Color Coded Tasks . . . 18-14
Customizing the Assignment Manager UI . . . 18-24
Setting Up Enhanced Planning Options . . . 18-43
Skills-based Filtering . . . 18-45
Self-testing Framework . . . 18-79
Support for Excluded Resources . . . 18-82
Publishing Assignment Manager Business Events . . . 18-85
Using Business Events to Generate Custom Logic . . . 18-91

19 Troubleshooting Assignment Manager

Common Implementation Errors for Assignment Manager . . . 19- 1
Error Messages for Assignment Manager . . . 19- 5
Troubleshooting Tips for Assignment Manager . . . 19- 5
Troubleshooting Tips for Gantt . . . 19- 5
Gantt Frequently Asked Questions (FAQs) . . . 19-14

20 Task Manager Implementation Overview

Overview . . . 20- 1
Steps . . . 20- 2

## 21 Setting Up Task Manager


Defining Task Types . . . . . 21- 1
Defining Task Statuses and Status Transition Rules . . . . . 21- 5
Defining Task Priorities . . . . . 21-13
Defining Task Date Types . . . . . 21-15
Mapping Task and Notes References, and Task Assignee Types to a Source . . . . . 21-16
Registering Task Mass Reassignment Screen . . . . . 21-18
Setting Profile Options . . . . . 21-18
Running the Task Manager Concurrent Program . . . . . 21-26
Setting Up Metadata Objects . . . . . 21-27
Publishing Task Business Events . . . . . 21-30


## 22 Working with Task Templates


Designing Task Templates . . . . . 22- 1
Defining Template Details . . . . . 22- 4


## 23 Customizing Tasks Security


Task Security Overview . . . . . 23- 1
Customizing Tasks Data Security . . . . . 23-10
Setting the Security Profile Option . . . . . 23-10
Customizing the List of Values Security Access . . . . . 23-12
Customizing the List of Values Security for HTML Tasks . . . . . 23-12
Customizing the Resource List of Values Security for Tasks in Oracle Applications Framework and Forms . . . . . 23-19
Granting Manager-Directs Security Access . . . . . 23-24
Troubleshooting Task Data Security . . . . . 23-30


## 24 Troubleshooting Task Manager


Common Implementation Errors . . . . . 24- 1
Answers to Frequently Asked Questions (FAQs) . . . . . 24- 1


## 25 Calendar Implementation Overview


Overview . . . . . 25- 1
HTML Calendar Overview . . . . . 25- 2
Forms-based Calendar Overview . . . . . 25- 5


## 26 Implementing the HTML Calendar


Adding a Calendar tab to a Responsibility . . . . . 26- 1
Creating a Calendar Administrator . . . . . 26- 2
Creating a Calendar User . . . . . 26- 4
Changing a Calendar Administrator . . . . . 26- 5
Implementing Calendar Events . . . . . 26- 7
Integrating with Web Mail . . . . . 26- 8

**Setting Profile Options** . . . 26- 9
**Starting Workflow Processes** . . . 26-12
**Running Concurrent Program** . . . 26-13
**Publishing Business Events for Appointments** . . . 26-14

## 27 Implementing the Forms-based Calendar

**Defining a Calendar** . . . 27- 1
**Defining Availability** . . . 27- 2
**Defining Unavailability (Exceptions)** . . . 27- 3
**Using the Assign Shift and Exceptions Window** . . . 27- 4
**Assigning a Calendar to a Shift** . . . 27- 4
**Assigning an Exception to a Calendar** . . . 27- 5
**Assigning a Resource to a Calendar** . . . 27- 6

## 28 Escalation Manager Implementation Overview

**Overview** . . . 28- 1
**Steps** . . . 28- 1

## 29 Implementation Tasks for Escalation Manager

**Setting Profile Options** . . . 29- 1
**Starting the Background Workflow Process** . . . 29- 4
**Setting Escalation Lookup Codes** . . . 29- 5
**Setting Up Escalation Status** . . . 29- 7
**Defining Escalation Reference Codes** . . . 29- 9
**Defining Escalation Reason Codes** . . . 29-10
**Publishing Business Events** . . . 29-11

## 30 Troubleshooting Escalation Manager

**Troubleshooting Tips** . . . 30- 1
**Error Messages** . . . 30- 1

## 31 BRM Implementation Overview

**Overview** . . . 31- 1
**Steps** . . . 31- 1

## 32 Phase I: Configuring the Business Rule Monitor

**Setting Up the Business Rule Monitor** . . . 32- 1
**Defining the Business Rule Monitor Workflow Administrator** . . . 32- 1
**Setting Profile Options** . . . 32- 3
**Starting the Background Workflow Processes** . . . 32- 3

## 33 Phase II: Implementing Business Rules Using the Business Rule Monitor


Creating a New Business Rule . . . 33- 1
Enabling a Business Rule . . . 33- 5
Verifying an Escalation Territory . . . 33- 6
Starting the Business Rule Monitor . . . 33- 7


## 34 Troubleshooting the Business Rule Monitor


Troubleshooting Tips . . . 34- 1
General Tips for Defining Rules . . . 34- 1
Stopping the Business Rule Monitor . . . 34- 2
Answers to Frequently Asked Questions (FAQs) . . . 34- 3


## 35 User Management Implementation Overview


Overview . . . 35- 1
User Types . . . 35- 1
Enrollments . . . 35- 2
Templates . . . 35- 3
Approval Processes . . . 35- 3
Access Control . . . 35- 5
Self-Service Registration . . . 35- 8
Terms and Definitions . . . 35- 8


## 36 Implementation Tasks for User Management


Introduction . . . 36- 2
Creating the User Management Administrative User . . . 36- 2
Setting Profile Options . . . 36- 3
Setting Up Workflow . . . 36- 7
Starting the Workflow Process . . . 36- 8
Stopping the Workflow Process . . . 36- 9
Setting Up Approvals . . . 36- 9
Creating a New Approval . . . 36-10
Removing an Approval . . . 36-11
Searching for an approval . . . 36-11
Editing Approval Details . . . 36-12
Enabling and Disabling Approval Definitions . . . 36-12
Updating Approval Preferences for an Organization . . . 36-13
Setting Up Templates . . . 36-14
Creating a Template . . . 36-14
Removing a Template . . . 36-15
Enabling and Disabling Template Definitions . . . 36-16
Editing a Template's Details . . . 36-17
Searching for a Template . . . 36-17
Setting Up Enrollments . . . 36-18
Creating an Enrollment . . . 36-18

**Removing an Enrollment** . . . 36-19
**Enabling and Disabling Enrollment Definitions** . . . 36-20
**Editing an Enrollment's Details** . . . 36-20
**Setting Up User Types** . . . 36-21
**Creating a User Type** . . . 36-22
**Removing a User Type** . . . 36-24
**Activating and Deactivating User Types** . . . 36-24
**Searching for a User Type** . . . 36-25
**Editing a User Type's Details** . . . 36-26
**Creating Primary User Approval Groups** . . . 36-27
**Backward Compatibility** . . . 36-28
**Related Documentation and Resources** . . . 36-29

## 37 Verify the Implementation

**Oracle Common Application Components Implementation Verification Tasks** . . . 37- 1

## A Profile Options

**Before You Begin** . . . A- 1
**About Profile Options** . . . A- 1
**Setting Profile Options** . . . A- 3
**Common Application Components Profile Options** . . . A- 4

## B Concurrent Programs

**About Concurrent Programs** . . . B- 1
**Running Concurrent Programs** . . . B- 1
**Common Application Components Concurrent Programs** . . . B- 2

## Glossary

# Send Us Your Comments

**Oracle Common Application Components Implementation Guide, Release 11*i***

**Part No. B12394-01**

Oracle welcomes your comments and suggestions on the quality and usefulness of this publication. Your input is an important part of the information used for revision.

- Did you find any errors?
- Is the information clearly presented?
- Do you need more information? If so, where?
- Are the examples correct? Do you need more examples?
- What features did you like most about this manual?

If you find any errors or have any other suggestions for improvement, please indicate the title and part number of the documentation and the chapter, section, and page number (if available). You can send comments to us in the following ways:

- Electronic mail: appsdoc_us@oracle.com
- FAX: 650-506-7200 Attn: Oracle Application Technology Group Documentation Manager
- Postal service:
  Oracle Application Technology Group Documentation Manager
  Oracle Corporation
  500 Oracle Parkway
  Redwood Shores, CA 94065
  USA

If you would like a reply, please give your name, address, telephone number, and electronic mail address (optional).

If you have problems with the software, please contact your local Oracle Support Services.

# Preface

## Intended Audience

Welcome to Release 11*i* of the *Oracle Common Application Components Implementation Guide*.

This guide assumes you have a working knowledge of the following:

- The principles and customary practices of your business area
- Oracle Common Application Components

  If you have never used Oracle Common Application Components, Oracle suggests you attend one or more of the Oracle Common Application Components training classes available through Oracle University.
- The Oracle Applications graphical user interface

  To learn more about the Oracle Applications graphical user interface, read the Oracle Applications User's Guide.

See **Other Information Sources** for more information about Oracle Applications product information.

See Related Documents on page xv for more Oracle Applications product information.

## Documentation Accessibility

Our goal is to make Oracle products, services, and supporting documentation accessible, with good usability, to the disabled community. To that end, our documentation includes features that make information available to users of assistive technology. This documentation is available in HTML format, and contains markup to facilitate access by the disabled community. Standards will continue to evolve over time, and Oracle is actively engaged with other market-leading technology vendors to address technical obstacles so that our documentation can be accessible to all of our customers. For additional information, visit the Oracle Accessibility Program Web site at `http://www.oracle.com/accessibility/`

### Accessibility of Code Examples in Documentation

JAWS, a Windows screen reader, may not always correctly read the code examples in this document. The conventions for writing code require that closing braces should appear on an otherwise empty line; however, JAWS may not always read a line of text that consists solely of a bracket or brace.

## Accessibility of Links to External Web Sites in Documentation

This documentation may contain links to Web sites of other companies or organizations that Oracle does not own or control. Oracle neither evaluates nor makes any representations regarding the accessibility of these Web sites.

## Structure


1 Introduction
2 Before You Begin
3 Resource Manager Implementation Overview
4 Phase I: Setting Up Resource Manager
5 Phase II: Managing Resources
6 Troubleshooting Resource Manager
7 Oracle Common Application Calendar Implementation Overview
8 Implementing the Oracle Applications Framework Based Notes
9 Implementing the Oracle Applications Framework Based Task Manager
10 Implementing the Oracle Applications Framework Based Calendar
11 Notes Implementation Overview
12 Setting Up Notes
13 Customizing HTML Notes Security
14 Troubleshooting Notes
15 Spreadtable Implementation Overview
16 Implementation Tasks for Spreadtable
17 Assignment Manager Implementation Overview
18 Implementation Tasks for Assignment Manager
19 Troubleshooting Assignment Manager
20 Task Manager Implementation Overview
21 Setting Up Task Manager
22 Working with Task Templates
23 Customizing Tasks Security
24 Troubleshooting Task Manager
25 Calendar Implementation Overview
26 Implementing the HTML Calendar
27 Implementing the Forms-based Calendar
28 Escalation Manager Implementation Overview
29 Implementation Tasks for Escalation Manager
30 Troubleshooting Escalation Manager
31 BRM Implementation Overview
32 Phase I: Configuring the Business Rule Monitor
33 Phase II: Implementing Business Rules Using the Business Rule Monitor
34 Troubleshooting the Business Rule Monitor
35 User Management Implementation Overview
36 Implementation Tasks for User Management
37 Verify the Implementation
A Profile Options
B Concurrent Programs
Glossary


## Related Documents

### Other Information Sources

You can choose from many sources of information, including online documentation, training, and support services, to increase your knowledge and understanding of *Oracle Common Application Components.*

If this guide refers you to other Oracle Applications documentation, use only the Release 11*i* versions of those guides.

**Online Documentation** All Oracle Applications documentation is available online (HTML or PDF). Online help patches are available on Oracle*MetaLink*.

**Related Documentation** *Oracle Common Application Components* shares business and setup information with other Oracle Applications products. Therefore, you may want to refer to other product documentation when you set up and use Oracle Common Application Components.

*Oracle CRM Technology Foundation Implementation Guide* contains information relating to User Management including user registration and management performed through the System Administrator's Console.

You can read the documents online by choosing Library from the expandable menu on your HTML help window, by reading from the Oracle Applications Document Library CD included in your media pack, or by using a Web browser with a URL that your system administrator provides.

If you require printed guides, you can purchase them from the Oracle Store at http://oraclestore.oracle.com.

**Documents Related to All Products**

- Oracle Applications User's Guide

  This guide explains how to enter data, query, run reports, and navigate using the graphical user interface (GUI) available with this release of Oracle Common Application Components (and any other Oracle Applications products). This guide also includes information on setting user profiles, as well as running and reviewing reports and concurrent processes. You can access this User's Guide online by choosing "Getting Started with Oracle Applications" from any Oracle Applications help file.

**Documents Related to This Product**

- Oracle Common Application Components User's Guide

  The User's Guide contains important reference and background information on each of the Oracle Common Application Components modules. In addition, it contains procedures and using information that describe the common user and tasks that are necessary to perform in each of the modules.

- Oracle Common Application Components API Reference Guide

  This manual describes the public, supported Oracle Common Application Components APIs. It includes API information for the following Application modules:

  - Resource Manager
  - Task Manager
  - Notes

**Installation and System Administration**

- Oracle Applications Concepts

  This guide provides an introduction to the concepts, features, technology stack, architecture, and terminology for Oracle Applications Release 11*i*. It provides

a useful first book to read before an installation of Oracle Applications. This guide also introduces the concepts behind Applications-wide features such as Business Intelligence (BIS), languages and character sets, and Self-Service Web Applications.

- Installing Oracle Applications

  This guide provides instructions for managing the installation of Oracle Applications products. In Release 11*i*, much of the installation process is handled using Oracle Rapid Install, which minimizes the time to install Oracle Applications, the Oracle8 technology stack, and the Oracle8*i* Server technology stack by automating many of the required steps. This guide contains instructions for using Oracle Rapid Install and lists the tasks you need to perform to finish your installation. You should use this guide in conjunction with individual product user guides and implementation guides.

- Oracle Applications Supplemental CRM Installation Steps

  This guide contains specific steps needed to complete installation of a few of the CRM products. The steps should be done immediately following the tasks given in the Installing Oracle Applications guide.

- Upgrading Oracle Applications

  Refer to this guide if you are upgrading your Oracle Applications Release 10.7 or Release 11.0 products to Release 11*i*. This guide describes the upgrade process and lists database and product-specific upgrade tasks. You must be either at Release 10.7 (NCA, SmartClient, or character mode) or Release 11.0, to upgrade to Release 11*i*. You cannot upgrade to Release 11*i* directly from releases prior to 10.7.

- Maintaining Oracle Applications

  Use this guide to help you run the various AD utilities, such as AutoUpgrade, AutoPatch, AD Administration, AD Controller, AD Relink, License Manager, and others. It contains how-to steps, screenshots, and other information that you need to run the AD utilities. This guide also provides information on maintaining the Oracle applications file system and database.

- Oracle Applications System Administrator's Guide

  This guide provides planning and reference information for the Oracle Applications System Administrator. It contains information on how to define security, customize menus and online help, and manage concurrent processing.

- Oracle Alert User's Guide

  This guide explains how to define periodic and event alerts to monitor the status of your Oracle Applications data.

- Oracle Applications Developer's Guide

  This guide explains how to define periodic and event alerts to monitor the status of your Oracle Applications data. Oracle Applications Developer's Guide This guide contains the coding standards followed by the Oracle Applications development staff. It describes the Oracle Application Object Library components needed to implement the Oracle Applications user interface described in the Oracle Applications User Interface Standards for Forms-Based Products. It also provides information to help you build your custom Oracle Forms Developer 6*i* forms so that they integrate with Oracle Applications.

- Oracle Applications User Interface Standards for Forms-Based Products

This guide contains the user interface (UI) standards followed by the Oracle Applications development staff. It describes the UI for the Oracle Applications products and how to apply this UI to the design of an application built by using Oracle Forms.

**Other Implementation Documentation**

- Multiple Reporting Currencies in Oracle Applications

  If you use the Multiple Reporting Currencies feature to record transactions in more than one currency, use this manual before implementing Oracle Common Application Components. This manual details additional steps and setup considerations for implementing Oracle Common Application Components with this feature.

- Multiple Organizations in Oracle Applications

  This guide describes how to set up and use Oracle Common Application Components with Oracle Applications' Multiple Organization support feature, so you can define and support different organization structures when running a single installation of Oracle Common Application Components.

- Oracle Workflow Administrator's Guide

  This guide describes Oracle Workflow setup steps, the administrator Status Monitor, and administrative scripts.

- Oracle Workflow Developer's Guide

  This guide describes Oracle Workflow Builder including defining workflow processes, defining Business Event System (BES) events, subscriptions, agents, and systems.

- Oracle Workflow API Reference

  This guide describes PL/SQL and Java Workflow APIs.

- Oracle Applications Flexfields Guide

  This guide provides flexfields planning, setup and reference information for the Oracle Common Application Components implementation team, as well as for users responsible for the ongoing maintenance of Oracle Applications product data. This manual also provides information on creating custom reports on flexfields data.

- Oracle eTechnical Reference Manuals

  Each eTechnical Reference Manual (eTRM) contains database diagrams and a detailed description of database tables, forms, reports, and programs for a specific Oracle Applications product. This information helps you convert data from your existing applications, integrate Oracle Applications data with non-Oracle applications, and write custom reports for Oracle Applications products. Oracle eTRM is available on Oracle*MetaLink*

- Oracle Manufacturing APIs and Open Interfaces Manual

  This manual contains up-to-date information about integrating with other Oracle Manufacturing applications and with your other systems. This documentation includes APIs and open interfaces found in Oracle Manufacturing.

- Oracle Order Management Suite APIs and Open Interfaces Manual

This manual contains up-to-date information about integrating with other Oracle Manufacturing applications and with your other systems. This documentation includes APIs and open interfaces found in Oracle Order Management Suite.

- Oracle Applications Message Reference Manual

  This manual describes Oracle Applications messages. This manual is available in HTML format on the documentation CD-ROM for Release 11*i*.

- Oracle Common Application Components Implementation Guide

  Many e-Business Suite products use components from Oracle Common Application Components. Use this guide to correctly implement Oracle Common Application Components.

**Training and Support**

**Training**: Oracle offers training courses to help you and your staff master Oracle Common Application Components and reach full productivity quickly. You have a choice of educational environments. You can attend courses offered by Oracle University at any one of our many Education Centers, you can arrange for our trainers to teach at your facility, or you can use Oracle Learning Network (OLN), Oracle University's online education utility. In addition, Oracle training professionals can tailor standard courses or develop custom courses to meet your needs. For example, you may want to use your organization's structure, terminology, and data as examples in a customized training session delivered at your own facility.

**Support**: From on-site support to central support, our team of experienced professionals provides the help and information you need to keep Oracle Common Application Components working for you. This team includes your Technical Representative, Account Manager, and Oracle's large staff of consultants and support specialists with expertise in your business area, managing an Oracle8*i* server, and your hardware and software environment.

**Oracle*MetaLink***: Oracle*MetaLink* is your self-service support connection with Web, telephone menu, and e-mail alternatives. Oracle supplies these technologies for your convenience, available 24 hours a day, 7 days a week. With Oracle*MetaLink*, you can obtain information and advice from technical libraries and forums, download patches, download the latest documentation, look at bug details, and create or update TARs. To use Oracle*MetaLink*, register at (http://metalink.oracle.com).

**Alerts**: You should check Oracle*MetaLink* alerts before you begin to install or upgrade any of your Oracle Applications. Navigate to the Alerts page as follows: Technical Libraries/ERP Applications/Applications Installation and Upgrade/Alerts.

**Self-Service Toolkit**: You may also find information by navigating to the Self-Service Toolkit page as follows: Technical Libraries/ERP Applications/Applications Installation and Upgrade.

## Do Not Use Database Tools to Modify Oracle Applications Data

Oracle STRONGLY RECOMMENDS that you never use SQL*Plus, Oracle Data Browser, database triggers, or any other tool to modify Oracle Applications data unless otherwise instructed.

Oracle provides powerful tools you can use to create, store, change, retrieve, and maintain information in an Oracle database. But if you use Oracle tools such as SQL*Plus

to modify Oracle Applications data, you risk destroying the integrity of your data and you lose the ability to audit changes to your data.

Because Oracle Applications tables are interrelated, any change you make using an Oracle Applications form can update many tables at once. But when you modify Oracle Applications data using anything other than Oracle Applications, you may change a row in one table without making corresponding changes in related tables. If your tables get out of synchronization with each other, you risk retrieving erroneous information and you risk unpredictable results throughout Oracle Applications.

When you use Oracle Applications to modify your data, Oracle Applications automatically checks that your changes are valid. Oracle Applications also keeps track of who changes information. If you enter information into database tables using database tools, you may store invalid information. You also lose the ability to track who has changed your information because SQL*Plus and other database tools do not keep a record of changes.

# 1

# Introduction

This chapter covers the following topics:

- Oracle E-Business Suite Overview
- Oracle Common Application Components Overview

## Oracle E-Business Suite Overview

The Oracle E-Business Suite is a comprehensive Web-based answer for business-to-business (B2B) and business-to-consumer (B2C) selling, marketing, and servicing through the Internet. The Oracle E-Business Suite consists of front-office Customer Relationship Management (CRM) applications and back-office Enterprise Resource Planning (ERP) applications. These applications automate marketing, sales, contracts, service, manufacturing, and supply chain processes as well as financial operations, project management, human resources operations, and business intelligence systems.

The Oracle E-Business Suite sits on a multi-layer platform which includes:

- Oracle 9*i* Database
- Oracle 9*i* Application Server
- Common Services and Components
- Oracle Internet Business Intelligence

## Oracle 9*i* Database

All applications reside on the Oracle9*i* Database. The Oracle database drives enterprise E-Business applications, online transaction processing applications (OLTP), query-intensive data warehouses, and high capacity Web sites. Because the Oracle database is available on many different platforms, applications can scale from handheld to laptop to desktop to enterprise providing consistent information over multiple channels.

## Oracle 9*i* Application Server

The Oracle 9*i* Application Server (Oracle 9*i*AS) is a middle-tier server which independently delivers the technology needed to build Web sites and applications, create personalized portals, extract business intelligence, and manage a secure Web site infrastructure.

## Common Services and Components

All the applications can leverage the common infrastructure and services components. Functionality includes Oracle Forms, Oracle Reports, Oracle Application Object Library (AOL), the Oracle JDeveloper and Oracle Discoverer development tools, the coding and UI standards, and other functionality used by the applications.

For example, you can extend the applications according to your business needs using flexfields. You can create and assign responsibilities using the system administrator responsibility. Also, you can use Oracle Workflow to configure background processes and set up notifications so that all the appropriate managers and groups are notified.

## Oracle Internet Business Intelligence

Above the E-Business Suite sits the Internet Business Intelligence application. This application integrate data from all of the E-Business Suite applications to provide key performance measurements, operating alerts, and management reports to every decision maker across the enterprise.

### The Applications in the E-Business Suite

Customers can seamlessly share data from front-end applications (CRM) to backend applications (ERP). The CRM applications include:

- the Marketing suite
- the Sales suite
- the Contracts suite
- the Service suite
- the eCommerce suite

The ERP applications include:

- Oracle Order Management
- Oracle Supply Chain Planning
- Oracle Manufacturing
- Oracle Financials
- Oracle Human Resources Management System

## Customer Relation Management (CRM)

Companies use Oracle's CRM suite of applications to acquire, maintain, and enhance customer relationships, by assisting companies with marketing automation, sales force automation, contracts management, customer service and support, and business intelligence, in a multi-channel environment.

- The Marketing suite provides campaign planning and execution, budget management, list creation, reporting and analysis tools. Marketing professionals use the Oracle Marketing applications to drive quality leads to sales, to expand reach and to maximize marketing effectiveness by using a comprehensive set of marketing automation, analysis and multi-channel execution capabilities. The Marketing suite offers seamless integration with sales, service and operations.

- The Sales suite provides integrated tools for all those who are involved in the sales process, including field salespeople, telesales agents, distributors and resellers, customers purchasing over the Internet and sales executives.

  Armed with up-to-the minute information regarding customers, leads and opportunities, as well as forecasts and compensation plans and projections, managers can proactively and effectively manage a sales force while providing the sales people with the information needed to close sales. Using this information, the field sales force, telesales teams, resellers, and Web storefronts can collaborate in closing more business together as one sales team.

- The Contracts suite enables authoring, executing and managing contracts, warranties and extended warranties which provides visibility to contract entitlements and proactively acting upon contractual commitments. Whether a buyer or a seller, issuing contracts or receiving them, the Contracts suite automates the full contract life cycle.

- The Service suite manages service activities with the goals of profitability, employee productivity and complete customer satisfaction by addressing all service and support activities from initial contact with the customer through issue resolution. Automating service efforts can potentially transform an area that has historically proven to be a cost center into a revenue generator.

  This suite of applications provides customer support, field service and depot repair functionality. In addition, Oracle Services offers complete visibility into spare parts availability, logistics, service billing and customer contract entitlements. Oracle Customer Care provides full access to customer information from each touch point in the enterprise and to each customer care agent or other employees who interact with the customer. All of the Service products can be deployed across Web, call center and mobile field channels.

- The eCommerce suite of products aids in establishing profitable long-term relationships with customers through one-to-one marketing and personalized shopping experiences as well as proactive support and self-service capabilities. Oracle eCommerce synchronizes all customer interactions and transactions by integrating Web-based channels with traditional channels.

## Enterprise Resource Planning (ERP)

Companies use the ERP applications to control their back-office operations. For example:

- Oracle Order Management applications feature advanced configurator functionality, global available to promise, flexible pricing support, efficient delivery, high volume transactions and flexibility to adapt to changing business conditions.

- Oracle Supply Chain Planning applications provide the tools required to optimize flow of material, cash, and information across the extended supply chain.

- Oracle Manufacturing applications support all styles of manufacturing - engineer-to-order, discrete, process, flow, lot based, and project based manufacturing.

- Oracle Financials provide solutions for strategic planning, accounting, treasury, project management, and travel management.

- Oracle Human Resources Management System is a comprehensive solution for managing a company's human resources, allowing organizations to attract, retain and develop critical skills and knowledge on a global basis.

# Common Application Architecture

The Common Application Architecture includes functionality that supports both CRM and ERP applications. For example, TCA, Oracle's Trading Community Architecture, consists of a database schema and Application Programming Interfaces (APIs) where you can model the complex relationships that occur within a business community and enter that data consistently throughout the enterprise. Because the model is not hierarchical, Oracle applications can model complex B2B2C relationships and not to be limited to either a B2B or B2C implementation. TCA delivers a 360-degree view of the customer.

## Oracle Common Application Components

Oracle Common Application Components is:

- A common infrastructure upon which the CRM applications are built
- A set of application components that can be used by all of the CRM applications

Oracle CRM Foundation divides into the Oracle Common Application components and the Technical Foundation components.

The key to the CRM products is that they are architected, designed, and built as an integrated suite of applications using the Oracle Common Application components. This layered architecture approach ensures that all CRM applications can interact with key business objects in a consistent manner.

Oracle Common Application Components provide standard APIs for accessing and manipulating business objects such as Customers, Resources, and Tasks.

The Oracle Common Application Components business APIs facilitate the integration of the CRM suite in heterogeneous Information Technology environments where integration with legacy or third party applications is essential.

# Oracle Common Application Components Overview

Oracle Common Application Components's purpose is to provide the CRM suite with a robust architecture, a stable and performing technology stack, and reusable application components.

The following Oracle Common Application Components include:


- Resource Manager, page 1- 5
- Oracle Common Application Calendar, page 1- 5
- Notes, page 1- 5
- Development Tools, page 1- 5
- Assignment Manager, page 1- 5
- Task Manager, page 1- 5
- Calendar (HTML and Forms-based), page 1- 6

- Escalation Manager, page 1- 6
- Business Rule Monitor, page 1- 6

## Resource Manager

Resource Manager is a single repository for defining teams and groups of people. Once an entity is defined as a resource, it becomes visible to the entire Oracle e-Business Suite, and tasks and calendars, for example, can be associated with this entity.

## Oracle Common Application Calendar

With recent expansion, Oracle Common Application Calendar including the Tasks, Notes and Calendar modules that are developed based on the Oracle Applications Self-Service Framework, the standard HTML development and deployment platform for Oracle Self–Service Applications, provides another set of HTML user interfaces (UIs) for integrated applications to uptake the essential calendar, tasks, and notes features while re-building their functions. Use Oracle Common Application Calendar to view scheduled appointments in personal calendar, create a single or repeating appointment, create tasks for a source object, and attach notes to an appointment or a contextual task.

## Notes

The entire Oracle e-Business Suite uses the Notes infrastructure to create, maintain, and share notes related to customers, opportunities, service requests, and other business objects through the Notes in Forms and HTML user interfaces.

## Development Tools

Oracle Common Application Components include several user interface components that can be embedded in an Oracle form and used by the other CRM modules. These components are referred to as development or infrastructure tools. They are:

- **Gantt chart**, a graphical tool that typically uses a bar chart to show the start date, end date and duration of tasks within the project
- **Spreadtable**, an object that contains rows, columns, and column headers set in a grid

## Assignment Manager

The Assignment engine determines the best resource to be assigned to tasks based on availability and skill set. This engine is used by the various CRM modules to automatically assign tasks to a resource or a group of people.

## Task Manager

This is the universal model, which is used by the entire Oracle e-Business Suite. Tasks are created and assigned to groups or individuals and are created and shared across Oracle e-Business Suite through the Forms-based and HTML Tasks.

## Calendar

There are two Calendars.

- The Forms-based Calendar is a scheduling tool used to define and view available times for a resource or a group of resources. Other CRM modules use the Calendar functionality to schedule resources.
- Employees use the HTML-based Calendar as a personal productivity tool to effectively manage daily activities, appointments, and tasks.

## Escalation Manager

You can manage situations either by creating an escalation document, assigning an escalation owner, or defining the necessary actions needed to resolve the escalation through the Escalation Manager interface. This module is used extensively by the service applications to ensure that Service Level Agreements are met.

## Business Rule Monitor

You can proactively manage escalations using the Business Rule Monitor which are based on your business logic and needs. It consists of:

- The Business Rule Workbench: this is used to define a business rule
- The Business Rule Monitor: this is the engine that monitors documents over time against the user-defined business rules.

# 2

# Before You Begin

This chapter covers the following topics:

- Related Documentation
- Installation Verification
- Application Procedures
- Oracle Common Application Components Dependencies

## Related Documentation

This chapter provides an overview of what you need to have installed, implemented, and verified before implementing the Oracle Common Application Components. You may also want to consult the following documentation:

- *Installing Oracle Applications, Release 11i*
- *Implementing e-Business Suite Applications*
- *Oracle Common Application Components User's Guide*
- *Oracle Common Application Components Technical Reference Manual*

## Installation Verification

Before attempting to run e-Business Suite applications, first verify that you can perform the tasks outlined in the following table. The listed tasks are generic tasks that are typical of all users of the Oracle E-Business Suite. Depending on your business processes, and the modules that you are installing, not every listed task is applicable to your installation.

The following table describes the non Common Application Components tasks that need to be performed, and which Common Application Components require the completion of the task before implementation.

***Table 2-1 Application Dependency Checklist***

| Application | Task | Common Application Components |
|---|---|---|
| Application Object Library | 1. Create an FND user, page 2- 3<br>2. Assign AOL responsibility to the user, page 2- 4<br>3. Set profile option, page 2- 5 | • Resource Manager<br>• Notes<br>• Spreadtable<br>• Gantt<br>• Assignment Manager<br>• Task Manager<br>• HTML-based Calendar<br>• Forms-based Calendar<br>• Escalation Manager<br>• Business Rule Monitor |
| Oracle Human Resources | Create an employee, page 2- 6 | Resource Manager |
| Oracle Human Resources | Create a new business unit, page 2- 6 | Resource Manager |
| Oracle Receivables | 1. Create a customer, page 2- 7<br>2. Create a new organization, page 2- 9 | Resource Manager |
| Oracle Workflow | Create a workflow with notifications, page 2- 9 | • Resource Manager<br>• Task Manager<br>• HTML Calendar<br>• Notes<br>• Business Rule Monitor<br>• Escalation Manager |
| Oracle Inventory | 1. Define categories, page 2-11<br>2. Define products and platforms, page 2-12<br>3. Define unit of measure, page 2-13<br>4. Define unit of measure classes, page 2-13 | • Resource Manager<br>• Task Manager<br>• Assignment Manager |
| Oracle Purchasing | Create a supplier contact, page 2-14 | Resource Manager |

| Application | Task | Common Application Components |
|---|---|---|
| Oracle Order Management | Define sales credit types, page 2-16 | Resource Manager |
| Oracle General Ledger | Set up descriptive accounting flexfields, page 2-16 | Resource Manager |

## Application Procedures

You must be able to complete each of the following non-e-Business Suite tasks successfully for your e-Business Suite applications to work properly. If you are unable to complete a task successfully, then correct the problem before continuing.

### Creating an FND User

Perform the following steps to create a FND user in the Application Object Library.

## Reference

*Oracle Applications System Administrator's Guide,* See Chapter 2, Managing Oracle Applications Security

## Prerequisites

None

## Responsibility

System Administrator

## Navigation

Navigate to **Security > User > Define**.

## Steps

1. In the User window, enter a new user name in the User Name field.
2. Enter a password in the Password field.
3. Re-enter the password for verification.
4. Select the employee's name from the list of Values (LOV) in the Person Field.
5. In the Responsibilities sub-tab, select the CRM HTML Administration responsibility from the drop-down list of values.
6. Save the new user.

To verify that the user setup is successful, perform the following steps:

1. Login to your Personal Home Page as the newly created user.

2. Enter your new password when prompted.

You should now be able to access the Personal Home Page for this user.

> **Note:** For this user to have access to HTML applications, you must set additional profile options as detailed in the Implementing Oracle Common Application Components manual.

### Assigning AOL Responsibilities to the User

A responsibility defines an application user's current privileges while working with Oracle Applications. When an application user signs on, they select a responsibility that grants certain privileges, specifically:

- The functions that the user may access. Functions are determined by the menu assigned to the responsibility.
- The concurrent programs, such as reports, that the user may run.
- The application database accounts to which forms, concurrent programs, and reports connect.

You cannot delete a responsibility because this information helps to provide an audit trail. You can deactivate a user's responsibility at any time by setting the End Date to the current date. If you wish to reactivate the responsibility for the user, change the End Date to a date after the current date, or clear the End Date.

After creating the FND User, perform the following steps to assign the user AOL responsibilities.

## Reference

*Managing People Using Oracle HRMS (US),* See Chapter 1, Employee Management

## Prerequisites

None

## Responsibility

System Administrator

## Navigation

Navigate to **Security > User > Define**.

## Steps

1. With the user information populated in the window, select the Responsibility field in the Responsibilities tab.
2. Select the necessary responsibility from the List of Values (LOV).
3. Define the Effective dates.
4. Save your work.

## Setting Profile Options

A user profile is a set of changeable options that affect the way your application looks and behaves. As System Administrator, you control how Oracle Applications operate by setting user profile options to the values you want. You can set user profile options at four different levels: site, application, responsibility, and user.

After creating the FND User, perform the following steps to set profile options.

# Reference

*Managing People Using Oracle HRMS (US),* See Chapter 1, Employee Management

# Prerequisites

None

# Responsibility

System Administrator

# Navigation

Navigate to **Security >Profile > System**.

# Steps

1. In the Find System Profile Values window, select an appropriate check box for the profile option that you want to set before clicking **Find**.

   The System Profile Values window opens with the profile option you searched for.

2. Set an appropriate value for your profile option if the checkbox is selected:

   1. Set the Site value. This field displays the current value, if set, for all users at the installation site.

   2. Set the Application value. This field displays the current value, if set, for all users working under responsibilities owned by the application identified in the Find Profile Values block.

   3. Set the Responsibility value. This field displays the current value, if set, for all users working under the responsibility identified in the Find Profile Values block.

   4. Set the User value. This field displays the current value, if set, for the application user identified in the Find Profile Values block.

      You should set site-level default values for any required options after installation of an application. If you do not assign a particular profile option at any of the four levels, that option does not have a default value and may cause errors when you use forms, run reports, or run concurrent requests.

3. Save your work.

### Creating an Employee

To successfully run most of the e-Business Suite products, you must first create employee resources within the ERP Human Resource Management System (HRMS) application. Perform the following steps to define an employee for minimal functionality.

> **Note:** If Oracle HRMS is not installed, then you must enter a new employee using the Enter Person form by navigating to **Resource Manager > Maintain Employee > Employee**.

## Reference

*Managing People Using Oracle HRMS (US),* See Chapter 1, Employee Management

## Prerequisites

None

## Responsibility

US HRMS Manager or US Super HRMS Manager

## Navigation

Navigate to **People > Enter and Maintain**.

## Steps

1. Click **New** In the find window.

   The People window opens.
2. Enter the following employee information in the appropriate form fields:
   - Last Name
   - First Name
   - Title
3. Select the person's gender from the drop-down list.
4. Select Employee from the type drop-down list.
5. Enter the person's social security number.
6. Save you work.

### Creating a New Business Unit

A Business Group is a special class of organization. Every Business Group can have its own set of default values, with its own internal organizations, grades, jobs, positions, payrolls, employees, applicants, compensations and benefits.

Organizations are the basic work structure of any enterprise. They usually represent the functional, management, or reporting groups which exist within a Business Group. Perform the following steps to create a new business unit.

## Reference

*Oracle Applications System Administrator's Guide*, See Chapter 2, Managing Oracle Applications Security

## Prerequisites

None

## Responsibility

US HRMS Manager or US Super HRMS Manager

## Navigation

Navigate to **Work Structures > Organization > Description**.

## Steps

1. Click **New** in the Find Organization window.
2. Enter the name for the Organization
3. Select Business Unit from the list of values (LOV) in the Type field.

   The current date populates the From Date field.
4. Enter the Organization location details from the LOV.
5. Save your work.
6. In the Organization Classification region, select the classification from the LOV.
7. Select the Enabled check box.
8. Save your work.
9. Click **Others** for additional information on the classification you selected.
10. Save your work.

### Creating a Customer

Perform the following steps to create a new customer, with an address and contact information in the Oracle ERP Accounts Receivables application.

## Reference

*Oracle Receivables User's Guide*, See Chapter 3, Customers

## Prerequisites

None

## Responsibility

Receivables Manager

## Navigation

Navigate to **Customers > Standard**.

## Steps

1. In the Find/Enter Customers window, select Person from the Customer Type drop-down list.
2. Enter the name of the customer in the Name column.
3. Click **Find** to ascertain if the customer already exists.

   As this customer does not exist, the New button is enabled in the Decisions window.
4. Click **New**.

   The Customer-Standard window opens.
5. On the Address tab, click **New** to create a new address.

   The Customer Addresses window opens.
6. Fill in the necessary information. Yellow fields are mandatory.
7. On the Business Purpose tab, fill in the Usage, Location and select the Primary check box. For example:
   - Usage: Marketing
   - Location: 6op9
   - Primary: Yes
8. On the Contacts: Telephones tab, enter a new contact and phone number.
9. Save your work.

## Verify Your Information

To verify that the process worked properly, perform the following steps.

1. Open the Customer-Standard window again.
2. Enter the company name you entered above.
3. Click **Find** to query for the record you created in the Match Results window.
4. If the record is found, click the Contacts: Telephone tab.
5. Place the cursor in the Last Name field.
6. From the menu, navigate to **View > Query by Example > Enter**.
7. Enter the contacts last name as the search criteria.
8. Select **View > Query by Example > Run**.

   If the record for your contact name is populated, then you have successfully created a customer with an address and a contact person for the customer.

### Creating a New Organization

Perform the following steps to create a new organization, with an address and contact information in the Oracle ERP Accounts Receivables application.

## Reference

*Oracle Receivables User's Guide*, See Chapter 3, Customers

## Prerequisites

None

## Responsibility

Receivables Manager

## Navigation

Navigate to **Customers > Standards**.

## Steps

1. In the Find/Enter Customer window, select Organization from the Customer Type drop-down list.
2. Enter the name of a test corporation in the Name field.
3. Click **Find** to ascertain if the customer already exists.

   As this customer does not exist, the New button is enabled.
4. Click **New**.

   The Customer-Standard window opens.
5. On the Address tab, click **New** to create a new address.

   The Customer Addresses window opens displaying the same business purpose table as on the first tab.
6. Fill in the necessary information. Yellow fields are mandatory.
7. On the Business Purpose tab, fill in the Usage, Location and select the Primary check box. For example:
   - Usage: Marketing
   - Location: 6op9
   - Primary: Yes
8. On the Contacts: Telephones sub-tab, enter a new contact and phone number.
9. Save your work.

### Creating a Workflow With Notifications

Perform the following steps to create and run a workflow with notifications.

## Reference

*Oracle Workflow Developer's Guide*, See Chapter 3, Defining a Workflow Process and Chapter 4, Defining Workflow Process Components

## Prerequisites

None

## Responsibility

Workflow Administrator

## Navigation

Navigate to **Workflow > Launch Processes**.

## Steps

1. In the Launch Processes window, In the Item Type column, click **Document Management**. If you have renamed the item types, this option appears in the Internal Name column as WFDM.

   The Initiate Workflow-WFDM page opens.

2. Enter values in the following fields:
   - Item Key: Enter your name plus a sequence number (for example, jdoe1001)
   - User Key: You may copy the value in the Item Key field
   - Process Name: Enter Document Review
   - Process Owner: Your logged in user name populates automatically
   - Send Document: Leave blank
   - Document Owner: Select a valid resource name
   - Document Reviewer: Choose one from the list of values
   - Comments: Enter Workflow Verification
   - Response Document: Leave blank
3. Click **OK**.

   The Activities List page opens to show workflow statuses. The status of the workflow you just initiated should be Active.

4. If the status of the workflow is Error, click **Exception** in the Result column to see an explanation of the error.
5. Click **View Diagram** to see a graphical representation of the workflow process.

   Leave the View Diagram window open as you continue to check the workflow.

6. Save your work.

## To Review the Progress of a Workflow

Use the following procedure to verify that the Workflow notification is sent.

## Steps

1. Login to your Personal Home Page.
2. In the list of Self Service Apps, choose the Workflow User Web Application responsibility.
3. In the Navigator, choose **Workflow >Find Notifications**.

   The Find Notifications page opens.
4. In the Type field, enter Document Management. In the To field, enter the document reviewer.
5. Click **Find**.

   The Worklist window opens.
6. Click **Subject** to open the notification.

   If you see the notification, then workflow is set up correctly.
7. Click **Approve** to return to the Worklist window.

## Further Verification

You may go back to the View Diagram window that you opened earlier. Click **Reload** in the browser window to refresh the contents of the window. After the workflow process completes successfully, you can see a green line from the Start icon to the End (Approve) icon.

### Defining Categories

You can use categories and category sets to group items for various reports and programs. Perform the following steps to define categories.

> **Note:** Category sets may be used as a means to develop custom lists of items on which to report and sort. You can also create other category sets such as John's Priority or Jane's Priority, with categories like high, medium, and low.

## Reference

*Oracle Inventory User's Guide*, See Chapter 4, Item Setup and Control

## Prerequisites

The categories you assign to a category set must have the same flexfield structure as the set itself. This is true even if you choose not to validate the category list.

## Responsibility

Inventory

## Navigation

Navigate to **Setup > Items > Categories > Category Sets**.

## Steps

1. Select the appropriate organization name in the Organization window, if necessary.
2. In the Category Sets window, enter a unique category set name and description information.
3. Enter a flexfield structure.
4. Select a control level.
   - Master Level: Item assigned to this category set has the same category value in all organizations where it is assigned.
   - Org Level: Item assigned to this category set may have a different category value in each organization where it is assigned.
5. Select a default category.

   This is the default category used when assigning an item to the category set. For example, a category set may have a default category called New. After an item is assigned to New, you can override the default category and choose another relevant category for each item.
6. Decide whether or not an item can be assigned to multiple categories within this category set.
   - Enable: You can assign an item to multiple categories within a category set. For example, you may define a Hazard category set. In this case, an item may be assigned to both the Poison and Corrosive categories.
   - Not Enable: You can assign an item to exactly one category. For example, you may define a Web Display category set. In this case, an item can be assigned to only one default display category.
7. Decide whether or not to enforce the list of valid categories.
   - Enable: You can assign an item only to those categories defined as valid categories for this category set. For Oracle Purchasing, this check box is not applicable, and you can assign items only to categories defined as valid for this category set.
   - Not Enable: You can assign an item to any defined category that uses the same flexfield structure as this category set.
8. Select a list of valid categories.

   The list of values here includes only categories that use the same flexfield structure as the category set you are defining.
9. Save your work.

### Defining Products and Platforms

You define and rate products and platforms in Oracle Inventory in order to set resource skill levels in the HTML Resource Manager. See the *Oracle Inventory User's Guide*, See Chapter 5, Items for more information on how to define products and platforms.

## Reference

*Oracle Inventory User's Guide*, See Chapter 5, Items

### Defining Unit of Measure Classes

Perform the following steps to define a unit of measure class.

## Reference

*Oracle Inventory User's Guide*, See Chapter 3 Units of Measure

## Prerequisites

None

## Responsibility

Inventory

## Navigation

Navigate to **Setup > Units of Measure > Classes**.

## Steps

1. In the Units of Measure Classes window, select **File > New**.
2. Enter a unique name for the unit of measure class.
3. Enter a description for the UOM class.
4. Define the base unit of measure for this class.
5. Enter a unique abbreviation for the unit of measure with a maximum length of three characters. Examples include, EA for each or HRS for hours.
6. Select the "inactive on" date from the date picker.
7. Save your work.

### Defining Units of Measure

Units of measure are used by a variety of functions and transactions to express the quantity of items. The values defined in the Units of Measure window provide the list of values available in unit of measure fields in other windows. Units of measure are not organization–specific. Perform the following steps to define units of measure.

## Reference

*Oracle Inventory User's Guide*, See Chapter 3 Units of Measure

## Prerequisites

At least one unit of measure class must exist.

## Responsibility

Inventory

## Navigation

Navigate to **Setup > Units of Measure > Units of Measure**.

## Steps

1. With the Units of Measure window open, select **File > New**.
2. Enter a unique name for the unit of measure.
3. Enter a unique abbreviation for the unit of measure with a maximum length of three characters. Examples include, EA for each or HRS for hours.
4. Enter a Description for the UOM.
5. Select the check box if this is the base unit of measure for the unit of measure class.
6. Enter a unit of measure class.
7. Select an "inactive on" date from the date picker.
8. Save your work.

### Creating a Supplier Contact

Set up suppliers in the Suppliers window to record information about individuals and organizations from whom you purchase goods and services. You can also enter employees whom you reimburse for expense reports. When you enter a supplier that does business from multiple locations, you store supplier information only once, and enter supplier sites for each location. You can designate supplier sites as pay sites, purchasing sites, RFQ only sites, or procurement card sites. For example, for a single supplier, you can buy from several different sites and send payments to several different sites. Most supplier information automatically defaults to all supplier sites to facilitate supplier site entry. However, you can override these defaults and have unique information for each site.

The system uses information you enter for suppliers and supplier sites to enter default values when you later enter transactions for a supplier site. Most information you enter in the Suppliers window is used only to enter defaults in the Supplier Sites window. When the system enters that information in a later transaction, it only uses supplier site information as a default, even if the supplier site value is null and the supplier has a value. If you update information at the supplier level, existing supplier sites are not updated.

When you enter a supplier, you can also record information for your own reference, such as names of contacts or the customer number your supplier has assigned to you. Perform the following steps to create a supplier contact.

## Reference

*Oracle Public Sector Purchasing User's Guide*, Chapter 5, Supply Base Management

## Prerequisites

- Verify that the supplier does not exist in the system. Use the Suppliers Report and Supplier Audit Report.
- Define the following lookups in the Oracle Purchasing Lookups window: Pay Group, Supplier Type, Minority Group.
- Define Supplier Types in the Oracle Payables Lookups window.
- If you have installed Purchasing, complete Purchasing setup.
- If you use Oracle Purchasing, define Supplier Types in the Oracle Payables Lookups window.
- If you use Oracle Purchasing, define FOB codes, Minority Groups, and Freight Terms codes in the Oracle Purchasing Lookups window.
- If you use Oracle Purchasing, define Ship Via codes in the Defining Freight Carriers window.

## Responsibility

Purchasing

## Navigation

Navigate to **Supply Base > Suppliers**.

## Steps

1. In the Suppliers window, enter a unique Supplier Name.
2. If the Supplier Number Entry option in the Financials Options window is set to Automatic, Payables automatically enters a Supplier Number for you. If this option is set to Manual, you must enter a unique Supplier Number.
3. (Optional) Enter the supplier's tax identification number in the Taxpayer ID field; for example, an individual's social security number, or a corporation or partnership's federal identification number/federal tax ID.
4. (Optional) Enter the value-added tax (VAT) registration number in the Tax Registration Number field if you are entering a VAT supplier.

   If you want to prevent invoice or purchase order entry for this supplier after a certain date, then enter the date in the Inactive On field.
5. Enter supplier information in the appropriate tabs of the Suppliers window.
6. In the Suppliers window, choose the Sites button to navigate to the Supplier Sites window. Enter at least one supplier site name and address.
7. Save your work.

### Defining Sales Credit Types

Order Management uses sales credit types to determine if the sales credit for an order is a quota or non-quota amount. Perform the following steps to define sales credit types.

## Reference

*Oracle Order Management User's Guide*, See Chapter 1, Setting up

## Prerequisites

None

## Responsibility

Order Management Super User

## Navigation

Navigate to **Setup > Sales > Credit Types**.

## Steps

1. Navigate to the Sales Credit Types window.
2. In the Sales Credit Type window, enter the Credit Type Name and Description for the credit type.
3. Select the Quota check box if the sales credit type applies to revenue quota sales credit that you assign to salespeople.
4. Select the Enabled check box to activate the sales credit type.
5. Save your work.

### Setting Up Accounting Flexfields

Use descriptive flexfields to tailor General Ledger to fit your unique information needs. For example, you may want to collect additional information on budget organizations, such as the manager and the size of the organization. You can even define context–sensitive flexfields that prompt you for additional information based on your previous entries. Perform the following steps to set up accounting flexfields.

> **Note:** You only need to set up accounting flexfields if you are using the Freight, Revenue, or Receivables Account fields, in the Resource Manager Receivables tab.

## Reference

*Oracle General Ledger User's Guide*, Chapter 9, Setup

## Prerequisites

Use the Value Sets window to define any value sets you need.

## Responsibility

General Ledger Super User

## Navigation

Navigate to **Setup > Financials > Flexfields > Descriptive > Segments**.

## Steps

Consult the following manuals for more information:

- *Oracle General Ledger User Guide*
- *Oracle Applications Flexfields Guide*

## Oracle Common Application Components Dependencies

Oracle Common Application Components integrates with other Oracle applications in the e-Business Suite to provide and extend its functionality. Some are mandatory and some are optional. You must set up the mandatory modules before the Common Application Components can run. Setting up the optional modules is not required; however, if they are not set up, then the additional functionality provided by these modules is not available.

Many of these modules are included in your general installation. The following list of modules or applications is included with your installation but if you have not licensed the entire suite, you will only have access to the functionalities and tables. In other words, you will not be able to access the user interface (UI) or APIs for the application.

> **Note:** The exception to the previous paragraph is that some UIs are shared. An example of this is in Oracle HRMS which will "share" some of it's Forms if you do not have HRMS set up.

For information on Oracle E-business Suite Release 11*i* system requirements and dependencies, consult the Oracle Applications *Installing Oracle Applications Release 11i* manual.

### Mandatory Dependencies by Module

## Resource Manager

- **Oracle Application Object Library (AOL)**: Resource Manager uses AOL to manage responsibilities that are used in various modules, and set application profile options. (Required)
- **Oracle Human Resources:** Resource Manager uses Oracle Human Resources to create employee resources so that the employee resources can be imported into Resource Manager. In addition, business units used in multi-organization are also created in Oracle Human Resources. **(Required)**
- **Oracle Purchasing**: Resource Manager uses Oracle Purchasing to create supplier contacts. **(Required)**

- **Oracle Inventory**: HTML-based Resource Manager users rate their skills based on the product and platforms defined in Oracle Inventory. **(Required)**
- **Oracle Receivables**: Resource Manager uses Oracle Receivables to create customers that are of party or partner resource type. In addition, new organizations used in multi-organization are also created in Oracle Receivables. **(Required)**
- **Oracle Workflow**: Resource Manager uses Oracle Workflow to send workflow notifications. **(Required)**

## Notes

- **Oracle Application Object Library (AOL)**: Notes uses AOL to set necessary profile options and uses the AOL lookups window to create new note types. (Required)

## Spreadtable

- **Oracle Application Object Library (AOL)**: Spreadtable uses AOL to set necessary profile options. (Optional)

## Assignment Manager

- **Oracle Application Object Library (AOL)**: Assignment Manager uses AOL to set application profile options that are used in various modules.
- **TCF Server:** It must be running and correctly configured to connect to Scheduler and for Gantt charts to display information and render properly. (Optional if Window to Promise and Intelligent options are used.)
- **Oracle Scheduler:** It is used to show the lowest cost resources and travel time information for a resource while using the Intelligent and Window to Promise assignment options. These two resource assignment options are used primarily for service requests in Field Service. (Optional)
- **Territory Manager**: Assignment Manager uses Territory Manager to retrieve qualified resources identified in a territory. (Optional)
- **Forms-based Calendar:** It is used to provide the availability of qualified resources. The Forms-based Calendar provides the work shift information for a resource. (Optional)
- **Oracle Contracts:** Assignment Manager uses Oracle Contracts to retrieve preferred engineers defined in Contract. (Optional)
- **Service Request:** Assignment Manager uses Service Requests primarily to have a resource assigned by the Intelligent and Window to Promise assignment options. (Optional)
- **Installed Base**: Assignment Manager uses Installed Based to retrieve preferred engineers defined in Installed Base. (Optional)

## Task Manager

- **Oracle Application Object Library (AOL)**: Task Manager uses AOL to manage responsibilities and profile options that are used in various modules. (Required)

- **TCA:** Task Manager uses TCA to locate the customer contact information when creating a task. (Required)
- **Oracle Workflow**: Task Manager uses Oracle Workflow to send workflow notifications in order to notify personnel about task creation and changes. (Required)
- **Notes**: Task Manager uses Notes to create notes attached to a task. (Optional)
- **Resource Manage**r: Task Manager queries Resource Manager to determine the owner and assignee of a resource. (Required)
- **Assignment Manager**: Task Manager uses Assignment Manager to assign qualified resources to a task. (Optional)
- **Escalation Manager**: Task Manager uses Escalation Manager to escalate a task. (Optional)

## Calendar (HTML-based)

- **Oracle Application Object Library (AOL)**: HTML Calendar uses AOL to create FND users (for example, to create a calendar workflow administrator) with appropriate responsibilities, as well as set necessary profile options. (Required)
- **HTML Tech Stack:** Set up properties in Oracle HTML Stack for debug logging trails and cookie encryption. You also specify default roles and responsibilities for users in this module. (Required)
- **Resource Manager**: HTML-based Calendar queries the Resource Manager tables so that individual resources can make and be invited to appointments. (Required)
- **Tasks**: HTML-based Calendar uses the HTML-based Tasks to create repeating appointments. (Required)
- **Notes**: HTML-based Calendar uses the HTML-based Notes to create a note and attach it to an appointment. (Required)

## Calendar (Forms-based)

- **Oracle Application Object Library (AOL)**: The Forms-based Calendar module uses AOL to manage responsibilities that are used in various modules. (Required)
- **Task Manager**: The Forms-based Calendar module uses Task Manager to create Todo Lists (tasks). (Required)
- **Resource Manage**r: The Forms-based Calendar module uses Resource Manager to assign resources to a calendar. (Required

## Escalation Manager

- **Oracle Application Object Library (AOL)**: Escalation Manager uses AOL to set necessary profile options that are used in various modules. (Required)
- **Oracle Workflow**: Escalation Manager uses Oracle Workflow to send workflow notifications to relevant resources when an escalation document is created or updated. **(Required)**
- **Service Request**: Service requests can be manually escalated through Escalation Manager if necessary. (Optional)

- **Oracle Quality Online (OQO):** Defects created in the OQO (formerly known as the Defect Management System) can be manually escalated through Escalation Manager if necessary. (Optional)
- **Assignment Manager**: Escalation Manager queries the escalation territory defined in Territory Manager through the Assignment Manager UI to determine the owner of an escalation. (Optional)
- **Task Manager:** Forms-based Task Manager is used to attach additional tasks to an escalation document. Tasks created in the Forms version can be manually escalated through Escalation Manager if necessary. (Optional)
- **Notes:** The Forms-based Notes module is used to attach additional notes information to an escalation document. (Optional)

## Business Rule Monitor

- **Oracle Application Object Library (AOL)**: The Business Rule Monitor uses AOL to set necessary profile options that are used in various modules and to create the BRM Workflow Administrator. (Required)
- **Oracle Workflow**: **It is used by the seeded workflow processes to send out workflow notifications to relevant document owners. (Required)**
- **Service Request**: Service Requests can be monitored and escalated based on your defined business rules. (Optional)
- **Oracle Quality Online (OQO**): Defects created in the OQO (formerly known as the Defect Management System) can be automatically escalated when a business rule is violated. (Optional)
- **Escalation Manager**: It is used by the seeded workflow processes to create an escalated document when a business rule is violated. (Required)
- **Territory Manage**r: It is used to retrieve qualified resources identified in the escalation territories if the identity of a person who receives notifications defined in the Workflow Attributes window cannot be determined. (Optional)
- **Task Manager:** It is used by the seeded workflow processes to create an automated escalation task. This is generated through the seeded Automated Escalation Template Group for Task Manager (Service Request or Oracle Quality Online) defined in the Forms-based Task Manager. Tasks created in the Forms version can also be automatically escalated when a business rule is violated. (Optional)

# 3

# Resource Manager Implementation Overview

This chapter covers the following topics:

- Overview
- Phase I: Setting Up Resource Manager
- Phase II: Managing Resources with Resource Manager

## Overview

Resource Manager is used with other applications in the e-Business suite to define, access, and maintain different categories of resources including employees, supplier contacts, parties, and partners. You can also define a Resource of type Other that is not a salesperson, but an individual or an object. Resource Manager enables you to perform these functions in a single application without having to access multiple repositories within the e-Business suite on an individual basis. Implementing Resource Manager takes place in two phases. In the first phase, you set up Resource Manager by importing resources from other e-Business applications, optionally defining roles and role types, setting profile options, configuring resource fields for update, and defining skill levels. In the second phase, you manage resources by finding and viewing resources, assigning roles and role types to resources, creating groups and teams to which resources can be assigned, and viewing resource reports. In addition to successfully completing these phases, you can troubleshoot any problems with Resource Manager as required. Before implementing Resource Manager, it is necessary to understand the definition of resources, how Resource Manager operates with other e-Business suite applications, and the functionality of both the Forms-based and HTML versions of the product.

### Resources

Resources are individuals or objects that are identified by categories based on the business function they perform. These categories include employees, parties, partners, and supplier contacts each of which is initially created and maintained in a specific e-Business application database. They also include resource of type other that can be objects such as items, assets, equipment, or property such as meals, audio/visual equipment, overhead projectors, and furniture. Resource Manager typically mass imports different types of resources from the following e-Business application databases:

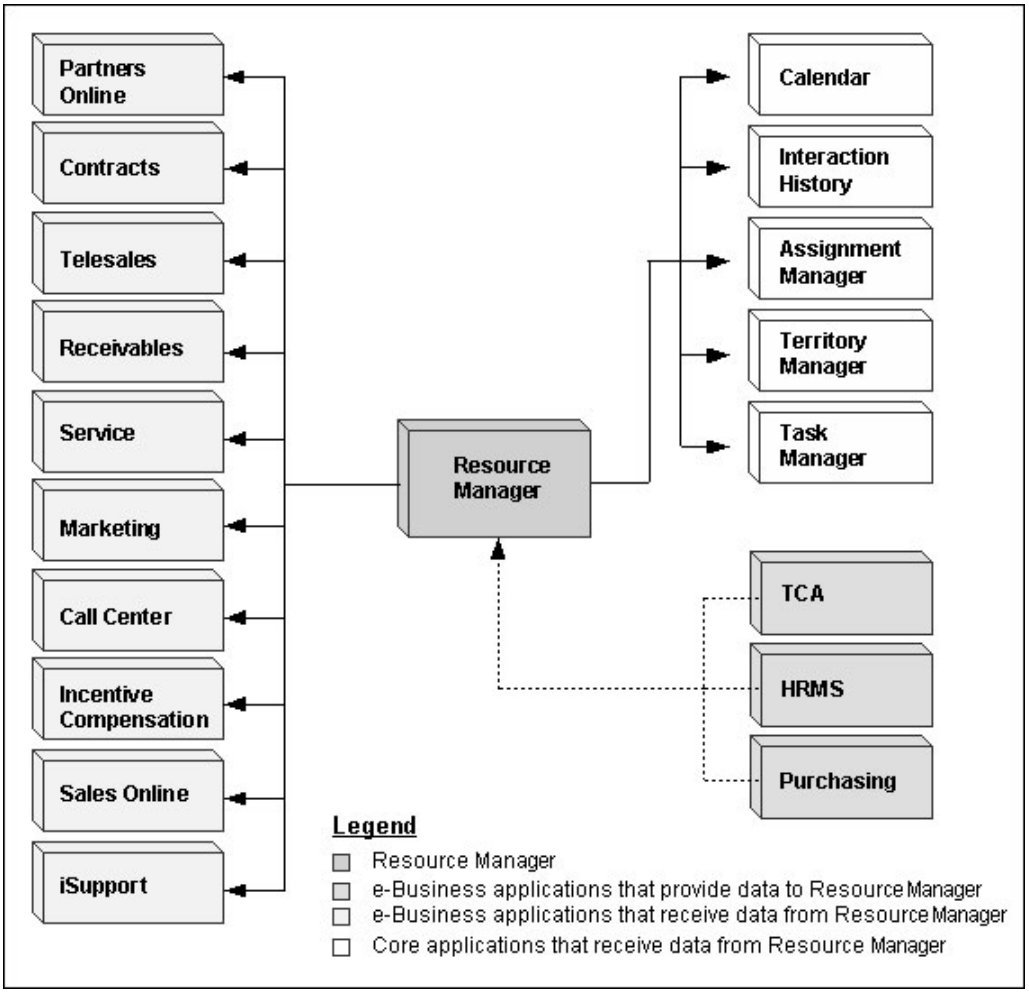
***E-Business Suite Application Resources***

| Resource | Description | E-Business Application |
|---|---|---|
| Employee | A person hired to work for a company. | Human Resource Management System (HRMS) |
| Party | An entity that can enter into a business relationship. | Trading Community Architecture (TCA) |
| Partner | One of two or more people who contribute capital to establish or maintain a commercial venture and who usually share in the risks and profits. | TCA |
| Supplier Contact | The contact information for a person or agency that sells raw material or goods. | Purchasing (PO) |
| Other | Objects such as items, assets, equipment, or property. Examples include but are not limited to meals, audio/visual equipment, and furniture. | Oracle Property Manager |

## Resource Manager Functionality within the E-Business Suite

Resource Manager imports data from the HRMS, TCA, and PO databases and provides the resulting resource information to other e-Business applications. Figure 3-1 illustrates Resource Manager interactions within e-Business and core applications. This diagram is explained in the table that follows.

*Interaction with Other E-Business and Core Applications*




The following table describes Resource Manager Interactions with other e-Business Suite applications:

*Interaction with Other E-Business and Core Applications*

| Application | Type | Resource Manager Interaction |
|---|---|---|
| Partners Online | e-Business | Partners Online uses Resource Manager to setup partners, parties, and relationships from TCA. |
| Contracts | e-Business | Contracts uses Resource Manager to tie contracts to employees. For example, a service contract may be tied to one or more preferred engineers. |

| Application | Type | Resource Manager Interaction |
|---|---|---|
| Telesales | e-Business | Telesales uses Resource Manager to set up a sales hierarchy. |
| Receivables | e-Business | Salesreps defined in Resource Manager are used by Receivables. |
| Marketing | e-Business | Marketing uses Resource Manager to set up marketing groups, identify approvers, and execute marketing campaigns. |
| Service | e-Business | Service uses group and team lists of resources from Resource Manager for service request assignments. |
| iSupport | e-Business | iSupport uses Resource Manager to set up support groups to fulfill service and support needs. |
| Incentive Compensation | e-Business | Incentive Compensation uses Resource Manager to set up sales representatives and sales compensation group hierarchies. |
| Call Center | e-Business | Call Center uses Resource Manager for call center routing. |
| Sales Online | e-Business | Sales Online uses Resource Manager to set up a sales hierarchy. |
| Calendar | e-Business | Calendar uses Resource Manager to track the availability of resources. |
| Interaction History | Common Application Components | Interaction History uses Resource Manager to provide touch points. |
| Assignment Manager | Common Application Components | Assignment Manager uses Resource Manager to provide a list of qualified resources. |
| Territory Manager | Common Application Components | Territory Manager uses Resource Manager to select the resources for a particular territory. |

| Application | Type | Resource Manager Interaction |
|---|---|---|
| Task Manager | Common Application Components | Task Manager uses Resource Manager to provide single, group, and team lists of resources for task assignments. |
| Trading Community Architecture (TCA) | e-Business | Resources of category "Party" and "Partner" can be imported from Accounts Receivables (AR) to Resource Manager and subsequently defined as e-Business Suite resources. |
| Purchasing | e-Business | Resources of category “Supplier Contact” can be imported as resources from Purchasing (PO). |
| Human Resource Management Systems (HRMS) | e-Business | Resources of category “Employee” can be imported as resources from Oracle Human Resource Management System (HRMS). |

### Forms-based and HTML Versions of Resource Manager

Resource Manager was initially a Forms-based application and was subsequently expanded to include an HTML version. A number of features are available in both versions of Resource Manager, however some features are available in only Forms or HTML. The HTML version of Resource Manager, has additional implementation requirements such as setting the necessary profile options for the application.

## Phase I: Setting Up Resource Manager

Implementing Resource Manager takes place in two phases. In the first phase, you set up Resource Manager by defining and configuring required components. In the second phase, you use Resource Manager to manage your resources. This section summarizes the basic steps for Phase I: Setting up Resource Manager. Detailed instructions for these steps can be found in the subsequent Resource Manager chapters of the Implementation Guide. Before performing these steps, you should first determine that Resource Manger is installed and configured properly to work with other applications in the e-Business suite.

### Defining Resources

The first step in implementing Resource Manager is to define resources. Typically this is accomplished by mass importing resources from other Oracle e-Business applications or from legacy systems. In some cases, however, you may want to define an individual resources by importing it from the relevant e-Business application or by creating it directly in Resource Manager.

## Mass Import Resource From Other e-Business Applications

Mass importing resources is the most common method of defining resources that are stored in e-Business applications such as HRMS, TCA, or PO. This is accomplished using concurrent programs to synchronize data between Resource Manager and the HRMS, TCA, and PO databases.

## Import Resources From Legacy Applications Using APIs

APIs are required to import resources from legacy HRMS, PO, or AR systems into Resource Manager. To accomplish this, you must use the APIs of your legacy system and the Resource Manager public Published APIs.

## Import Individual Resources From Other e-Business Applications

An individual resource can be imported into Resource Manager by logging in with the CRM Administrator responsibility, and selecting Resource Manager > Maintain Resources > Import Resources.

## Create Individual Resources in Resource Manager

You can create one of the following in the Forms-based version of Resource Manager:

- An employee that is defined as a salesperson in the Forms-based version of Resource Manager
- A resource of type Other that is either an individual who is not a salesperson, or an object such as a hospital bed.

When you create Resources of these types in Resource Manager the information is written directly to the HRMS tables. If you want to create individual resources of other types, you must first create them in the appropriate application and then import them into Resource Manager.

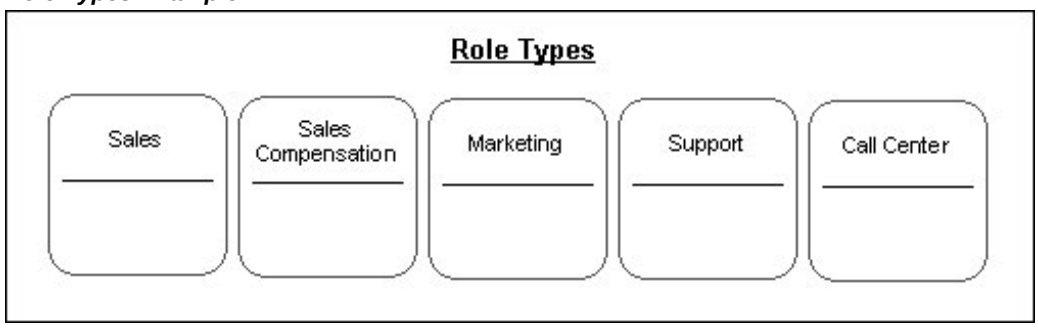
### Optionally Defining Roles Types and Roles

Resource Manager comes with seeded role types and roles that are used to better organize your resources. If you do not wish to use the seeded role types and roles, you can optionally create your own in Resource Manager.

## Role Types

A role type is a broad descriptive category such as "Sales" that contains one or more detailed descriptive categories such as "Sales Representative" or "Sales Manager". Sales, Telesales, Marketing, Sales Compensation, Support, and Call Center are all examples of role types that are seeded by the different modules that access Resource Manager. You can also define custom role types for your business needs.

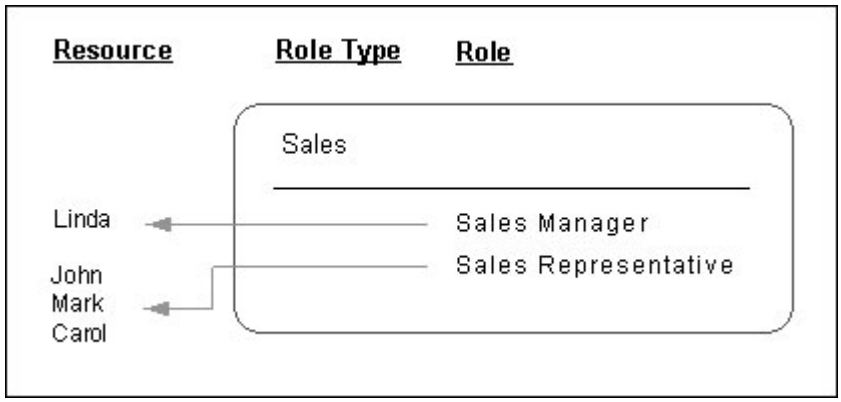
*Role Types Example*




## Roles

Roles are detailed descriptive categories that are grouped together within role types. A role can encompass one or more job descriptions and job titles that are used to assign responsibilities to resources, groups, and teams. For example, the Sales role type can encompass several roles including Sales Manager and Sales Representative. A resource named Linda who is a Sales manager can be assigned the Sales Manager Role while sales representatives, John, Mark, and Carol are assigned the Sales Representative role.

*Roles Example*



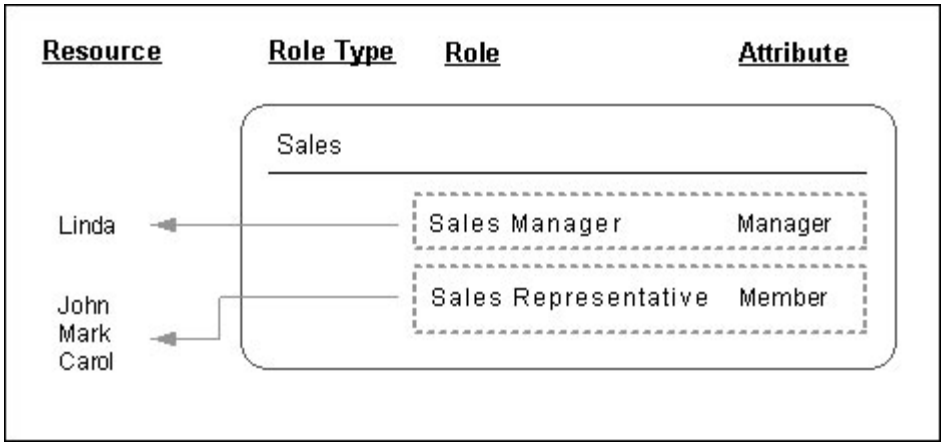

## Role Attributes

When a role is created, it is associated with a specific role attribute. This enables different roles to be grouped together when defining a resource reporting hierarchy. The hierarchy is used in sales product families to control data access privileges, sales forecast rollups, and incentive compensation plans. It is also used for workflow notifications and escalations. When defining a role, you must also specify its attribute by selecting one of the Resource Manager seeded role attributes:

- **Member**: This is the attribute for group members and is the default attribute for any group.
- **Lead**: This is the attribute for the team lead within a group.
- **Admin**: This attribute enables group members with the associated role to view and modify information about other group members. In the HTML Resource Manager, only a user in a group with either the Administrator or Manager group member role can update group member and group hierarchy information.

- **Manager**: This attribute is used to set up the group reporting hierarchy. For example, all the forecasts for a group of sales representatives will roll up to the person with the Manager role attribute in that group. If Linda is a sales manager who is assigned the Sales Manager role that is associated with the Manager attribute, then only Linda will receive forecasts for the group. In addition, a user with the Manager group member role can update the group member and group hierarchy information in the HTML Resource Manager.

***Role Attributes Example***




## Modifying Resource Fields in HTML

In the HTML version of Resource Manager, the appropriate users or system administrators with the Resource Self Service Administrator responsibility must set up the Define Resource Fields for Update window. This determines which fields for the resource's personal information can be updated and how the update should occur.

## Defining Skill Levels in HTML

In the HTML version of Resource Manager, the appropriate users or system administrators with the Resource Self Service Administrator responsibility must set up the Define Skill Levels window. This determines the name of the skill level and its associated numeric value. Once this is specified, an individual resource can select an appropriate skill level from the LOV of the Level field in the Rate Skill window to rate their technical skills. These skill levels are standard regardless of whether the resource is rated at category, product, platform, or problem level. The numeric values for the related skill levels can be a part of the calculation when selecting the optimal individual for a service request.

## Configuring Group and Team Member Notifications

Resource Manager enables group and Team members to receive Workflow notifications. This is particularly useful when important communications are sent to a group or team that require immediate dissemination to all of the their members. For example, if a support group or team receives a high priority service request then all members of the group or team can simultaneously be notified to ensure that immediate action is taken. Resource Manager accomplishes this by integrating resources, groups, group members, teams, and team members with Workflow roles. When a resource is created or updated, its information, including relevant

attributes, is stored in both Resource Manager and the corresponding Workflow role tables. Notifications can only be sent to all group or team members if the group-to-membership or team-to-membership relationship information stored in Resource Manger is in sync with the data stored in the corresponding Workflow role tables. To accomplish this, Resource Manager administrators must run the Synchronize Workflow Roles concurrent program on a periodic basis.

### Publishing Business Events

Resource Manager publishes events such as creating and importing resources, updating resources, and deleting resources using the Oracle Workflow Business Event System. Applications that contain data directly affected by these events can subscribe to them and synchronize or modify their data accordingly. For example if a resource that is assigned to a Task is deleted, this action is published or "raised" as a business event. Task Manager, can consequently subscribe to this event and reassign the task to an available resource.

## Phase II: Managing Resources with Resource Manager

After successfully setting up Resource Manager in Phase I, you can proceed to Phase II: Managing Resources with Resource Manager. In this phase, you can optionally find and view resources, modify resources with roles and role types, create groups and teams, view resource reports, synchronize imported resources with updated records in their database of origin, and troubleshoot Resource Manager if required.

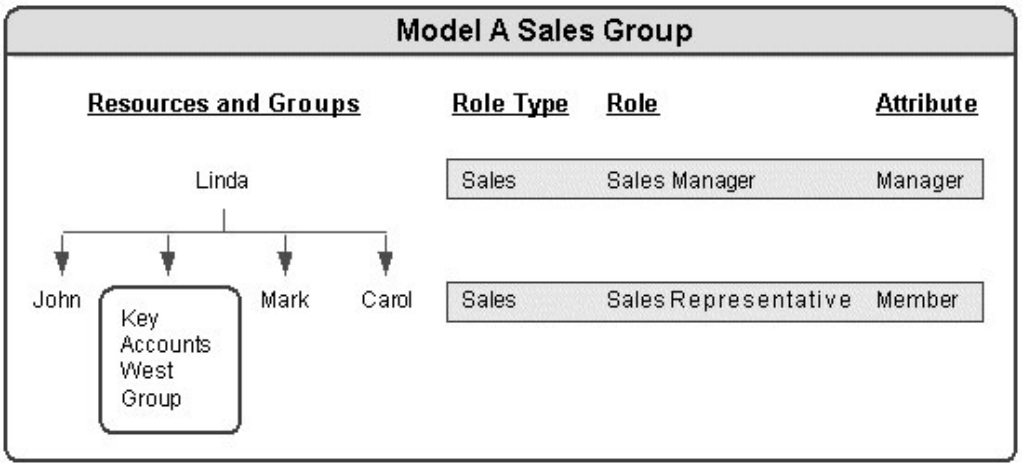
### Finding and Viewing Resources

After importing a resource into Resource Manager, you can find and view the resource and manage it by performing any of the actions described in the remainder of this chapter.

### Defining Groups

A group is a unit of organization based on the similar function or roles of its members. It can consist of individual resources and resource groups and any resource can belong to multiple groups. For example, a manufacturing company has sales groups for different product models. A sales manager named Linda, leads the Model A Sales Group and has three sales representatives, John, Mark and, Carol who report directly to her. The Model A Sales Group can also contain another resource group, Key Accounts West Group that handle sales in the west region for model A, and whose members also report to Linda.

***Groups Example***




## Group Member Roles

Roles and responsibilities can be associated with all members of a resource group. For example, Linda is a sales manager; John, Mark, and Carol are sales representatives. The Sales Manager and the Sales Representative are job roles assigned to the Model A Sales Group. Each member can have multiple roles defined within a group or among groups. If the Key Accounts West Group only contains two resources, one of them can perform two roles, sales manager and field sales agent Or while Linda, the manager in the Model A Group, may also be a member of a group called Model B Group.

## Group Usage

Group usage must also be specified. For example, the Model A Group can be used in Sales Compensation, Sales, and Telesales.

## Dynamic Groups

Instead of assigning each individual or group resource to an existing group, you can create a dynamic group based on the criteria you define in SQL statements. For example, Oracle Interaction Center's Telephony Manager uses Dynamic Groups for skill-based routing. In active mode, Oracle Telephony Manager routes calls according to defined rules. The active mode is the default mode of operation. In active mode, Oracle Telephony Manager uses skill-based routing, a dynamic call routing intelligence that delivers inbound calls to an agent who is appropriately skilled to meet the needs of the caller. When inbound calls arrive at the switch, the switch issues a routing request. Oracle Telephony Manager monitors the routing request, then applies skill-based routing rules, and identifies suitably skilled agents. Meanwhile, a representation of the call waits in the virtual queue within Oracle Telephony Manager. When a suitable agent becomes available, Oracle Telephony Manager responds to the routing request and instructs the switch to deliver the call to the agent's extension through the Universal Work Queue (UWQ), where more specific pre-defined rules may apply in directing the call. In a dynamic group, the database automatically updates information about individual group members (dynamic routing executes the workflow/procedure to get an agent list).

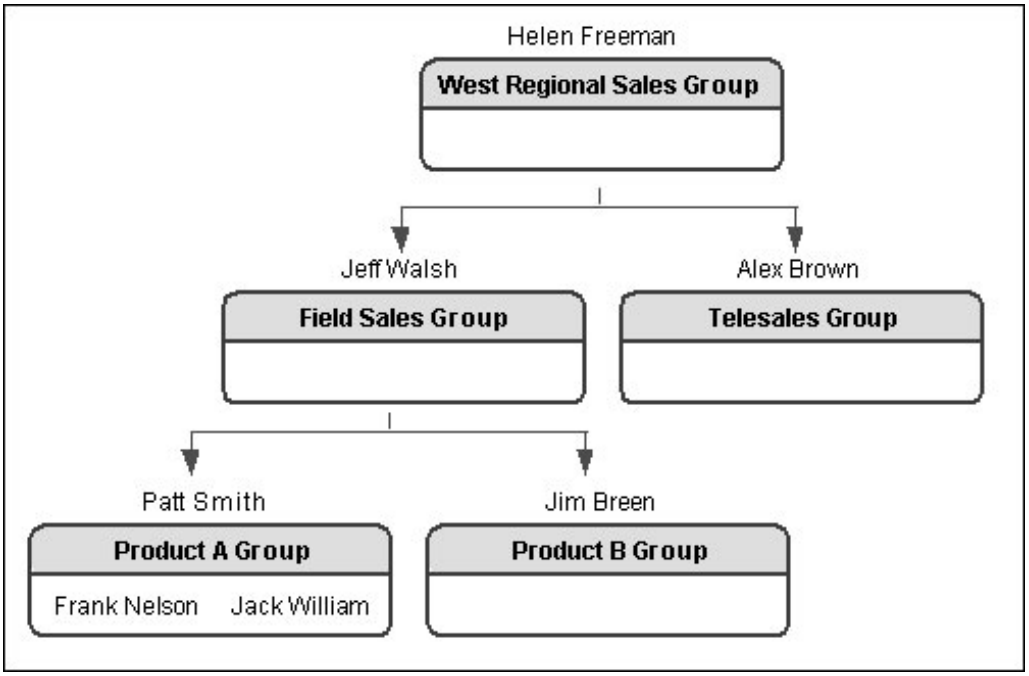
## Group Hierarchy

Because individual resources can be assigned to a group, and a group can belong to another group or to multiple groups, resources can be organized in a group hierarchy with a parent-child relationship.

For example, Jack William and Frank Nelson are sales representatives who belong to the Product A group and report directly to Pat Smith, the sales manager of Product A; but they report indirectly to Jeff Walsh who leads the Field Sales group as field sales manager. The Field Sales group and the Product A group have a parent-child relationship.

You can use the group hierarchy to view direct reporting or all reporting information for a resource. For example, you can search for direct reporting information for the employee Jeff Walsh based on the above group hierarchy. You can see Pat Smith and Jim Breen listed as the results for direct reporting. Jack William and Frank Nelson are added to the list if it is for all the reporting information due to the parent-child relationship between these groups.

***Group Hierarchy Example***




## Group Member Notifications

You can configure groups to receive notifications to ensure that important communications reach all group members.

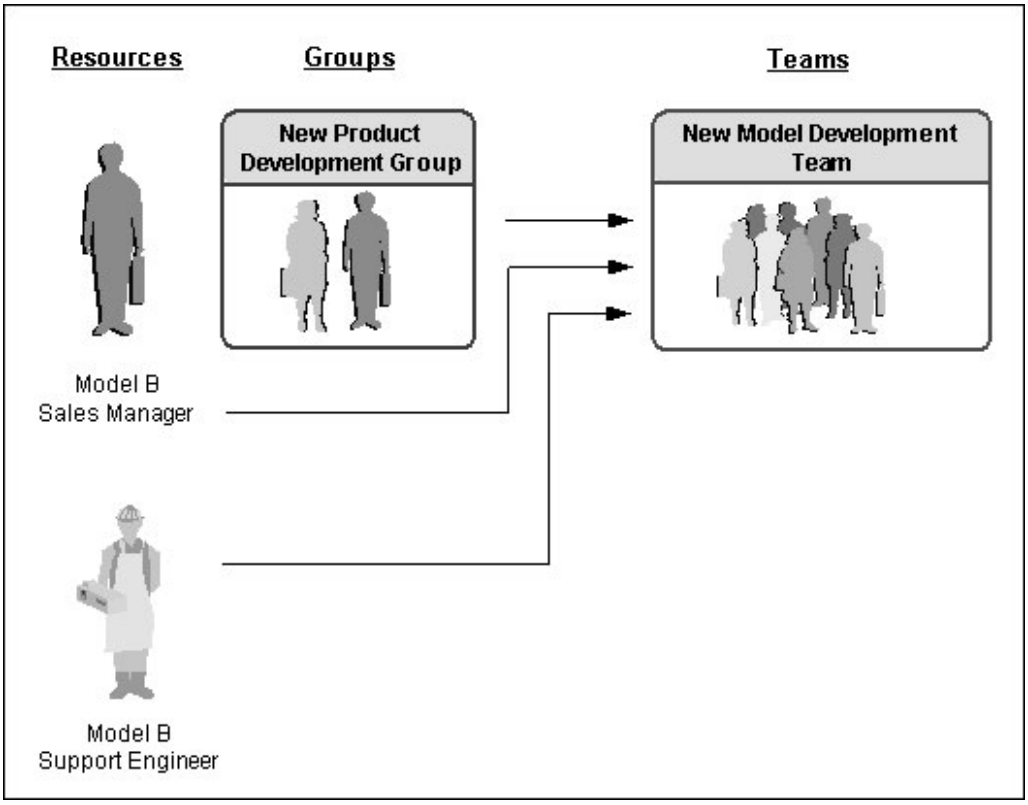
### Managing Roles and Groups

You can manage roles and groups by viewing role details, assigning roles to resources, or assigning resources to groups.

## Defining Teams

A team is a collection of groups and resources that is organized to accomplish a specific task or objective. Team members are chosen on the basis of their availability, qualifications, and location. For example, a manufacturing company wants to develop a new model that has the same features of a model called Model B. To accomplish this, the company sets up a new model development team can be established to have a new product development group, a sales manager for model B, and a support engineer who specializes in model B.

***Teams Example***




# Team Member Roles

Each team member, whether it is an individual resource or a resource group, has a member role assigned to it. For example, the new model development group (a group resource) and the support engineer (an individual resource) can both have a development member team role. The Development Member role must be one of the group roles that have been assigned to the New Model Development Group. Like a group member, a team member can have multiple roles assigned to a team.

# Team Roles

You can assign multiple roles to a team. For example, the New Model Development Team will play a Development Member role, and a Support Manager role at the same time.

## Team Usage

Specify the usage of your team. For example, the New Model Development Team can be used in Support, Telesales, and Service.

## Team Member Notifications

You can configure teams to receive notifications to ensure that important communications reach all team members.

### Running Reports

Resource Manager enables you to run Group Audit and Group Structure reports.

## Group Audit Report

Resource Manager supports the ability to run an audit report detailing changes to resources and resource groups created within a date range. For example, any changes made to new members of a group are defined, but role change information is not. This provides an audit trail of the actions taken for specific groups, and resources.

For example, a sales manager can use the Group Audit Report to verify and trace a specific sales group for its group members' (sales representatives) change history information based on a specific time range. From the report, you can easily identify that Lisa Jones with her resource number has been changed from Key Accounts Central Group (group number 54) to Key Accounts Group (group number 43). This information can be an audit record for sales credits or compensation distribution.

Only the movement of a resource from a given group to another group is tracked. Resources changing roles within the same group are not reported in the Audit Report.

## Group Structure Report

Resource Manager supports the ability to run a Group Structure Report. It displays only the group hierarchy and structure information.

For example, you can use the Group Structure Report to view the group hierarchy information for a specific group, such as Key Accounts Group. The group member's name and its resource category information (such as employee resource), child group name (Key Accounts Central), and numbers of level down from the selected group (such as the Key Accounts Central child group is one level down from the selected Key Accounts Group) and effective date information are all visible in the report.

# 4

# Phase I: Setting Up Resource Manager

This chapter covers the following topics:

- Overview of Setting Up Resource Manager
- Mass Importing Resources From Other Applications in the E-Business Suite
- Importing Resources From Legacy Applications Using APIs
- Importing Individual Resources
- Creating a Resource Manually
- Creating a Salesperson Automatically
- Creating a Salesperson in Multiple Organizations
- Defining Role Types
- Defining Roles in Forms
- Defining Roles in HTML
- Specifying Role Attributes
- Defining Skill Levels in HTML
- Assigning a Numeric Value to a Skill Rating
- Changing the Name of a Skill Rating
- Publishing Workflow Business Events

## Overview of Setting Up Resource Manager

Implementing Resource Manager takes place in two phases. In the first phase, you set up Resource Manager by defining and configuring required components. In the second phase, you use Resource Manager to manage your resources. This chapter provides detailed instructions for Phase I: Setting up Resource Manager. This section contains a summary of the steps for setting up Resource Manager. Detailed instructions for these steps are provided in the subsequent sections.

### Defining Resources

You define resource by either importing them into Resource Manager and then modifying them or by creating them in Resource Manager.

## Importing Resources

Instructions for importing resources are contained in the following sections:

- Mass Importing Resources From Other E-Business Applications, page 4- 3
- Importing Resources From Legacy Applications, page 4- 4
- Importing Individual Resources, page 4- 4

## Creating Resources in Forms

You can create a salesperson in the Forms-based version of Resource Manager and designate it as type Other or TBH (To Be Hired). Resources of this type are written directly to the Resource Manager tables and do not appear in the HRMS tables. You can also create a resource such as a salesperson in Forms by first creating the resource in HRMS and then importing the resource into resource manager and modifying it as required. If you have not licensed HRMS, you can create a resource using the Form windows that are shared with HRMS and then using Resource Manager to import the resource. Detailed instructions for these steps are provided in the following sections:

- Creating a Salesperson in Forms, page 4- 6
- Creating Salespersons in Multiple Organizations, page 4- 2

### Optionally Defining Role Types and Roles

After defining resource, you can organize them with roletypes and roles. A role type is a broad descriptive category such as "Sales" that contains one or more roles. A role is a more detailed descriptive categories such as "Sales Representative" or "Sales Manager". When a role is created, it is associated with a specific role attribute. This enables different roles to be grouped together when defining a resource reporting hierarchy. Detailed instructions for creating role types and roles and for assigning attributes to roles are provided in the following sections:

- Defining Role Types, page 4-17
- Defining Roles in Forms, page 4-18
- Defining Roles in HTML, page 4-19
- Specifying Role Attributes, page 4-19

### Defining Skill Levels in HTML

The final step in setting up Resource Manager is to define skill levels in the HTML version of Resource Manager. In the HTML version of Resource Manager, the appropriate users or system administrators with the Resource Self Service Administrator responsibility must set up the Define Skill Levels window. Instructions for performing this step are contained in the Defining Skill Levels in HTML section, page 4-21.

### Configuring Group and Team Member Notifications

Resource Manager enables group and team members to receive Workflow notifications. This is particularly useful when important communications are sent to a group or team that require immediate dissemination to all of their members. For example, if a support group or team receives a high priority service request then all members of the group or team can simultaneously be notified to ensure that

immediate action is taken. Resource Manager accomplishes this by integrating resources, groups, group members, teams, and team members with Workflow roles. When a resource is created or updated, its information, including relevant attributes, is stored in both Resource Manager and the corresponding Workflow role tables. Notifications can only be sent to all group or team members if the group-to-membership or team-to-membership relationship information stored in Resource Manger is in sync with the data stored in the corresponding Workflow role tables. To accomplish this, Resource Manager administrators must run the Synchronize Workflow Roles concurrent program on a periodic basis. Instructions for performing this step are contained in the Configuring Group and Team Member Notifications section, page 5-20.

> **Note:** In addition to enabling group and team member notification, Resource Manager integration with Workflow roles also provides a framework for task security. The Tasks chapter in the Oracle Common Application Components User Guide provides a conceptual overview of task security features. The Tasks chapter in the Oracle Common Application Components Implementation Guide provides technical information including instructions for customizing security and granting access privileges to appropriate grantees or users.

### Publishing Workflow Business Events

Resource Manager uses event subscriptions to publish events such as creating, updating, and deleting resources to enable resource manager users to subscribe to these events and perform their required business processes. An event subscription is a registration indicating that a particular event is significant to a particular system and specifying which processing to perform when the triggering event occurs. Instructions for performing this step are contained in the Publishing Business Events section, page 4-22.

## Mass Importing Resources From Other Applications in the E-Business Suite

Mass importing resources is the most common method of defining resources that are stored in E-Business applications such as HRMS, TCA, or PO. This is accomplished using concurrent programs listed in the following table to synchronize data between Resource Manager and the HRMS, TCA, and PO databases. Oracle recommends that the system administrator run the concurrent programs, listed in the following table, on a regular basis, to synchronize data between the Resource Manager and other applications and to maintain data integrity.

## Importing Contingent Workers from Oracle HRMS

You can import contingent workers that are defined in HRMS into Resource Manager by using public APIs. Resource Manager does not differentiate between imported contingent workers and employees and exposes both as employee resources. You cannot maintain contingent workers in Resource Manager but can do so in Oracle HRMS.

## Prerequisites

None

## Responsibility

CRM Administrator or

System Administrator

## Navigation

Navigate to the Navigator - CRM Administrator window, or

Navigate to the Navigator - System Administrator window

## Steps

Run the Resource Manager concurrent programs listed in Appendix B: Concurrent Programs, page B- 1 . Instructions for running the concurrent programs are contained in this appendix.

**Note:** Oracle strongly recommends that an employee, or party, or supplier contact **not** have more than one application user.

**Note:** If a resource (employee, party, or supplier contact) is linked to two or more application users, and imported into Resource Manager, then one application user is selected at random and associated with that resource.

## Importing Resources From Legacy Applications Using APIs

You can import resource from legacy application using the Resource Manager public published APIs. To accomplish this you must first use the APIs of your legacy system to import the legacy data into either the HRMS, TCA, or PO databases. Once this is accomplished, create a batch program that calls the Resource Manager public published APIs and uses them to transfer data from HRMS, TCA, or PO, to Resource Manager. See the Resource Manager chapter in the Oracle CRM API Reference Guide for more information about Resource Manager public published APIs.

## Importing Individual Resources

In some cases, you may want to import individual resources from different application databases. You can accomplish this by selecting a resource based on its category and then identifying its role and eligibility dates before saving it to Resource Manager.

You can import Employees, Parties, Partners, and Supplier Contacts into Resource Manager from Oracle HRMS, Purchasing and TCA, depending on the resource category you select. The only resource that you can create, but not import through the Resource window, is with category of Other, or To Be Hired in Forms. Perform the following steps to import a resource.

- If Oracle HRMS is installed and you have a license for it, then you must create a resource in that application first before importing it.
- If you do not have HRMS installed and licensed, then create a resource using "shared" forms that the HRMS application uses. The navigation path to create a resource is: Maintain Employee > Employee.

- Whether or not you use HRMS, the data is written to the HRMS tables.
- For further details, consult the Oracle HRMS documentation.

## Prerequisites

None

## Responsibility

- CRM Administrator for Forms
- CRM Resource Self Service Administrator or
- CRM Application Foundation User for HTML

## Navigation

In the Navigator window select **Resource Manager > Maintain Resources > Import Resources**.

## Steps

1. Use the Select Resources to Import window to search for the resource you wish to import.
2. Choose a resource from the search results.
3. Optionally modify any of the default values. For example, you can automatically create a sales person when importing a resource by selecting the Create Salesperon Automatically checkbox and by choosing a value from the resulting Sales Credit Type field.
4. Save the resource.
5. Optionally define additional resource information such as roles, group or team membership by clicking the **Details** button and using the resulting forms as required.

## Guidelines

Before importing an individual resource, you should understand the following:

- Resource Manager does **not** require transaction numbers to import a resource.
- The Comments field in the Selected Resources window indicates whether or not the resource entry is a new record, duplicate record, or has a new role definition.
- When synchronizing an employee resource imported from HR using the Synchronize Employees concurrent program, the end date will not be modified. To synchronize the end date in Resource Manager, you must modify it manually with the correct information. If you have imported a large number of employees and do not want to end date them manually, you can write a script that calls the Update_Resource API and passes the required value to the p_end_date_active parameter.

## See Also

See the Synchronize Employees concurrent program in Appendix B: Concurrent Programs, page B- 1 .

## Creating a Resource Manually

Using the Resource window, you can manually designate a resource either as Other or as a salesperson of type Other or To Be Hired. Resources that are designated as Other can be individuals who are not salespeople or can be objects such as a hospital bed. When you designate a resource as a salesperson of type Other, then it must be associated with a specific organization however, resources are generally not associated with specific organizations.

### Resource Window

You define a resource as a salesperson in the Resource window. This window contains a Resource section in which you provide basic information about the resource and a series of tabs that enable you to provide more detailed information about the resource. The Identification Num field of the Resource section enables you to specify a resource of type Other that is not a salesperson. The following table describes the available functions in the Resource window tabs:

***Resource Tab Descriptions***

| Tab | Description |
|---|---|
| Roles | Use this tab to view, assign, and modify information about roles and role types. The role type is the actual role a resource plays, for example, Administrator or Contractor. These roles, role types, and role attributes check boxes are defined in the Setup window. The Start Date default is the current date, and it can be modified. |
| Groups | Use this tab to view, assign, and modify information about groups. Groups are not necessarily one person, and a resource can belong to more than one group. The Groups tab reveals in detail which groups the resource belongs to, and the role in the group. Resources can play multiple roles in a group. Click the group name to display the group member roles if this resource has group member roles assigned. |
| Teams | Use this tab to view, assign, and modify information about teams. Teams can comprise multiple groups and combinations of groups and individuals. Click the team name to view the Team Member Roles. |

| Tab | Description |
|---|---|
| Service | Use this tab to define the Cost per Hour and Time Zone information. The Support Site field is not operational, and not used at this time. You define the currency type in the Compensation tab. |
| Interaction Center | Use this tab to view, assign, and modify the email addresses and the Agent ID numbers of resources associated with the eMail Center or Call Center modules. This tab is used primarily by the Call Center and eMail Center modules. All fields are read-only. If the resource is not associated with either center, these fields are blank.<br>(Optional) Enter the Scripting Agent Login if the employee uses Oracle Scripting. Use the Telephony Parameters region to enter middleware configuration, parameters, and values for the agent. Which telephony parameters are required and which values to specify depend on the types of switch and CTI middleware used in the Call Center. |
| Compensation | Use this tab to view or define the Currency Type corresponding to the Cost per Hour listed on the Service tab. |
| Receivables | Use this tab to define a salesperson and to assign a territory. |
| Miscellaneous | Use this tab to view personal information about the resource. The fields in this tab are read-only. |

## Receivables Tab

Some of the required functions for defining a resource as a salesperson are performed in the Receivables tab of the Resource window. The following table describes the available functions in the Receivables tab fields:

*Field Descriptions for the Receivables tab in the Resource Window*

| Field | Description |
|---|---|
| Date Active | Enter the range of dates that this salesperson is to be active. Date Active (start date) is a required field, the Date Active (end date) is optional. If you do not enter an end date, this salesperson is active indefinitely. |
| Geo Override and Inside City Limits | The Geo Override value associates the salesperson with a unique tax jurisdiction. Both fields are available only if you have installed a sales tax vendor of type Taxware Sales. Oracle recommends you use Tax System or Vertex Quantu. |
| Accounting Flexfield (Forms) | The accounting flexfield includes Revenue, Freight, and Receivable Accounts. Receivables can use this information, along with your AutoAccounting rules, to determine the revenue, freight, and receivable accounts for invoices that you assign to this salesperson. |
| Territory Flexfield (Forms) | If you want to assign a territory to this salesperson, then enter the range of dates that this territory is to be assigned to this salesperson. The Start Date defaults as the current date, but you can change it. If you do not enter an End Date, this territory is active for this salesperson infinitely. |

Perform the following steps to create a salesperson.

## Steps

1. Log on to the system with the CRM Administrator or CRM Resource Manager reponsibility and in the Navigator, select **Resource Manager > Maintain Resources > Resources**.
2. Click **New** in the Find Resource window.
3. Select either TBH or Other for the Category.
4. To create a salesperson, you **must** enter a valid value for the Salesperson Number. Although it can accept a 0 value, it is not recommended.
5. Enter the name of the resource in the Name field. If the resource is an object such as a hospital bed, enter the name of the object in this field.
6. Enter a Start Date for the resource.

   You must enter at least a start date here. The end date defaults to an open end data and is optional.
7. (Optional) If the resource is type Other and is not a salesperson, enter the reference number for the resource in the Reference Num field.
8. Select the Receivables tab and perform the following:

1. Enter the range of dates that this resource is to be active.

   The Date Active (start date) is a required field and defaults as the current date. However, you can change it by accessing the calendar through the list of values (LOV). If you do not enter a Date Active (end date), this salesperson is active indefinitely. The Date Active cannot precede the Start Date.

   If the resource's status is Active but the transaction date that you enter is not within this date range, Receivables does not display this salesperson in the LOV in the Transactions window.

2. (Optional) Enter the resource's Email address.

3. (Optional) Enter a Geo Override value for the resource. This value associates the resource with a unique tax jurisdiction.

   The Geo Override and Inside City Limits fields are available only if you have installed a sales tax vendor of type Taxware Sales/Use Tax System® or Vertex Quantum®.

   If you entered a value in the Geo Override field and the tax jurisdiction for this address is within city limits, select the **Inside City Limits** check box. This check box is enabled only if your sales tax vendor is Vertex Quantum.

   For additional information, see the following:

   *Integrating Oracle Receivables with Taxware Sales/Use Tax System, Release 11i.*

   *Integrating Oracle Receivables with Vertex Quantum, Release 11i.*

4. Check the **Active for Receivables** check box to indicate that this resource is an active salesperson for use in Oracle Receivables.

5. Enter a quota Sales Credit Type.

   Oracle Order Management uses this information to determine if the sales credit for an order is a quota or non-quota amount. You can define additional sales credit types in Oracle Order Management. However, you can only assign Sales Credit Types that are of type 'Quota' to salespersons in Receivables.

6. (Optional) Enter the Accounting Flexfield for your Revenue, Freight, and Receivable Accounts.

   Receivables can use this information, along with AutoAccounting rules, to determine the revenue, freight, and receivable accounts for invoices you assign to this salesperson.

7. (Optional) Assign a territory to this resource.

   The Territory Flexfield must be set up before an assignment is made.

8. (Optional) If you assigned a territory to this resource, then enter the range of dates that this territory is to be assigned to this salesperson.

   The Start Date defaults as the current date, but you can change it. If you do not enter an End Date, this salesperson is active indefinitely, or as long as the territory is active.

9. (Optional) Enter more information in the other tabs to further specify the resource. You can simultaneously end date a resource's roles, group member roles, team member roles, and sales person records.

10. Choose **File > Save** to save your work.

This action populates the Resource Number field with the automatically generated resource tracking number.

## Guidelines

You can only create a resource of category Other, or To Be Hired, through the Resource window. If the resource is of any other category, it must be imported.

You can create a resource of type Other or a salesperson of type Other or To Be Hired. To create a resource of type Other, you must enter a reference number in the Reference Num field. A resource of type Other that is not a salesperson can be an individual or an object.

If a salesperson is defined with category To Be Hired, then this salesperson is not visible within Accounts Receivable. A Salesperson defined in this manner can be viewed only within CRM.

Users are not allowed to create a new user that is associated with a resource/employee. It is only the first time during the "Create Employee" process that user can specify a non-existing user name.

If you make any changes to an employee in HRMS, then you must run the Synchronize Employee concurrent program to synchronize resource information. See the chapter on Concurrent Programs in the Implementation Guide appendix.

If a resource (who first was a salesperson with a salesperson's number) changes jobs within the same company (and is no longer a salesperson), you must end date the first resource and create a new resource with new settings. You cannot delete a salesperson's number once it is assigned, but in such cases you end date the salesperson record instead of the resource.

You can create a resource of type Other or To Be Hired and you can create a corresponding salesperson record for either.

## Creating a Salesperson Automatically

You can automatically create a salesperson when importing resources by using either the Import Resource form or the Synchronize Employees concurrent program. You can also set up job role mappings that are associated with resources when they are automatically created as a salesperson.

### Using the Import Resource Form

The Import Resource form imports selected resources, based on filtering criteria from HRMS, TCA, and Purchasing into Resource Manager. To create a salesperson automatically using the Import Resource form, you must perform the steps listed in the following table.

***Create Salesperson Automatically Using the Import Resource Form***

| Step | Required Action |
|---|---|
| Create Salesperson | Perform the required steps for Importing Individual Resources., page 4- 4 As part of this process, select the **Create Salesperson** check box in the default values window of Import Resources form. |
| Provide Sales Credit Type Information | Continue to perform the required steps for Importing Individual Resources, page 4- 4 . As part of this process, select a value from the **Sales Credit Type** field in the default values window of the Import Resources form. |
| Determine mode of salesperson creation number | To determine the mode for creating the salesperson number, set the required value for the Profile Option JTFRS: Mode of Salesperson Number Creation, page A- 7 :<br>• **Employee Number**. The salesperson number is identical to the employee number.<br>• **Sequence Generated**. The salesperson number is auto-generated by a newly created Sequence.<br>• **Manually**. The salesperson number is manually entered by the implementor. If no salesperson number is specified for the selected resources then the import process fails. |

## Using the Synchronize Employees Concurrent Program

The Synchronize Employee concurrent program imports resources in bulk from HRMS into Resource Manager by synchronizing resource information with its corresponding employee information. The "Get New Employees" parameter can be used to import newly created employees from HRMS. To create a salesperson automatically using the Synchronize Employees concurrent program, you must perform the steps listed in the following table.

> **Note:** When using the Synchronize Employees concurrent program for bulk import, the sales person numbers can only be Employee Numbers or Sequence Generated numbers and cannot be entered manually

*Create Salesperson Automatically Using the Synchronize Employees Concurrent Program*

| Step | Required Action |
|---|---|
| Create Sales Person | Run the Synchronize Employees concurrent program, page B- 3 . Select Yes from the **Create Salesperson** field. |
| Provide Sales Credit Type Information | Select a value from the **Sales Credit Type** field In the Synchronize Employees concurrent program, page B- 3 . |

### Automatically Creating Resource Roles for Job-role Mapping

When importing employees from HRMS to Resource Mangager, the Import Resource form and the Synchronize Employees concurrent program automatically create resource rolls based on the employees' jobs. When importing Employees from HRMS to Resource Manager, all of the roles associated with their jobs are automatically created as Resource Roles.

## Examples

The following examples demonstrate how to use the Import Resource form and the Synchronize Employees concurrent program to automatically create or modify a resource role that is mapped to a job role in HRMS. In each of these examples, a major retail store is adding new temporary sales representatives to its workforce to cover its annual sale. The company hires two-hundred temporary employees and enters their data into its HRMS application.

**Note:** For examples that use the Import Resource form, see also:

- Defining Roles in Forms, page 4-18
- Importing Individual Resources, page 4- 4

## Mapping a Single Job to a Single Role (Import Resource Form)

An implementor or system administrator for the retail store performs the following:

1. Defines a job roll, "Floor Sales Rep II" in HRMS and assigns it to the two hundred temporary employees when their data is entered in that application.
2. Defines a new role, "Sales Rep Floor", in Resource Manager.
3. Maps the role in Resource Manager to the job roll in HRMS.
4. Imports the two hundred temporary employees from HRMS to Resource Manager. During this process, they are automatically assigned the resource role, "Sales Rep Floor".

## Mapping a Single Job to Many Roles (Import Resource Form)

An implementor or system administrator for the retail store performs the following:

1. Defines job role, "Floor Sales Rep I" in HRMS and assigns it to the two hundred temporary employees when their data is entered in that application.

2. Defines three new roles in Resource Manager, "Sales Rep I", "Sales Rep Merchandise" and "Sales Rep III".
3. Maps the Human Resources job role, "Floor Sales Rep I" to the newly defined resource roles.
4. Imports the two hundred temporary employees from HRMS to Resource Manager. During this process, they are automatically assigned the resource rolls "Sales Rep I", "Sales Rep Merchandise", and "Sales Rep III".

## Mapping Multiple Jobs to a Single Role (Import Resource Form)

An implementor or system administrator for the retail store performs the following:

1. Defines three jobs in HRMS: "Floor Sales Rep I", "Floor Sales Rep II" and "Floor Sales Rep III".
2. Defines a role, "Sales Rep Floor" in Resource Manager.
3. Maps the three HRMS job roles to the resource role.
4. Imports the two hundred temporary employees from HRMS to Resource Manager. During this process, they are automatically assigned the role, "Sales Rep Floor".

## Mapping One or More Jobs to No Roll (Import Resource Form)

When HRMS jobs are not mapped to a resource roll, no roll is assigned to these employee resources when they are automatically imported in Resource Manager. Users can, however, assign them manually.

## Oracle HRMS Job Change with No Existing Roll (Synchronize Employees Concurrent Program)

For its annual sale, the retail store decides to place its stock room employees on the sales floor to work with the two hundred temporary employees:

1. A member of the Human Resources staff changes the "Stock Room Clerk" job roll to "Floor Sales Rep II" in HRMS.
2. The implementor or system administrator runs the Synchronize Employees concurrent program to synchronize changes in HRMS with data in Resource Manager. As a result, the stock room employees are automatically assigned the "Sales Rep Floor" role in Resource Manager.
3. When the sale is finished, the stock room employees resume their original jobs. To end date the "Sales Rep Floor" role , a new role must be associated with the "Stock Room Clerk" job roll in HRMS, otherwise it will continue to be associated with the "Sales Rep Floor" role in Resource Manager .
    1. To accomplish this, a member of the Human Resources staff defines a new 'dummy' role in Resource Manager called "Store Clerk" and maps it to the Human Resources job roll, "Stock Room Clerk".
    2. The implementor or system administrator runs the 'Synchronize Employees' concurrent program. Consequently, the "Sales Rep Floor" roll is end dated and the new role, "Store Clerk" is associated with the resource.

## Human Resources Job Change with an Existing Role Where One-to-one Mapping Occurs (Synchronize Employees Concurrent Program)

For its annual sale, the retail store decides to place its line manager employees on the sales floor with the two hundred temporary employees:

1. A member of the Human Resources staff changes the job roll from "Line Manager I" to "Floor Sales Rep I" in HRMS.
2. The implementor or system administrator runs the Synchronize Employees concurrent program to synchronize employee data in HRMS with Resource Manager. As a result, the "Sales Manager" roll is end dated for the line manager employees and they are subsequently assigned the "Sales Rep Floor" roll.
3. When the sale is concluded, the line managers resume their original jobs. When the implementor or system administrator runs the Synchronize Employees concurent program, the "Sales Rep Floor" roll is end dated and the "Sales Manager" role is once again associated with the line managers.

## Human Resources Job Change with an Existing Role Where One-to-many Mapping Occurs (Synchronize Employees Concurrent Program)

For its annual sale, the retail store decides to place its line manager employees on the sales floor with the two hundred temporary employees:

1. A member of the Human Resources staff changes the job roll from "Line Manager I" to "Floor Sales Rep II" in HRMS.
2. The implementor or system administrator runs the Synchronize Employees concurrent program to synchronize employee data in HRMS with Resource Manager. As a result, the "Sales Manager" roll is end dated for the line manager employees and they are subsequently assigned the "Sales Rep I", "Sales Rep Merchandise", and "Sales Rep III" rolls.
3. When the sale is concluded, the line managers resume their original jobs. When the implementor or system administrator runs the Synchronize Employees concurent program, the "Sales Rep I", "Sales Rep Merchandise", and "Sales Rep III" rolls are end dated and the "Sales Manager" role is once again associated with the line managers.

### Business Rules

This section discusses business rules for creating a sales person automatically and for creating roles for job role mapping.

## Creating a Salesperson Automatically

The following rules apply to creating a new Salesperson when importing resources from HRMS into Resource Manager:

## Rule1

If the salesperson number already exists in the Salesreps table, based on the value chosen for the Profile Option 'JTFRS: Mode of Salesperson Number Creation', the following rules apply

**If Profile Value is 'Employee Number' or 'Manually Entered'**:

- In the Import Resource form, an error message indicates that the salesperson number already exists.
- When running the Synchronize Employees concurrent program, a log of error messages for all employees appears in the concurrent program log.

**If Profile Value is 'Sequence Generated'**:

The sequence will continue to generate next number until it produces a value that does not already exist as salesperson number in the Salesreps table. This number is used as salesperson number to create the new salesperson

## Rule2

If the user chooses to create Salesperson, during bulk import, using Synchronize Employees concurrent program, a value for the new parameter "Sales Credit Type" must be chosen. If not, the import resource process will stopp, and corresponding error message will be displayed in the concurrent program log

# Creating Roles for Job Role Mapping

## Rule 1

When importing an employee from HRMS application into Resource Manager, new Resource Roles are automatically created for all the imported Resources, if the corresponding employees' job title has job-role mappings, set up in Resource Manager.

## Rule 2

If an Employees' Job Title has changed in HRMS and if there is at least one corresponding Role associated with the current Job Title of the Employee, in the Resource Job Roles Setup, the Synchronize Employees concurrent program will do the following:

- Attempt to terminate all the Active Roles associated with the previous job title of the employee with end date as Sysdate - 1
- Create new roles, for job-role mappings in Resource Manager, corresponding to the current job title of the employee, with the start date as Sysdate.

If any of the business validation fails when terminating the roles associated with the previous job title of the employee, the end-dating process does not occur and the corresponding error messages are displayed in the concurrent program log.

# Creating a Salesperson in Multiple Organizations

A business unit such as a corporation can have multiple separate organizations within its structure that are also known as MULTI-ORGS. A salesperson can cover areas in multiple organizations. In order to receive the appropriate compensation from each organization, the salesperson must belong to both organizations. The salesperson has one employee number, but multiple salesperson numbers that correspond to each organization that the salesperson belongs to.

To add a salesperson to another organization requires two steps:

1. First set the multiple organization profile option MO: Operating Unit to the appropriate organization using the drop down menu provided in the Responsibility field. Use the System Administrator responsibility and select Profile > System. In the Find System Profile Values window, select the appropriate Responsibility and enter the MO: Operating Unit profile option. Save your work and log in using your user ID.
2. Query the resource in Resource Manager and assign a salesperson's number as well as the other required actions outlined in the following steps.

**Example**
Business World Enterprises is a global company consisting of several organizations including Business World, USA, and Business World, Canada. You are a salesperson for Business World, USA. Your coverage encompasses parts of Western Canada and Mexico. In order to receive financial compensation in both US and Canadian dollars, as well as Mexican pesos, you must be a salesperson for Business World, USA, Business World, Canada, and Business World, Mexico. Your employee number is #0001 and your salesperson number in Business World USA is #0001US. Your employee number for Business World, Canada is #0001CAN and for Business World, Mexico #0001MEX.

Any changes pertaining to your Canadian and Mexican compensation packages can be handled by the Resource Administrators in Business World, Canada and Business World, Mexico. In other words, regional changes that affect you are handled by that organization. Changes that affect you on a global level, such as if you receive a promotion and becomes a Senior Salesperson, would be handled by the parent company, Business World Enterprises.

The following table lists the sample data.

***Example Data***

| Country | MO:Operating Unit | Salesperson ID Number |
|---|---|---|
| United States | Vision Corporation | 0001US |
| Canada | Vision Canada | 0001CAN |
| Mexico | Vision Mexico | 0001MEX |

Perform the following steps in Forms to make an existing salesperson visible from one organization to another organization.

## Prerequisites

- The salesperson must exist in one organization in Resource Manager.
- The profile value for the administrator (for example, the profile value at the user level) for 'MO: Operating Unit' must correspond to the targeted organization before you set the salesperson in that organization. Set the profile option before using Resource Manager.

## Responsibility

- CRM Administrator or

- CRM Resource Administrator

## Navigation

Navigate to the Define Resource window.

## Steps

1. Query the imported resource for the selected employee.
2. Click **Resource Details.**

   The Resource window opens and is populated with your selection.
3. Specify a salesperson number for the resource. Since you have changed your profile option, it is empty.
4. In the Receivables tab, verify that the default Date Active is the correct one.
5. Enter the information for Sales Credit type.
6. Save your work.

   The employee is a salesperson in both organizations.
7. (Optional) Repeat the entire procedure including first resetting the profile option to assign the salesperson to an additional organization.

## Guidelines

You can also create a salesperson in multiple organizations using the HTML-based Resource Manager, but you first must set your profile option in Forms.

## Defining Role Types

A role type is a broad descriptive category such as "Sales" that contains one or more roles. A role is a more detailed descriptive categories such as "Sales Representative" or "Sales Manager". Resource Manager is delivered with many predefined Role Types. Perform the following steps to define additional custom Role Types for your company. Make sure that a role type exists with which you can associate the new role.

## Prerequisites

None

## Responsibility

- CRM Administrator or
- CRM Resource Manager

## Navigation

Navigate to the **Navigator - CRM (or CRM Resource Manager) Administrator window.**

## Steps

1. Select **Resource Manager > Setup > Role Types**.

   The Application Object Library: JTF_RS_ROLE_TYPES Lookups window displays existing Role Types.

2. Use the down arrow to scroll to the bottom of the list of Role Types.
3. Select the last entry in the record and choose **File > New** to add a blank field.
4. Enter the name of the new Role Type in the blank field at the bottom of the list.
5. In the Meaning field, enter the CRM module for which this Role Type is created.
6. Choose **File > Save** to complete the Role Type definition.

# Defining Roles in Forms

A Role may encompass one or more job descriptions and job titles. Use Roles to assign responsibilities to resources, resource groups and resource teams. Resource Manager is delivered with pre-defined Roles for all CRM modules. Perform the following steps in Forms to define additional custom Roles for your enterprise.

## Prerequisites

Make sure that a Role Type exists with which you can associate the new Role.

> **Note:** When a sales role is associated with a resource that is attached to a group with no group member role, the OIC application may provide the sales representative with incorrect compensation and may incorrectly roll up the hierarchy.

## Responsibility

- CRM Administrator or
- CRM Resource Manager

## Navigation

Navigate to the **Navigator - CRM (or CRM Resource Manager) Administrator window.**

## Steps

1. Select **Resource Manager > Setup > Roles.**
2. Enter your values in the Code and Name fields. Choose a Role Type from the list of values (LOV). The role code can only be entered in upper case.
3. Select the Active box to make the Role active. Select one or more of the role attribute check boxes–**Member, Lead, Admin, Manager**–to associate the Role to a responsibility. See the Resource Roles Attributes table in the Guidelines section for descriptions of these role attributes.
4. Select one or more Job names in the job region to map the reource roll to a job roll in HRMS.

5. Select **File > Save** to complete the Role definition.

   The new role name registers in the Role Name field in Resource Manager. The following table describes resource role attributes.

## Guidelines

The following table describes resource role attributes used in the Resource Manager.

***Resource Role Attributes***

| Check Box | Action |
|---|---|
| Member | Identifies the role name as a member of the role. |
| Lead | Identifies the role name as a lead for the role. |
| Active | Identifies the role as active. |
| Admin | Identifies the role as administrative. |
| Manager | Identifies the role as managerial. |
| Seeded (Read-only) | Identifies the role as seeded. |

## Defining Roles in HTML

A Role Type is a category of roles associated with a particular CRM module. Resource Manager is delivered with pre-defined Role Types for all CRM modules. Perform the following steps in HTML to define additional custom Roles for your enterprise. Ensure that a role type exists with which you can associate the new role.

## Responsibility

Resource Self Service Administrator

## Steps

1. Navigate to the **Setup** tab, click the **Roles** subtab and then click the **Create** button.
2. In the Create Role page, enter the required information in the Role Name, Role Code, and Description fields and select a role type from the drop-down list.
3. Select the required role attributes from the check boxes and then lick the **Create** button.

## Specifying Role Attributes

Attributes aid in grouping different roles together when defining a resource reporting hierarchy. This hierarchy is used in sales product families, such as Sales Online and Telesales, to control the data access privilege (customer, sales lead, and sales opportunity) as well as sales forecast rollup and incentive compensation plan. It is also used for

workflow notifications and escalations. You can have more than one attribute such as Admin and Manager as each has different functions. However, you would not select Lead and Manager, for example, because Lead is a subset of Manager.

**Example**

You set up an escalation for service requests and tasks, notifications for members of groups go to the manager. Therefore, besides defining a role, you also need to specify the role attribute information for this new role by selecting the following seeded role attribute check boxes:

- **Member**: Default when another attribute is not chosen (Lead, Administrator, Manager).
- **Lead**: Used in the context of team lead.
- **Admin**: Used to view and modify information about other group members. In the HTML Resource Manager, only a user in a group with either the Administrator or Manager group member role can update group member and group hierarchy information.
- **Manager**: Used to set up the group reporting hierarchy. For example, all the forecasts for a group of sales representatives roll up to the person with the Manager role attribute in that group. In addition, a user with the Manager group member role can update the group member and group hierarchy information in the HTML Resource Manager.

Perform the following steps to view roles and role attributes.

## Prerequisites

A role must exist before it can be viewed.

## Responsibility

- CRM Administrator or
- CRM Resource Manager

## Navigation

Navigate to **the Navigator - CRM (or CRM Resource Manager) Administrator window.**

## Steps

1. Select **Resource Manager > Setup > Roles**.
2. On the application tool bar, click **View > Find All**.

   Information populates the window.
3. Use the up and down arrows to move through the various role definitions.

   As the role type changes, you can also view the responsibilities associated with each role.

## Defining Skill Levels in HTML

Defining skill levels in HTML is accomplished by assigning a numeric value to a skill rating and changing the value of the skill rating if required. Instruction for performing these steps are contained in the following sections:

- Assigning a Numeric Value to a Skill Rating, page 4-21
- Changing Skill Rating Values, page 4-22

## Assigning a Numeric Value to a Skill Rating

Use the Define Skill Levels window in HTML to enter the name of the skill level and its associated numeric value. Once this is specified, an individual resource can select an appropriate skill level from the list of values of the Level field in the Rate Skill window to rate his technical skills. These skill levels are standard regardless of whether or not the resource is rated at product, platform, or problem code level. The numeric values for the related skill levels can be a part of the calculation when selecting the optimal individual for a service request.

Use the following rules to define skill level information:

- No two skill ratings can have the same numeric value or the same name.
- Only positive integers are acceptable in the Numeric Value field.
- There is no change to the numeric value of "Not Applicable" (N/A).
- The sorting order depends on the numbers assigned to the values.

Perform the following steps to assign a numeric value to a skill rating.

## Responsibility

Resource Self Service Administrator

## Steps

1. Navigate to the **Setup** tab and click the **Skill Levels** subtab.
2. Enter a numeric value in the skill rating you want to modify.
3. Click **Update** to modify the information or click **Restore** to reset the original values in the window.

   **Note:** Possible combinations for defining skills include:

   - Product
   - Category
   - Product and component
   - Product and problem code
   - Problem code
   - Problem code and category
   - Platform
   - Platform and Category

- Product and category
- Category, product, and component

## Changing the Name of a Skill Rating

The skill levels are editable, but you cannot delete any of them without entering a new name or value. Otherwise, an error message occurs saying “Level Name cannot be null” or “Numeric Value cannot be null.” Perform the following steps to change the name of a skill rating.

## Responsibility

Resource Self Service Administrator

## Steps

1. Navigate to the **Setup** tab and click the **Skill Levels** subtab.
2. Select the skills rating you want to modify and enter a new name in the text field.
3. Click **Update** to modify the information or click **Restore** to reset the original values in the window.

## Publishing Workflow Business Events

Resource Manager publishes Workflow business events such as creating and importing resources, updating resources, and end dating resources using the Oracle Workflow Business Event System. Applications that contain data directly affected by these events can subscribe to them and synchronize or modify their data accordingly. For example if a resource that is assigned to a Task is end dated, this action is published or "raised" as a business event. Task Manager, can consequently subscribe to this event and reassign the task to another resource.

### The Oracle Workflow Business Event System

The Oracle Workflow Business Event System is an application service that leverages the Oracle Advanced Queuing (AQ) infrastructure to communicate business events between systems. The Business Event System consists of the Event Manager and workflow process event activities.

The Event Manager contains a registry of business events, systems, named communication agents within those systems, and subscriptions indicating that an event is significant to a particular system. Events can be raised locally or received from an external system or the local system through AQ. When a local event occurs, the subscribing code is executed in the same transaction as the code that raised the event, unless the subscriptions are deferred.

### Resource Manager Events

When a resource is created, imported, updated, or deleted, the Resource Manager APIs call wrapper APIs that raise the following events:

***Resource Manager Events***

| Event | Description |
|---|---|
| Resource Create | This event is raised for all newly created and imported resources. |
| Resource Update User | This event is raised for resources whose USER_ID data has changed. |
| Resource Update dateEffectivity | This event is raised for all resources that have a modified start date active or end date active. |
| Resource Update Attribute | This event is raised for all the resources that have a changes in the following attributes:<br>• RESOURCE_NAME<br>• TIME_ZONE<br>• COST_PER_HR<br>• PRIMARY_LANGUAGE<br>• SECONDARY_LANGUAGE<br>• IES_AGENT_LOGIN<br>• SERVER_GROUP_ID<br>• ASSIGNED_TO_GROUP_ID<br>• COST_CENTER<br>• CHARGE_TO_COST_CENTER<br>• COMPENSATION_CURRENCY_CODE<br>• COMMISSIONABLE_FLAG<br>• HOLD_REASON_CODE<br>• HOLD_PAYMENT<br>• COMP_SERVICE_TEAM_ID<br>• SUPPORT_SITE_ID |
| Resource Delete | This event is raised for deleted resources. |
| Assign new role to resources | This event assigns new roles to resources |
| Assign new role to resources within a resource group or team | This event assigns new roles to resources within a resource group or team |
| Update existing role for a resource | This event updates existing roles for a resource |
| Update existing role for a resource | This event updates existing roles for a resource within a resource group or team |
| Delete role from a resource | This event deletes roles from resources |

| Event | Description |
|---|---|
| Delete role from a resource within a resource group or team | This event deletes roles from resources within a resource group or team |
| Merge resources | This event merges resources |

## Example: Importing a Resource

In this example, the Oracle Mobile Field Sales team wants to populate its temporary table with all newly imported/created resources in Resource Manager. This process is accomplished as follows:

1. A new employee is hired to fill an open position within the organization.
2. Resource Manager conducts its weekly import of new resources from HRM.
3. The new employee is imported into Resource Manager and the following new record is created as an employee resource in the table JTF_RS_RESOURCE_EXTNS_VL:

***Imported Resource Johnson Record***

| Resource Id | Resource Name | Category | User Id |
|---|---|---|---|
| 10001 | Johnson | Employee | 101 |

4. Importing the resources into Resource Manager raises the following Resource Create event in the Oracle workflow event Manager:

***Resource Create Event***

| Event Name | Event Key |
|---|---|
| oracle.apps.jtf.jres.resource.create | oracle.apps.jtf.jres.resource.create-1001 |

5. Oracle Mobile Field Sales subscribes to the Resource Create event, every time a user syncs from a remote location to determine whether any new records have been created in Resource Manager. Because the field sales application is used mostly offline, new resource records may not be replicated into the local database, there fore, by subscribing to the event, field sales can get up to date records when a user syncs to replicate the online database.

***Subscription for Resource Create Event***

| Event Filter | Phase | Status | Rule Function |
|---|---|---|---|
| oracle.apps.jtf.jres.<br>resource.create | >100 | Enabled | OracleMobileFieldSales.<br>ResourceCreated |

The Oracle Mobile Field Sales team owns the rule function, **OracleMobileFieldSales.ResourceCreated**, and has the logic to populate their temporary table with all newly imported or newly created resources in Resource Manager.

1. The sales manager with the open position syncs the sales manager's laptop to replicate its data with the system's data using the temporary table. After completing the sync, the sales manager sees the new employee record and is able to assign the open opportunities to the new salesrep as well as adding the new salesrep to the manager's sales group.

### Example: Updating a Resource

In this example, Oracle Service only assigns the following resources to a Service Request if the resource is attached to an FND user:

***Resource Johnson Data***

| Resource Id | Resource Name | Category | User Id | Start Date | End Date | Time Zone |
|---|---|---|---|---|---|---|
| 10001 | Johnson | Employee | 101 | 01-01-2002 | None | Pacific |

## Updating the USER_ID Value

If the Service Request is already assigned to a resource that has a USER_ID value attached and Resource Manager changes the USER_ID value to NULL, then Oracle Service must reassign the Service Request to a different resource.

1. Resource Johnson is attached to a valid FND user and is assigned to the following Service Request:

***Service Request for Resource Johnson***

| Service Request Id | Service Request Name | Assignee Id | Assignee Name |
|---|---|---|---|
| 1001 | Software Problem | 10001 | Johnson |

2. The FND user record with USER_ID value 101 is deleted in FND Applications.
3. Resource Manager performs the following steps to update the record for the resource, Johnson:
    1. Resource Manger executes the 'Synchronize Application user name' Concurrent Program to update the USER_ID attached to 'Johnson' to NULL

***Updated Record for User Johnson***

| Resource Id | Resource Name | Category | User Id |
|---|---|---|---|
| 10001 | Johnson | Employee | NULL |

2. Resource Manager simultaneously raises the Business event, **oracle.apps.jtf.jres.resource.update.user** with the following parameters:

***Resource Update Event***

| Parameter Name | Parameter Value |
|---|---|
| RESOURCE_ID | 10001 |
| CATEGORY | EMPLOYEE |
| OLD_USER_ID | 101 |
| NEW_USER_ID | NULL |

4. The service request subscribes to the resource update event with the following details:

***Subscription for Resource Update Event***

| Event Filter | Phase | Status | Rule Function |
|---|---|---|---|
| oracle.apps.jtf.jres.resource.update.user | >100 | Enabled | OracleService.ResourceUserUpdated |

Oracle Service owns the rule function **OracleService.ResourceUserUpdated** that contains the logic to reassign the resource to a resource that has a valid USER_ID attached.

## When START_DATE_ACTIVE and/or End_DATE_ACTIVE is Changed

In this example, Oracle Service only assigns the resources to a Service Request if the resource is valid in Resource Manager because the service request assignment period exists within the Resource start date and end date. If the Service Request is already assigned to a resource and Resource Manager changes the date effectivity of that resource, Oracle Service must reassign the Service Request to some other resource.

1. Resource Johnson is assigned to the following Service Request from 08-01-2002 to 08-01-2003:

***Service Request for Resource Johnson***

| Service Request Id | Service Request Name | Assignee Id | Start Date | End Date |
|---|---|---|---|---|
| 1001 | Software Problem | 10001 | 08-01-2002 | 08-01-2003 |

2. The Resource Johnson is updated and a business event is raised.
   1. Resource, Johnson is end dated in Resource Manager with the end date, '08-01-2002:

***Modified Record for Resource Johnson***

| Resource Id | Resource Name | Category | Start Date | End Date |
|---|---|---|---|---|
| 10001 | Johnson | Employee | 01-01-2002 | 08-01-2002 |

   2. Resource Manager raises the event, **oracle.apps.jtf.jres.resource.update.effectivedate** with the following parameters:

***Resource Update Event***

| Parameter Name | Parameter Value |
|---|---|
| RESOURCE_ID | 10001 |
| CATEGORY | EMPLOYEE |
| RESOURCE_NAME | Johnson |
| OLD_START_DATE_ACTIVE | 01-01-2002 |
| OLD_END_DATE_ACTIVE | NULL |
| NEW_START_DATE_ACTIVE | 01-01-2002 |
| NEW_END_DATE_ACTIVE | 08-01-2002 |

3. Service request subscribes to the resource update event with the following details.

***Subscription for Resource Update Event***

| Event Filter | Phase | Status | Rule Function |
|---|---|---|---|
| oracle.apps.jtf.jres.resource.update.effectivedate | >100 | Enabled | OracleService.ResourceDateUpdated |

Oracle Service owns the rule function **OracleService.ResourceDateUpdated** and has the logic to reassign the resource to a resource with a valid date effectivity.

## When Resource Time Zone is Changed

In this example, Oracle Service assigns the resources to a service request that depends on the time zone of the resource. If the Service Request is already assigned to a resource and Resource Manager changes the time zone of that resource, Oracle Service must reassign the Service Request to some other resource.

1. Resource Johnson is assigned to the following Service Request that has a time zone 'Pacific':

***Service Request Assignment***

| Service Request Id | Service Request Name | Assignee Id | Time Zone |
|---|---|---|---|
| 1001 | Software Problem | 10001 | Pacific |

2. The resource is modified as follows:
    1. Time zone for the resource, Johnson is changes from 'Pacific' to 'Central':

***Modified Service Request Assignment***

| Service Request Id | Service Request Name | Assignee Id | Time Zone |
|---|---|---|---|
| 1001 | Software Problem | 10001 | Central |

    2. Resource Manager simultaneously raises the Business event, **oracle.apps.jtf.jres.resource.update.attributes** with the following parameters:

***Resource Update Event***

| Parameter Name | Parameter Value |
|---|---|
| RESOURCE_ID | 10001 |
| CATEGORY | EMPLOYEE |
| RESOURCE_NAME | Johnson |
| OLD_ TIME_ZONE | Pacific |
| NEW_ TIME_ZONE | Central |

3. Service request subscribes to the resource update event with the following details:

***Subscription to Resource Update Event***

| Event Filter | Phase | Status | Rule Function |
|---|---|---|---|
| oracle.apps.jtf.jres. resource.update. attributes | >100 | Enabled | OracleService. ResourceTimeoneUpdated |

Oracle Service owns the rule function, **OracleService.ResourceTimeoneUpdated** that contains the logic to reassign the resource to a resource that has a required time zone.

## Example: Deleting a Resource

In this example, only Resource of type 'TBH' such as the following resource can be deleted using the delete resource API:

***Resource Abraham Example***

| Resource Id | Resource Name | Category | User Id | Start Date | End Date |
|---|---|---|---|---|---|
| 10002 | Abraham | Other | NULL | 01-01-2002 | NULL |

Task Manager assigns the resources to a Task only if that resource exists in Resource manager. If the Task is already assigned to a resource and Resource Manager deletes that resource, Task Manager needs to reassign that Task to some other existing resource.

1. Resource Abraham is assigned to the following Task from 08-01-2002 to 08-01-2003:

***Task Assignment***

| Task Id | Task Name | Resource Id | Resource Name | Start Date | End Date |
|---|---|---|---|---|---|
| 1002 | Product Presentation | 10002 | Abraham | 08-01-2002 | 08-01-2003 |

2. Resource, Abraham is deleted using the API Resource Public API jtf_rs_resource_pub.delete_resource.
3. Because resource, Abraham is deleted, Task Manager must reassign the task to a different resource. To accomplish this, Resource Manager raises the Business event, **oracle.apps.jtf.jres.resource.delete** with the following parameters:

***Resource Delete Event***

| Parameter Name | Parameter Value |
|---|---|
| RESOURCE_ID | 10001 |

4. Task Manager subscribes to the resource update event with the following details:

***Resource Delete Event Subscription***

| Event Filter | Phase | Status | Rule Function |
|---|---|---|---|
| oracle.apps.jtf.jres.resource.delete | >100 | Enabled | TaskManager.ResourceDeleted |

Task Manager owns the rule function, **TaskManager.ResourceDeleted** is the Rule function that contains the logic to reassign the resource to an existing resource.

### Steps

This section provides instructions for publishing Resource Manager business events.

## Create Resource

Perform the following to raise a business event using the jtf_rs_wf_event_pub.create_resource wrapper API:

1. Add the following parameters into the parameter list using, wf_event.Add ParameterToList
   - RESOURCE_ID
   - RESOURCE_NAME
   - CATEGORY
   - USER_ID

- START_DATE_ACTIVE
- END_DATE_ACTIVE

2. Event_key will be 'oracle.apps.jtf.jres.resource.create-'||jtf_rs_wf_event_guid_s.nextval.
3. Raise the Event, oracle.apps.jtf.jres.resource.create using the workflow API, Wf_event.Raise.

## Update Resource

Perform the following to raise a business event using the jtf_rs_wf_event_pub.update_resource API:

## When the user_id is updated

1. Add the following parameters into the parameter list using, wf_event.Add ParameterToList.
2. RESOURCE_ID
3. CATEGORY
4. RESOURCE_NAME
5. OLD_USER_ID
6. NEW_USER_ID
7. Event_key will be 'oracle.apps.jtf.jres.resource.update.user-'||jtf_rs_wf_event_guid_s.nextval.
8. Raise the Event, oracle.apps.jtf.jres.resource.update.user using the workflow API, Wf_event.Raise.

## When Start Date Active or End Date Active is changed

1. Add the following parameters into the parameter list using, wf_event.Add ParameterToList
2. RESOURCE_ID
3. CATEGORY
4. RESOURCE_NAME
5. OLD_START_DATE_ACTIVE
6. OLD_END_DATE_ACTIVE
7. NEW_START_DATE_ACTIVE
8. NEW_END_DATE_ACTIVE
9. Event_key will be 'oracle.apps.jtf.jres.resource.update.effectivedate-'|| jtf_rs_wf_event_guid_s.nextval.
10. Raise the Event, oracle.apps.jtf.jres.resource.update.effectivedate using the workflow API, Wf_event.Raise.

## When any of the following attributes changed

RESOURCE_NAME

- TIME_ZONE
- COST_PER_HR
- PRIMARY_LANGUAGE
- SECONDARY_LANGUAGE
- IES_AGENT_LOGIN
- SERVER_GROUP_ID
- ASSIGNED_TO_GROUP_ID
- COST_CENTER
- CHARGE_TO_COST_CENTER
- COMPENSATION_CURRENCY_CODE
- COMMISSIONABLE_FLAG
- HOLD_REASON_CODE
- HOLD_PAYMENT
- COMP_SERVICE_TEAM_ID
- SUPPORT_SITE_ID
- Add the following parameters into the parameter list using, wf_event.Add ParameterToList
- RESOURCE_ID
- CATEGORY
- OLD_RESOURCE_NAME
- OLD_TIME_ZONE
- OLD_COST_PER_HR
- OLD_PRIMARY_LANGUAGE
- OLD_SECONDARY_LANGUAGE
- OLD_IES_AGENT_LOGIN
- OLD_SERVER_GROUP_ID
- OLD_ASSIGNED_TO_GROUP_ID
- OLD_COST_CENTER
- OLD_CHARGE_TO_COST_CENTER
- OLD_COMPENSATION_CURRENCY_CODE
- OLD_COMMISSIONABLE_FLAG
- OLD_HOLD_REASON_CODE
- OLD_HOLD_PAYMENT
- OLD_COMP_SERVICE_TEAM_ID

- OLD_SUPPORT_SITE_ID
- NEW_RESOURCE_NAME
- NEW_TIME_ZONE
- NEW _COST_PER_HR
- NEW _PRIMARY_LANGUAGE
- NEW _SECONDARY_LANGUAGE
- NEW _IES_AGENT_LOGIN
- NEW _SERVER_GROUP_ID
- NEW _ASSIGNED_TO_GROUP_ID
- NEW _COST_CENTER
- NEW _CHARGE_TO_COST_CENTER
- NEW_COMPENSATION_CURRENCY_CODE
- NEW _COMMISSIONABLE_FLAG
- NEW _HOLD_REASON_CODE
- NEW _HOLD_PAYMENT
- NEW _COMP_SERVICE_TEAM_ID
- NEW _SUPPORT_SITE_ID
- Event_key will be 'oracle.apps.jtf.jres.resource.update.attributes-'|| jtf_rs_wf_event_guid_s.nextval.
- Raise the Event oracle.apps.jtf.jres.resource.update.attributes using the workflow API, Wf_event.Raise.

## Delete Resource

Perform the following to raise a business event using the jtf_rs_wf_event_pub.delete_resource API.

1. Add the RESOURCE_ID parameter into the parameter list using, wf_event.Add ParameterToList
2. Event_key will be 'oracle.apps.jtf.jres.resource.delete-' || jtf_rs_wf_event_guid_s.nextval.
3. Raise the Event, oracle.apps.jtf.jres.resource.delete using the workflow API, Wf_event.Raise.
4. Only Resource of 'TBH' can be deleted using the delete resource API.

# 5

# Phase II: Managing Resources

This chapter covers the following topics:

- Overview of Managing Resources
- Finding a Resource in Forms
- Finding and Changing a Resource in HTML
- Configuring Resource Fields for Updates
- Assigning Additional Resource Attributes
- Synchronizing End Dates for Partner and Employee Resources
- Creating Groups in Forms
- Creating Groups in HTML
- Defining Dynamic Groups in Forms
- Defining Dynamic Groups in HTML
- Viewing Group Hierarchy in Forms
- Viewing Role Details
- Assigning Roles to Resources
- Assigning Resources to Groups
- Defining Teams in Forms
- Defining Teams in HTML
- Configuring Group and Team Member Notifications
- Moving a Group of Salespersons from One Compensation Analyst to Another
- Running a Group Audit Report
- Viewing an Audit Report
- Running a Group Structure Report
- Viewing a Group Structure Report
- Running Resource Skills Report
- Viewing Resource Skills Report

# Overview of Managing Resources

Implementing Resource Manager takes place in two phases. In the first phase, you set up Resource Manager by defining and configuring required components. In the second phase, you use Resource Manager to manage your resources. This chapter provides detailed instructions for Phase II: Managing Resources. This section contains a summary of the steps for managing resources with Resource Manager. Detailed instructions for these steps are provided in the subsequent sections.

## Finding and Viewing Resources

After importing a resource into Resource Manager, you can find and view the resource and manage it by performing any of the actions described in the remainder of this chapter. Instructions for finding and viewing resources are contained in the following sections:

- Finding a Resource in Forms, page 5- 4
- Finding a Resource in HTML, page 5- 5

## Modifying Resources

You can modify resources by configuring resource fields for updates in HTML, assigning additional attributes to resources in Forms, or synchronizing end dates for partner relationship resources in Forms. You can also modify some resource information by searching for a resource and then changing the resource's data as required.

# Configuring Resource Fields for Updates

If you are using the HTML version of Resource Manager, then the appropriate users or system administrators with the Resource Self Service Administrator responsibility must set up the Define Resource Fields for Update window. This is used to determine which fields for the resource's personal information can be updated and how the update should occur. Instructions for performing this step are contained in the Configuring Resource Fields for Updates section, page 5- 6 .

# Assigning Additional Resource Attributes

In the Forms-based version of Resource Manager, you can add additional attribute information if the resource is used by one of the following e-Business applications:

- Service
- Interaction Center
- Compensation
- Receivables

Instructions for performing this step are contained in the Assigning Additional Resource Attributes, page 5- 7 section.

# Synchronizing End Dates for Partner Relationship Resources

Resource Manager enables you to synchronize the end date of an imported partner relationship resource with the end date of the partner relationship resource from

which it was imported. For instance, if you import a partnership resource from an application such as OSO and the end date for that partnership resource is subsequently changed in OSO, you must reflect this change in the imported resource. Instructions for pilfering this step are contained in the Synchronizing End Dates for Partner Relationship Resources section, page 5- 8 .

### Defining Groups

You can organize and manage your resources by defining groups to which they can be assigned. You can create groups in the Forms-based or HTML versions of Resource Manager, define dynamic groups, and view group hierarchy.

## Creating Groups in Forms

The Forms-based version of Resource Manager enables you to create groups, to assign them roles, and to use the exclusive flag feature. You can only assign existing roles to a resource group in Forms. Instructions for this step are contained in the Creating Groups in Forms section, page 5- 9 .

## Creating Groups in HTML

The HTML version of Resource Manager enables you to create groups and to assign new or existing roles to those groups. You cannot, however use the exclusive flag feature in HTML. Instructions for this step are contained in the Creating Groups in HTML section, page 5-11.

## Defining Dynamic Groups

You can define a dynamic group based on criteria specified in a SQL statement. Instructions for this step are contained in the Defining Dynamic Groups section, page 5-13.

## Viewing Group Hierarchy

Resource Manager enables you to view group hierarchy including managers and subordinates for a group or resource. Instructions for this step are contained in the Viewing Group Hierarchy section, page 5-15.

### Managing Roles and Groups

You can manage roles and groups by viewing role details, assigning roles and group membership to resources, and setting up group member notification.

## Viewing Role Details

Instructions for this step are contained in the Viewing Role Details section, page 5-16.

## Assigning Roles to Resources

In HTML, you can attach a roles to resources. A Role is comprised of a Role Type, a Role, and a start and end date. Instructions for this step are contained in the Assigning Roles to Resources section, page 5-16.

## Assigning Resources to Groups

In HTML, you can assign resources to a Group. Group membership is comprised of a Group, Role Type, Role, and a start and end date. Instructions for this step are contained in the Assigning Resources to Groups section, page 5-17.

### Defining Teams

You can organize resource and groups by organizing them in teams. A team is a collection of groups and resources that is organized to accomplish a specific task or objective. Instructions for this step are contained in the Defining Teams section, page 5-17.

### Running Reports

Resource Manager enables you to obtain a variety of information about resources, groups and skills by running the following reports:

- Running an Audit Report, page 5-29
- Viewing an Audit Report, page 5-30
- Running a Group Structure Report, page 5-31
- Viewing a Group Structure Report, page 5-32
- Running Resource Skills Report, page 5-32
- Viewing Resource Skills Report, page 5-33

## Finding a Resource in Forms

In Forms, use the Find Resources window to perform the following actions:

- Defining a search criteria to find one or more resource summaries
- Defining a Salesperson

You can search for a resource on any single or combination of fields. Perform the following steps to find one or more resource summaries.

## Prerequisites

Create or Import a Resource

## Steps

1. Log on to the system with the CRM Administrator or CRM Resource Manager responsibility and in the navigator, navigate to **the Navigator - CRM (or CRM Resource Manager) Administrator window**.

2. Select **Resource Manager > Maintain Resources > Resources**.
3. Search for the resource using any required parameters including the following. You can search for resources using partial characters such as "johnso" instead of "johnson":
   - Number
   - Category
   - Transaction Number
   - Name
4. (Optional) Enter the required dates for the resource in the Start Date and End Date fields.
5. Click **Find**.

   The Resource Search Results window opens with a list of resources that met your criteria.
6. Select your resource and click **Resource Details**.

   The Resource window opens. From here, you can select the appropriate tab to view more details for the selected resource.

## Finding and Changing a Resource in HTML

You can use the HTML version of Resource Manager to find and modify resources whose category is Employee, Party, Partner or Supplier Contact.

## Responsibility

- CRM Application Foundation User
- Resource Self Service Administrator (for administrative purposes)

## Steps

1. Navigate to the **Resources** tab and click the appropriate subtab depending on the type of resource you wish to locate. Resource categories include:
   - Employees
   - Parties
   - Partners
   - Supplier Contacts
2. Enter the resource name in the Resource Name field and click the **Go** button.
3. In the search results page, you can optionally view the resource's manager, organization information, and skills, or you can update the resource's information by clicking the appropriate icon next to the resource.
4. To view resource details click, the resource in the search results page. Resource details include:
   - The resources picture if it is available
   - Phone/Email

- Work Address
- Salesperson Details
- Service
- Active Roles
- Group Membership

5. You can optionally modify some resource information such as Personal Details, Salesperson Details, and Service. You can also assign or revoke resource roles and can add resource to or remove them from groups. Some resource information such as Phone, Fax, Email, and Address is imported from HRMS and cannot be modified.

## Configuring Resource Fields for Updates

Administrators can set up resource fields for to be updated as follows:

- **Full Update**: Anyone can update the field without approval or workflow notification.
- **Update With Notification**: Anyone can update the field but it requires that a workflow notification be sent to the appropriate individual.
- **Update With Approval**: Anyone can update the field but it requires an approval first.
- **No Update**: No one can ever update the field.

By using the previous four update options, administrators can define the following specific fields that can and cannot be changed, as well as how those fields can be modified (with approval or with notification only):

- **Preferred Name:** Resources can enter and maintain their full name information.
- **Resource Address**: Resources can enter and maintain their work address information.
- **Work Phone Number**: Resources can enter and maintain their work phone number.
- **E-mail Address**: Resources can enter and maintain their e-mail address information.

Perform the following steps to add or modify field updates for a resource.

## Prerequisites

You must have the Resource Self Service Administrator responsibility.

## Responsibility

Resource Self Service Administrator

## Steps

1. Navigate to the **Setup** tab and click the **Resources** subtab.
2. Modify preferences for each field by selecting the option button for the type of update you want to define.

3. Click the**Update**button and then click the **Edit Details** to return to the Define Resource Fields for Update window.

## Guidelines

Users with the Resource Self Service Administrator responsibility can determine which fields (preferred name, resource address, work phone number, and e-mail address) can be updated and how the update should occur, such as full update, update with notification, update with approval, or no update. Detailed information is covered in the 11*i* Implement Common Application Components course.

## Assigning Additional Resource Attributes

In Forms, you can assign or view additional resource information if the resource is used by other applications. In the following tabs you can add additional information:

- **Service**: You define the time zone for resources and cost per hour. You can enter or view the Support Site information. This information populates automatically in the Assignment Manager if the resource is selected. Note that you define the currency type in the Compensation tab.
- **Interaction Center**: You can view the e-mail addresses and the agent IDs of resources associated with the eMail Center or Interaction Center modules here. This tab is used primarily by the Interaction Center and eMail Center modules. Optionally, enter the Scripting Agent Login if the employee uses Oracle Scripting. Use the Telephony Parameters region to enter middleware configuration, parameters, and values for the agent. Which telephony parameters are required and which values to specify depend on the types of switch and CTI middleware used in the Interaction Center. Optionally, use the Email Parameters region to specify the Interaction Center Agent's e-mail account, parameter, and value if the agent uses Oracle eMail Center to work with e-mail work items. All fields are read-only. If the resource is not associated with either center, these fields are blank.
- **Compensation:** Either view or define the Currency Type corresponding to the Cost per Hour listed on the Service tab. This information is primarily used by the Sales application.
- **Receivables:** Identify a salesperson by entering additional information in the Receivables tab. The attributes defined here are used by Oracle Accounts Receivables.

You can view only personal information about the resource in the Miscellaneous tab.

You can search for a resource on any single or combination of fields. Perform the following steps to find one or more resource summaries.

## Prerequisites

A Resource has been created or imported.

## Responsibility

- CRM Administrator or
- CRM Resource Manager

## Navigation

Navigate to **the Navigator - CRM (or CRM Resource Manager) Administrator window.**

## Steps

1. Select **Resource Manager > Maintain Resources > Resources**.
2. Choose one or more parameters upon which to search.
3. Click **Find**.

   The Resource Search Results window opens with a list of resources that met your criteria.
4. Select your resource and Click **Resource Details**.

   The Resource window opens. From here, you can select the appropriate tab to add more details for the selected resource.
5. Save your work.

## Guidelines

For complete instructions, refer to "Setting Up Telephony Parameters" in Implementing Oracle Telephony Manager.

## Synchronizing End Dates for Partner and Employee Resources

This section provides instructions for synchronizing the end date of an imported partnership or employee resource in Resource Manager with the original partnership or employee resource in the application from which it was imported. The synchronization process also enables you to augment the end date with a unit of time specified in the appropriate profile option. This provides additional time to process the termination of the partnership or employee resource instead of doing so on the end date.

## Prerequisites

A partner or employee relationship must be created in an environment such as OSO and imported by Resource Manager. The partner or employee relationship must subsequently be end dated in the application from which it was imported, either by specifying an end date or by making the partner relationship resource inactive.

## Responsibility

CRM Administrator

Resource Self Service Administrator

## Navigation

Log in to the Forms interface and access the navigator.

## Steps

1. Navigate to **Resource Manager>Others>Profile** and select the "Resource active days after termination of relationship" profile option.
2. Specify the number of days after the end date that you want to terminate the partner or employee relationship, and save your work.
3. Navigate to **Resource Manager>Others>Requests>Run** and select the option for running a single request.
4. Locate and run the appropriate concurrent program:
   - For partnership resources run the "Synchronize Parties and Partners" concurrent program.
   - For employee resources, run the "Synchronize Employees" concurrent program.
5. Check the partner or employee relationship resource to ensure that the end date has been synchronized according.

## See Also

- Importing Individual Resources, page 4- 4
- Mass Importing Resources from other e-Business Applications, page 4- 3
- Setting Profile Options, page A- 4
- Running Concurrent Programs, page B- 1

# Creating Groups in Forms

In this Forms-based procedure, an individual or group resource can belong to more than one group. Either search for an existing group or create a new group; then define the group's members, roles, usages, and relations. Perform the following steps to define a resource group.

> **Note:** To view a group in HTML that was created in Forms, you must specify a member role.

## Steps

1. Navigate to the **Navigator - CRM (or CRM Resource Manager) Administrator window.** using either the CRM Administrator or CRM Resource Manager responsibility.
2. Select **Resource Manager > Maintain Resources > Groups**.
3. (Optional) To find an existing resource group, use this procedure.
   1. On the application tool bar, click **View > Find**.
   2. In the Find Group window, select a group name from the list of values (LOV) in the Group Name field and click **Find**.

      The application populates the Results region with the group name search results.
   3. Select a group name in the Results table and click **OK**.

The application populates the Define Groups window with the group information.

4. To create a new resource group, then use this procedure.
    1. Enter a group name in the Name field.
    2. Enter a brief description of the group in the Description field.
    3. Enter the effective dates for the team in the Start and End fields.
5. (Optional) Select the **Exclusive Flag** check box to assign resources to this group with a particular member role and usage that is not assigned to any other exclusive group with the same member role and usage, in the same time frame.
6. In the Members tab, select a resource category and member number from the LOV in the Category and Number fields.

    The application populates the Name field with the member's name and affiliated organization.
7. (Optional) Select a member name and click one of the available buttons.

    For a detailed description of the group member button options, see the Resource Group Member Buttons table in the Guidelines section.
8. In the Roles tab, select a role type and role name from the LOV in the Role Type and Role fields.

    The roles relationship to its category is indicated by the role attributes check box selections.
9. In the Used In tab, select one or more usage descriptions from the LOV in the Usage field.
10. Choose **File > Save**.
11. Select either the Parent Group or Child Group tab depending on the relation type.
12. Select a group number from the LOV in the Group Number field of the selected tab.

    The application populates the Group Name field of the Parent Group or Child Group tab.
13. Select effective dates for the relation from the LOV in the Start and End Date fields. If the group contains group member, group roles, or parent/child group hierarchies whose end date exceeds the group's expiration date, you can optionally select **Yes** when prompted to update all active roles and parent/child group hierarchies with the group's end date. Selecting **No** reverts the end date for members, roles, or group hierarchies to their previous value and requires you to manually end date them when you end date the group.
14. Choose **File > Save** to save the group definition.

    The new group is accessible from the Group tab in the Resource window.

    **Note:** If the reporting hierarchy needs to be changed, it is better to delete a group member role rather than end dating it.

## Guidelines

The following table describes the Resource Group member buttons.

***Resource Group Member UI Components***

| Button or checkbox | Action |
|---|---|
| Member Details button | Opens the main Resource window and record of the member. |
| Move Member button | Opens the Move Member window, where you can assign the member to another group and can move member roles to another group. |
| Member Roles | Opens the Member Roles window, where you can define the member role type, name, and effective dates. |

The following table describes the Define Group tabs.

***Define Group Tab Descriptions***

| Tab | Description |
|---|---|
| Members | Use this tab to define the member category and member number of the group.You can also view a members details, assign the member to another group, and view a members role type in this tab. |
| Roles | Use this tab to define roles and role types for the group. |
| Usages | Use this tab to determine what CRM modules use the group. |
| Parent Group | Use this tab to define a group as a parent group. |
| Child Group | Use this tab to define a group as a child group. |

## Creating Groups in HTML

A group is a collection of resources or other groups that is based on the similar functionality or roles of its members.

**Example**

Vision Motor Corporation has several sales groups for different models. Linda, as a sales manager, leads the Vision Model A Sales Group. She has three sales representatives, John, Mark, and Carol, directly working for her. This Vision Model A Sales Group can also consist of another resource group, Key Accounts West Group, to handle sales in the west region for model A. A resource can belong to multiple groups. For example, as a sales manager for model A, Linda may belong to another sales group to provide model A information.

You can then create a new resource group, identify parent group name and group usage, as well as assign group member information. Perform the following steps in HTML to create a Group resource.

- If the row contains a **Remove** check box, you can select the check box and update the window to delete the record. If the row contains a **Remove** icon, click it to clear the row.
- You should not modify an HTML Calendar in the Resource Manager or add either Calendar Group usages (PUBLIC CALENDAR or HTML GROUP CALENDAR) to a new or existing Resource Manager Group.
- Only one parent record can be specified for a specific period of time. However, several child records can be active at once.
- Group role functionality is defined in the Forms version only. The group role is particularly useful when a group is assigned to a team.

## Prerequisites

The JTFRS: Group Update Access profile must be set to "None."

## Responsibility

Resource Self Service Administrator

## Steps

1. Navigate to the **Resources** tab, click the **Groups** subtab and then click the **Create** button.
2. Enter the required information in the Create Groups window including the name of the group and the date from which it becomes active.
3. Optionally enter the following information for the group:
   - **Description**. A description of the group.
   - **Parent Group**. If you are creating a child group, use the search tool to locate the parent group to which it belongs.
   - **Email**. The group's email address.
   - **Active To**. The date on which the group is no longer active.
4. Optionally configure group membership information:
   - **Add members**. To add group members, click the **Members** icon, click the **Add Members** button and use the search window to locate and select the desired resources.
   - **Assign roles to members**. Click the search icon next to each group member to locate and assign it the appropriate role.
   - **Dates active**. Use the Active To and Active From fields next to each member to optionally specify when it is active. The Active To field is required.
   - **Remove members**. Click the **Remove** icon next to each group member that you wish to remove.
5. Optionally specify the applications in which the group is used by clicking the **Used In** icon and entering the required information.

6. Optionally specify any child groups that belong to this group by clicking the **Child Group** icon and entering the required information. A child group cannot have overlapping date ranges with its parent group.

## Defining Dynamic Groups in Forms

You can create dynamic groups in the Forms-based and HTML versions of Resource Manager. Dynamic groups use SQL statements to derive group members based on specific requirements and cannot be hierarchical. Dynamic groups can have the same name as resource groups and can contain the same members. With dynamic groups, however, membership is derived exclusively from the SQL statement and members cannot be added in the same manner as they are to resource groups.

After entering group name and usage information, you can then enter SQL statements in the SQL Statement field. Click the Check Syntax button to check your code for syntax errors before saving your work. This action creates a dynamic group, but not an actual group which you would find in the list of values.

**Example**

Interaction Center's Telephony Manager uses Dynamic Groups for skill-based routing. In active mode, Oracle Telephony Manager routes calls according to defined rules. The active mode is the default mode of operation. In active mode, Oracle Telephony Manager uses skill-based routing, a dynamic call routing intelligence that delivers inbound calls to an agent who is appropriately skilled to meet the needs of the caller. When inbound calls arrive at the switch, the switch issues a routing request. Oracle Telephony Manager monitors the routing request, then applies skill-based routing rules, and identifies suitably skilled agents. Meanwhile, a representation of the call waits in the virtual queue within Oracle Telephony Manager. When a suitable agent becomes available, Oracle Telephony Manager responds to the routing request and instructs the switch to deliver the call to the agent's extension through the Universal Work Queue, where more specific pre-defined rules may apply in directing the call. In a dynamic group, the database automatically updates information about individual group members.

The following code example shows how a dynamic group is created and the type of information returned, which is the dynamic routing executes the workflow/procedure to get an agent list.

```
Select Resource_ID from

JTF_IH_INTERACTIONS

where Party_ID=:CUSTOMER_ID

order by Last_update_date desc
```

**Note:** Oracle Interaction Center's Telephony Manager commonly uses dynamic groups for skill-based routing.

Perform the following steps to define a dynamic group.

## Prerequisites

Resource Manager must be configured with Call Center usage.

## Responsibility

- CRM Administrator or
- CRM Resource Manager

## Navigation

Navigate to **the Navigator - CRM (or CRM Resource Manager) Administrator window.**

## Steps

1. Select **Resource Manager > Maintain Resources > Dynamic Groups**.
2. In the Dynamic Groups window, enter a group name in the Name field.
3. Select a group usage from the Usage field.
4. Select the effective dates for the group from the list of values (LOV) in the Start and End fields.
5. Enter a brief description of the group name and usage in the Description field.
6. Enter the SQL statement to define a group.
7. Click **Check Syntax** to check the code for syntax errors.
8. Choose **File > Save** to save the group.

   The new group name registers in the Group Name field in Resource Manager.

## Defining Dynamic Groups in HTML

You can create dynamic groups in the Forms-based and HTML versions of Resource Manager. Dynamic groups use SQL statements to derive group members based on specific requirements and cannot be hierarchical. Dynamic groups can have the same name as resource groups and can contain the same members. With dynamic groups, however, membership is derived exclusively from the SQL statement and members cannot be added in the same manner as they are to resource groups.

> **Note:** This feature is not exposed for the Resource Manager and Resource Self Service Administrator responsibilities.

## Steps for Defining Dynamic Groups in HTML

1. In the Dynamic Groups window, click **Create**.
2. Enter required information such as Name, Used In, and Active Dates. and click **Apply**.

## Steps for Modifying Dynamic Groups in HTML

1. Select Dynamic Groups from the Quick Find menu, enter the name of the dynamic group you wish to locate and click **Go**.
2. Select the dynamic group you wish to modify from list of search results.

Modify the resource information as required and click **Update**.

## Viewing Group Hierarchy in Forms

You can use the group hierarchy feature in Forms to view the reporting structure for a resource as well as the placement of a group within a group hierarchy. The first feature enables you to view resources that are direct reports, or those that report to a specific individual, however it does not identify a resource's manager or subordinates. You can restrict your view by resource category. The second feature enables you to obtain more detailed information about a group including its members, roles, usages, as well as hierachical information such as its parent and child groups.

## Prerequisites

None

## Responsibility

- CRM Administrator or
- CRM Resource Manager

## Navigation

In the navigator, select **Resource Manager > Maintain Resources > Group Hierarchy**

## Viewing Reporting Structure Steps

1. In the Group Hierarchy window, select a resource from the list of values (LOV) in the Resource Name field and click **View** to view the groups of a particular resource member.
2. Select a resource category from the Category LOV and click **View** to view the groups and members of a resource category.
3. Select **All** from the Category LOV and click **View** if you want to view all the resource groups and members in the database.

## Viewing Group Hierarchy Steps

1. In the Group Hierarchy window, select a resource from the list of values (LOV) in the Resource Name field and click **View** to view the groups of a particular resource member.
2. In the Groups area, click the hyperlinked name of the group whose hierarchy you wish to view.
3. Click the following tabs for specific group hierarchy information:
   - Members
   - Roles
   - Usages
   - Parent Groups
   - Child Groups

## Viewing Reporting Structure Guidelines

Selecting **Reports Directly** from the LOV in the View By field searches the database for members that report directly to a specific resource.

## Viewing Role Details

The Role Details window provides information on a selected role such as the code, name, type, description, and the selected attributes.

Attributes aid in grouping different roles together when defining a resource reporting hierarchy. This hierarchy is used in sales product families, such as Sales Online and Telesales, to control the data access privilege (customer, sales lead, and sales opportunity) as well as sales forecast rollup and incentive compensation plan. It is also used for workflow notifications and escalations. You can have more than one attribute such as Admin and Manager as each has different functions. However, you would not select Lead and Manager, for example, because Lead is a subset of Manager. Perform the following steps to view a role's details.

## Prerequisites

A role must exist before it can be viewed.

## Responsibility

Resource Self Service Administrator

## Steps

1. Navigate to the **Setup** tab and then click the **Roles** subtab.
2. Narrow your search criteria by entering values in either the Role Code, Role Name, or Role Type fields. You can search all fields, or just one. You can also use wildcards to aid your search.
3. Click **Search** and then click the hyperlink of your preferred role.

## Assigning Roles to Resources

Perform the following steps, in HTML, to attach a Role to a resource.

## Prerequisites

Make sure that a Role Type exists with which you can associate the new Role.

## Responsibility

Resource Self Service Administrator

## Steps

1. Navigate to the **Resources** tab and click the appropriate subtab depending on the resource to which you wish to assign roles. Resource categories include:
   - Employees
   - Parties
   - Partners
   - Supplier Contacts
2. Use the Simple Search page to locate the resource to which you want to add roles. On the search results page, click the **Update** icon next to the resource.
3. Use the Active Roles section to select the role types, roles, and active dates for each and then click the **Update** button.

## Assigning Resources to Groups

Perform the following to assign a resource to a group.

## Responsibility

Resource Self Service Administrator

## Steps

1. Navigate to the **Resources** tab and click the **Groups** subtab.
2. Use the Simple Search page to locate the group to which you want to add resources and then click the **Update** icon next to the resource in the search results page.
3. Click the **Members** icon and then click the **Add Members** button.
4. Search for and select the members you wish to add to the group and then click the **Apply** button.

## Defining Teams in Forms

You can create a team in the Forms-based and HTML version of Resource Manager. For example, you can specify exclusive flag and descriptive flexfield information in the HTML version of Resource Manager but cannot do so in Forms. Perform the following steps to define a team in Forms.

## Prerequisites

You must define a resource group.

## Responsibility

- CRM Administrator or
- CRM Resource Manager

## Navigation

Navigate to **the Navigator - CRM (or CRM Resource Manager) Administrator window.**

## Steps

1. Select **Resource Manager > Maintain Resources > Teams.**
2. (Optional) Use the following procedure to find an existing resource team.
    1. On the application tool bar, click **View > Find**.
    2. In the Find Team window, select a team name from the list of values (LOV) in the Name field and click **Find**.

        The application populates the Results region with the team name search results.
    3. Select a team name in the Results table and click **OK**.

        The application populates the Define Teams window with the group information.
3. Enter a team name in the Name field.
4. (Optional) Select the **Exclusive Flag** check box to assign resources to this team with a particular member role and team usage that is not assigned to any other exclusive team with the same role and usage, in the same time frame.
5. Enter a brief description of the team in the Description field.
6. Enter the effective dates for the team in the Start and End fields. If the team contains team member, team roles whose end date exceeds the team's expiration date, you can optionally select **Yes** when prompted to update all active members and roles with the team's end date. Selecting **No** reverts the end date for members, or roles to their previous value and requires you to manually end date them when you end date the team.
7. In the Members tab, select a category and member from the LOV in Category, and Number fields. For a detailed description of the group member button options, see the Resource Group Member Buttons table in the Guidelines section.

    The application populates the Name field with the member's name.
8. (Optional) Click **Member Roles** to assign team member roles to a team.
9. (Optional) Select a member name and click **Member Details** to view specific member information.
10. In the Roles tab, select from the LOV in the Role Type and Role fields.

    The roles relationship to its category is indicated by the role attributes check box selections.
11. In the Usages tab, select from the LOV in the Name field.
12. Choose **File > Save** to save the team definition.

    The new team is accessible from the Team tab in the Resource window.

## Guidelines

The following table gives a description of the tabs located in the Define Team window.

***Define Team Tab Descriptions***

| Tab | Description |
|---|---|
| Members | Use this tab to define members of a team. |
| Roles | Use this tab to define the team roles and role types. |
| Usages | Use this tab to determine what CRM modules use the team. |

## Defining Teams in HTML

You can use the HTML version of Resource Manager to create and modify resource teams. You can additionally view their usage and membership details. However, creating teams in the HTLM version of Resource Manager is not as extensive as the Forms-based version. For example, you cannot specify exclusive flag or descriptive flexfield information in the HTML version of Resource Manager. Although you can provide role information for team members in the HTML version of Resource Manager, you cannot do so for teams themselves.

## Responsibility

Resource Self Service Administrator

## Steps for Creating Teams in HTML

1. Navigate to the **Resources** tab, click the **Teams** subtab and , click the **Create** button.
2. Enter required information such as Name and the date from which the team becomes active. You can optionally enter additional information such as the date at which the team is no longer active, its email address and description.
3. Optionally specify resources that belong to the team by expanding the **Members** node and entering the required information.
4. Optionally specify groups that belong to the team by expanding the **Member Groups** node and entering the required information.
5. Optionally specify the applications in which the team is used by expanding the **Used In** node and entering the required information.

## Steps for Modifying Teams in HTML

1. Navigate to the **Resources** tab, click the **Teams** subtab and use the quick find menu to search for team you wish to modify.
2. Click the **Update** icon next to the team you wish to modify, enter the required information, and click the **Update** button.

# Configuring Group and Team Member Notifications

Resource Manager enables Workflow notifications to be sent to group and team members integrating groups, teams, and their members with workflow roles. The Synchronize Workflow Roles concurrent program must be run on a periodic basis to ensure that the group-to-membership and team-to-membership relationship information stored in Resource Manger is in sync with the data stored in the corresponding Workflow role tables.

## Group Example

The integration of resources, groups, and group members with Workflow roles can be demonstrated by creating a sample group with four members. When the sample group and its members are created in Resource Manager, the Resource Manager APIs call wrapper APIs that subsequently populates the corresponding Workflow tables with the required information.

# Step 1: Creating a Group

Begin by creating a sample group called My Group. Information for this group is stored in the JTF_RS_GROUPS_VL table in Resource Manager. Assume that creating this group generates a group ID number 10011.

***Group Information***

| Group ID | Group Name |
|---|---|
| 10011 | My Group |

When you create a group with the preceding information, the wrapper APIs create new records in the Workflow WF_LOCAL_ROLES and WF_LOCAL_USER_ROLES tables. These records contain the original group information and additional data required by Workflow.

***Group Information Stored in WF_LOCAL_ROLES table***

| Role Name | Orig System | Orig System |
|---|---|---|
| JRES_GRP:10011 | JRES_GRP | 10011 |

***Group Information Stored in the WF_LOCAL_USER_ROLES table***

| User Name | User Orig System | User Orig System ID | Role Name | Role Orig System | Role Orig System ID |
|---|---|---|---|---|---|
| JRES_GRP: 10011 | JRES_GRP | 10011 | JRES_GRP: 10011 | JRES_GRP | 10011 |

## Step 2: Defining Resources to Add to the Group

Next, you must define the four resources that you will subsequently add to the group as group members. Information for these resources will be stored differently in the Workflow tables depending on their category and whether or not their user id is null.

***Resources To Be Added to My Group***

| Resource ID | Resource Name | Category | User ID |
|---|---|---|---|
| 10001 | johnson | employee | 101 |
| 10002 | jones | employee | null |
| 10003 | lewis | other | null |
| 10004 | smith | party | null |

**Resource Johnson**. To define the resource "Johnson" as an employee first create a new record in HRMS using the Define Employee screen. Then create an FND_USER employee using the Define User screen whose user ID is 101 and user name is "johnson". Import this employee in to Resource Manager using the Import Resource form. Resource Manager will not create a corresponding record for this employee in the Workflow tables since the WF_USERS table will already contain a record corresponding to the one in FND_USER. The FND_USER information will be stored in the following Workflow tables:

***Resource Johnson Information Stored in WF_LOCAL_ROLES table***

| Role Name | Orig System | Orig System ID |
|---|---|---|
| johnson | FND_USER | 101 |

***Resource Johnson Information Stored in the WF_LOCAL_USER_ROLES table***

| User Name | User Orig System | User Orig System ID | Role Name | Role Orig System | Role Orig System ID |
|---|---|---|---|---|---|
| johnson | FND_USER | 101 | johnson | FND_USER | 101 |

**Resource Jones**. To define the resource "Jones" as an employee, first create a new record in HRMS using the Define Employee screen, then import it into Resource Manager using Import Resource form. Information for the resource "jones" will be stored in the Workflow tables as follows since the user ID is null.

***Resource Jones Information Stored in WF_LOCAL_ROLES table***

| Role Name | Orig System | Orig System ID |
|---|---|---|
| JRES_IND:10002 | JRES_IND | 10002 |

***Resource Jones Information Stored in the WF_LOCAL_USER_ROLES table***

| User Name | User Orig System | User Orig System ID | Role Name | Role Orig System | Role Orig System ID |
|---|---|---|---|---|---|
| JRES_IND: 10002 | JRES_IND | 10002 | JRES_IND: 10002 | JRES_IND | 10002 |

**Resource Lewis**. To define a resource "Lewis" as a resource of type Other, create a new resource in Resource Manager using the Define Resource form. Information for the resource "lewis" will be stored in the Workflow tables as follows since the resource is of type Other.

***Resource Lewis Information Stored in WF_LOCAL_ROLES table***

| Role Name | Orig System | Orig System ID |
|---|---|---|
| JRES_IND:10003 | JRES_IND | 10003 |

***Resource Lewis Information Stored in the WF_LOCAL_USER_ROLES table***

| User Name | User Orig System | User Orig System ID | Role Name | Role Orig System | Role Orig System ID |
|---|---|---|---|---|---|
| JRES_IND: 10003 | JRES_IND | 10003 | JRES_IND: 10003 | JRES_IND | 10003 |

**Resource Smith**. To define a resource "Smith" as a party, first create a new record in TCA and then import in into Resource Manager using the Import Resource form. Information for the resource "smith" will be stored in the Workflow tables as follows since the user ID is null.

***Resource Smith Information Stored in WF_LOCAL_ROLES table***

| Role Name | Orig System | Orig System ID |
|---|---|---|
| JRES_IND:10004 | JRES_IND | 10004 |

***Resource Smith Information Stored in the WF_LOCAL_USER_ROLES table***

| User Name | User Orig System | User Orig System ID | Role Name | Role Orig System | Role Orig System ID |
|---|---|---|---|---|---|
| JRES_IND: 10004 | JRES_IND | 10004 | JRES_IND: 10004 | JRES_IND | 10004 |

## Step 3: Adding Resources to the Group

After creating the required resources, you must add them to My Group. To accomplish this, query up "My Group" in the Define Groups form and add all the above members in the member region. Information for the group members will be stored in the Workflow tables as follows since the user id is null for this resource:

***Group Member Information Stored in the WF_LOCAL_USER_ROLES table***

| User Name | User Orig System | User Orig System ID | Role Name | Role Orig System | Role Orig System ID |
|---|---|---|---|---|---|
| JOHNSON | FND_USER | 101 | JRES_GRP: 10011 | JRES_GRP | 10011 |
| JRES_IND: 10002 | JRES_IND | 10002 | JRES_GRP: 10011 | JRES_GRP | 10011 |
| JRES_IND: 10003 | JRES_IND | 10003 | JRES_GRP: 10011 | JRES_GRP | 10011 |
| JRES_IND: 10004 | JRES_IND | 10004 | JRES_GRP: 10011 | JRES_GRP | 10011 |

### Team Example

The integration of resources, teams, and team members with Workflow roles can be demonstrated by a sample team with three individual members and one group member. When the sample team and its members are created in Resource Manager, the Resource Manager APIs call wrapper APIs that subsequently populates the corresponding Workflow tables with the required information.

## Step 1: Creating a Team

Begin by creating a sample team called My Team. Information for this team is stored in the JTF_RS_TEAMS_VL table in Resource Manager. Assume that creating this team generates a team ID number 10011.

***Team Information***

| Team ID | Team Name |
|---|---|
| 10011 | My Team |

*Team Information Stored in WF_LOCAL_ROLES table*

| Role Name | Orig System | Orig System |
|---|---|---|
| JRES_TEAM:10011 | JRES_TEAM | 10011 |

*Team Information Stored in the WF_LOCAL_USER_ROLES table*

| User Name | User Orig System | User Orig System ID | Role Name | Role Orig System | Role Orig System ID |
|---|---|---|---|---|---|
| JRES_TEAM: 10011 | JRES_TEAM | 10011 | JRES_TEAM: 10011 | JRES_TEAM | 10011 |

## Step 2: Defining Resources and a Group to Add to the Team

Next, you must define the three resources and one group that you will subsequently add to the team as team members. Information for the resources and group will be stored differently in the Workflow tables depending on their category and whether or not their user id is null.

*Resources To Be Added to My Team*

| Resource ID | Resource Name | Category | User ID |
|---|---|---|---|
| 10001 | johnson | employee | 101 |
| 10002 | jones | employee | null |
| 10003 | lewis | other | null |

**Resource Johnson**. To define the resource "Johnson" as an employee first create a new record in HRMS using the Define Employee screen. Then create an FND_USER employee using the Define User screen whose user ID is 101 and user name is "johnson". Import this employee in to Resource Manager using the Import Resource form. Resource Manager will not create a corresponding record for this employee in the Workflow tables since the WF_USERS table will already contain a record corresponding to the one in FND_USER. The FND_USER information will be stored in the following Workflow tables:

*Resource Johnson Information Stored in WF_LOCAL_ROLES table*

| Role Name | Orig System | Orig System ID |
|---|---|---|
| johnson | FND_USER | 101 |

*Resource Johnson Information Stored in the WF_LOCAL_USER_ROLES*

| User Name | User Orig System | User Orig System ID | Role Name | Role Orig System | Role Orig System ID |
|---|---|---|---|---|---|
| johnson | FND_USER | 101 | johnson | FND_USER | 101 |

**Resource Jones**. To define the resource "Jones" as an employee, first create a new record in HRMS using the Define Employee screen, then import it into Resource Manager using Import Resource form. Information for the resource "jones" will be stored in the Workflow tables as follows since the user ID is null.

*Resource Jones Information Stored in WF_LOCAL_ROLES table*

| Role Name | Orig System | Orig System ID |
|---|---|---|
| JRES_IND:10002 | JRES_IND | 10002 |

*Resource Jones Information Stored in the WF_LOCAL_USER_ROLES table*

| User Name | User Orig System | User Orig System ID | Role Name | Role Orig System | Role Orig System ID |
|---|---|---|---|---|---|
| JRES_IND: 10002 | JRES_IND | 10002 | JRES_IND: 10002 | JRES_IND | 10002 |

**Resource Lewis**. To define a resource "Lewis" as a resource of type Other, create a new resource in Resource Manager using the Define Resource form. Information for the resource "lewis" will be stored in the Workflow tables as follows since the resource is of type Other.

*Resource Lewis Information Stored in WF_LOCAL_ROLES table*

| Role Name | Orig System | Orig System ID |
|---|---|---|
| JRES_IND:10003 | JRES_IND | 10003 |

*Resource Lewis Information Stored in the WF_LOCAL_USER_ROLES table*

| User Name | User Orig System | User Orig System ID | Role Name | Role Orig System | Role Orig System ID |
|---|---|---|---|---|---|
| JRES_IND: 10003 | JRES_IND | 10003 | JRES_IND: 10003 | JRES_IND | 10003 |

**Resource Smith**. To define a resource "Smith" as a party, first create a new record in TCA and then import in into Resource Manager using the Import Resource form. Information for the resource "smith" will be stored in the Workflow tables as follows since the user ID is null.

*Resource Smith Information Stored in WF_LOCAL_ROLES Table*

| Role Names | Orig System | Orig System ID |
|---|---|---|
| JRES_IND:10004 | JRES_IND | 10004 |

**Group My Group**. Next. create a sample group called "My Group". Information for this group is stored in the JTF_RS_GROUPS_VL table in Resource Manager. Assume that creating this group generates a group ID number 10012.

*Group to be added to My Team*

| Group ID | Group Name |
|---|---|
| 10012 | My Group |

When you create a group with the preceding information, the wrapper APIs create new records in the Workflow WF_LOCAL_ROLES and WF_LOCAL_USER_ROLES tables. These records contain the original group information and additional data required by Workflow.

*Group Information Stored in WF_LOCAL_ROLES table*

| Role Name | Orig System | Orig System |
|---|---|---|
| JRES_GRP:10012 | JRES_GRP | 10012 |

*Group Information Stored in the WF_LOCAL_USER_ROLES table*

| User Name | User Orig System | User Orig System ID | Role Name | Role Orig System | Role Orig System ID |
|---|---|---|---|---|---|
| JRES_GRP: 10012 | JRES_GRP | 10012 | JRES_GRP: 10012 | JRES_GRP | 10012 |

## Step 3: Adding the Group and Resources to the Team

After creating the required group and resources, you must add them to My Team. To accomplish this, query up "My Team" in the Define Teams form and add all the above members in the member region. Information for the team members will be stored in the Workflow tables as follows since the user id is null for this resource:

***Group Member Information Stored in the WF_LOCAL_USER_ROLES table***

| User Name | User Orig System | User Orig System ID | Role Name | Role Orig System | Role Orig System ID |
|---|---|---|---|---|---|
| JOHNSON | FND_USER | 101 | JRES_TEAM: 1001 | JRES_TEAM | 10011 |
| JRES_IND: 10002 | JRES_IND | 10002 | JRES_TEAM: 1001 | JRES_TEAM | 10011 |
| JRES_IND: 10003 | JRES_IND | 10003 | JRES_TEAM: 1001 | JRES_TEAM | 10011 |
| JRES_GRP: 10012 | JRES_GRP | 10012 | JRES_TEAM: 1001 | JRES_TEAM | 10011 |

## Prerequisites

None

## Responsibility

CRM Administrator or

System Administrator

## Navigation

Navigate to the Navigator - CRM Administrator window, or

Navigate to the Navigator - System Administrator window

## Steps

To run the following concurrent program, follow the steps listed in Appendix B: Concurrent Programs, page B- 1 . Choose the appropriate parameter depending on whether you are synchronizing groups and group members, teams and team members or both with Workflow roles.

***Synchronize Workflow Roles Concurrent Programs***

| Name | Description | Frequency | Notes |
|---|---|---|---|
| Synchronize Workflow Roles | This program synchronizes all attributes and records in the workflow wf_local_* tables with the mismatching records in Resource manager.<br><br>The **Synchronize Workflow For** parameter enables you specify which of the following Resource Manager entities you wish to synchronize with Workflow roles:<br><br>• **Groups and Group Members** synchronizes Resource Manager groups and group members with the appropriate Workflow roles tables.<br><br>• **Teams and Team Members** synchronizes Resource Manager teams and team members with the appropriate Workflow roles tables.<br><br>• **All** synchronizes Resource Manager groups, group members, teams, and team members with the appropriate Workflow roles tables. | As needed | This program should be run as follows:<br><br>• The first time group or team notification functionality is implemented in Resource Manager.<br><br>• When groups, teams, or resources that were not active at the time of their creation have become activated.<br><br>• If online transactions encounter a Workflow error.<br><br>• When the Synchronize Employees concurrent program is run.<br><br>• When the Synchronize Parties and Partners concurrent program is run.<br><br>• When the Synchronize Supplier Contact concurrent program is run. |

## Moving a Group of Salespersons from One Compensation Analyst to Another

The Move Salespersons window enables you to move groups of salespersons from one analyst to another. Typically, this feature is used when one analyst replaces another, and the salespeople assigned to the previous analyst must be reassigned to the new one. The

Move Salesperons window provides a feature for accomplishing this task in bulk instead of querying and modifying a large number of resources on an individual basis.

## Prerequisites

None

## Responsibility

CRM Administrator

CRM Resource Manager

## Navigation

In the navigator, select Maintain Rersources>Move Salespersons

## Steps

1. Select the name of the analyst from which you want to move the salespersons in the Analyst Name field.
2. Select the checkbox adjacent to the reources you wish to move.
3. Select the analyst to which you wish to move the salespersons in the Move to Analyst field and click **Move**.

## Running a Group Audit Report

Use Resource Manager to run audit reports detailing changes to resources and resource groups created within a defined date. For example, any changes made to new members of a group are defined, but role change information is not. This provides an audit trail of the actions taken for specific groups and resources. Perform the following steps to run an Audit Report.

> **Note:** Only the movement of a resource from a given group to another group is tracked. Resources changing roles within the same group are not reported in the Audit Report.

## Prerequisites

None

## Responsibility

CRM Administrator

## Navigation

Navigate to the Navigator - CRM Administrator window.

## Steps

1. Select **Resource Manager > Others > Requests > Run.**
2. Select **Single Request** and click **OK**.
3. Use the Name list of values (LOV) to select a report.
4. In the Reports window, select Group Audit Report from the list of reports and click **OK**.
5. Enter parameters for the report.

   In order for an Audit Report to run successfully, it is necessary to define both Report Based On and Date Range/No. of Days for the report. The report runs based on the information you enter for the following criteria.

   - Report Based On
   - Group
   - Resource
   - Updated By
   - Date Range/No. of Days
   - Start Date
   - End Date
   - Number of Days for
6. (Optional) Change the time frame the report is suppose to run by clicking **Schedule**.
7. Select the time frame when you want the report to run:
   - As soon as possible
   - Once
   - Periodically
   - On specific days
8. Click **OK**.
9. (Optional) Click **Options** to determine who should be notified when the report is complete and where you want to print the output to.
10. Click **Submit**.
11. A dialog opens confirming your request was submitted.

## Viewing an Audit Report

You can monitor the status of an audit report to verify completion. Perform the following steps to view an Audit report.

## Prerequisites

A Group Audit Report must run successfully.

## Responsibility

CRM Administrator

## Navigation

Navigate to the Navigator - CRM Administrator window.

## Steps

1. Select **Requests > Run > View.**
2. In the Find Requests window, select the **All My Requests** option button and click **Find**.
3. In the Requests window, select a Group Audit Report to view.
4. Click **View Log** to display the results of the report.

   The report details opens in an HTML window along with a log file for the report.

# Running a Group Structure Report

Use Resource Manager to run a Group Structure report detailing any changes made to a specific Parent or Child relationship of a resource group. The report details a reliable audit trail of the actions taken for a specific group. Group name changes, or any resource changes within the same group, are not detailed in this report. Perform the following steps to run a Group Structure report.

## Prerequisites

None

## Responsibility

CRM Administrator

## Navigation

Navigate to the Navigator - CRM Administrator window.

## Steps

1. Select **Resource Manager > Others > Requests > Run.**
2. Select **Single Request** and click **OK**.
3. Use the Name list of values (LOV) to select a report.
4. In the Reports window, select Group Structure Report from the list of reports and click **OK**.
5. Select the group you want to run the report on from the list of values (LOV) and click **OK**.
6. (Optional) Change the time frame the report runs by clicking **Schedule**.

The Schedule window opens.

7. Select the time frame when you want the report to run:
   - As soon as possible
   - Once
   - Periodically
   - On specific days
8. Click **OK**.
9. (Optional) Click **Options** to determine who should be notified when the report is complete and where you want to print the output.
10. Click **Submit**.

## Viewing a Group Structure Report

You can monitor the status of an audit report to verify completion. Perform the following steps to view your Group Structure report.

## Prerequisites

You must first run a Group Structure Report successfully.

## Responsibility

CRM Administrator

## Navigation

Navigate to the Navigator - CRM Administrator window.

## Steps

1. Select **Requests > Run > View.**
2. Select the **All My Requests** option button.
3. Click **Find**.
4. In the Requests window, select the Group Structure Report.
5. Click **View Log** to display the results of the report.

   The report details opens in an HTML window along with a log file for the report.

## Running Resource Skills Report

This report displays the skills a resource has listed using the HTML-based Resource Manager. You can run a Skills Report either by resource or group. If you choose to run a Skills Report by resource, then any direct reports under the resource will be included in the report. If you choose to run a Skills Report by group, then the entire group's skill set will be displayed.

## Prerequisites

Your resources must have:

1. Skills listed using the HTML-based Resource Manager
2. Have a manager listed if you are running a report based on resource.

## Responsibility

CRM Administrator

## Navigation

Navigate to the CRM Administrator window.

## Steps

1. Select **Resource Manager > Others > Requests > Run.**
2. Select **Single Request** and click **OK**.
3. Use the Name list of values (LOV) to select the Resource Skills Report and click **OK**.
4. Use the LOV in the Report Type field to select either Resource or Group and click **OK**.
5. Depending on your choice, use the LOV in the corresponding Resource or Group field to find your selection.
6. (Optional) If you do not want the report to run as soon as possible, click **Schedule** to change the time frame when you want the report to run.
7. (Optional) Click **Options** to determine who should be notified when the report is complete and where you want to print the output.
8. Click **Submit**.

## Viewing Resource Skills Report

You can monitor the status of an audit report to see when it has been successfully completed. Perform the following steps to view your Resource Skills report.

## Prerequisites

You must first run the Resource Skills Report successfully.

## Responsibility

CRM Administrator

## Navigation

Navigate to the CRM Administrator window.

## Steps

1. Select **Requests > Run > View.**
2. Select the **All My Requests** option button.
3. Click **Find**.
4. Select your Group Structure Report and click **View Log**.

# 6

# Troubleshooting Resource Manager

This chapter covers the following topics:

- Common Implementation Errors
- Error Messages
- Frequently Asked Questions (FAQs)

## Common Implementation Errors

**Note:** The Oracle CRM Diagnostic Tool is useful in pinpointing problems with the setup and configuration of the many CRM modules. It is available through the CRM System Administration Console.

This section contains information on some of the common implementation errors associated with implementing Resource Manager.

### Unable to Import a Resource

**Action**: Perform the following procedures:

1. Run the concurrent program "Resource Manager Diagnostics" available under CRM Administrator Responsibility. If it is not available, then perform the following:
2. Log on using the System Administrator responsibility.
3. In the "Executable" option, under "Concurrent Program", query for "Resource Manager Diagnostics."
4. Enable it by checking the checkbox.
5. After the concurrent program completes, view the log file generated by pressing the "View Log" button. See if any errors are reported.
6. Correct any errors as reported in the concurrent program log. Then, import again.

### Unable to Import a Resource From Human Resources

**Cause**: Form JTFRSSEC does not compile after applying the latest patch.

**Action**: Compile the Form based on following steps.

```
cd $AU_TOP/forms/us
f60gen module=JTFRSSEC.fmb userid=apps/apps
mv JTFRSSEC.fmx $JTF_TOP/forms/US
cd $AU_TOP/resource/US
f60gen module=JTFRSSEC.pll userid=apps/apps module_type=library
chmod 755 JTFRSSEC.plx
```

## Unable to Save a Resource

**Action**: Performing the following checks:

1. In SQL*Plus, connecting as apps/apps, enter the following:

   ```
   SQL> desc xmlgen
   ```

   If this returns the statement that object xmlgen does not exist, then ensure that "apps" has execute privilege on "xmlgen."

2. In SQL*Plus, connecting as apps/apps, enter the following:

   ```
   SQL> select status from all_objects where object_name = 'JTF_USR_
   HKS';
   ```

   If this returns a status of 'INVALID,' then alter package JTF_USR_HKS and compile the body. Repeat this check until the status becomes 'VALID.'

3. In SQL*Plus, connecting as apps/apps, enter the following:

   ```
   SQL> select status from all_objects where object_name = 'JTF_RESO
   URCE_UTL';
   ```

   If this returns a status of 'INVALID,' then create this view in the apps schema and compile the JTF_RESOURCE_UTL package body.

   Create or replace view IEM_EMAIL_ACCOUNTS_V as:

   ```
   SQL> select b.server_group_id interaction_center_id,
               a.account_name config_name,
               to_char(a.email_account_id) value_type
        from iem.iem_email_accounts a, iem.iem_email_icntr_maps b
        where a.email_account_id=b.email_account_id;
   ```

## Unable to See Resource Name

**Cause**: This problem can occur in the CRM or Common Application Components modules, the LOVs, and in other similar items.

**Action**: In SQL*Plus, connecting as apps/apps, enter the following:

```
SQL> select count(*) from jtf_rs_resource_extns where source_name
 is null;
```

If count(*) is non-zero then run the concurrent program "Synchronize Employees" using the CRM Administrator responsibility.

## Cannot Invoke Salesperson Form from AR Menu

**Cause**: This problem occurs when invoking the Salesperson form from the Accounts Receivables menu. It occurs under the following circumstances:

(Navigation path: **Setup > Transactions > Salesperson**)

- Double click from the navigator menu and a small blue window with a red bar(row) is received with no legible fields or label markings.
- Press the Tab or Enter key and a calendar window appears also with no legible fields/label markings.

In either case, the user is unable to close the form or application unless the File > Close or Exit toolbar menu option is used.

**Action**: apply patch 1799597. Read the README mentioned in the patch.

## Accounting Flexfield LOV Display Parent Values

**Action**: Perform the following steps to define the accounting flexfield:

1. Navigate to the General Ledger module: **GL > Setup > Financials > Flexfields > Key > Values**.

   In Find form, check for find values by Key flexfield. In the Title Field, choose from the list of values "accounting flexfield" and click Find. There is an extensive list of values. To the right, there is a box called "Effective" title. Check for it's other title "Hierarchy, Qualifiers." A parent check box is checked for some of the values and not checked for others.

2. You can add values and check them as parent but this is not necessary, you can simply write down a few values that are checked as parents. (For example, the first value 1000- Total asset is checked as one.)

3. Navigate to Accounts Receivables: **Setup > Transactions > Autoinvoice > Salespersons**.

   Receivables uses the general ledger accounts that you enter there in combination with your AutoAccounting rules to determine the default revenue, freight, and receivable accounts for your invoices.

4. Create a new salesperson. Enter a name and a sales credit type from the list. In the next three fields enter the Accounting Flexfield for your Revenue, Freight, and Receivables Accounts.

   If you open the list and see account aliases, click **OK**. A form in which you can enter a department value and an account value appears.

   In the account values list, verify the parent values observed in step 2. (For example, the first value might be 1000- Total asset.)

5. You can choose this value and save the transaction.

It must be emphasized again that the parent values should not appear in the list and you should not be able to select them. These are only summary accounts and not accounts you can use for regular processes, which means you cannot enter amounts to accounts which are checked as parents.

## List of Values (LOV) Are Not Populated in the Hold Reasons Field

**Cause**: Incentive Compensation uses Resource Manager to set up sales representatives and sales compensation group hierarchies. If the Hold Reason field is not populated in the Compensation tab, then create a lookup type.

**Action**: Perform the following steps:

1. Navigate to the Application Object Library Lookups window.
2. Enter in the type field: "JTF_RS_HOLD_REASON_TYPE"
3. In the User Name field, enter the same value again.
4. In the Application field, select **CRM Foundation** from the LOV.
5. In the Access Level radio group, select **User**.
6. In the detail block, enter suitable values for Code, Meaning, and Description fields.

   Note that what you enter in the Meaning field is what the LOV for Hold Reason field in the Define Resource form will display.

## List of Values (LOV) Are Not Populated in the Support Site Fields

**Cause**: Support site information, which displays in Assignment Manager, is actually attached to a resource in Resource Manager. You can attach the information from an LOV in either the HTML or Forms-based module. The List of values are populated from several sources including Teleservice with the Customer Support responsibility.

**Action**: Add support sites based on previously defined addresses. The city of the address will populate the LOVs. Perform the following:

1. Navigate to the Navigator > Customer Support window.
2. Select **Customer Management > Contact Center**.
3. In the Caller Type field, select either Organization or Person.
4. In the Organization field, select your organization.
5. Select the Address tab.
6. In the Status column, select **Active**.
7. In the Address1 column, select the appropriate address from the LOV.

   The City field automatically populates.
8. In the Usage field, select **Support Site**.
9. Select Active in the Usage Status field.
10. Save your work.

## JTF-Post Vertical User Hook

**Cause**: This error occurs when attaching a role type of Sales Compensation to a resource.

**Action**: First determine whether or not the resource has been saved. If the result is:

- No, then save the resource, then try again.
- Yes, then assign a different role type such as Service, or, Sales and Telesales to the resource, and confirm whether or not you are able to save. If you are able to assign a

role other than Sales Compensation to a "saved" resource, but, are unable to assign the Sales Compensation role, then log a bug against Oracle Sales Compensation application.

## Same Resource Showing Twice in Define Resource Form

**Cause**: In this case, both resources have the same transaction number, but one record displays the salesperson number, and the other does not.

To verify this problem, perform the following steps:

1. In the Define Resource form, note the resource number for both the records.
2. If the resource number is the same (for example, 10015), then run the following query:

```
SQL> select res.resource_id,sr.salesrep_id,sr.org_id
     from jtf_rs_resource_extns res,jtf_rs_salesreps sr
     where res.resource_id = sr.resource_id
     and res.resource_number = 10015;
```

3. If the output of this query results in two or more records with the **same** resource_id, and the **same** org_id, but, different salesrep_id then it is bad data. For example, the sample output following would be considered bad data;

```
RESOURCE_ID       SALESREP_ID          ORG_ID

----------------- -----------------    ----------

100000016         100000019            2

100000016         100000054            2
```

This type of data can never be created using the Define Resource form, or any of the Resource Manager public APIs.

**Action**: To clean up the data, perform the following steps:

1. There are two records, one, for example, with a salesrep number non NULL value and other with a NULL value. Identify which is the one you want to remove. To Identify the IDs, run the following statement:

```
SQL> select res.resource_id,sr.salesrep_id,sr.org_id,

         sr.salesrep_number

     from jtf_rs_resource_extns res,jtf_rs_salesreps sr

     where res.resource_id = sr.resource_id
```

```
and res.resource_number = 10015;
```

This will return two records. Note down the resource_id, salesrep_id, and the org_id of the record which you want to delete.

2. Run the following delete statement. Assuming, you decided to delete record with salesrep_id 100000019, org_id 2, it would look like:

```
SQL> delete from jtf_rs_salesreps

where salesrep_id = 100000019

and org_id = 2

and resource_id = 100000016;
```

This should cleanup all bad data.

**Warning:** You are actually deleting physical records from the database. This has the RISK of leaving behind dangling foreign keys in other tables in other applications. Confirm the check for FOREIGN KEYS before deleting records as suggested above. Otherwise, you may end up corrupting your database.

**Contact Oracle Support in case of any doubt.**

## JTF_RS_TERR_EDDT_GRTR_SRP_EDDT

**Cause**: This is a data problem. This error occurs when the territory Start and End dates are out of range with salesperson dates.

**Action**: Perform the following steps:

1. Find out the maximum Start_date_active value and minimum End_date_active value for a salesrep_id across all org_id from JTF_RS_SALESREPS table. (Be aware that the end_date_active value can be NULL.)
2. For the salesrep_id in step 1, find the Start_date_active and End_Date_active from RA_SALESREP_TERRITORIES table. (Be aware that the Start_date_active and end_date_active values can be NULL.) You may get multiple records.
3. For every record in step 2, verify whether or not the dates fall within the dates in Step 1.
   - If yes, then no further action required.
   - If no, then:
   - Update the Start_date_active, End Date_active in RA_SALESREP_TERRITORIES Table with the Dates from Step1.
   - Repeat Steps 1 through 4 for all the salesrep_id in JTF_RS_SALESREPS table.

## Invalid User Error

**Invalid User- Resource link, Contact Your System Administrator**

This problem has been observed in the Service Request form, however, it could occur in other places too. While creating or updating a Service Request in the "Owner" field, it is possible to pick a resource from the LOV, and get the "Invalid User - Resource link" error.

**Cause**: This problem occurs if the currently logged in user (as defined in FND_USER), is **not** mapped to a proper resource who you are trying to update the SR with.

**Action**: Ensure that the user ID of the resource that you select in the LOV matches with the one that the user is currently logged in as. This restriction is due to the fact that in trying to create interactions, there is a validation that the user must be a resource.

## Product Name Displays Improperly

When selecting a product, the product appears as "X" instead of displaying the product name.

**Cause**: When setting up Inventory, the item flexfield segment was not compiled.

**Action**: Compile the item flexfield segment by performing the following:

1. Log in to the Forms interface with System Administrator responsibility.
2. Select **Flexfield>Key>Segments**.
3. Run a query for Application "Oracle Inventory" and Flexfield Title "System Items" by performing the following:
    1. Select **View>Query by Example>Enter**.
    2. In the newly hilighted Application and Flexfield Title fields enter "Oracle Inventory" and System Items".
    3. Select **View>Query by Example>Run**.
4. In the Structures menu, select "SYSTEM_ITEMS" and click the **Compile** button.

## Performance Issue When Selecting the Resource Details Button

**Cause:** When selecting the Resource Details button, forms do not display for up to thirty minutes.

**Action:** A fix for this problem is available in a patch release. Details about this patch and its availability are found on the metalink Web site. As an interim solution, you can run the Synchronize Employees concurrent program and set the Get New Employees parameter to "Yes".

## Synchronize Employee Concurrent Program Does not End Date Resources

**Cause:** End date for terminated resources does not display properly when running the Synchronize Employees Concurrent program.

**Action:** A fix for this problem is available in a patch release. Details about this patch and its availability are found on the metalink Web site. When running the Synchronize Employees concurrent program, you must run the concurrent program when the employee is no longer active. For example, if the employee is today and inactive starting tomorrow, you must run the concurrent program tomorrow, to end date the resource in

Resource Manager. If the Employee is end dated in HR with a previous date, then run the concurrent program today, resource will be end dated with sysdate-1.

# Error Messages

This section contains information on some of the error messages associated with implementing Resource Manager.

## APP-FND-00668

**Routine FDFBKS found no row in FND_ID_FLEX_SEGMENT.**

**Cause**: This is a flexfield issue.

**Action**:

1. Define the Territory Flex field.
    1. Recompile.

## APP-FND-01934: ORA-01400

**Cannot insert NULL into ("CN"."CN_ROLE_QUOTA_CATES"."ROLE_MODEL_ID") in Package CN_ROLE_QUOTA_CATE_PVT**

**Cause**: This error can occur when trying to save a new role.

Procedure Create_Role_Quota_Cate

**Action**:

1. Verify whether or not CN_ROLE_QUOTA_CATE_PVT is valid in the database.
2. Select status, owner, object_type from dba_objects where object_name='CN_ROLE_QUOTA_CATE_PVT ';
3. If invalid, compile it and try again.
4. If valid then, make ROLE_MODEL_ID column null in the following tables:
    - CN_ROLE_QUOTA_CATES
    - CN_SRP_QUOTA_CATES_ALL
    - CN_SRP_ROLE_DTLS_ALL
5. Recompile and re-run.

    **Note:** If this error continues, refer to the OIC (Oracle Incentive Compensation) Implementation documentation for additional troubleshooting under the topic: Assign Resources to Roles and Groups.

## APP-PER-50022

**APP-PER-50022: Oracle HR could not retrieve a value for the User Type profile option.**

**Cause**: This error occurs when pressing the "View" Button in Define Resource Form.

**Action**: Verify that it is set properly for your responsibility. Ensure that the current resource is of type "Employee." Update the profile "HR: User Type" at the application level by selecting a valid value from the LOV. If you select "HR User", then verify that the user currently logged in has the "US HRMS Manager" responsibility.

## APP-PER-500022

**Cause**: This error can occur when **trying to access employee information:**

**APP-PER-500022 Oracle Human Resources could not retrieve a value for the user type profile option.**

**Action**: Ensure that the profile option HR: User Type is set correctly for your responsibility. This occurs when there is a shared installation of HR, and the value for profile option HR:User Type in corresponding responsibility level is not properly set.

Set up profile option HR: User Type to HR user in responsibility level. If the profile option cannot be updated in responsibility level, then update it in the responsibility level from application developer responsibility.

## HTTP 404

**Cause**: This error occurs while trying to log in to an HTML application. It is an environment issue. Perform the following steps to correct the problem.

**Action**:

1. Close Netscape.
2. Remove fat.db, netscape.hst, and cookies.txt.
3. Clear disk cache and memory cache.
4. Log in again.

## ORA-01422

**Cause**: This error can also occur when invoking the Accounts Receivables forms.

- **FRM-40735: PRE-FORM Trigger Raised Unhandled Exception ORA-01422**
- **ORA-01422: Exact fetch returns more than requested number of rows.**

**Action**: Perform the following procedures:

1. In SQL*Plus, connecting as apps/apps, enter the following:

```
SQL> set pages 999

SQL> set long 9999

SQL> select text from dba_views where view_name = 'RA_SALESREPS';
```

Check to see if the results of the FROM clause in the view definition list any of the following tables or views:

- RA_SALESREPS_ALL RA
- AS_SALESFORCE ASF
- RA_CUSTOMERS RACUS
- PER_PEOPLE_X HR
- AS_LOOKUPS ASL

If so, then log a bug against Accounts Receivable.

2. In SQL*Plus, connecting as apps/apps, enter the following:

```
SQL> select table_name

     from all_synonyms

     where synonym_name ='RA_SALESREPS_ALL' and owner = 'APPS';
```

- If the result of this query returns RA_SALESREPS_ALL, then Salesperson migration has not happened. If you do want the migration to happen, then apply the following patches:
- 1638958
- 1757827

  or else, log a bug against Accounts Receivable.

- If the result of this query returns JTF_RS_SALESREPS, then the salesperson migration has occurred. In this case, run the following in SQL*Plus connected as apps/apps:

  ```
  SQL> delete from jtf_rs_salesreps

       where salesrep_id=-3 and org_id is null;
  ```

  If the previous command deletes one record, then perform a COMMIT, otherwise, perform a ROLLBACK operation.

  **Warning:** You are actually deleting physical records from the database. This has the RISK of leaving behind dangling foreign keys in other tables in other applications. Confirm the check for FOREIGN KEYS before deleting records as suggested above. Otherwise, you may end up corrupting your database.

  **Warning:** Contact Oracle Support if you have any questions.

## ORA-01422

**ORA-01422: Exact fetch returns more than requested numbers of rows.**

**Cause**: This occurs while adding a group role to a resource in Define Resource Form, and indicates that an unexpected error was encountered in INSERT_REP_MANAGER.

**Action**: To resolve this, contact your system administrator.

**Alternate Cause:** This problem can occur when there is more than one snapshot view log on JTF_RS_REP_MANAGERS table.

**Alternate Action**: To confirm, run the following query in SQL*Plus, connected as apps/apps:

```
SQL> insert into rep_temp
       (denorm_mgr_id,
        resource_id,
        person_id, category,
        manager_person_id,
        group_id,
        hierarchy_type,
        created_by,
        creation_date,
        last_updated_by,
        last_update_date,
        last_update_login,
        reports_to_flag,
        start_date_active,
        end_date_active,
        par_role_relate_id,
        child_role_relate_id,
        object_version_number)
     values
```

```
       (-9, 1, 1, 'employee', null, 1, 'x', -1, sysdate, -1, sysd
ate,

        -1, 'y', sysdate, null, -1, -1, 1);
```

If the result is:

**ORA-01422: Exact fetch returns more than requested numbers of rows,**

then more than one snapshot log exists. There should be only one snapshot log on the table MLOG$_JTF_RS_REP_MANAGERS. Verify if there are more, and drop them. If after ensuring that there is only one snapshots of log MLOG$_JTF_RS_REP_MANAGERS, and the error still occurs, log a bug against Oracle Sales.

## ORA-20002

**Cause**: There are several issues that can affect migration of salesperson data. Errors can occur when accessing the following Accounts Receivables forms:

- ARXTWMAI

  Transaction Entry: FRM-40735 Pre-form trigger raised unhandled exception ORA-20002.

- ARXRWMAI

  Receipt Entry: FRM-40735 New form instance trigger raised unhandled exception ORA-20002.

- ARXCWMAI

  Account Detail: FRM-40735 WHEN-NEW-FORM-INSTANCE trigger raised unhandled exception ORA-20002.

**Action**: To diagnose and resolve, perform the following checks:

1. In SQL*Plus, connecting as apps/apps, enter the following:

   ```
   SQL> set pages 999

   SQL> set long 9999

   SQL> select text from dba_views where view_name = 'RA_SALESREPS';
   ```

   Check to see if the results of the FROM clause in the view definition list any of the following tables or views:

   - RA_SALESREPS_ALL RA
   - AS_SALESFORCE ASF
   - RA_CUSTOMERS RACUS
   - PER_PEOPLE_X HR

- AS_LOOKUPS ASL

  If so, then log a bug against Accounts Receivable.

2. In SQL*Plus, connecting as apps/apps, enter the following:

```
SQL>select table_name

   from all_synonyms

   where synonym_name ='RA_SALESREPS_ALL' and owner = 'APPS';
```

   If the result of this query is RA_SALESREPS_ALL, then the salesperson migration has **not** happened. If you do want the migration to happen, then you must apply the following patches:

   - 1638958
   - 1757827

     or else, log a bug against Accounts Receivable.

### ORA-4062

**ORA-4062: Signature of package "APPS.JTF_RS_RESOURCE_PVT" has been changed.**

**Cause:** This is an environment error in which the package body and spec are out of sync.

**Action:** Recompile all JTF forms and libraries. This process will not work if directories contain invalid characters.

Problem: Ran the API Jtf_Rs_Role_Relate_Pub.create_resource_role_relate and it stops with an error:

### ORA-20000

**The API JTF_RS_ROLE_RELATE_PUB.CREATE_RESOURCE_ROLE_RELATE, generates the following error message: ORA-20000 buffer overflow.**

**Cause:** This error is caused by the table space being full.

**Action:** A future release will contain more specific error message such as the following:

ORA 01653: Unable to extend table CN.CN_SRP_QUOTA RULES_ALL by 515 in tablespace CND

## Frequently Asked Questions (FAQs)

The following are frequently asked questions. Answers to these questions may help you in troubleshooting problems with the Resource Manager.

### Does JTF_RS_REP_MANAGERS Table Denormalize RESOURCE_ID?

**Answer:** Yes, in the PARENT_RESOURCE_ID column in this table.

## How Are Role Types Associated with the Applications?

Where do you define the role type? In the Meaning field for defining the Role Type? If yes, how is this controlled as the field doesn't contain an LOV and it is a free form entry. Also should the customer use one of the defined meanings for the application/Role Type association?

**Answer:** Navigation steps to define a Role Type:

With the CRM Administrator responsibility, select **Resource Manager > Setup > Role Types**.

The content in the "Meaning" field is what is displayed in all LOV for Role Type.

When you invoke the "Role Types" form, you see a numerous records. Many of them are shipped out-of-the-box as seeded values. Customer can add new Role Types, or, change the Meaning, Description, or Dates of the seeded ones. But, customers cannot delete seeded values. To determine which ones are seeded, and which ones are added by the Customer, navigate to each Role Type record, and see if the "Delete" option in the tool bar is enabled. It is enabled for new records, not for seeded values.

## How is the Role Associated with the Application?

**Is this done by the Type (Role Type) on the Roles definition form?**

**Answer:** Roles are associated one-to-many with a Role Type. Just like Role Type, we ship quite a few Roles for each Role Type out-of-the-box. Individual Applications use both Role Type and Role. Some applications use it as a filter mechanism, while some use it for reporting.

**Example:** If you have 100,000 Employee Resources in the system, and you are only interested in the subgroup Salespersons, then an application such as Oracle Sales and Marketing assigns a Role of type Oracle Sales to the those resources and write logic to only display those salespersons in their application LOVs.

There is no association necessarily between Role Type and an Application; except that the names of the Role Types appear like Application Names.

## Are Resources Org Striped?

How about **Salespersons?**

**Answer:** Resources are NOT org striped, but salespersons are.

**Example:** If you have an Employee Resource R1 who is a Salesrep in multiple orgs (lets say org_id 100, 200, 300), then in the Define Resource window, when you query the Resource in the context of Org 100, you see the Resource information, and the Salesrep information for Org 100. However, if you are in the context of Org 150, then only the Resource displays, but none of the Salesrep information such as Salesrep Number or Sales Credit Type displays in the header and the Receivables tab.

The same is true with all other types of Resources like Party, Partner, Supplier Contact, Other, and To-Be-Hired.

## IS There a One to One Mapping Between an FND_USER and Resource?

**Answer:** Use the "Define User" window in AOL to assign an Employee, Party, and Supplier Contact to the same FND User.

## What Can I Import into Resource Manager?

**Answer:** Even though its possible to attach an Employee, Party, Supplier, or Contact to the SAME FND User, you cannot import all of them into Resource Manager. You can only import one: Employee, Party, or Supplier Contact.

## How Do I Send Notifications?

**I've attached a Resource Group to a Task. How can I send notifications to all members of this group?**

Resource Groups are not tied to Workflow groups. So, when a workflow is in setup, for example, in Task Manager, to send notification to the Task Owner, how can I ensure that if a Resource Group is assigned an owner to the Task, then the notification will be sent to all the members of that Resource Group automatically?

**Answer:** Examine the example of Task Manager.

Decide which workflow process to launch by defining a new workflow process under the workflow item: JTFTASK (User name for seeded workflow: Workflow for Task Manager.) Within the new workflow process, call a workflow (and PL/SQL) function in a loop, which retrieves the members of the group and send the notification to all the members.

An example of SQL code to get all the GROUPS and RESOURCES, under one GROUP (one hierarchical level):

```
SELECT  group_id  group_id,  resource_id  group_resource_id,  'IN
DIVIDUAL'  resource_type


FROM jtf_rs_group_members UNION


SELECT rgm.group_id  group_id,  rgr.group_id  group_resource_id,
 'GROUP'   resource_type


FROM jtf_rs_group_members rgm, jtf_rs_grp_relations rgr


WHERE rgm.group_id = rgr.related_group_id;
```

- The query results appear like the following:

  GROUP_IDGROUP_RESOURCE_IDRESOURCE_TYPE

  5 15 GROUP

  5 21 INDIVIDUAL

  5 175 GROUP

  5 199 INDIVIDUAL

  15 1 INDIVIDUAL

  15 5 GROUP

  15 689 INDIVIDUAL

**Note:** The GROUP_RESOURCE_ID stores RESOURCE_ID for Resource_type = 'INDIVIDUAL', and Group_ID for Resource_type = 'GROUP').

## Why Are Party and Partner Treated Differently?

**Why are Party, and Partner treated as separate Resource Categories in Resource Manager? Should they not be combined into just one category?**

**Answer:** The parties of party_type 'PARTY_RELATIONSHIP' can be imported as a resource of category 'PARTY' or 'PARTNER'. But there are some other party types that can be brought in only as category PARTY (for example, PERSON) and those that can be brought in only as PARTNER (for example, Organization.) The categories need to exist independently rather than being merged.

## What is the Geo Override and Inside City Limits Fields?

**What is the significance of fields "Geo Override", and "Inside City Limits"? How should these fields be used in the Define Resource window when defining a Salesperson?**

**Answer:** The Geo Override value associates the salesperson with a unique tax jurisdiction. Both fields should normally be used if you have installed a sales tax vendor of type Vertex Taxware Sales. Oracle recommends you use Tax System or Vertex Quantu.

If you entered a value in the Geo Override field and the tax jurisdiction for this address is within city limits, select the "Inside City Limits" check box. This check box should typically be enabled only if your sales tax vendor is Vertex Quantum.

Geocodes are used by tax engine to identify taxing jurisdiction. A geocode is typically needed when the state, zip, and city fields of an address do not uniquely identify the exact taxing jurisdiction. For example, same city and zip can be found in multiple counties. Inside city limits adds more to that geocodes. For example a city has different tax rates for city limit, in this case the city will have two different jurisdictions: one inner city and another that is outer city. The tax will be calculated accordingly.

Third party tax engines like vertex and taxware recognize such complicated geocode.

For additional information, see the following:

- Integrating Oracle Receivables with Taxware Sales/Use Tax System, Release 11*i*.
- Integrating Oracle Receivables with Vertex Quantum, Release 11*i*.

## Where Can I Set Up Sales Credit Types?

**In the Define Resource Form, under "Receivables" tab, there is a field labeled "Sales Credit Type". Where do values in the LOV for this field come from and how to I populate the LOV if it contains no values?**

**Answer:** The Sales Credit Type field values come from Order Management. To populated the LOV with values, navigate to: **Order Management > Set up > Sales > Credit Types** and use the forms accordingly.

## What are the Attributes of an Employee Resource?

**What are the attributes of an Employee Resource that are kept in SYNC with HR? What is the list of all HR denormalized columns in Resource Manager.**

**Answer:**

**SOURCE_ID (mapped to Person Id in HR)**

**MANAGING_EMPLOYEE_ID**

**SOURCE_NAME**

**SOURCE_NUMBER**

**SOURCE_JOB_TITLE**

**SOURCE_EMAIL**

**SOURCE_PHONE**

**SOURCE_ORG_ID**

**SOURCE_ORG_NAME**

**SOURCE_ADDRESS1**

**SOURCE_ADDRESS2**

**SOURCE_ADDRESS3**

**SOURCE_ADDRESS4**

**SOURCE_CITY**

**SOURCE_POSTAL_CODE**

**SOURCE_STATE**

**SOURCE_PROVINCE**

**SOURCE_COUNTY**

**SOURCE_COUNTRY**

**SOURCE_MGR_ID**

**SOURCE_MGR_NAME**

**SOURCE_BUSINESS_GRP_ID**

**SOURCE_BUSINESS_GRP_NAME**

**SOURCE_FIRST_NAME**

**SOURCE_MIDDLE_NAME**

**SOURCE_LAST_NAME**

**SOURCE_CATEGORY**

**SOURCE_STATUS**

**SOURCE_OFFICE**

**SOURCE_LOCATION**

**SOURCE_MAILSTOP**

## What Are the Responsibilities Associated With Resource Manager?

**What are the responsibilities associated with Resource Self Service (HTML) functionality? What are the Responsibility names for "Super User", and "Regular User"?**

**Answer:**

- Super User: Resource Self Service Administrator
- Regular User: CRM Application Foundation User

## How Does the Employee Button in the Resource Summary Page Appear?

**Answer:** If the user is logged in with "Resource Self Service Administrator" responsibility, and if the value of the profile "JTFRS: Employee Resource Update Access" is set to "ANY," then, the Create button for Employee will appear in the Resource Summary page.

## How Does the Create Button in the Groups Summary Page Appear?

**Answer:** If the user is logged in with "Resource Self Service Administrator" responsibility, AND if the value of the profile "JTFRS: Group Update Access is set to "ALL" then, the Create button for Groups will appear in the Resource Groups Summary page.

## How are Supplier Contact Type Resources Set Up?

**Explain the detailed steps in defining a supplier contact resource such that it can be imported in Resource Manager.**

**Answer:** Perform the following steps.

**Responsibility**: Purchasing, Vision Operations (USA)

**Navigation**: Supply Base > Suppliers

**Steps:**

1. When the appropriate supplier record has been found, select the 'Supplier' icon at the bottom right hand corner.
2. In the 'Contacts' tab, enter the supplier contact name, telephone number and their email address in the Mail Stop field.
3. Switch responsibility to CRM Administrator.
4. Select Resource Manager > Maintain Resources > Import Resources -> Select Resource category.
5. Supplier Contact > choose Contact as previously created. Find, then Create resource. View using Resource details.

## How are Support Site IDs in Resources Set Up?

**Explain the detailed steps in defining a support site such that it can be associated to a Resource Manager.**

**Answer:** Perform the following steps.

**Responsibility**: Customer Support.

**Navigation**: Customer Management > Contact Center

**Steps:**

1. In the Caller Type field, select either Organization or Person.
2. In the Organization field, select your organization.
3. Select the Address tab.
4. In the Status column, select Active.
5. In the Address1 column, select the appropriate address from the LOV.

6. The City field automatically populates.
7. In the Usage field, select Support Site.
8. Select Active in the Usage Status field.
9. Save your work.

## How is Data in JTF_RS_GROUPS_DENORM Populated?

**Explain the detailed steps by which resource group hierarchy information is denormalized / flattened in this table.**

**Answer:** The following example illustrates the answer.

**Example:**

- Group G1 is a parent of group G2
- Group G2 is a parent of group G3
- Group G3 is a parent of group G4
- Group G1 is a parent of group G5
- Group G5 is a parent of group G6

The following table depicts group information.

***Group Information***

| Group Name | Group ID |
|---|---|
| G1 | 100000001 |
| G2 | 100000002 |
| G3 | 100000003 |
| G4 | 100000004 |
| G5 | 100000005 |
| G6 | 100000006 |

## How Are Records Populated?

**How are records populated in JTF_RS_GROUPS_DENORM table for the previous example?**

**Answer**:

***Group Data***

| Group_Id | Parent_Group_Id | Immediate_parent_ flag | Denorm_Level |
|---|---|---|---|
| 100000001 | 100000001 | N | 0 |
| 100000002 | 100000002 | N | 0 |
| 100000003 | 100000003 | N | 0 |
| 100000004 | 100000004 | N | 0 |
| 100000005 | 100000005 | N | 0 |
| 100000006 | 100000006 | N | 0 |
| 100000002 | 100000001 | Y | 1 |
| 100000003 | 100000002 | Y | 1 |
| 100000003 | 100000001 | N | 2 |
| 100000004 | 100000003 | Y | 1 |
| 100000004 | 100000002 | N | 2 |
| 100000004 | 100000001 | N | 3 |
| 100000005 | 100000001 | Y | 1 |
| 100000006 | 100000005 | Y | 1 |
| 100000006 | 100000001 | N | 2 |

**Note:** DENORM_LEVEL column is new in our current release. It DOES NOT exist in CRM 11.5.6 Family Pack.

## How Can Employee Number Generation Be Controlled?

**Explain the steps by which Employee Number can be manually entered while creating an Employee Resource.**

**Answer:** Perform the following steps:

**Responsibility:** US HRMS

**Navigation**: Work Structures > Organization > Description.

**Steps:**

1. Query the Business Group you want to control the generation of Employee number.
2. In the Organization Classification section Select "Business Group"
3. Click on Others Button.
4. Chose Business Group info. This will invoke a Flex Field.

In the flexfield one segment is defined as Employee number generation. Depending on the value of this segment the system decides whether or not the number needs to be manually entered/or be automatically generated.

## Can I Use Netscape's Back Button in Resource Manager?

There is a bug in the Netscape browser that can affect Resource Manager. Do not use the Back button, as you may loose your data. It is recommended that you use the Resource Manager user interface (UI). The Internet Explorer browser does not have this issue.

## How Many Contacts Can Be Imported For a Supplier Site?

**Can you import contacts for just one supplier site?**

**Answer**: If you want to import a supplier contact, you must enter the supplier name and site. In the Payables Supplier Form, you can specify contacts for each supplier site.

**Responsibility:** Customer Support

**Navigation**: Resource Management > Maintain Resources > Import Resources

**Steps:**

1. Select **Supplier Contact** from the Resource Category field.
2. Select your chosen name from the list of values (LOVs).
3. Select your chosen address from the LOVs.
4. Select your chosen Supplier Contact from the LOVs.

If there are multiple addresses and supplier contacts, then you can only select one to import into Resource Manager at a time.

Required fields are Supplier Name and Supplier Site.

## How Can I Import Salesrep Information?

**How can I import Salesrep information from a legacy or third party system?**

**Answer**: Use the API of your HR system and Resource Manager public API, JTF_RS_RESOURCE_PUB. Create_Resource ( ), to import employees if you want to import employee data from a legacy HR system. For details of Resource Manager public APIs, see *Oracle Common Application Components API Reference Guide*.

## Which API Returns all Workflow Roles for a Specific Resource ID?

**Which API Returns all Workflow roles for a resource when provided with a specific resource ID?**

**Answer:** The get_wf_role procedure in package JTF_RS_WF_INTEGRATION_PUB returns all workflow roles for a resource when provided with a specific resource ID. This procedure contains the following function:

```
FUNCTION get_wf_role(p_resource_id IN number) RETURN varchar2


 IS
```

```
l_role_name         wf_local_roles.name%TYPE;

l_orig_system       wf_local_roles.orig_system%TYPE;

l_orig_system_id    wf_local_roles.orig_system_id%TYPE;
```

When the user ID is provided as an input value, the function returns the name of the Workflow role, its original system, and its original system identification.

## How do I display Flexfields in a JSP/HTML page within Resource Manager:

**What are the steps to display a flexfield in a JSP/HTML page within the HTML version of Resource Manager?**

**Answer:** You cannot perform this action because the HTML version of Resource Manager does not support Flexfields.

## Which Partner Categories Are Terminated in Resource Manager?

**Which partner categories are terminated in Resource Manager after running the Number of Days profile option?**

**Answer:** The Number of Days profile option terminates resources in Resource Manager a specified number of days after they have been terminated in Human Resources. This profile option only terminates the partner category of resources.

## How do I Enable Flexfields for the HTML Version of Resource Manager?

**Is there a different set of steps to enable flexfields for the HTML version of Resource Manager**? Enabled flexfields in the 'Groups' and 'Employees' region of Resource Manager. When user navigates to the Groups and Employees regions in the Forms-based interface, enabled flexfields are displayed. However, they are not displayed under the Employee and Groups tab of the JSP generated HTML page.

**Answer:** Resource Manager HTML currently does not support Flexfields. However, this feature will be available in a future release.

## Why does the Synchronize Employee Concurrent Program Always update every record's last_update_date parameter?

**The Synchronize Employee concurrent program updates every record's last_update_date even if the record is not changed. Is this a bug?**

**Answer:** No. The program is designed that way to update the entire set using a single SQL command, which results in the observed behavior.

## Error Encountered When Running the Synchronize Employee Concurrent Program

**The Synchronize employee concurrent program imports new employees into Resource Manager. When attempting to modify the new resource encountered error:**

**" Resource End Date out of range for the salesperson related End dates of the resource"**

**The new resource cannot be modified until the 31-DEC-4712 has been manually removed.**

**Answer:** There are two answers to this problem:

1. When running the concurrent program, use the mass import by organization function since it does not populate the date field.
2. If you cannot delete all the imported records, then nullify the 31-DEC-4712 date in the JTF_RS_RESOURCE_EXTNS table.

## Deactivated Role Still Appears

**Why does a role that is made inactive still appear as a valid role with no end date on the resource record?**

**Resolution:** Currently the resource role is not affected when a role is made inactive. A future release will address the issue of preventing inactive roles from being specified for resources when adding resources to groups.

## What is the Correct Public API Sequence for Creating a Sales Rep?

**What is the correct sequence for using pubic published Resource Manager APIs to create a sales rep?**

**Answer:** To create a salesrep, must first create it as a resource using JTF_RS_RESOURCE_PUB API. Then, create a salesrep using JTF_RS_SALESREPS_PUB API.

## How do I set the org_context to Properly Call the Create_Salesrep and Update_Salesrep APIs using SQL*Plus

**What are the requirements for setting the org context and passing the org_id as a parameter when using SQL*Plus to call the Create_Salesrep and Update_Salesrep APIs?**

**Answer:** Use the following command in your scripts when setting the org_context to call the Create_Salesrep and Update_Salesrep APIs:

```
mo_global.set_org_context(999, NULL);
```

where 999 is the org_id parameter value to which the context is set. This should be done every time you call the Create_Salesrep and Update_Salesrep APIs.

# 7

# Oracle Common Application Calendar Implementation Overview

This chapter covers the following topics:

- Overview of Implementing Oracle Common Application Calendar
- Implementing Notes in Oracle Applications Framework
- Implementing Tasks in Oracle Applications Framework
- Implementing Calendar in Oracle Applications Framework

## Overview of Implementing Oracle Common Application Calendar

Oracle Common Application Calendar including Tasks, Notes and Calendar is developed based on the Oracle Applications Framework, the standard HTML development and deployment platform for Oracle HTML Applications. It provides essential Notes, Tasks, and Calendar functionalities for integrated applications, such as Oracle Service Online or Oracle Customers Online.

Users can use Oracle Common Application Calendar as a personal productivity tool to help manage their daily activities and resource reservations based on the availability of the resources. They can create contextual tasks for a source object and assign resources to the tasks in Task Manager, add notes to a contextual task or an appointment using Notes, and view scheduled appointments and other activities from their personal calendar views. Since these features are developed based on the HTML versions of Tasks, Notes, and Calendar with some enhancements, implementing Oracle Common Application Calendar requires implementors or system administrators to:

- First, complete basic setup steps for these modules, such as defining task and note types and statuses, running concurrent programs, and setting profile options
- Secondly, set additional steps specifically for the Oracle Applications Framework based Tasks, Notes or Calendar module if needed for them to work properly

## What is Oracle Applications Framework?

The Oracle Applications Framework is the development environment for the current generation of Oracle Self-Service Applications. The purpose of the Oracle Applications Framework is to provide developers of Oracle's Self-Service Applications with a set of common technologies, modules and standards. This Framework moves the next generation of Self-Service Applications to a standard HTML development and deployment platform which aims to make Oracle Self-Service Applications easy to

use, build, deploy, maintain and customize, and to enforce the Oracle wide common look and feel.

In addition, the Framework facilitates rapid application development and tries to eliminate hand coded implementations that were a major part of previous development platforms. It also ensures high performance and scalability at run time.

> **Note:** For those who familiar with Oracle's Forms-based application development, the Oracle Applications Framework is to the Self-Service Applications what Application Object Library (AOL) is to Forms-based development.

Detailed information on Oracle Applications Framework, refer to *Oracle Applications Framework Developer's Guide* at *OracleMetaLink* Document 269138.1.

## Implementing Notes in Oracle Applications Framework

The implementation for Notes developed for Oracle Common Application Calendar uses the same set up steps for HTML Notes including creating new note types, mapping note types and references to a source, setting up source object codes, and setting necessary profile options.

Additionally, with the continuous support of existing notes data security, all data access and updates in Notes developed for Common Application Calendar are based on the concept of HTML Notes Application Object Library (AOL) data security rules. Implementors can customize Notes security and then grant object level security to users with qualifying access privileges if needed.

### Notes in Oracle Applications Framework Implementation Steps

This section provides an overview of the required steps for implementing the Oracle Applications Framework based Notes. Detailed instructions for these steps are contained in the subsequent chapters.

## Setting Up Note Types

In addition to the seeded note types, the implementor or system administrator can create new note types to categorize a note, such as a General note type for a general note, or an Interaction note type for a note created specifically for an interaction or activity.

## Mapping Note Types to a Source

After creating note types, the implementor or system administrator can map these note types to a source object, such as Task Manager, or Sales Lead, or a specific resource category, such as Employee Resource. This limits the visibility of the note type appearing in the Note Type list of values only to the mapped specific source object or resource category.

## Defining Notes Reference Mapping

In addition to mapping note types to a source, implementors can also map references to a source object. This narrows down the References drop-down list to objects that are actually relevant to a document's source object.

The Mapping Objects window used to define reference mapping is for both Task Manager and Notes modules. Therefore, implementors need to locate the setup screen under the Task and Escalation Manager navigation node.

## Setting Up the Source Object Code and Context

The implementor or system administrator can add additional data in the JTF objects table if necessary. For example, if a document is newly defined or integrated with Notes, such as Task Manager, then the new document must be associated with Notes usage. As a result, the document name (Task Manager) appears in the Source list when a note is created for task 1150. Each item in the source list has an associated related object (task 1150), which appears in the Related To list.

## Setting Profile Options

The implementor or system administrator can use the "Notes: Default Note Status" profile option to set the default value to note status and the "Notes: Default Note Type" profile option to set the default value to note type at site, application, responsibility, or user level based on business needs.

Since note types can be mapped to a source object, if the default note type is not mapped to a source or the profile option is not set, then there will not have a default value in the Note Type field during note creation. Otherwise, the default note type will appear in the Note Type field.

## Customizing Notes Security

With the continuous support of existing notes data security, all data access and updates in Notes developed for Common Application Calendar are based on the concept of HTML Notes Application Object Library (AOL) data security rules.

This security model is used to restrict data access to appropriate users through a specific authorization process. It allows Notes implementor or system administrator to customize notes data, and then grant specific notes to appropriate users or user groups with right access privileges. This includes granting users the ability to view a note, create a note, update a note, update a regular note, update a large note, update a note's secondary information (such as note type, status, relation and attachment), delete a note, and restrict "note type" list of values. This functionality is only enforced in the HTML Notes, not the Forms-based Notes.

## Implementing Tasks in Oracle Applications Framework

Similar to Notes in Oracle Applications Framework, implementing Tasks developed for Oracle Common Application Calendar also takes place in two phases.

In phase I, implementors need to complete the basic setups for Tasks mostly in Forms. These attributes are also used in Forms and HTML based Tasks. It includes the setup for task types, statuses, priorities, task type and reference mappings, metadata, concurrent programs, profile options, business events, and task security rules.

In phase II, in order for the Oracle Applications Framework based Task Manager to work properly, implementors need to perform one additional implementation step required specifically for Tasks in Oracle Applications Framework.

**Note:** To implement the Forms-based and HTML versions of Task Manager, see Setting Up Task Manager chapter for details.

### Tasks in Oracle Applications Framework Implementation Steps

This section provides an overview of the required steps for implementing the Oracle Applications Framework based Notes. Detailed instructions for these steps are contained in the subsequent chapters.

- Phase I: Setting Up Basic Task Features, page 7- 4
- Phase II: Setting Up Additional Steps for Tasks in Oracle Applications Framework, page 7- 6

## Phase I: Setting Up Basic Tasks Features

The basic setups for Tasks in phase I are mostly performed in Forms. It includes the following setup steps:

## Defining Task Types

In addition to the seeded task types, the implementor or system administrator can create new task types to specify the purpose of a task creation, such as a "Follow-up" task or an "Appointment" task. They can also map task types to a source object. This way, users will see the task types that are mapped to the source object from the Task Type list of values when creating a task.

## Defining Task Statuses and Status Transition Rules

The implementor or system administrator can create new task statuses to specify the progress of a task, such as "Completed", or "Working".

To regulate status change at the task level, the implementor can set the task status rules in the status transition window, and define appropriate rule access through responsibilities.

## Defining Task Priorities

The implementor or system administrator can create additional task priorities to determine an importance rating for a task, such as Low, High, and Critical. In addition, like task types, task priorities can be mapped to a source object. This allows users to see only the task priorities that are mapped to the source object from the Task Priority list of values when creating a task.

## Mapping Task and Notes Reference Mapping

The implementor or system administrator can map reference types to a source object, such as Task Manager. This limits the selection of Reference Type list of values shown in the Task Manager.

## Setting Profile Options

The implementor must set necessary profile options used in Task Manager to set default values for task status, priority, types, as well as owner and assignee statuses. Other profile options determine the client time zone, unit of measure, workflow functionality, notification, and task security access.

## Running the Concurrent Program

In order to retrieve new and updated tasks from quick find search, the system administrator must run the Rebuilding Intermedia Index for Task Names concurrent program periodically.

## Setting Up Metadata Objects

The implementor or system administrator can add additional data in the JTF objects table if necessary. For example, if a document (such as Service Request) is newly defined or integrated with Task Manager, then the new document must be associated with Tasks usage.

## Publishing Task Business Events

Task Manager, leveraging the Oracle Workflow Business Event System, publishes business events such as creating, updating, and deleting a task or an assignment when a task or an assignment is created, updated, and deleted from APIs, or application user interfaces (UIs) regardless of the Forms, HTML, or Oracle Applications Framework based applications. Applications that contain data directly affected by these events can subscribe to them and synchronize or modify their data accordingly.

Task business events will not be raised when an escalation or appointment is created even the data is saved in the same tables.

For detailed information about escalations business events, see Publishing Escalations Business Events in Escalation Manager of the *Oracle Common Application Components Implementation Guide*.

## Customizing Task Data Security

With the continuous support of the existing task security rules used in HTML Tasks, all data access and updates in Tasks developed for Common Application Calendar are based on the concept of Application Object Library (AOL) data security including the security rules around updating contextual tasks using a profile option and allowing group managers to access their direct's tasks. Additionally, to provide product specific security rules for customizing the resource list of values security for assignees, Task Manager leverages the AOL data security based on Virtual Private Database (VPD) policy to allow applications to set product specific security rules specifically for the resource list of values security.

Be aware that this security model with VPD feature is only implemented in the Forms-based and Oracle Applications Framework based Tasks specifically for the resource list of values security. It is not used in HTML Tasks.

## Phase II: Setting Up One Additional Step for Tasks in Oracle Applications Framework

In phase II, implementors must perform the following step specifically for Tasks in Oracle Applications Framework. Even though this step is performed in Forms, it is not used by the Form-based or HTML Tasks.

## Mapping Task Assignee Types to a Source

Similar to the functionality of mapping task references to a source used in the HTML Tasks, implementors can map both task assignee types and owner types to a source object for the Oracle Applications Framework based Task Manager. This limits the selection of task assignee types and owner types from the list of values for a mapped source object.

## Implementing Calendar in Oracle Applications Framework

The Oracle Applications Framework based Calendar module is developed based on existing HTML Calendar concept with some enhancements; therefore, its implementation steps are similar to the steps of implementing HTML Calendar and it requires no further set up specifically for the Calendar in Oracle Applications Framework.

Since group and public calendar features are not used in the Oracle Applications Framework based Calendar module; therefore, there is no need to create a Calendar Administrator in the Oracle Applications Framework based Calendar module. There is also no need to implement calendar events. This is because applications that want to uptake this feature require both implementors to perform necessary steps during the implementation and Calendar users to meet certain conditions to be able to view calendar events in their personal calendars. If applications complete all required steps for this feature, then Calendar views will display these event items. In addition, since tasks will not be displayed from your personal calendar views, there is no need for Calendar in Oracle Applications Framework to run the "Rebuilding Intermedia Index for Task Names" concurrent program periodically.

> **Note:** To implement the Forms-based and HTML versions of Calendar, see Implementing the HTML Calendar chapter and Implementing the Forms-based Calendar chapter for details.

### Calendar in Oracle Applications Framework Implementation Steps

This section provides an overview of the required steps for implementing the Oracle Applications Framework based Calendar. Detailed instructions for these steps are contained in the subsequent chapters.

## Creating a Calendar User

Every employee resource with appropriate responsibilities can use the Oracle Applications Framework based Calendar functionality to create appointments, view personal calendars, check resource availability, and customize personal preferences.

To create a Calendar user, the implementors or system administrators need to grant appropriate responsibilities to the employee resource.

## Integrating with Web Mail

To invoke web mail compose window through an integrated Web Mail, such as Oracle Collaboration Suite, from the calendar Availability view, implementors or system administrators must set necessary profile options to enable the webmail function, specify correct server URL address for the integrated webmail server, and perform additional implementation steps on the server side to launch webmails successfully.

## Setting Profile Options

Implementors or system administrators need to set the necessary profile options that are used in the Oracle Applications Framework based Calendar module including client timezone, self service accessibility features to access the Accessibility Daily View page, and the options for enabling web mail feature.

## Starting Workflow Processes

Similar to the HTML Calendar module, implementors or system administrators need to start the necessary workflow processes used in the Oracle Applications Framework based Calendar module including "JTF Calendar Workflows" and "JTF Task Reminder".

## Publishing Business Events for Appointments

The Calendar module publishes business events for appointments such as creating, updating, and deleting an appointment, adding and removing an invitee, as well as responding to an invitation when the following conditions occur from APIs, application user interfaces (UIs) in HTML or the Oracle Applications Framework based modules:

- An appointment is created, updated, and deleted
- An invitee is added to or removed from an appointment
- An invitee accepted or rejected an appointment

Applications that contain data directly affected by these events can subscribe to them and synchronize or modify their data accordingly.

# 8

# Implementing the Oracle Applications Framework Based Notes

This chapter covers the following topics:

- Overview of Notes in Oracle Applications Framework
- Implementation Steps
- Setting Up Note Types
- Mapping Note Types to a Source
- Defining Notes Reference Mapping
- Setting Up the Source Object Code and Context
- Setting Profile Options
- Customizing Notes Security

## Overview of Notes in Oracle Applications Framework

The Notes module adopts the Oracle Applications Framework, the standard HTML development and deployment platform for Oracle HTML Applications. It provides Notes functionality including creating notes, and viewing or updating notes history screens for integrated applications, such as Service Online.

Notes features can only be accessed through the integrated applications and they are not available in the standalone Notes module. Notes can only be created or viewed in the context of a source object. Source can be any business object, such as service request, lead, and opportunity.

Since Notes features developed in Oracle Applications Framework are also available in the Forms-based or HTML Notes, implementing the Oracle Applications Framework based Notes uses the same setup steps.

## Implementation Steps

The implementation for Notes developed for Oracle Common Application Calendar uses the same set up steps for HTML Notes as follows:


- Setting Up Note Types, page 8- 2
- Mapping Note Types to a Source, page 8- 2
- Defining Notes Reference Mapping, page 8- 2

- Setting Up the Source Object Code and Context, page 8- 2
- Setting Profile Options, page 8- 2
- Customizing Notes Security, page 8- 3


## Setting Up Note Types

In addition to the seeded note types, implementors can create new note types to categorize a note, such as a General note type for a general note, or an Interaction note type for a note created specifically for an interaction or activity.

See: Setting Up Note Types, page 12- 1 .

## Mapping Note Types to a Source

After creating note types, implementors can map these note types to a source object, such as Task Manager, or Sales Lead, or a specific resource category, such as Employee Resource. This limits the visibility of the note type appearing in the Note Type list of values only to the mapped specific source object or resource category.

See: Mapping Note Types to a Source, page 12- 2 .

## Defining Notes Reference Mapping

In addition to mapping note types to a source, implementors can also map references to a source object. This narrows down the References drop-down list to objects that are actually relevant to a document's source object.

The Mapping Objects window used to define reference mapping is for both Task Manager and Notes. Therefore, implementors need to locate the setup screen under the Task and Escalation Manager navigation node.

See: Defining Note Reference Mapping, page 12- 3 .

## Setting Up the Source Object Code and Context

The implementor can add additional data in the JTF objects table if necessary. For example, if a document is newly defined or integrated with Notes, such as Task Manager, then the new document must be associated with Notes usage. As a result, the document name, Task Manager, appears in the Source list when a note is created for task 1150. Each item in the source list has an associated related object, task 1150, which appears in the Related To list.

See: Setting Up the Source Object Code and Context, page 12- 4 .

## Setting Profile Options

The implementor needs to set the following profile options for the Oracle Applications Framework based Notes:

- Notes: Default Note Status: This profile option sets the default value to the note status.

- Notes: Default Note Type: This profile option sets the default value to the note type. Please note that it only applies to the Oracle Applications Framework based Notes. It is not used in the Forms-based Notes and HTML Notes.

  Since note types can be mapped to a source object, if this profile option is not set or the default note type is not mapped to a source, then there will not have a default value in the Note Type field during note creation. Users can select a desired mapped note type from the drop-down list in the Oracle Applications Framework based Notes. Otherwise, the default note type value will appear in the Note Type field.

See: Setting Profile Options, page 12- 5 .

## Customizing Notes Security

With the continuous support of existing notes data security, all data access and updates in Notes developed for Common Application Calendar are based on the concept of HTML Notes Application Object Library (AOL) data security rules. This security concept allows implementors or system administrators to customize the security rules and then grant object level security to users with qualifying access privileges. In other words, the security rules restrict the data access only to appropriate users.

To customize Notes data security, it is necessary to first identify the following three grant components:

- Identifying users or user groups
- Defining object instance sets
- Defining menus

Once the grant components are identified, the administrator can start the granting process:

- Disabling existing grants
- Adding new grants

See Customizing HTML Notes Security chapter for notes AOL data security and customization details.

# 9

# Implementing the Oracle Applications Framework Based Task Manager

This chapter covers the following topics:

- Overview of Task Manager in Oracle Applications Framework
- Implementing the Oracle Applications Framework Based Task Manager
- Phase I: Setting Up Basic Task Features
- Defining Task Types
- Defining Task Statuses and Status Transition Rules
- Defining Task Priorities
- Mapping Task and Notes References to a Source
- Setting Profile Options
- Running the Task Manager Concurrent Program
- Setting Up Metadata Objects
- Publishing Task Business Events
- Customizing Task Security
- Phase II: Setting Up One Additional Step for Tasks in Oracle Applications Framework
- Mapping Task Assignee Types to a Source

## Overview of Task Manager in Oracle Applications Framework

Task Manager for Oracle Common Application Calendar adopts the Oracle Applications Framework, the standard HTML development and deployment platform for Oracle HTML Applications. It provides essential task screens including creating tasks, updating tasks, and viewing contextual tasks for integrated applications such as Service Online or Sales Online.

Task Manager in Oracle Applications Framework provides basic task functionality in accordance with Task's data security rules. These task features can only be accessed through integrated applications and they are not available in the standalone Task Manager. These features include creating tasks with or without templates, updating tasks, and viewing tasks which are also available in the Forms-based, or HTML Tasks. As a result, implementation steps for the Oracle Applications Framework based Task Manager are still performed in Forms. In order for Tasks in Oracle Applications

Framework to work properly, implementors also need to perform one additional setup step.

Oracle Service Online and Sales Online are the applications that are currently integrated with Task Manager. Refer to *Oracle Sales Online Implementation Guide* and *Oracle Service Online Implementation Guide* for more product specific implementation.

## Implementing the Oracle Applications Framework Based Task Manager

Implementing Tasks developed for Oracle Common Application Calendar takes place in two phases.

In phase I, implementors need to complete the basic setups for Tasks mostly in Forms. These attributes are also used in Forms and HTML based Tasks. It includes the setup for task types, statuses, priorities, task type and reference mappings, metadata, concurrent programs, profile options, business events, and task security rules.

In phase II, in order for the Oracle Applications Framework based Task Manager to work properly, implementors need to perform one additional implementation step required specifically for Tasks in Oracle Applications Framework.

## Phase I: Setting Up Basic Task Features

In phase I, implementors need to complete basic Tasks setup steps. It includes the following task attributes:

- Defining Task Types, page 9- 2
- Defining Task Statuses and Status Transition Rules, page 9- 2
- Defining Task Priorities, page 9- 3
- Mapping Task and Notes References to a Source, page 9- 3
- Setting Profile Options, page 9- 3
- Running the Task Manager Concurrent Program, page 9- 4
- Setting Up Metadata Objects, page 9- 4
- Publishing Task Business Events, page 9- 4
- Customizing Tasks Data Security, page 9- 4

## Defining Task Types

In addition to the seeded task types, the implementor can create new task types to specify the purpose of a task creation, such as a "Follow-up" task or an "Appointment" task. They can also map task types to a source object. As a result, users will see the task types that are mapped to the source object from the Task Type list of values when creating a task.

See: Defining Task Types, page 21- 1 .

## Defining Task Statuses and Status Transition Rules

The implementor can create new task statuses to specify the progress of a task, such as "Completed", or "Working".

To regulate status change at the task level, the implementor can set the task status rules, and define appropriate rule access through responsibilities.

See: Defining Task Statuses and Status Transition Rules, page 21- 5 .

## Defining Task Priorities

The implementor can create additional task priorities to determine an importance rating for a task, such as "Low", "High", and "Critical". Similar to task types, task priorities can also be mapped to a source object. This allows users to see only the task priorities that are mapped to the source object from the Task Priority list of values when creating a task.

See: Defining Task Priorities, page 21-13.

## Mapping Task and Notes References to a Source

The implementor can map reference types to a source object, such as Task Manager. This limits the selection of Reference Type list of values shown in the Task Manager.

See: Mapping Task and Notes References to a Source, page 21-16.

## Setting Profile Options

The implementor or system administrator must set necessary profile options used in Task Manager to set default values for task status, priority, types, as well as owner and assignee statuses. Other profile options determine the client time zone, unit of measure, and task security access.

Set the following profile options used in the Oracle Applications Framework based Tasks if required:

- Task Manager: Default Task Type
- Task Manager: Default Task Status
- Task Manager: Default Task Priority
- Task Manager: Default Task Owner
- Task Manager: Owner Type for Task
- Task Manager: Default Assignee Status
- Task Manager: JTF Tasks Default Date Selected
- Time Unit of Measure Class
- Client Timezone
- Task Manager: Send Notifications to Group or Team Members
- Task Manager: Enable Automated Task Workflow Functionality
- Task Manager: Abort Previous Task Workflow if it is still active
- Task Manager: Set Context Data Security

See: Setting Profile Options, page 21-18.

## Running the Task Manager Concurrent Program

In order to retrieve new and updated tasks from task search, the system administrator must run the Rebuilding Intermedia Index for Task Names concurrent program periodically.

See: Running the Task Manager Concurrent Program, page 21-26.

## Setting Up Metadata Objects

The implementor or system administrator can add additional data in the JTF objects table if necessary. For example, if a document, such as Service Request, is newly defined or integrated with Task Manager, then the new document must be associated with Tasks usage.

See: Setting Up Metadata Objects, page 21-27.

## Publishing Task Business Events

Task Manager, leveraging the Oracle Workflow Business Event System, publishes business events such as creating, updating, and deleting a task or an assignment when a task or an assignment is created, updated, and deleted from APIs, or application user interfaces (UIs) regardless of the Forms, HTML, or Oracle Applications Framework based applications.

These events will not be raised when an escalation or appointment is created even the data is saved in the same tables.

Applications that contain data directly affected by these events can subscribe to them. All subscriptions to the events must be asynchronous and follow the subscription guidelines mentioned in the workflow development standards.

Relevant information for task business events and event subscription guidelines, see: Publishing Task Business Events, page 21-30.

## Customizing Task Security

With the continuous support of the existing task security rules used in HTML Tasks, all data access and updates in Tasks developed for Common Application Calendar are based on the concept of Application Object Library (AOL) data security including the security rules around updating contextual tasks using a profile option and allowing group managers to access their direct's tasks. This AOL security concept allows implementors or system administrators to customize the security rules and then grant object level security to users with qualifying access privileges.

To provide product specific security rules for customizing the resource list of values security, Task Manager leverages the AOL data security based on Virtual Private Database (VPD) policy, a feature implemented in database to allow security dynamically created at runtime to all queries issued against a database table or view. This security model with VPD feature provides more flexibility in task security for resource assignments to allow any applications to set product specific security rules around the existing task security.

> **Note:** This security model with VPD policy is only applied to the resource list of values security for assignees and is only implemented in

the Forms-based and Oracle Applications Framework based Tasks. It is not used in HTML Tasks.

For example, only the resources that have privileges to access certain types of service request can be assigned to these types of service related tasks as assignees. Therefore, with this security model, Oracle Service Online can pass its own security functions to Tasks in Forms or in Oracle Applications Framework to allow qualified resources to be retrieved from the resource list of values when assigning them to a service request of certain types.

For detailed information about the security model with Virtual Private Database (VPD) feature, seeding strategy, and its impact on the Oracle Applications Framework based Tasks, see the following links in the Customizing Tasks Security chapter:

- Understanding AOL Data Security in HTML Tasks, page 23- 2
- New Security Model for Tasks in Forms and Oracle Applications Framework for Resource Assignments, page 23- 8
  - What is Virtual Private Database?, page 23- 8
  - How Does this VPD Model Work?, page 23- 8
- Customizing the Resource List of Values Security Access in Oracle Applications Framework and Forms, page 23-19
  - Task Resource LOV Security Seeding Strategy, page 23-19
  - Impact on Existing HTML Tasks, page 23-21
  - Uptake Instructions, page 23-21
  - Uptake Considerations, page 23-23

## See Also

Phase II: Setting Up Additional Steps for Tasks in Oracle Applications Framework, page 9- 5

## Phase II: Setting Up One Additional Step for Tasks in Oracle Applications Framework

After setting up basic task features in Forms, in phase II, implementors need to perform the following step specifically for Tasks in Oracle Applications Framework. Even though it is performed in Forms, it is not used by Forms or HTML Tasks.

- Mapping Task Assignee Types to a Source, page 9- 5

## See Also

Phase I: Setting Up Basic Task Features, page 9- 2

## Mapping Task Assignee Types to a Source

Similar to the functionality of mapping task references to a source used in the HTML Tasks, implementors can use the Mapping Objects window to map both task assignee

types and owner types to a source object for the Oracle Applications Framework based Task Manager.

In the Mapping Objects window, implementors or system administrators can select appropriate source objects from the list of values, and resource types used for both assignee and owner types from the "Used for Mapping Task owner" field. This limits the visibility of task assignee and owner types shown in the assignee's and owner type's list of values for a mapped source object. These resource types can be resources of any category including employee, group, team, party, partner, other, and to be hired.

After mapping task assignee and owner types to a source, end users will see only the mapped assignee and owner types displayed in the list of values. All other unmapped types will not be in the list. In addition, if none of the types is mapped to your source object, then end users will see all resource types from the owner's and assignee's list of values.

For example, if a task created for a service request can only be assigned to and owned by an individual resource or a resource group, then implementors should select a resource category of "Group" and "Employee" and map them to a source object, Service Request. Therefore, end users can select either "Employee" or "Group" from the drop-down list when assigning an owner or assignee to a task created for a service request.

To limit the functionality, implementors can put an end date to terminate the mapping or can select Applications to restrict the mapping usage to certain applications.

Be aware that implementors can also use the Mapping Objects window to Map Task and Notes Reference to a Source. However, this reference mapping functionality is used in the HTML Tasks only. When mapping assignee types to a source in the Mapping Objects window, "Task Assignee" is automatically displayed in the Map field located on the top of the window while "References" is displayed if it is for mapping references to a source.

Perform the following steps in Forms to define the mapping objects.

## Prerequisites

None

## Responsibility

CRM Administrator

## Navigation

Navigate to **Task and Escalation Manager > Setup > Map Task Assignees to Source**

## Steps

1. In the Mapping Objects window, you can see the Task Assignees populated in the Map field.
2. Select your source object from the LOV, for example, Sales Opportunity.
3. Select appropriate owner types in the "Used for Mapping Task owner" field that you want to appear in the drop-down list from the LOV. These selected owner types will also be used for assignee types.

4. Select an end date from the LOV.
5. Select the application where you want to extract your additional data from.
6. Save your information by clicking **Save**.
7. Repeat these steps for every object that you want to appear in the LOV for your source object.

## See Also

Defining Task and Notes Reference Mapping, page 21-16

# 10

# Implementing the Oracle Applications Framework Based Calendar

This chapter covers the following topics:

- Overview of Calendar in Oracle Applications Framework
- Implementing the Oracle Applications Framework Based Calendar
- Creating a Calendar User
- Integrating with Web Mail
- Setting Profile Options
- Starting Workflow Processes
- Publishing Business Events for Appointments

## Overview of Calendar in Oracle Applications Framework

The Calendar module adopts the Oracle Applications Framework, the standard HTML development and deployment platform for Oracle HTML Applications. It provides essential Calendar functionality including creating and updating appointments, checking resource availability, and viewing scheduled activities through personal calendar views for integrated applications, such as Oracle Sales Online.

Since these Calendar features are developed based on the concept of existing HTML Calendar with some enhancements, the implementation steps for Calendar in Oracle Applications Framework are similar to the steps of implementing HTML Calendar except that implementors do not need to add Calendar tab to responsibility, create calendar administrator, run concurrent program, and implement calendar events.

## Implementing the Oracle Applications Framework Based Calendar

Implementing the Oracle Applications Framework based Calendar module requires the following steps:


- Creating a Calendar User, page 10- 2
- Integrating with Web Mail, page 10- 2
- Setting Profile Options, page 10- 2
- Starting Workflow Processes, page 10- 2
- Publishing Business Events for Appointments, page 10- 3

## Creating a Calendar User

Every employee resource with appropriate responsibilities can use the Oracle Applications Framework based Calendar functionality to create appointments, view personal calendars, and check resource availability. Make sure that all employees exist in the Resource Manager and the resources are linked to the application login user names (FND_User). Otherwise, they need to be imported from Oracle Human Resource Management System (HRMS) into Resource Manager.

To create a Calendar user, the implementors, or system administrators need to grant appropriate responsibilities to the employee resource.

See: Creating a Calendar User, page 26- 4 .

## Integrating with Web Mail

To invoke web mail compose window through an integrated Web Mail, such as Oracle Collaboration Suite, from the calendar Availability view, implementors or system administrators must perform the following steps to enable web mail feature:

- Set the profile option "ATGCA: Enable Web Mail" to "Yes" in order to enable and launch webmails through the Availability window.
- Specify correct server URL address for the integrated webmail server using a profile option "ATGCA: Web Mail Server URL".
- Perform additional implementation steps on the server side to launch webmails successfully, such as including "jtfCalWebMail.js" in your jsp file, and using appropriate syntax to invoke web mail feature or HTML "mailto:".

For detailed information about valid server address and additional steps on the server side, see: Integrating with Web Mail, page 26- 8 .

## Setting Profile Options

The Oracle Applications Framework based Calendar module uses the following profile options; therefore, implementors or system administrators must set them so that the module can work properly:

- Client Timezone
- ATGCA: Enable Web Mail
- ATGCA: Web Mail Server URL
- Self Service Accessibility Features

The profile option "Self Service Accessibility Features" is used to turn on the access to the Accessibility Daily View if it is set to either "Screen Reader" or "Yes". If it is set to "No", then users can only access the regular Personal Calendar Daily View page. See: Setting Profile Options, page 26- 9 .

## Starting Workflow Processes

Similar to the HTML Calendar module, implementors or system administrators need to start the following workflow processes, so that the Oracle Applications Framework based Calendar can work properly:

- JTF Calendar Workflows. Use JTF Calendar Workflow to track and route relevant workflow notifications to an appointment owner when an invitee accepts or rejects an invitation.
- JTF Task Reminder. Use JTF Task Reminder to pick up appointment reminders for scheduled appointments.

## Publishing Business Events for Appointments

The Calendar module, leveraging the Oracle Workflow Business Event System, publishes business events for appointments such as creating, updating, and deleting an appointment, adding and removing an invitee, and responding to an invitation when the following conditions occur from APIs, application user interfaces (UIs) in HTML or the Oracle Applications Framework based modules:

- An appointment is created, updated, and deleted
- An invitee is added to or removed from an appointment
- An invitee accepted or rejected an appointment

Applications that contain data directly affected by these events can subscribe to them and synchronize or modify their data accordingly.

For detailed information about appointment business events and event attributes, see Publishing Business Events for Appointments, page 26-14.

# 11

# Notes Implementation Overview

This chapter covers the following topics:

- Overview
- Steps

## Overview

A note is free-form text attached to an object that records descriptive information about business transactions and that can be referenced across modules. It can be created by an agent, sales, or service representative, to capture a chronological log of information for business needs. The Notes module provides a common look and feel across applications and can be used as a communication tool to record business information throughout Oracle E-Business Suite.

Notes can be further defined by setting up note types, and note statuses. A note type is used to classify notes or indicate the type of notes, such as a general note type or an interaction note type. In addition to the seeded note types, the implementor or system administrator can create note types to further categorize notes if necessary. Note types can be mapped to a source object to limit the selection in a drop-down list. A note status is used to determine note accessibility, such as a private note with note status Personal. The value of a note status can be set by a profile option during Notes implementation.

In addition, the Notes module provides a flexible security system that the implementor or system administrator can further customize the notes data and then grant appropriate users or user groups with read only or full privilege to access particular notes.

Before implementing Notes, however, it is necessary to understand the functionality of both the Forms-based and HTML versions of Notes.

### Forms-based and HTML Versions of Notes

Notes was initially a Forms-based application, and was subsequently expanded to include an HTML version. The functionality of both versions is almost identical. The only difference is that the Forms-based Notes module is not a standalone module and it can be accessed only through integrated applications, such as notes created for a service request or task. HTML Notes can be used as a standalone module to create personal notes or integrated with other applications, like the Forms-based Notes, to create context sensitive notes.

As Notes can have both HTML and Forms-based functionalities, both versions require the same setup steps and all steps are performed in Forms.

**Note:** With recent expansion, the Notes module developed for Oracle Common Application Calendar adopts Oracle Applications Self–Service Framework, the standard HTML development and deployment platform for Oracle Self-Service Applications, to provide another HTML version of essential notes screens for integrated applications to uptake these features while re-building their functions. The Notes module in Oracle Applications Framework is not fully compatible with HTML Notes user interface. For basic implementation tasks, see Implementing the Oracle Applications Framework Based Notes chapter. For detailed implementation and use features of the integrated applications, please consult product specific documentation.

# Steps

This section provides an overview of the required steps for implementing Notes including setting up Notes, customizing HTML Notes security, and troubleshooting Notes. Detailed instructions for these steps are contained in the subsequent Notes chapters.


- Setting Up Notes, page 11- 2
  - Setting Up Note Types, page 11- 2
  - Mapping Note Types to a Source, page 11- 2
  - Defining Notes Reference Mapping, page 11- 3
  - Setting Up the Source Object Code and Context, page 11- 3
  - Setting Profile Options, page 11- 3
- Customizing HTML Notes Security, page 11- 3
- Troubleshooting Notes, page 11- 3


## Setting Up Notes

This chapter contains basic instruction for setting up the Notes components in the following topics:

# Setting Up Note Types

In addition to the seeded note types, the implementor or system administrator can create new note types to categorize a note, such as a General note type for a general note, or an Interaction note type for a note created specifically for an interaction or activity.

# Mapping Note Types to a Source

After creating note types, the implementor or system administrator can map these note types to a source object, such as Task Manager, or Sales Lead, or a specific resource category, such as Employee Resource. This limits the visibility of the note type appearing in the Note Type list of values only to the mapped specific source object or resource category.

## Defining Notes Reference Mapping

In addition to mapping note types to a source, implementors can also map references to a source object. This narrows down the References drop-down list to objects that are actually relevant to a document's source object.

The Mapping Objects window used to define reference mapping is for both Task Manager and Notes. Therefore, implementors need to locate the setup screen under the Task and Escalation Manager navigation node.

## Setting Up the Source Object Code and Context

The implementor or system administrator can add additional data in the JTF objects table if necessary. For example, if a document is newly defined or integrated with Notes, such as Task Manager, then the new document must be associated with Notes usage. As a result, the document name (Task Manager) appears in the Source list when a note is created for task 1150. Each item in the source list has an associated related object (task 1150), which appears in the Related To list.

## Setting Profile Options

The implementor or system administrator can use the Notes: Default Note Status profile option to set the default value for note status at site, application, responsibility, or user level based on business needs.

### Customizing HTML Notes Security

The HTML Notes module contains a security model used to restrict data access to appropriate users through a specific authorization process. This Notes security model, leveraged the Application Object Library (AOL) data security model, provides a flexible mechanism for notes security access. It allows Notes implementor or system administrator to customize notes data, and then grant specific notes to appropriate users or user groups with right access privileges. This includes granting users the ability to view a note, create a note, update a regular note, update a large note, update a note's secondary information (such as note type, status, relation and attachment), and restrict "note type" list of values. This functionality is only enforced in the HTML Notes, not the Forms-based Notes.

### Troubleshooting Notes

In addition to the implementation steps, some troubleshooting information is also addressed in a separate chapter. This includes common implementation errors and frequently asked questions (FAQs) for implementing Notes.

# 12

# Setting Up Notes

This chapter covers the following topics:

- Setting Up Note Types
- Mapping Note Types to a Source
- Defining Notes Reference Mapping
- Setting Up the Source Object Code and Context
- Setting Profile Options

## Setting Up Note Types

In addition to using seeded note types, implementor or system administrator can create new note types to categorize notes for specific business needs. For example, if a note is created for a general purpose, then a note type for this note can be “General.” If a note is created specifically for an interaction or activity, then a note type for the interaction note or the activity note can be “Interaction” or “Activity”.

To create a new type, enter the Code name of your application (such as KB_Action for Knowledge Base note with note type called Action), and this code name must be unique and cannot have a duplicate record in the system. In addition, enter note type name (such as Action) in the Meaning field. Select the Enabled check box before using the new note type.

In order to hide an existing note type, implementor or system administrator can assign an end date to that note type.

Perform the following steps in Forms to create new note types.

## Prerequisites

None

## Responsibility

CRM Administrator

## Navigation

Navigate to **Notes Setup > Note Type Setup**.

## Steps

1. In the Application Object Library: Note Types Lookups window, place your cursor in the code field and select **File > New** to enter new note type.
2. Enter the code, meaning, and description information for the new type.
3. Select the Enable check box to activate the new note type.
4. Chose **File > Save** to save your work.

## See Also


- Mapping Note Types to a Source, page 12- 2
- Defining Notes Reference Mapping, page 12- 3
- Setting Up the Source Object Code and Context, page 12- 4
- Setting Profile Options, page 12- 5


## Mapping Note Types to a Source

After creating a note type, the implementor or system administrator can map a note type to a source object in order to limit the selection of note type list of values for the mapped source.

**Source Objects**

A source object is a business object that initiates the creation of a note. If a note is created for a service request or party, then the service request or party is the source object of that note. A note must have a source object.

**Related Objects**

Be aware of the difference between a source object and related object. A related object is an object related to a note, but is not the source of the note. A note may be created for a task, a source object, but it can be related to a party, an opportunity, or an employee as well. These party, opportunity, and employee are the related objects for that note. Related objects are not mandatory, instead they are nice to have information for a note.

**Mapping Note Types to a Source**

Use the Mapping Objects window to map note types to a source. For example, if closure, activity, and interaction note types are mapped to Task Manager, a source object, then when users create a note from a task, they can see these three note types displayed in the list of values. If the same note types are not mapped to another source, Campaign Schedule for Marketing, then they will not see them while attaching a note to a campaign schedule.

Please note that it is necessary to map note types to a source "Employee Resource" so that employee resources can see the mapped note types from the list of values when creating a note.

In addition, implementors or system administrators can set an end date for a mapped note type if necessary.

> **Note:** This Mapping Note Types to a Source functionality is not enforced in the Forms version.

Perform the following steps in Forms to map a note type to a source object.

## Prerequisites

A new note type must exist.

## Responsibility

CRM Administrator

## Navigation

Navigate to **Notes Setup > Source and Note Type Mapping.**

## Steps

1. To search for existing data for a source object, navigate to **View > Query by Example > Enter** and enter your query in the Source Object field.
2. Select **View > Query by Example > Run** to run your query or select **View > Find All** to search for all records.

   The information appears in the Mapping Objects window.
3. Select the Source Object from the list of values (LOV), for example, Task Manager.
4. Select the Note Type you want to map to the drop-down list from the LOV, for example Call Back.
5. (Optionally) Enter an end date or use the calendar LOV to select a date.

   The seeded check box is not editable.
6. Click **Save**. The Call Back note type will now appear in the note type drop-down when you create a note in Task Manager.

## See Also


- Setting Up Note Types, page 12- 1
- Defining Notes Reference Mapping, page 12- 3
- Setting Up the Source Object Code and Context, page 12- 4
- Setting Profile Options, page 12- 5


## Defining Notes Reference Mapping

Use the Mapping Objects window to map a reference type to a source object. This narrows down the References list of values (LOV) to the mapped object. For example, when creating a note for a Sales Opportunity, users typically don't want to see such objects as Service Request or Defect in the References list of values. Instead, they only want to see Lead, Forecast, Quote, and Sale Organization. Therefore, implementors or system administrators must map note references such as Lead, Forecast, Quote, and Sales Organization, to the source object, Sales Opportunity.

Be aware that the Mapping Objects window is used to define reference mapping for both Task Manager and Notes. To locate the reference mapping screen, select the Task and Escalation Manager, not Notes navigation node.

> **Note:** This window defines reference mapping for both the Task Manager and the Notes module.

Perform the following steps in Forms to map note references.

## Prerequisites

Your source object must exist.

## Responsibility

CRM Administrator

## Navigation

Navigate to **CRM Administrator > Task and Escalation Manager > Setup > Task & Note References.**

## Steps

1. In the Mapping Objects window, select your source object from the list of values, for example, Sales Opportunity.
2. Select the References you want to appear in the LOV.
3. Optionally select an end date for the mapped reference.
4. Select the application where you want to extract your additional data from and click **Save**.
5. Repeat these steps for every object that you want to appear in the References LOV for your source object.

## See Also

- Setting Up Note Types, page 12- 1
- Mapping Note Types to a Source, page 12- 2
- Setting Up the Source Object Code and Context, page 12- 4
- Setting Profile Options, page 12- 5

## Setting Up the Source Object Code and Context

When defining a new document, Notes implementor or system administrators must associate Notes usage to the new document. In the Forms-based Notes, the document name appears in the Source list. Each item in the Source list has an associated related object, which appears in the Related To list.

How to enter each field for different tabs, see the detailed step by step instruction in the Setting Up Metadata Objects, page 21-27 section, Setting Up Task Manager chapter, *Oracle Common Application Components Implementation Guide*.

Perform the following steps in Forms to define the source code usage as NOTES.

## Prerequisites

None

## Responsibility

CRM Administrator

## Navigation

Navigate to **Task and Escalation Manager > Setup > Objects Meta-data**.

## Steps

1. In the Tasks Setup: Object Types window opens, perform one of the following tasks:
    1. If the source object code you want to seed already exists, then define the usage as NOTES.
    2. If the source object code is not defined, then you must define the source object code, the name, and select its details and usage. (Usage should be NOTES.)
2. For detailed instruction on how to enter each field, please see Setting Up Metadata Objects., page 21-27

## See Also

- Setting Up Note Types, page 12- 1
- Defining Notes Reference Mapping, page 12- 3
- Mapping Note Types to a Source, page 12- 2
- Setting Profile Options, page 12- 5

## Setting Profile Options

The following table describes the profile option used by Notes. Please note that the profile option "Notes: Default Note Type" only applies to the Oracle Applications Framework based Notes. It is not used in the Forms-based Notes and HTML Notes.

***Notes Profile Options***

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| Notes: Default Note Status | Public | Site | This profile option sets the default note status. Profile option values include private, public, or publish. | If you select **Publish**, then that is the default value shown in the Status drop-down list when creating a new note.<br>If no profile option is set, default is **Public.** |
| Notes: Default Note Type | N/A | Site | This profile option sets the default note type only to the Notes in Oracle Applications Framework. It does not apply to the HTML and Forms-based Notes. | Set the desired value to the note type. If this profile option is not set or the note type default value is not mapped to a source, then there will not have a default value in the Note Type field during note creation. Otherwise, the default note type will appear in the field. |

**Note:** See Appendix A, Profiles Options, page A- 4 , for details on how these profile options can be set.

# 13

# Customizing HTML Notes Security

This chapter covers the following topics:

- HTML Notes Security Overview
- Terms and Definitions
- Steps for Customizing HTML Notes Security

## HTML Notes Security Overview

By leveraging the Application Object Library (AOL) data security model, the HTML Notes module provides a flexible mechanism for notes security access. This security model provides the ability to restrict data access to appropriate users through a specific authorization process.

For example, in the past, almost all users can create new notes, but now only the users who are granted access to the create note function would be able to create notes. The same theory can be applied to the creation or deletion of attachments, or note modifications.

With the new security model, based on the AOL security model, the HTML Notes module uses the concepts of objects, instances, and instance sets to further group all data in HTML Notes into different units or sets. The biggest unit is Notes that is considered as an object in AOL term. Within the object Notes, multiple notes can be grouped into different subsets (or object instance sets), such as all notes with status "private", all notes of type "offer", or all notes not of type "offer". Based on the definition of these subsets, a private note, or a note of type "offer" then becomes the smallest unit of the Notes object and is called the object instance.

With these data object concepts, information entered in HTML Notes can be further restricted to the data level, customized for your business needs, and then securely granted to resources and resource groups.

As HTML Notes security is based on the AOL security model, relevant AOL data security concept and terminology will be introduced first. How to customize the notes security is addressed later.

> **Note:** Even if you define the data security rules in the HTML Notes module, these rules will not be enforced in the Forms-based Notes.

Information on AOL data security framework, refer to *Oracle Applications System Administrator's Guide*.

## Terms and Definitions

This section explains the various terms used in the HTML Notes security:


- Users (User Groups), page 13- 2
- Objects, page 13- 2
- Object Instances, page 13- 2
- Object Instance Sets, page 13- 2
- Functions (Privileges), page 13- 3
- Menus (Roles), page 13- 4
- Grants (Authorizations), page 13- 4
- Global Grants, page 13- 5


## Users (User Groups)

A user is a single person with an account on the system (represented by a row entry in FND_USER). Users can be grouped into groups. Therefore, a user role may represent a user or group of users. A user group is any grouping of FND_USERS who are exposed through the WF_ROLES view.

Users and user groups can be referred as **Grantee** if they are the subjects of a data security grant. These users and user groups must be exposed in the WF_USER/WF_ROLES.

## Objects

An object is a type of thing on which security can be managed. Notes is an example of an object.

In a technical definition, each object must be registered in the FND_OBJECTS tables. Every object definition will contain related database object (table or view) and primary key information for the object.

There are two seeded objects used in Notes security:

- JTF_NOTES
- JTF_NOTE_TYPES

## Object Instances

An object instance is a specific entity of an object. This generally corresponds to a row (or related set of rows) in the database. If the Notes module is considered an object, then a note with number 1541 is an object instance.

In a technical explanation, object instances are derived from the primary key values. The primary key values should be set for the registered object in the FND_OBJECTS and FND_GRANTS tables.

## Object Instance Sets

An object instance set is a group of multiple object instances. For example, all notes with a number smaller than 5 could be considered as an object instance set.

In a technical definition, object instance set definition is stored in the FND_OBJECT_INSTANCE_SET table. The definition contains a SQL "where" clause, the predicate, that combined with the object definition will return all the object instances that are part of the object instance set.

Use the following examples to understand the concept of object instance sets. Please note that all words after the "where" clause in Italic style are defined in the FND_OBJECT_INSTANCE_SET table. In addition, to avoid processing issues all the columns used in the "where" clause should be prefixed with "&TABLE_ALIAS" in the object instance set definition.

- All notes with a number smaller than 5:

```
SELECT jtf_note_id
FROM jtf_notes_b
WHERE&TABLE_ALIAS.jtf_note_id < 5
```

- All non private notes:

```
SELECT jtf_note_id
FROM jtf_notes_b
WHERE &TABLE_ALIAS.note_status <> 'P'
```

- All notes that are not confidential

```
SELECT jtf_note_id
FROM jtf_notes_b
WHERE &TABLE_ALIAS.note_type <> 'CONFIDENTIAL'
```

- All notes that are confidential

```
SELECT jtf_note_id
FROM jtf_notes_b
WHERE &TABLE_ALIAS.note_type = 'CONFIDENTIAL'
```

All columns exposed through the FND_OBJECTS.DATABASE_OBJECT_NAME table/view can be used to create instance sets, although basic performance rule should be taken into account.

## Functions (Privileges)

A function is an action that can be performed on an object or object instance. It is the smallest unit of secured product functionality. It can be granted to a user or user group which means that it gives the user or user group permission to perform that function. Therefore, it can also be referred as a permission or privilege from a user's point of view.

For example, a note can be created so that CREATE_NOTE could be considered as a function. A note can be updated so that UPDATE_NOTE again could be considered as a function. Functions can be secured through the AOL security model. The Notes module has the following functions defined for the Notes object:

- JTF_NOTE_SELECT, the ability to view a note
- JTF_NOTE_TYPE_SELECT, the ability to view a note type
- JTF_NOTE_CREATE, the ability to create a note including a regular note, large note (detailed note) and an attachment for a note
- JTF_NOTE_UPDATE_NOTES, the ability to update a note's text (regular note)

- JTF_NOTE_UPDATE_NOTE_DETAILS, the ability to update a note's details (a large or detailed note)
- JTF_NOTE_DELETE, the ability to delete a note
- JTF_NOTE_UPDATE_SECONDARY, the ability to update a note's type, status, relation (relate to), and attachment information

These functions are defined in the FND_FORM_FUNCTIONS table since they are referenced in the actual code. Therefore, they cannot be changed or extended.

In addition, functions (privileges) can be grouped into menus (roles) to reduce the granting overhead.

## Menus (Roles)

A menu is a grouping of functions. It is required to group functions into related sets of menus necessary to perform a particular job role on an object instance. A good example is an "Administrator" menu, which might include many functions required for a user with an administrator role to perform his job. Therefore, menus can also be referred as roles.

In addition, menus can have multiple hierarchies and this menu structure is built upon logical groups of functions.

The following menus (roles) are defined for Notes security:

- JTF_NOTES_USER
  - JTF_NOTE_SELECT
  - JTF_NOTE_UPDATE_SECONDARY
- JTF_NOTES_CREATOR
  - JTF_NOTE_CREATE

Please note that menus are user definable, the seeded menus only exist to ensure backward compatibility.

## Grants (Authorization)

A grant is an authorization for the grantee (users or user groups) to perform the specified object role on the specified object instance or object instance set. Therefore, grants are used to tie the whole thing together. A grant consists of the following three components:

- Object. Any object instance or object instance set, for instance, all non-private notes.
- Grantee. Any user or user group, for instance, "JDOE" for John Doe
- Menu. Any menu, for instance, "JTF_NOTES_USER"

These three components would grant the user, John Doe, the ability to select and update all non-private notes.

In addition, all grants should be registered in table FND_GRANTS.

Please note that when using AOL security a user will by default not be able to do anything unless explicitly granted.

## Global Grants

To reduce the administration of grants, authorizations can be granted globally to the following:

- The "Global" user or user group (grantee)
- The "Global" object instance (object)

## Steps for Customizing HTML Notes Security

After understanding of how data can be organized in HTML Notes based on the AOL security model, system administrators can further customize the HTML Notes security rules by granting users appropriate data access permissions using the concept of object instance sets.

To better explain how the customization can be done, use the following business scenario to lead you through the possible customization steps.

## Business Scenario

*A company's Sales department wants sales managers to be able to create and delete confidential notes for their sales leads. These confidential notes will be of note type "Confidential" and should be invisible to normal sales representatives. In addition, only sales managers should be able to create and delete confidential notes.*

To customize HTML Notes security which is, in other words, to create grants based on the business scenario. Before starting a new grant, the following three components should be identified first:


- Identifying Users or User Groups (Grantee), page 13- 5
- Defining Object Instance Sets (Object), page 13- 6
- Defining Menus (Menu), page 13- 7


Once the grant components (who has what privileges to access which objects) are identified, the administrator can start the granting process:


- Disabling Existing Grants, page 13- 9
- Adding New Grants, page 13- 9


### Identifying Users or User Groups

Users need to be identified so that appropriate access privileges can be granted to them. In general, a user can be a single resource, resource group, or all members of a resource group.

Based on the scenario, sales mangers and sales representatives are the grantees who will be given appropriate access permissions should be first identified. It can be done in Resource Manager by creating a resource group "SalesReps" containing all the sales representatives, and another group "SalesMan" containing all sales managers. How to create a resource group, refer to Resource Manager chapter, *Oracle Common Application Components Implementation Guide.*

## See Also

- Defining Object Instance Sets, page 13- 6
- Defining Menus, page 13- 7
- Disabling Existing Grants, page 13- 9
- Adding New Grants, page 13- 9

### Defining Object Instance Sets

Use an object instance set to specify a parameterized set of rows for the Notes object so that it can be granted to appropriate users.

An object instance set is a subset of data resided within an object, therefore an object must exist first before you are able to create an object instance set for that object.

> **Note:** The creation of object instance set is metadata driven, all data required to ensure backward compatibility with current Note security model are seeded.

The Notes module uses two seeded objects, JTF_NOTES and JTF_NOTE_TYPES. Each object can be customized by creating object instance sets to provide users with specific sets of Notes data if necessary. For example, notes (JTF_NOTES object) can be customized to have different object instance sets, such as all confidential notes. Note types (JTF_NOTE_TYPES object) list of values (LOV) can also be customized for different users.

Based on our scenario, in order to grant sales managers the permission to create confidential notes, and ensure sales representatives cannot create confidential notes, the following object instance sets should be created for JTF_NOTES:

- All confidential notes
- All non-confidential notes

Additional object instance sets should be created for JTF_NOTE_TYPES so that sales manager, not sales representatives, can see the confidential note type. To do so, you can filter the list of available note types:

- All confidential note types
- Sales representative note types (all note types except the confidential note type)

> **Note:** The note type LOV uses the internal API and appends the returned where clause to the base query to provide security data access.

Use the following steps to define object instance sets:

## Prerequisites

An object must be in place.

## Responsibility

FND Security Administration (Self Service Application)

## Navigation

Objects

## Steps

**Tips**: First locate the object that you want a new instance set created for, then enter necessary information for the set.

Detailed information on how to define object instance sets, see *Oracle Applications System Administrator's Guide*.

1. Enter necessary search information in the Find Objects window to locate the JTF_NOTES and JTF_NOTE_TYPES objects. Search results should be listed after executing the search.
2. Click the object name hyperlink for which you want the new instance set to be created from the search result to open the Find Object Instance Set window.
3. Existing instance sets for the selected object are also listed here. Click **Create New Instance**.
4. Enter instance set detail information including instance set name, display name, description and predicate.
5. Save your work.

## See Also


- Identifying Users or User Groups, page 13- 5
- Defining Menus, page 13- 7
- Disabling Existing Grants, page 13- 9
- Adding New Grants, page 13- 9


### Defining Menus

A menu is a hierarchical arrangement of functions and menus of functions. If a grant just involves a single function, such as grant the create notes function (JTF_NOTE_CREATE) to a user, then there is no need to define menus. As mentioned earlier, the purpose of using menus is to reduce the administrative tasks. If multiple functions need to be given to a user, it is necessary to group them into a menu or menu structure.

In our scenario, sales mangers require the following functions in a menu format:

- JTF_NOTE_SELECT
- JTF_NOTE_CREATE
- JTF_NOTE_DELETE
- JTF_NOTE_UPDATE_NOTES
- JTF_NOTE_UPDATE_SECONDARY
- JTF_NOTE_TYPE_SELECT

In addition, create another menu for sales representatives including the following functions:

- JTF_NOTE_SELECT
- JTF_NOTE_CREATE
- JTF_NOTE_UPDATE_SECONDARY
- JTF_NOTE_TYPE_SELECT

## Prerequisites

None

## Responsibility

System Administrator

## Navigation

Application > Menu

## Steps

1. Enter the menu name that describes the purpose of your menu, such as "SalesMan" or "Salesrep" in the Menu and User Menu Name fields.

   The User Menu Name is used when a responsibility calls a menu or when one menu calls another.

2. Select an appropriate menu type and enter description information:
   - Standard. For menus that would be used in the Navigator form
   - Tab. For menus used in self service applications tabs
   - Security. For menus that are used to aggregate functions for data security or specific function security purposes, but would not be used in the Navigator form
3. Enter required functions for this menu including:
   - Sequence. Enter an integer here.
   - Navigation prompt. Enter a user-friendly, intuitive prompt your menu displays for this menu entry. This menu prompt appears in the hierarchy list of the Navigator window.
   - Submenu name. Enter a submenu name if applies. This calls another menu and allows users to select menu entries from that menu.
   - Function name and description. Enter a function name that you wish to include in the menu. Descriptions appear in a field at the top of the Navigate window when a menu entry is highlighted.
   - The Grant check box. This should always be checked which indicates that this function is automatically enabled for the user. If this is not checked, then the function must be enabled using additional data security rules.
4. Click **View Tree...** to see menu's hierarchical structure.

Refer to *Oracle Applications System Administrator's Guide* for more information regarding how to define a menu.

## See Also

- Identifying Users or User Groups, page 13- 5
- Defining Object Instance Sets, page 13- 6
- Disabling Existing Grants, page 13- 9
- Adding New Grants, page 13- 9

### Disabling Existing Grants

The purpose of disabling existing grants is to make sure that all seeded global grants are revoked so that they don't interfere with the new grants. To disable a grant, you can set an end date for the grant, instead of deleting it completely.

## Prerequisites

None

## Responsibility

FND Security Administration (Self Service Application)

## Navigation

Grants

## Steps

1. Search the existing grants that you want to disable by entering search criteria in the Search Grants window.
2. Click **Go** to retrieve the grants that match your search criteria.
3. Select the grant that you want to disable from the search result.
4. Set an end date in the Context window and click **Finish** to disable the grant.

More information on how to disable existing grants, see *Oracle Applications System Administrator's Guide.*

## See Also

- Identifying Users or User Groups, page 13- 5
- Defining Object Instance Sets, page 13- 6
- Defining Menus, page 13- 7
- Adding New Grants, page 13- 9

### Adding New Grants

A new grant must take place when there is a need to authorize access privileges for a user so that the user can perform certain functions, or to have more specific actions on a designated instance set. Therefore, based on the data access levels, there are two types

of grants: Function Grants (such as "Administrator" menu) and Data Grants (such as the note type LOV data)

**For function grant**, it applies to all objects and consists of the following windows:

1. Grantee: There are three grantee types appeared in radio buttons. Only one of them should be selected as a grantee.
   - All users (global)
   - Group of users (group)
   - Single user (user)

     In the case of a group or a single user is selected, the corresponding group or user name should be further identified. The selected grantee will be validated against WF_ROLES table.
2. Function Set: A function set (or a menu) can be selected from the LOV so that an appropriate function set can be granted to a specified grantee.
3. Context: The screen provides grant attributes information including organization, responsibility, start and end dates, program name, and program tag fields. This is the place where a grant can be disabled by entering an end date.

**For data grant**, a specific object and instance set information need to be further identified. It consists of the following windows in a sequential order:

1. Object: A specific object name needs to be specified for this grant.
2. Grantee: Like the function grant, grantee can be a user, a group, or all users.
3. Function Set: Like the function grant, a function set needs to be specified in order to authorize it to a specified grantee.
4. Data Set: There are three types of instance. Only one of them should be selected:
   - All rows of the object (global): When it is selected, the Data Set Details window will be skipped and you are directed to the Context window.
   - A specific row of the object (instance)
   - A parameterized set of rows (instance set): When it is selected, the instance set name needs to be further identified.
5. Data Set Details: In the case of instance or instance set is selected in the Data Set window, more data or data set details will be displayed in this window. If instance is selected, then this page will have associated primary key values displayed. If instance set is selected, then this page will have parameter columns displayed with the associated predicate information for the selected instance set.
6. Context: Like the function grant, additional grant attributes can be addressed here. Use the end date field to revoke a grant.

Based on the scenario we have, the following grants need to be authorized:

- Grant all sales representatives the access to all non-confidential notes
- Grant all sales mangers the access to all non-confidential notes
- Grant all sales mangers the access to all confidential notes
- Grant all sales representatives the access to sales representative note types
- Grant all sales managers the access to all confidential note types

- Grant all sales managers the access to sales representative note types

Use the following steps to add a new grant. Detailed information on how to add new grants, see *Oracle Applications System Administrator's Guide.*

## Prerequisites

None

## Responsibility

FND Security Administration (Self Service Application)

## Navigation

Grants

## Steps

1. Select **Create Data Grant** to add new grants to sales managers or sales representatives.
2. In the Object window, select JTF_NOTES as the object name.
3. In the Grantee window, select the Group of Users radio button. Additionally, specify appropriate group name.
4. In the Function Set window, specify a menu name for either sales managers or sales representatives.
5. In the Data Set window, select the A parameterized set of rows (Data Set) radio button. Furthermore, specify the object instance set that you have defined earlier.
6. In the Data Set Details window, enter appropriate primary key values.
7. In the Context window, enter appropriate organization, responsibility and start date information. Leave the End Data field blank.
8. Enter JTF_NOTES in the Program Name field.
9. Enter JTF_SALES_NOTES or JTF_SALES_NOTETYPES in the Program Tag field depending on the selected object instance set.
10. Click **Finish**. Once this process is successfully completed, the confirmation page opens with the message saying that the grant has been created.

## See Also


- Identifying Users or User Groups, page 13- 5
- Defining Object Instance Sets, page 13- 6
- Defining Menus, page 13- 7
- Disabling Existing Grants, page 13- 9

# 14

# Troubleshooting Notes

This chapter covers the following topics:

- Errors Messages
- Answers to Frequently Asked Questions (FAQs)

## Errors Messages

### ORA-20000

**InterMedia Text error: ORA-01722: invalid number ORA-06512: at "CTXSYS.DRUE", line 126 ORA-06512: at "CTXSYS.TEXTINDEXMETHODS", line 226 ORA-06512: at line 1.**

**Cause:** Script Failure Error

**Action:** To resolve this issue, configure your environment to include Intermedia text. For more information, refer to the *Oracle 8i Intermedia Text Installation Manuals FAQ* or contact Oracle Support.

### Script Failed Error

The following error message can occur:

- **ORA-29856: error occurred in the execution of ODCIINDEXDROP routine.**
- **ORA-20000: interMedia Text error: ORA-01722: invalid number ORA-06512: at "CTXSYS.DRUE", line 126 ORA-06512: at "CTXSYS.TEXTINDEXMETHODS", line 226 ORA-06512: at line 1.**

Configure your environment to include Intermedia text. For more information, refer to the *Oracle 8i Intermedia Text Installation Manuals FAQ* or contact Oracle Support.

## See Also


- Setting Up Note Types, page 12- 1
- Mapping Note Types to a Source, page 12- 2
- Setting Up the Source Object Code and Context, page 12- 4
- Setting Profile Options, page 12- 5

## Answers to Frequently Asked Questions (FAQs)

The following are frequently asked questions. Answers to these questions may help you in troubleshooting problems with the Notes module.

### Can You Delete or End Date Seeded Note Types?

Seeded data cannot be end dated or deleted. However, users can define new note types.

# 15

# Spreadtable Implementation Overview

This chapter covers the following topics:

- Overview
- Steps

## Overview

A spreadtable is a metadata driven user interface component that contains rows, columns, and column headers set in a grid that can display dynamic content at run time. Spreadtable can be embedded into an Oracle form. Oracle Common Application Components use Spreadtable to provide flexibility in displaying and handling data through an interactive way. It allows users to sort, search, copy and export data, and customize the display through the features of resize, resequence, and hide and show columns.

Before implementing Spreadtable, it is necessary to understand the functionality of the Spreadtable including sorting, searching, customizing layout, and copying and exporting.


- Sorting, page 15- 1
- Searching, page 15- 2
- Copying and Exporting, page 15- 2
- Customizing Layout, page 15- 2


### Sorting

Spreadtable provide users to sort data in the following two ways:

1. Click the grey dot in a column header in order to sort a category.

   The arrow that replaces the grey dot indicates a direction of order, for example, ascending or descending alphabetical or chronological order, where applicable.

   Re-sort in the opposite direction by clicking the header arrow again.

2. Right-click on a cell and select **Sort** in the table from the pop-up menu that appears. This action opens a dialog box in which you can select up to three columns for sorting.

## Searching

Spreadtables allows users to search for specific information in the spreadtable. To perform a search, right-click on a cell in the spreadtable and select **Find** from the pop-up menu that appears.

Find a matching value by typing the desired sequence of characters into an appropriate text field. Indicate whether or not to match case, and select the direction of the search, backward or forward.

## Copying and Exporting

In addition to sorting and searching, users can use the spreadtable to copy necessary information and then export the data into a spreadsheet application, such as Microsoft Excel.

Users can copy a cell, selected rows, or all rows in the spreadtable to a clipboard by right-clicking in the cell and then selecting the appropriate option from the menu.

When users insert the copied selection into a spreadsheet application, such as Microsoft Excel, the appropriate headers automatically migrate with the selection and appear as its first row. Rows are copied in a tab-delimited format.

Cells that display values as check marks or X display differently when copied and exported: positive values are expressed as asterisks (*) and negative values do not display.

**Note:** Hidden information does not migrate with exported data.

## Customizing the Layout

Spreadtables allow users to adjust the table layout in order to accommodate different business needs in the following ways:

- Make changes to the column width, sequence, visibility, and sort order.
- Resize the columns or rows to display text as you wish.
- Resize the window depending on the application you use. The spreadtable display will adjust accordingly.
- Resequence the columns by clicking the header that you want to be resequenced and holding mouse until a black box appears. Move the header to the selected position.
- Hide columns to make irrelevant or confidential information invisible. This can be done by right-clicking the header of the column you wish to hide and then selecting Hide Column from the pop-up menu. Hidden information does not migrate when data is copied to the clipboard.
- Show columns by using the Show Column option. This option lists a submenu that has currently hidden columns. Select all or only those you wish to display.
- Preserve or restore the changes you make to the table layout. This can be done by right-clicking a column header and clicking **Customizations**. Click **Save** from its submenu to save the changes. Click **Clear** to restore default settings.

## Steps

This section provides an overview of the required steps for implementing Spreadtable including creating a new spreadtable and setting profile options. Detailed instructions for these steps are contained in the subsequent chapters.

- Creating a New Spreadtable, page 16- 1
- Setting Profile Options, page 29- 1

### Creating a New Spreadtable

The implementor or system administrator can create a new spreadtable by defining a new datasource (a set of metadata) that can plug into an Oracle Forms bean area container. Metadata is information that defines what data is retrieved at run time and how that information is presented. After entering required data in a newly defined spreadtable, the implementor can test the functions of this new spreadtable before actually use it.

### Setting Profile Options

After defining a new spreadtable, the implementor or system administrator must set up necessary profile options in order to specify whether or not images are visible in the spreadtable. These include displaying images in grid column headers, header popup, row header images in the grid, grid popup, check box images, custom images, and long wait images.

# 16

# Implementation Tasks for Spreadtable

This chapter covers the following topics:

- Creating a New Spreadtable
- Setting Profile Options

## Creating a New Spreadtable

Use the Spreadtable MetaData Administration window to design spreadtables that plug into an Oracle Forms bean area container.

- A spreadtable is the user interface component that contains rows, columns, and column headers set in a grid that can be embedded into an Oracle form.
- Oracle Forms-based Common Application Components use the spreadtable to display and format dynamically retrieved data at run time. This is accomplished by predefined metadata definitions.
- Metadata is information that defines what data is retrieved at run time and how that information is presented.

The following table describes the Spreadtable MetaData Administration tabs.

***Spreadtable MetaData Administration Tab Descriptions***

| Tab | Description |
|---|---|
| Database | Use the Database tab to set column type and order, datatype, sequence, and default sort order. |
| Display | Use the Display tab to set column label, visibility, display sequence, and display width. |
| Alignment and Formatting | Use the Alignment and Formatting tab to set type of header and cell alignment, as well as display type and format. |
| Custom Format Masks and Mappings | Use the Custom Format Masks and Mappings tab to set how data shows. This applies to columns with datatype of number, check box, and images. For example, a spreadtable can display data values as a percent. |
| Query | The Query tab is for internal use only. It is used exclusively by the Universal Work Queue. |
| Sort Order | Use the Sort Order tab to set the overall sort order of the columns for the spreadtable. For example, you may set the primary sort order to be alphabetical based on column A, and set a secondary sort order to be numerical based on column B if B is defined as number in the database. |
| Test | Use the Test tab to test the newly defined spreadtable. |

**Warning:** Oracle does not support custom development of new forms using the spreadtable interface.

- Do not delete currently existing columns when modifying an existing spreadtable. Instead, use the Freeze Visible State property in the Display tab to make the column invisible to the user.
- Do not delete any existing metadata definitions.
- If you modify existing metadata definitions, these changes may be overwritten by subsequent patches.

Perform the following steps to create a new spreadtable.

## Prerequisites

None

## Responsibility

CRM Administrator

## Navigation

Navigate to the **Spreadtable Administration** window.

## Steps

1. In the Spreadtable MetaData Administration window, define a new datasource (a set of metadata) by entering the following:
   - **Datasource Name**: The unique name that identifies a set a metadata. It must always be <Application Prefix>_<Name>.
   - **Application**: The name of your product.
   - **Title**: A descriptive name for this set of metadata.
   - **Relational View Name**: Select, from the LOV, the name of the view from which information is to be retrieved to populate the spreadtable.
   - **Lines/Rows**: Enter how many lines of text are to display per row.
   - **WHERE Clause:** (Optional) Enter a SQL statement here if desired. Use this field to enter filtering criteria. Note the following:
   - Do **not** start the SQL statement with the keyword WHERE, as this is automatically pre-pended to the statement.
   - **Always** use bind variables if the value changes at runtime.
   - **Fetch Size:** Enter how many rows to be fetched each time. The default is set to 200 rows if it is not specified.
2. Select the Database tab, if it is not already selected, and enter the following information for each column that you want to be visible in the spreadtable:
   - **Column Alias**: The column alias becomes part of the primary key, therefore it must be a unique name.
   - **View Column/ Function**: Select from the LOV the desired name of the View Column.
   - **Datatype**: Select from the LOV either character, number, or date.
   - **Query Sequence**: The sequence value determines the order in which columns are extracted from the database. You could start with 1, but in actual practice, it is a good idea to leave gaps in the sequence for ease of row insertion later. To improve performance, begin with the columns that you will refer to in your code, typically the primary key columns to execute a query in a detail block.
   - **Fire Post Query Flag:** Select this flag to fire the post query event when the row is displayed or used.
   - **Sortable**: Select this check box allows the user to sort on this column.
   - **Sort Column**: Select from the LOV the desired column name that you want to use for sorting. If this field is specified, then a user can sort on criteria (the specified column name as sorting criteria) other than the actual data. If it is not specified, then the View Column is used to sort data. For example, if Priority is selected in this field and it is associated with a code ('High' - 1, 'Medium' - 2, 'Low' - 3), then the priority code can be used to sort the Priority column values.

- **Default Sort Order**: Sort in ascending or descending default order.

3. Select the Display tab, and enter the following for each column that you defined previously:
   - **Column Alias**: The column alias field is filled automatically.
   - **Label**: This field is supplied automatically to identify the column header information once the Column Alias field is identified. You can change the label information if desired.
   - **Visible**: Select to make this column visible in the spreadtable.
   - **Freeze Visible Property**: Select if you want the end user to be able to change the visible properties (show/hide) at run time for this column.
   - **Display Sequence**: The value determines the order in which the columns show in the spreadtable.
   - **Display Width**: Set the width (in pixels) of the displayed column.
4. Select the Alignment and Formatting tab, and enter the following:
   - **Header Alignment**: Select, from the LOV, either Center, End, Right, or Start.
   - **Cell Alignment**: Select, from the LOV, either Center, End, Right, or Start.
   - **Display Type**: Select, from the LOV, either Check Box, Hyperlink, Text, or Image.
   - **Display Format:** (Optional) Select, from the LOV, either Currency, Date, or Date Time.
5. Select the Custom Format Masks and Mappings tab.
   - **Column Alias**: The column alias field is filled automatically.
   - **Check box Mappings**: These options apply only if the display type field in the Alignments and Formatting tab is set to Check Box.
     - **Checked**: Select this check box to represent a column value as a selected check box, not its corresponding image.
     - **Unchecked**: Select this check box to represent a column value as an unselected check box, not its corresponding image.
     - **Other**: Select this check box to represent a column value as neither checked nor unchecked.
   - **Format Mask**: Use this column to set how columns with a datatype of Number display data. For example, a spreadtable can display data values as a percent. However, you should set this only in rare cases.
   - **Image Description Column**: Uses this column as a tool tip for an image. For every column defined as image, if the Image Description Column is not Null (left blank), then both the View Column and the Image Description Column are retrieved. If it is left blank, then only the View Column is retrieved. Users can position mouse over an image to see the image description information if it is specified.
   - **Currency Column**: Uses this column to point to the database View Column where the currency code for the current column is stored. This applies only if the display format is set to Currency.
6. Select the Sort Order tab, and perform the following:

- Choose the Primary Sort key from the LOVs.
- You can optionally select a secondary or tertiary sort key from the LOV.

7. Click the Save icon on the toolbar. (The icon looks like a floppy disk.)
8. Select the Test tab, and click **Test**. Your table appears. You can customize your spreadtable display or copy and export data if necessary.

## Setting Profile Options

Images are used in the spreadtable to improve usability. These include displaying images in grid column headers, header popup, row header images in the grid, grid popup, check box images, custom images, and long wait images.

While these images improve the visual effectiveness of the spreadtable they do not, in reality, contribute to its functionality and hence, can be removed if needed.

Use the following profile options to control whether or not any of these images are visible:

- JTA_GRID_DISPLAY_IMAGES (JTA Display images in the grid)

  This profile option is a global setting, which can be overridden by setting the following profile options.

- JTA_GRID_DISPLAY_CHEADER_IMAGES (JTA Display images in grid column headers)
- JTA_GRID_DISPLAY_HEADER_POPUP_IMAGES (JTA Display header popup images)
- JTA_GRID_DISPLAY_RHEADER_IMAGES (JTA Display row header images in the grid)
- JTA_GRID_DISPLAY_GRID_POPUP _IMAGES (JTA Display grid popup images)
- JTA_GRID_DISPLAY_CHECKBOX_IMAGES (JTA Display checkbox images)
- JTA_GRID_DISPLAY_CUSTOM_IMAGES (JTA Display custom images)
- JTA_GRID_DISPLAY_LONGWAIT_IMAGES (JTA Display long wait images)

  **Note:** The browser must be restarted for changes to these settings to take effect.

***Spreadtable Profile Options***

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| JTA Display images in the grid | Null | User | This profile options sets whether or not images are visible in the spreadtable. (This is a global setting, which can be overridden by setting the following profile options.)<br>Possible values are Null, Yes, or No. | If **Null** (left blank), the value is treated as **Yes**.<br>If set to **Yes**, all images are visible. This is a global setting for all spreadtable images.<br>If set to **No** all images are turned off. |
| JTA Display images in grid column headers | Null | User | This profile options sets whether or not column header images are visible in the spreadtable.<br>Possible values are Null, Yes, or No. | If **Null** (left blank), it has the same value as JTF_GRID_DISPLAY_IMAGES.<br>If set to **Yes**, all column header images are visible.<br>If set to **No** all column header images are turned off. |
| JTA Display header popup images | Null | User | This profile options sets whether or not header popup images are visible in the spreadtable.<br>Possible values are Null, Yes, or No. | If **Null** (left blank), it has the same value as JTF_GRID_DISPLAY_IMAGES.<br>If set to **Yes**, all header popup images are visible.<br>If set to **No**, all header popup images are turned off. |

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| JTA Display row header images in the grid | Null | User | This profile options sets whether or not row header images are visible in the spreadtable.<br>Possible values are Null, Yes, or No. | If **Null** (left blank), it has the same value as JTF_GRID_DISPLAY_IMAGES.<br>If set to **Yes**, all row header images are visible.<br>If set to **No**, all row header images are turned off. |
| JTA Display grid popup images | Null | User | This profile options sets whether or not grid popup images are visible in the spreadtable.<br>Possible values are Null, Yes, or No. | If **Null** (left blank), it has the same value as JTF_GRID_DISPLAY_IMAGES.<br>If set to **Yes**, all header popup images are visible.<br>If set to **No**, all header popup images are turned off. |
| JTA Display checkbox images | Null | User | This profile options sets whether or not images in cells defined as check boxes are visible in the spreadtable.<br>Possible values are Null, Yes, or No. | If **Null** (left blank), it has the same value as JTF_GRID_DISPLAY_IMAGES.<br>If set to **Yes**, all check box images are visible.<br>If set to **No**, an asterick (*) is used for True and Null (blank) for False |

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| JTA Display custom images | Null | User | This profile options sets whether or not custom images in cells defined as "Image" are visible in the spreadtable.<br>Possible values are Null, Yes, or No. | If **Null** (left blank), it has the same value as JTF_GRID_DISPLAY_IMAGES.<br>If set to **Yes**, all cell images are visible.<br>If set to **No**, the image description is used in place of the image. |
| JTA Display long wait images | Null | User | This profile options sets whether or not long wait images are visible in the spreadtable.<br>Possible values are Null, Yes, or No. | If **Null** (left blank), it has the same value as JTF_GRID_DISPLAY_IMAGES.<br>If set to **Yes**, all long wait images are visible.<br>If set to **No**, no long wait images are visible. |

**Note:** See Appendix A, Profiles Options, page A- 4 , for details on how these profile options can be set.

# 17

# Assignment Manager Implementation Overview

This chapter covers the following topics:

- Overview
- Steps

## Overview

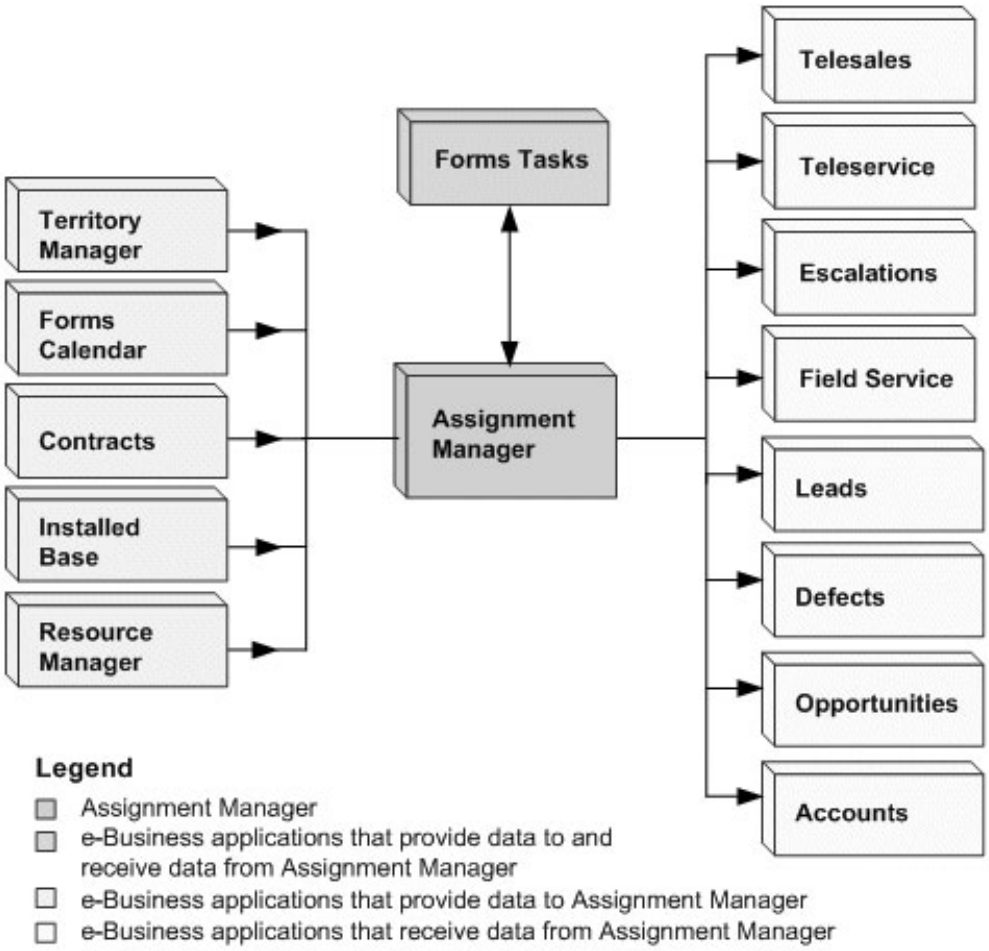
Assignment Manager is a tool used to select qualified resources and to designate them to a document or a task. It is also used to assign ownership to a document or a task. Assignment Manager is accessed from other modules and applications, and does not function as a standalone module. It supports all resource categories defined in Resource Manager.

> **Note:** Documents can be leads, opportunities, service requests, defects, or escalations. Once a document is created, it can require multiple tasks to fulfill the requirements.

### Interaction with Other Applications in the e-Business Suite

The following diagram illustrates how Assignment Manager interacts with other applications in the e-Business Suite

*Assignment Manager Interaction with Other e-Business Applications*




*Interaction with Other E-Business Applications*

| Application | Type | Assignment Manager Interaction |
|---|---|---|
| Territory Manager | e-Business | Assignment Manager uses Territory Manager to identify qualified resources within a territory. |
| Forms Calendar | Common Application Components | Assignment Manager uses the Forms-based Calendar to obtain resource work shift information. |
| Contracts | e-Business | Assignment Manager uses Contracts to identify preferred engineers for a customer. |

| Application | Type | Assignment Manager Interaction |
|---|---|---|
| Installed Base | e-Business | Assignment Manager uses Installed Base to identify preferred engineers for an installed product. |
| Leads | e-Business | Leads uses Assignment Manager to obtain a list of qualified resources. |
| Defects | e-Business | Defects uses Assignment Manager to obtain a list of qualified resources. |
| Opportunities | e-Business | Opportunities uses Assignment Manager to obtain a list of qualified resources. |
| Accounts | e-Business | Accounts uses Assignment Manager to obtain a list of qualified resources. |
| Resource Manager | Common Application Components | Assignment Manager uses Resource Manager to provide a list of qualified resources. |
| Forms Tasks | Common Application Components | The forms-based Task Manager determines task duration. It also uses Assignment Manager to assign resources (an owner and an assignee) to a task. |
| Telesales | e-Business | Telesales uses Assignment Manager to assign appropriate resources to a task or to a service request. |
| Teleservice | e-Business | Teleservice (formerly known as Customer Support) uses Assignment Manager to assign an owner (individual or group resource) to a service request. |
| Escalations | Common Application Components | Escalation Manager uses Assignment Manager to assign an owner to an escalation document. |
| Field Service | e-Business | Field Service uses Assignment Manager in the Dispatch Center (previously the Control Tower) to assign an owner to a field service request. |

## Steps

This section provides an overview of the required steps for implementing Assignment Manager. Detailed instructions for these steps are contained in the chapter that follows.

### Verifying the TCF Server is Correctly Installed and Running

The implementor or system administrator verifies that the TCF (Thin Client Framework) server is installed and functions properly. The Thin Client Framework Server connects to Scheduler and aids the Gantt chart to display and render information.

### Setting Profile Options

After verifying that the TCF server installed and running properly, the implementor or system administrator must set the required profile options for Assignment Manager. Profile options enable Assignment Manager to retrieve preferred resource information including scheduling options.

### Verifying Additional Setup Dependencies

Assignment Manager does not operate as a standalone application but is integrated with other components from the e-Business suite and from ERP (Enterprise Resource Planning). As a result, the implementor or system administrator must verify that all of the following components are installed and configured properly to operate with Assignment Manager:

- Territory Manager
- Forms-based Calendar
- Service Request
- Oracle Contracts
- Installed Base

### Configuring Color Coded Tasks

Assignment Manager uses different colors to identify scheduled functions such as shifts, assigned tasks, escalations, and available time slots when a planned time period is indicated by the calling application. In addition to providing a default set of colors that denote available times slots for specific functions, Assignment Manager also enables implementor and administrators to configure their own color coded functions. This feature simplifies the operation of applications that require intensive manual tasks to assign resources. For example, a support representative using a support or service application can easily determine the availability of qualified technicians to answer a support call if their shifts, tasks, and availability are denoted by color.

### Customizing the Assignment Manager UI

Assignment Manager is used by different applications each of which generally requires a limited subset of its total available fields and options. For this reason, when implementing Assignment Manager, the implementor or system administrator can customize its UI based on their application requirements. The Assignment Manager UI can be customized to meet the individual requirements of the following applications:

- Tasks

- Service Requests
- Service Request Tasks
- Escalations

**Note:** If patch FND.D or higher is installed, do **not** perform the TCF verification steps listed above. They are not necessary. Instead, consult **Note: 164766.1**, available on MetaLink.

## Setting Up Enhanced Planning Options

Assignment Manager enables you to configure time planning options that use the SYSDATE and TIME functions to indicate the start of a shift instead of defaulting to the task's start date. This is useful in situations where the task's start date precedes the date and time in which the shift is assigned and consequently predates the resource's shift assignment. Enhanced planning options are configured using the JTFAM:Use systime for Assignments profile option which is set to Yes or No at the site level. When set to Yes, the profile option enables the SYSDATE and TIME functions to determine the start of a shift. When set to No, the profile enables the task start date and time to represent the start of a shift.

## Skills-based Filtering

When assigning a resource to a Service Request for a specific problem, product, or product category, Assignment Manager enables the most skilled resource to be selected for each. Assignment Manager filters the values of the problem, product, or product category that it receives from a Service Request. When Assignment Manager subsequently searches the Resource Manager Skills Bank for a resource skill to assign to the Service Request it uses search rules based on the filtered problem, product, or product category values. Assignment Manager ships with tables that contain seeded search rule data. When implementing Assignment Manager, you can create or modify these search rules by inserting or updating data in the tables that contain the seeded search rule information.

## Self-testing Framework

The Assignment Manager self-testing framework provides relevant parties such as support analysts and quality assurance engineers with a method for testing Assignment Manager that does not require input from calling documents. Normally, Assignment Manager fetches and displays a list of resources based on parameter values passed by a calling document such as a Service Request, Task, or Escalation. With the self-testing Framework, data from calling documents can be simulating for testing purposes. The Assignment Manager self-testing framework may only be used with JTA patch level 11.5.10 and higher.

## Support for Excluded Resources

Assignment Manager provides support for excluded resources in the assignment process for Service Requests, Service Request Tasks, and Tasks. Installed Base uses this feature to maintain a list of excluded contacts in addition to preferred ones that are associated with a party. Contracts uses this feature to track excluded resources in the task assignment process. Assignment Manager extracts information from these applications and filters it to exclude the appropriate resources from being dispatched for an assignment.

## Publishing Assignment Manager Business Events

Assignment Manager publishes a business event for assignments generated by the Service Request application using the Oracle Workflow Business Event System. When Assignment Manager is called by a service request document, it fetches a resource list. Assignment Manager then publishes resources that it fetches from the list and relevant context information. Applications that subsequently subscribe to this event can modify its content based on the context information and fetched resources, or by plugging in their own custom logic.

## Using Business Events to Generate Custom Logic

Assignment Manager provides a plug-in facility that enables organizations to supplement the predefined logic that Assignment Manager uses to return preferred or qualified resources to calling modules. This enables organizations to extend, and customize Assignment Manager for specific routing and assignment requirements. Assignment Manager accomplishes this by publishing business events for the assignment process. These events are defined in the Oracle Workflow Event Manager and are raised from the Assignment Manager API for the Service Request (SR) document type. Subscriptions to these events may perform the custom processing logic. The Assignment Manager API subsequently returns a PL/SQL table of resources to the UI or to the calling module.

# 18

# Implementation Tasks for Assignment Manager

This chapter covers the following topics:

- Setting Up the TCF Servers for Gantt
- Setting Profile Options
- Setting Up Other Dependencies
- Configuring Color Coded Tasks
- Customizing the Assignment Manager UI
- Setting Up Enhanced Planning Options
- Skills-based Filtering
- Self-testing Framework
- Support for Excluded Resources
- Publishing Assignment Manager Business Events
- Using Business Events to Generate Custom Logic

## Setting Up the TCF Servers for Gantt

Assignment Manager uses Gantt to display tasks that are assigned, available, or escalated and for scheduling. The Thin Client Framework (TCF) server must be running and correctly configured for Gantt to display information and render it properly.

> **Note:** Setting up the TCF servers is only required if you are using the Gantt chart in the Intelligent and the Window to Promise options or using the Field Service product.

### What is a Gantt Chart?

A Gantt chart displays tasks or other time bound entities in relation to their associated resources and is typically used for scheduling purposes. A manager can use a Gantt chart to view a team's current workload. Based on this information, the manger can make real-time decisions about task assignments, or can adjust and reassign tasks. A Gantt chart can only display and render information properly if the TCF server is running and is correctly configured.

Gantt charts are used by the following CRM modules:

- Field Service (Dispatch Center)
- Assignment Manager

### What is the TCF Server?

The Thin Client Framework (TCF) server is a middle tier process that enables some Oracle Applications user interface Java components to communicate with the middle tier and database tier. The following CRM user interface Java components use the TCF server to communicate the middle tier and database tier:

- Field Service Scheduler
- JTF Gantt Chart
- JTF Assignment Manager

The TCF server process should always be running in a production installation.

## The Socket Server Class

The TCF server uses the Socket Server class (in the oracle.apps.fnd.tcf package) to handle incoming connections. Administration of the TCF server is typically handled through the ServerControl class (in the same package), which basically provides a clean interface around all the different TCF server functions that an administrator might perform (for example, starting, stopping, updating, and other similar tasks). Oracle recommends using the ServerControl class for most purposes.

> **Note:** The order and list of parameters for the ServerControl class, and the SocketServer class are not the same. Refer to the *Administering the TCF Server (11i)* documentation for a complete list. You can access this document on Metalink (Note 123689.1).

#### Proxy Objects and Dispatchers

TCF is comprised of the following:

- A pair of Dispatcher classes which own the network connection
- An interface called Proxy which enables an object to use the TCF network connection
- An Item class which serializes data for transmission

Generally, the client application or applet creates a number of Proxy objects at the same time, and then requests the Dispatchers to connect these objects to peer objects on the middle tier. During this process the following occur:

- Proxies are implemented in pairs, one for the client, and one for the middle tier.
- The Dispatchers maintain a list of connected proxy pairs and handle the routing of messages.
- Proxies communicate by writing messages to a buffer maintained by a Dispatcher, and then instructing the Dispatcher to send these messages.
- Several proxies can share a round trip by waiting to call "send" until after each has had an opportunity to write its messages.
- The Dispatchers deliver these messages by invoking the read Item method of Proxy.

## Configuring the TCF Servers

**Note:** If patch FND.D or higher is installed, do not perform the TCF configuration steps listed. They are not necessary. Instead, consult Note: 164766.1, available on MetaLink.

**Caution:** These instructions for implementing the TCF servers are NOT valid if the AOL TCF Server patch (bug # 1699404) has been installed. This patch is owned by the Oracle Applications Object Library (AOL). Contact AOL support for issues with this patch.

Configuring the TCF servers is a complex process with specific prerequisites. The following table lists the required steps and sequence for configuring the TCF server.

***TCF Configuration Steps***

| Step | Description |
|---|---|
| 1 | Apply any necessary patches., page 18- 3 |
| 2 | Perform the necessary post-install steps., page 18- 4 |
| 3 | Configure the servers., page 18- 4 |
| 4 | Verify the server configuration., page 18- 6 |
| 5 | Troubleshoot any subsequent problems, page 18-11 |

# Step 1: Installing any Required Patches

Begin configuring the TCF server by installing any patches required for the correct performance of your system.

# Patch 135908

You must apply patch 135908 if you have set up the Oracle Applications to use HTTP protocol for communicating between a client browser and Oracle Forms and TCF servers.

**135908 HTTP mode fails with: "java.io.IOException: Invalid HTTP Packet received" when using TCF APIs.**

# Patch 1473057

You must apply patch 1473067 if you created the database using a non-US7ASCII and non-WE8ISO8859P1 character set.

**1473057 NLS enabled JDBC drivers. This is required for non-US7ASCII and non-WE8ISO8859P1 character sets.**

## Step 2: Performing Post Install Steps

There are several post install steps that you need to perform after installing the patches listed in Step 1: Installing any Required Patches, page 18- 3 . These steps are described in this section.

> **Warning:** If you have installed the TCF server on an IBM AIX machine, then you MUST perform the steps listed in the AIX Port , page 18- 4 Instructions section.

## Post Install Steps

The patches described in section Step 1: Installing Any Required Patches, page 18- 3 contain both client and mid-tier Java code. After applying any of these patches, perform the following steps:

1. Stop and start the TCF server.

   The TCF server does not pick up the latest code until it is bounced.

2. Close the browsers on the client machines.

3. Clear out the JInitiator Jackie directory on the client machines.

4. Restart the client browsers. You must do this to force the regenerated JAR files to be downloaded after you apply the patch.

## AIX Port Instructions

If the TCF server is installed on an IBM AIX machine, then you must also do the following:

1. Perform the port specific instructions provided in the JDBC 8.1.6 Release notes. These Release Notes can be found on Metalling, note 114464.1.

   In addition to the environment variables specified in the JDBC release notes, you **must** update adovars.env with the following environment variable:

   ```
   <JAVA_COMPILER>
   ```

   set to:

   ```
   <NONE>
   ```

   Omitting this step causes the problem described in bug 1510941 to occur, thereby causing the Gantt chart to fail.

2. Shut down the TCF server and restart it to force the changes to take effect.

## Step 3: Configuring the Servers

> **Warning:** Setting the communication protocol correctly is extremely critical. If this step is performed incorrectly, the client/server communication will not work.

In order for the TCF server and client to establish a connection over the network, you should set up the following using the **same** communication protocol.

- Forms servers, page 18- 5
- File appsweb.cfg, page 18- 5
- TCF servers, page 18- 6

The following table lists the valid communication protocols that you can use in setting up and starting the Forms and TCF servers.

***Communication Protocols***

| Forms Mode | TCF Protocol |
|---|---|
| http | HTTP |
| https | SSL |
| socket | SOCKETS |

## Forms Servers

If starting the Forms server from the command line (on UNIX), then you must include the Forms "mode" argument:

```
f60ctl { start | stop } port=port_num pool=pool_num log=log_file
mode={http|https|socket} exe=exe_name
```

Valid Forms modes are:

- http
- taps
- socket

## File appsweb.cfg

Modify the appsweb.cfg file (usually found under $APPL_TOP/html/bin) so that it includes the following:

```
connectMode=<protocol>
```

The connect mode parameter **must** indicate the same protocol as that which you set for the Forms server. Again, valid protocols are:

- http
- https
- socket

## TCF Servers

Configure the TCF servers to start and run in the same communication protocol mode as that which you set for the Forms servers and indicated in the appsweb.cfg file.

## Configuring the TCF Server Protocol

For details on configuring TCF servers, refer to the *Administering the TCF Server (11i)* documentation for a complete list of the configuration settings. It is available on Metalink (Note 123689.1).

## Starting the TCF Servers

> **Note:** Oracle Applications provide a script to start and stop a TCF server. Refer to the *Installing Oracle Applications* guide, section "Review Server Process Control Scripts" for the name and location of this file.

Start the TCF server from the command line (on UNIX) using the following arguments:

```
jre oracle.apps.fnd.tcf.ServerControl [START|STOP|STATUS|UPDATE]

<portnumber|default=10021> [<param=value>]
```

Valid parameters are listed and described in the previously mentioned *Administering the TCF Server (11i)* documentation.

Note the following:

1. Oracle strongly recommends that you start the TCF server with the PROTOCOL parameter set to the same value that you set for the Forms mode argument, as described in the Forms servers, page 18- 5 section.
2. The DBC file parameter is **required**.
3. At server startup, the TCF:HOST and TCF:PORT profile options are updated with the information passed into ServerControl.
    1. If the TCF server is started using HTTP protocol, then the TCF:HOST profile is prefixed with "http://".
    2. If the TCF server is started using SOCKETS protocol, then the TCF:HOST profile is set without the "http://" prefix.

## Step 4: Verifying the Server Configurations

The following table lists the required steps for verifying that the servers are configured correctly.

***Steps to Verify Server Configuration***

| Step | Action |
|---|---|
| 4a | Verify that the mandatory setup steps were performed correctly, page 18- 7 . |
| 4b | Verify the TCF Host Name and Port Number, page 18- 7 . |
| 4c | Verify the TCF Connection., page 18- 8 |
| 4d | Verify that resources exist in the system, page 18- 9 . |
| 4e | Verify the Assignment Manager Setup, page 18-10. |

Each of these steps is described in detail in the following sections.

## Step 4a: Verify Mandatory Setups

Verify that you have correctly performed all the steps listed in the previous sections:

- Step 1: Installing any Required Patches, page 18- 3
- Step 2: Performing the Post Install Steps, page 18- 4
- Step 3: Configuring the Servers, page 18- 4

If necessary, repeat any steps that were not performed correctly.

## Step 4b: Verify TCF Host Name and Port Number

Perform the following steps to verify that the TCF host name and port number have been set correctly.

1. Log in to your Personal Home Page (PHP) and select the System Administrator responsibility.
2. In the Navigator, select **Application > Menu**.

   The Menus window opens.
3. Select **Diagnostics > Examine** from the Help menu.

   A password protect dialog box opens.
4. Enter a valid password.

   If necessary, contact your system administrator for a valid password. After the password is authenticated, the Examine Field and Variable Values window opens.
5. Enter the following search parameters:
   - Block: $PROFILES$
   - Field: TCF:HOST

     The Value field should now display the host name of the TCF server.

- If the TCF server is started using HTTP protocol, then the host name must be prefixed with "http://." If this is not the case, then one of the following has occurred:
- The TCF server was not started in HTTP mode.
- The SocketServer class was used instead of ServerControl class to start the TCF server.
- The system level TCF:HOST profile has been overridden at the application or user level.
- The system level TCF:HOST profile has been manually changed on the system level.
- If the TCF server is started using the SOCKETS protocol, then the host name must **not** be prefixed with "http://."

  If the ServerControl class (not the SocketServer class) is used to start the TCF server, then it automatically sets the system level profile options. These profile option values can also be set manually at the system, application, or user level in Forms through the Profile menu, using the System Administrator responsibility.

  **Warning:** Exercise extreme caution if you manually change these values. Setting these values incorrectly may cause the Oracle Applications client code to not be able to establish a connection to the TCF server.

6. Perform a new search, changing the value of Field to TCF:PORT.

   The Value field should reflect the number of the port on which the TCF was started.

## Step 4c: Verify the TCF Connection

Using the Menu Tree Viewer, perform the following steps to verify that the TCF connection is working properly:

1. Log in to your Personal Home Page (PHP), if you are not already there, and select the Application Developer responsibility.
2. Select **Application > Menu**.
3. Query up the JTF_NAVIGATE Menu item.
   1. Select **View > Query by Example > Enter**.
   2. Enter JTF_NAVIGATE in the Menu field.
   3. Select **View > Query by Example > Run**.

      The Menus window populates with the information.
4. Click **View Tree**.

   You should see a tree like structure that corresponds to the Navigator hierarchy for the CRM Administrator responsibility.

If you get an error after clicking **View Tree**, then the TCF Server has not been set up properly. The error may read - The application was unable to establish a network connection with the TCF SocketServer listening on port: <#####> on host: http:/// Please contact your system administrator.

**Note:** If you are unable to establish a TCF connection, then a generic TCF setup problem could exist. Contact your System Administrator or Oracle Support representative to resolve the issue. Until this issue is resolved, Gantt will not work properly.

**Note:** The Menu and View Tree forms are owned by the Oracle Application Object Library (AOL). It could be that this is an issue that needs to be resolved within that context.

## Step 4d: Verify Resources Exist in the System

Perform the following to verify that resources are available in the system.

**Note:** Refer to the *Oracle Common Application Components User Guide,* and the *Oracle Common Application Components Implementation Guide* for details on setting up and configuring the Resource Manager

Log on as the APPS user using SQL*Plus and run the following SQL statement. This returns resources that you can use to query in the Assignment Manager: Unassisted mode:

```
SELECT jtf_task_utl.get_owner(r.resource_type ,r.resource_id)

       resource_name

      ,r.resource_id

      ,r.resource_type

      ,o.name -- This is a descriptive name of the resource type

FROM ( select resource_id

      ,decode(category,'EMPLOYEE','RS_EMPLOYEE'

      ,'PARTNER','RS_PARTNER'

      ,'SUPPLIER_CONTACT','RS_SUPPLIER'

      ,'PARTY','RS_PARTY'

      ,'OTHER','RS_OTHER') resource_type
```

```
FROM jtf_rs_resource_extns) r

      ,jtf_objects_vl o

      ,jtf_object_usages u

WHERE r.resource_type  = o.object_code

AND o.object_code      = u.object_code

AND u.object_user_code = 'RESOURCES';
```

The result of running this query is a list of the defined resources that you can use to verify that the Gantt chart is set up correctly.

## Step 4e: Verify the Assignment Manager Setup

Perform the following steps to verify that all the installation and setup steps for the Oracle Common Application Components Assignment Manager have been performed correctly.

> **Note:** Refer to the *Oracle Common Application Components User Guide*, and the *Oracle Common Application Components Implementation Guide* for details on setting up and configuring the Assignment Manager.

1. Log in to your Personal Home Page (PHP) and select the CRM Administrator responsibility.
2. In the Navigator menu, select **Task and Escalation Manager > Manage Escalations**.
3. Enter sample text into the Escalation Summary field.
4. Click **Assign**.

   The Assignment Manager window opens.
5. Select the **Unassisted** option button.
6. In the Resource Partial Name field, enter the first few letters from one of the names returned by the SQL statement in the previous section (Step 4d: Verify Resources Exist, page 18- 9 ) and suffix the name with a percent "%" character.
7. Click **Search**.
   - If the Gantt and TCF servers are working and have been set up correctly, then you will see the resource name at the left side of the Gantt chart. If the Forms-based Calendar module is defined correctly, then you also see Shifts (yellow background color) and Tasks (blue and red bars).

     For a task to be visible, it must exist, and have a scheduled start date and end date that fall within the visible time range, and be assigned to a resource.

- If an "APP-JTF-210807: No Resources Found. Please Try Again." message is returned, then you have entered a name that does not exist, or alternatively there may be a problem in Assignment Manager.
- If nothing is returned, check the JInitiator Console Window for exceptions.

**Note:** Another reason for no resource found could be caused by:

**Note:** Patch 1883463 was applied and enable TCF to run as a servlet. Files zone.properties and jserv.properties were configured incorrectly.

**Note: Resolution**:

**Note:** 1. The file zone.properties under the Apache install configuration directory (/Apache/Jserv/etc) should include the lines:

**Note:** servlets.default.initArgs=FND_TOP=servlets.startup=oracle.apps.fnd.tcf.SocketServer

**Note:** 2. The file jserv.properties (also under /Apache/Jserv/etc) should include the lines: wrapper.classpath=<8.0.6 oracle home>/forms60/java/f60srv.jar

## Step 5: Troubleshoot Any Subsequent Problems

If any subsequent problems develop in configuring the TCF Server, consult the Assignment Manger Troubleshooting Chapter, page 19- 1 for more information.

## Setting Profile Options

The following table lists the profile options used for implementing Assignment Manager. You can set these options in any sequence.

***Assignment Manager Profile Options***

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| Activate Auto Selection of Resources | Yes | Application | This profile option is set to activate the auto-selection of resources by the Assignment Manager engine. The engine uses this profile option setting to determine where the user needs to make a selection from the provided list of resources, or if this task is performed automatically by the Assignment Manager engine itself. | If you set this profile option to **No**, the Assignment Manager engine will automatically make a selection from the provided list of resources. |
| Activate Contracts Preferred Resources | No | Application | This profile option is set to retrieve the preferred resource information from the Contracts module. The engine uses this profile option setting to determine whether the Contracts Preferred Engineers are picked up automatically by the Assignment Manager engine or not. | If you set this profile option to **No**, it will uncheck the Contracts check box in the Assignment Manager. |
| Activate Installed Base Preferred Resources | No | Application | This profile option is set to retrieve the preferred resource information from the Installed Base module. The engine uses the profile option setting to determine whether the Installed Base Preferred Engineers are picked automatically by the engine. | If you set this profile option to **No**, it will uncheck the Installed Base check box in the Assignment Manager. |
| Activate Workflow Name | No default value | Application | This profile option is set to a user-defined workflow procedure name. This workflow procedure is user-programmed code for further filtering the resources. The engine retrieves the procedure name from this profile option, and uses it to process the user's request. | This profile option is an additional filter based on the user's criteria. |
| JTFAM: Resource Type for Unassisted Mode | Employee Resource | Site | This profile option sets the default value for resource type in the unassisted mode. | This profile option is a convenience to the user who wants the resource type to be the defaulted value in the unassisted mode. |

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| JTFAM:Use systime for Assignments | Yes | Site | This profile option enables the start time for a resource's shift to be determined by either the SYSDATE or the start date and time of the relevant task. | When set to **Yes**, the Assignment Manager uses the SYSDATE and TIME functions to determine the start of a resource's shift.<br>When set to **No**, Assignment Manager uses the task start date and time to determine the start of the shift |
| JTFAM: Resource Search Order | Contracts Preferred Resource | Site | This profile option sets the default order for resource selection between Contracts and Installed Base if both check boxes are selected in the Assignment Manager for a service request assignment. | If Contracts Preferred Resource is selected, then Assignment Manager engine checks Contracts preferred resources first. If a Contracts preferred resource is found, then stop the process. If not, then check the Installed Base preferred resources. If a Installed Base preferred resource is found, and stop the process. If not, then continue check the territories.<br>If Installed Base Preferred Resource is selected, then Installed Base preferred resources are checked first, if a resource is found, then stop the process. If not, then continue check the Contracts.<br>If "Both Contracts and Installed Base" is selected, then Assignment Manager checks both preferred resources simultaneously before retrieving qualified resources from winning territories. |
| JTFAM: Usage for Groups and Teams | All | Site | This profile option sets the default value for the group and team resource selection used in a service request assignment. | If it is set to **All**, then all group or team resources, regardless of its usage, are all displayed in the Gantt chart. If it is set to **Support**, then only the group or team with Support usage can then be retrieved for a service request assignment. |

**Note:** See Appendix A, Profiles Options, page A- 4 , for details on how these profile options can be set.

## Setting Up Other Dependencies

This section describes calling modules that require proper configuration to ensure that the Assignment Manager selection criteria functions completely. Assignment Manager

performs an autoquery whenever it is opened from a calling module. Assignment Manager also generates specific error messages when it encounters any problems performing a search. If no error occurs and no resources are found based on the search criteria, Assignment Manager displays error messages stacked from the API.

### Territory Manager

Territory Manager retrieves qualified resources specified in territories. Make sure that transaction qualifiers are set up correctly and qualified resources are specified when defining territories. Territories should be set up properly in order to use the Assisted assignment option or the Intelligent and Window to Promise assignment options in the Field Service Dispatch Center.

### Forms-based Calendar

Forms-based Calendar displays the work shift information of qualified resources. Resources' shift schedules should be defined in the Forms-based Calendar module in order to use the Resource Availability for the Assisted assignment option or the Intelligent and Window to Promise assignment options in the Field Service Dispatch Center.

> **Note:** Log in with the CRM Administrator responsibility and select Calendar > Calendar Setup to access the calendar setup windows.

### Service Request

Service Request designates a resource as Web available or unavailable. It assigns the resource Web availability by using the Territory Assisted assignment option and assigns resources by using the Intelligent and Window to Promise assignment options in the Field Service Dispatch Center.

### Contracts

Oracle Contracts specify preferred engineers defined in Contracts. This components enables the use of Contracts preferred resources in the Assisted assignment option or the Intelligent and Window to Promise assignment options in the Field Service Dispatch Center.

### Installed Base

Installed Base specifies preferred resources defined in Installed Base. This components enables the use of Installed Base preferred resources in the Assisted assignment option or the Intelligent and Window to Promise assignment options in the Field Service Dispatch Center.

## Configuring Color Coded Tasks

Assignment Manager displays a resource's tasks for a specified time period in the Gantt chart. The time period for each task is color coded according to a set of rules stored in the color configuration table. Each row in this table contains rules for a unique color values. Assignment Manager accesses a Task Manager table with seeded color values that can be retained in their original state or modified. You can also configure additional color values. When Assignment Manger obtains the list of tasks

to display for a resource, the Assignment Manager engine calls the Tasks public API: JTF_TASK_CUSTOM_COLORS_PUB.GET_TASK_BGCOLORS. The API receives information about the task, task type, assignment status, and priority, and returns the background color value for each record in decimal format. The Assignment Manger UI interprets the color's decimal value and displays it in standard color format.

## Color Configuration Table

The attributes that determine a task color can be registered with those of the currently displayed color in the color configuration table. The following table contains the color configuration table columns and their corresponding attributes:

***Assignment Manager Color Configuration Table***

| Column | Function | Primary Key | Mandatory | Data Type |
|---|---|---|---|---|
| RULE_ID | Provides a unique identifier for each rule. | Yes | Yes | Number |
| OBJECT_VERSION_NUMBER | Maintains the revisions of each table row. | No | Yes | Number |
| COLOR_DETERMINATION_PRIORITY | Provides a numeric value for determining the order in which the color will be evaluated by the GET_TASK_BGCOLORS procedure. | No | Yes | Number |
| TYPE_ID | Identifies the task type. | No | No | Number |
| PRIORITY_ID | Determines the priority level. | No | No | Number |
| ASSIGNMENT_STATUS_ID | Determines the task assignment status. | No | No | Number |
| ESCALATED_TASK | Specifies whether or not the task is escalated. | No | No | Varchar2(1) |
| BACKGROUND_COL_DEC | Provides a decimal version of the color. | No | Yes | Number |
| BACKGROUND_COL_RGB | Provides an RGB virions of the color. | No | Yes | Varchar2(12) |

| Column | Function | Primary Key | Mandatory | Data Type |
|---|---|---|---|---|
| CREATED_BY | Provides the identity of the individual who created the task color. | No | Yes | Number |
| CREATION_ DATE | Provides the date on which the task color was created | No | Yes | Date |
| LAST_U PDATED_BY | Provides the identity of the individual who last updated data for the task color. | No | Yes | Number |
| LST_UPDATE_ DATE | Provides the date on which the task color data was last updated. | No | Yes | Date |
| LAST_UPDATE_ LOGIN | Displays the login information of the last person to update the record. | No | No | Number |
| ACTIVE_FLAG | Specifies whether the task color is active or not. If the task color is not active, then its information can be overwritten by subsequent patch installations. | No | Yes | Varchar2(1) |

## Seeded Color Configuration Data

Assignment Manger provides seeded data for red, golden yellow, and blue background colors. These colors represent specific functions based on the following business logic:

***Assignment Manager Seeded Colors***

| Color | Function |
|---|---|
| Red | Displays escalations. |
| Golden Yellow | Displays shifts |
| Blue | Displays assigned tasks. |

These colors can be used, modified, or flagged for nonuse as required but should not be removed from the color configuration table. If you do not want to use a seeded color, you must flag it for nonuse by setting the ACTIVE_FLAG column in the color configuration table to "N". If you modify seeded data, then it will not be overwritten by any subsequent patch installations. If, however, you do not modify seeded data, then it will be overwritten by the seed data of any subsequently installed patches. The following table contains Assignment Manager seeded color data information:

***Assignment Manager Seeded Colors Data***

| Color Configuration Table Column | Red Data | Golden Yellow Data | Blue Data |
|---|---|---|---|
| RULE_ID | 1 | 2 | 3 |
| COLOR_DETERMINATION_PRIORITY | 10 | 20 | 100 |
| TYPE_ID | Null | Null | Null |
| PRIORITY_ID | Null | Null | Null |
| ASSIGNMENT_STATUS_ID | Null | 5 | Null |
| ESCALATED_TASK | Y | N | Null |
| BACKGROUND_COL_DEC | 16711680 | 16776960 | 3342591 |
| BACKGROUND_COL_RGB | Red | GoldenYellow | Blue |
| ACTIVE_FLAG | Y | Y | Y |

## Hard Coded Colors

In addition to providing seeded colors, Assignment Manager contains two hard coded colors that cannot be modified. These colors are reserved for specific Assignment Manager business logic and should not be duplicated in the color configuration table:

***Assignment Manager Hard Coded Colors***

| Color | Decimal Value | Function |
|---|---|---|
| Green | 44370 | Displays available time slots. |
| Yellow | 16776960 | Task assignments that are in status Working. |

## Guidelines

To properly configure color coded tasks in Assignment Manger you must adhere to the following guidelines:

## Determining Task Color Per Resource

Assignment manager determines the task color for each resource. The color of multiple tasks can be determined in one API call, however, some applications such as Field Service determine the color by using an inline function call in a SQL statement.

## Evaluating Color Prioritization

Each record in the color configuration table contains rules for displaying a unique task color. The GET_TASK_BGCOLORS procedure evaluates these rules for each row in ascending order beginning with the row that contains the lowest value in the COLOR_DETERMINATION_PRIORITY column. When creating or modifying colors, consider the order in which you want them evaluated and insert values in the COLOR_DETERMINATION_PRIORITY column accordingly.

## Creating Values for the RULE_ID Column

The RULE_ID column must contain unique sequential values. This is accomplished by using the sequence JTF_TASK_CUSTOM_COLOR_S.

## Creating Values for the COLOR_DETERMINATION_PRIORITY Column

The value of the column COLOR_DETERMINATION_PRIORITY must be a unique number between 0 and 100.

## Creating Values for the LAST_UPDATED_BY Column

If seed data is modified, then the value of column LAST_UPDATED_BY should be set to a value other than 0 and 1.

## Using Unique Colors for Each Function

If you use the same color to represent availability, shifts, task load, or escalations you will not be able to differentiate between each function. For this reason, each function must be represented with a unique color.

## Using Different Background and Foreground Colors

If you use identical background and foreground colors it will be difficult to infer if the colors actually correspond to a given task. Because Assignment Manger currently does not perform validation for separate background and foreground colors, it is the implementor's responsibility to ensure that they are not identical.

## Reserving Assignment Manager Hard Coded Colors

Do not create custom color values for the hard for the green and yellow hard coded colors that ship with Assignment Manager.

## Examples

This section contains examples for creating two new task colors to denote high priority and low priority tasks that have been rejected. In this example, the implementor wants the high priority rejected tasks to be evaluated and displayed in Assignment Manger before the low priority rejected tasks.

# Creating Violet Color for High Priority Rejected Tasks

Assume that the implementor creates a record for the color DarkViolet that represents high priority rejected tasks. The following table contains data for the color DarkViolet that is used to denote high priority rejected tasks. Since the value in the COLOR_DETERMINATION_PRIORITY column is 5, the rules for this task color will be evaluated by the GET_TASK_BGCOLORS procedure before any task color with a value in this column of 6 or higher.

***DarkViolet Color Example Data***

| Color Configuration Table Column | Violet Color Data |
|---|---|
| RULE_ID | 101 |
| COLOR_DETERMINATION_PRIORITY | 5 |
| TYPE_ID | Null |
| PRIORITY_ID | 1 |
| ASSIGNMENT_STATUS_ID | 4 |
| BACKGROUND_COL_DEC | 9400D3 |
| ESCALATED_TASK | N |
| BACKGROUND_COL_RGB | DarkViolet |
| ACTIVE_FLAG | Y |

# SQL Script

The following script creates a record for the DarkViolet color in the color configuration table:

```
SET SERVEROUTPUT ON

DECLARE

   l_rowid      ROWID;

   l_color_id   NUMBER;
```

```
BEGIN
   fnd_global.apps_initialize (
      user_id => 100001746, -- login user id
      resp_id => 0,  --- responsibility id
      resp_appl_id => 0,
      security_group_id => 0
   );
   SELECT jtf_task_custom_colors_s.nextval
     INTO l_color_id
     FROM dual;
   jtf_task_custom_colors_pkg.insert_row (
      x_rowid => l_rowid,
      x_rule_id => l_color_id,   ---101
      x_color_determination_priority => 5,
      x_type_id => null,
      x_priority_id => 1,
      x_assignment_status_id => 4,
      x_escalated_task => 'Y',
      x_active_flag => 'Y',
```

```
      x_background_col_dec => 9400D3,

      x_background_col_rgb => 'r148g000b211',  --DarkViolet

      x_creation_date => SYSDATE,

      x_created_by => fnd_global.user_id,

      x_last_update_date => SYSDATE,

      x_last_updated_by => fnd_global.user_id,

      x_last_update_login => 0

   );

END;

/

COMMIT;

EXIT;
```

## Creating Lime Green Color for Low Priority Rejected Tasks

Assume that the implementor creates a record for the color LimeGreen that represents low priority rejected tasks. The following table contains data for the color LimeGreen that is used to denote low priority rejected tasks. Since the value in the COLOR_DETERMINATION_PRIORITY column is 7, the rules for this task color will be evaluated by the GET_TASK_BGCOLORS procedure after those of the high priority rejected task color in the preceding example.

*Lime Green Color Example Data*

| Color Configuration Table Column | Violet Color Data |
|---|---|
| RULE_ID | 102 |
| COLOR_DETERMINATION_PRIORITY | 7 |
| TYPE_ID | Null |
| PRIORITY_ID | Null |
| ASSIGNMENT_STATUS_ID | 4 |
| ESCALATED_TASK | N |
| BACKGROUND_COL_DEC | 00FF00 |
| BACKGROUND_COL_RGB | LimeGreen |
| ACTIVE_FLAG | Y |

## SQL Script

The following script creates a record for the LimeGreen color in the color configuration table:

```
SET SERVEROUTPUT ON

DECLARE

   l_rowid      ROWID;

   l_color_id   NUMBER;

BEGIN

   fnd_global.apps_initialize (

      user_id => 100001746, -- login user id

      resp_id => 0,  --- responsibility id

      resp_appl_id => 0,
```

```
   security_group_id => 0

);

SELECT jtf_task_custom_colors_s.nextval

  INTO l_color_id

  FROM dual;

jtf_task_custom_colors_pkg.insert_row (

   x_rowid => l_rowid,

   x_rule_id => l_color_id,   ---102

   x_color_determination_priority => 7,

   x_type_id => null,

   x_priority_id => NULL,

   x_assignment_status_id => 4,

   x_escalated_task => 'Y',

   x_active_flag => 'Y',

   x_background_col_dec => 00FF00,

   x_background_col_rgb => 'r50g205b50',   --LimeGreen

   x_creation_date => SYSDATE,

   x_created_by => fnd_global.user_id,

   x_last_update_date => SYSDATE,
```

```
      x_last_updated_by => fnd_global.user_id,

      x_last_update_login => 0

   );

END;

/

COMMIT;

EXIT;
```

# Customizing the Assignment Manager UI

The Assignment Manager UI can be customized to better suit the requirements of the applications with which it is integrated. These applications which include Tasks, Service Requests as well as Service Request Tasks, and Escalations generally require a limited subset of the total fields and options available in the Assignment Manager UI. Assignment Manager renders the UI based on seeded data in the table JTF_AM_SCREEN_SETUPS_B. When implementing Assignment Manager, you can customize its UI by modifying data in this table.

## Table JTF_AM_SCREEN_SETUPS_B

The following table describes JTF_AM_SCREEN_SETUPS_B including Who columns and Flex field columns. Columns directly related to modifying the Assignment Manager UI are indicated accordingly:

***Table JTAM_SCREEN_SETUPS_B***

| Column Name | Data Type | Not Null | Default | Description |
|---|---|---|---|---|
| SCREEN_SETUP_ID | Number | N | N | UI Related. Specifies the unique ID for the table. |

| Column Name | Data Type | Not Null | Default | Description |
|---|---|---|---|---|
| DOCUMENT_TYPE | Varchar2(30) | N | N | UI Related. Specifies the document from which Assignment Manager is called, such as SR (Service Request). This will be unique for the table. |
| MODE_ASSIST | Varchar2(1) | N | Y | UI Related. Determines whether or not the UI displays the Assisted mode radio button. Valid values are Y/N. |
| MODE_UNASSIST | Varchar2(1) | N | Y | UI Related. Determines whether or not the UI displays the Unassisted mode radio button. Valid values are Y/N. |
| CONTRACTS | Varchar2(1) | N | Y | UI Related. Determines whether or not the UI displays the Contracts checkbox. Valid values are Y/N. |
| INSTALLED_BASE | Varchar2(1) | N | Y | UI Related. Determines whether or not the UI displays the Install Base checkbox. Valid values are Y/N. |
| TERRITORY | Varchar2(1) | N | Y | UI Related. Determines whether or not the UI displays the Territories checkbox. Valid values are Y/N. |

| Column Name | Data Type | Not Null | Default | Description |
|---|---|---|---|---|
| AVAILABILITY | Varchar2(1) | N | Y | UI Related. Determines whether or not the UI displays the Resource Availability checkbox. Valid values are Y/N. |
| DOC_DETAILS | Varchar2(1) | N | | UI Related. Determines whether or not the UI displays Document Details. Valid values are Y/N. |
| WINDOW_WIDTH | Number | N | 7 | UI Related. Determines the width of the window for the Assignment Manager screen in inches. |
| WINDOW_HEIGHT | Number | N | 5 | UI Related. Determines the height of the window for the Assignment Manager screen in inches. |
| WINDOW_X_POSITION | Number | N | 0 | UI Related. Specifies the Assignment Manager screen position's X co-ordinates. |
| WINDOW_Y_POSITION | Number | N | 0 | UI Related. Specifies the Assignment Manager screen position's Y co-ordinates. |
| DOC_DTLS_USER_VALUES | Varchar2(1) | N | N | UI Related. Provides the Products team the flexibility to customize what the UI displays in the Document Details section. Valid values are Y/N. This setting only works if the |

| Column Name | Data Type | Not Null | Default | Description |
|---|---|---|---|---|
| | | | | DOC_DETAILS column is set to Y. |
| SHOW_ SELECTED_T IME | Varchar2(1) | N | Y | UI Related. Determines whether or not the UI displays the selected resource's start and end time. Valid values for this column are Y/N. |
| OBJECT_VERS ION_NUMBER | Number | Y | N | The object version number. |
| USER_ID | Number | N | N | The user ID. |
| ATTRIBUTE1 | Varchar2(150) | N | N | Flex field. |
| ATTRIBUTE2 | Varchar2(150) | N | N | Flex field. |
| ATTRIBUTE3 | Varchar2(150) | N | N | Flex field. |
| ATTRIBUTE4 | Varchar2(150) | N | N | Flex field. |
| ATTRIBUTE5 | Varchar2(150) | N | N | Flex field. |
| ATTRIBUTE6 | Varchar2(150) | N | N | Flex field. |
| ATTRIBUTE7 | Varchar2(150) | N | N | Flex field. |
| ATTRIBUTE8 | Varchar2(150) | N | N | Flex field. |
| ATTRIBUTE9 | Varchar2(150) | N | N | Flex field. |
| ATTRIBUTE10 | Varchar2(150) | N | N | Flex field. |
| ATTRIBUTE10 | Varchar2(150) | N | N | Flex field. |
| ATTRIBUTE12 | Varchar2(150) | N | N | Flex field. |
| ATTRIBUTE13 | Varchar2(150) | N | N | Flex field. |
| ATTRIBUTE14 | Varchar2(150) | N | N | Flex field. |
| ATTRIBUTE15 | Varchar2(150) | N | N | Flex field. |
| ATTRIBUTE_ CATEGORY | Varchar2(150) | N | N | Determines the attribute category. |

| Column Name | Data Type | Not Null | Default | Description |
|---|---|---|---|---|
| CREATED_BY | Number | Y | N | Determines the identity of the individual who creates the screen setup. |
| CREATION_ DATE | Date | Y | N | Specifies the date on which the screen setup is created. |
| LAST_U PDATED_BY | Number | Y | N | Specifies the individual who last updates the screen setup. |
| LAST_UPDATE_ DATE | Date | Y | N | Specifies the date on which the screen setup is last updated. |
| LAST_UPDATE_ LOGIN | Number | Y | N | Specifies the login ID of the individual who last updates the screen setup. |
| SECURITY_ GROUP_ID | Number | N | N | Specifies the security group ID of the individual who last updates the screen setup. |

## Supported Document Types

Assignment Manager supports document types in FND_LOOKUPS (LOOKUP_TYPE = JTF_AM_DOCUMENT_TYPE) as follows:

***Assignment Manager Supported Document Types***

| Document Type | Definition |
|---|---|
| SR | Service Request |
| TASK | Tasks |
| SR_TASK | Service Request Task |
| ESC | Escalations |
| DEF | Defects |
| LEAD | Leads |
| OPPR | Opportunities |
| ACC | Accounts |

### UI Layout Rules

The Assignment Manager UI must be customized according to a specific set of rules. These rules specify how the UI is rendered and which columns in the table JTF_AM_SCREEN_SETUPS_B contain information that is based on the values of other columns in this table.

## Document Type

The document type must be unique across the table. A unique constraint is enforced using a unique index on the DOCUMENT_TYPE column. Based on the DOCUMENT_TYPE data passed in the new AM_UI_TYPE parameter in forms, the UI is rendered accordingly. If no data is passed in the AM_UI_TYPE parameter, then the UI is rendered based on value of the existing AM_CALLING_DOC_TYPE parameter.

## Assisted and Unassisted Mode

Assignment Manager displays the Mode window and its corresponding options depending on the value of the MODE_ASSIST and MODE_UNASSIST columns based on the following rules:

*Assisted and Unassisted Mode Rules*

| MODE_UNASSIST | MODE_ASSIST | Remarks |
|---|---|---|
| N | N | Both the modes cannot be set to 'N' at the same time. If this combination is set for any document type then the UI will not be rendered when called for that document. |
| N | Y | 1. Mode window will not appear.<br>2. Only Assisted Mode's corresponding fields will be shown. |
| Y | N | 1. Mode window will not appear.<br>2. Only Unassisted Mode's corresponding fields will be shown. |
| Y | Y | The UI will default to the existing UI layout and will show both Assisted and Unassisted modes as well as their corresponding field. |

## Assisted Mode

In case of assisted mode, at least one of the following search options should be enabled in the table:

- Contracts
- Installed Base
- Territories
- Availability

If for example, the value of the MODE_ASSIST column is 'Y' then at least one of the preceding four values must also be 'Y'.

## Intelligent and Window to Promise modes

Because the Intelligent and Window to Promise modes are not supported in the post 11.5.6 version of the Assignment Manager UI, neither one can be customized.

## Document Details

Document Details can be customized based on the values entered in the DOC_DETAILS and DOC_DTLS_USER_VALUES columns according to the following rules:

***Document Details Rules***

| DOC_DETAILS | DOC_DTLS_USER_VALUES | Remarks |
|---|---|---|
| N | N/Y | The UI will not show document details at all. It will disregard the values entered for DOC_DTLS_ USER_VALUES column. |
| Y | N | 1. Document Details will be displayed.<br>2. The content of Document details will be the default layout content i.e. it will continue to display whatever it is displaying in existing version of AM UI. |
| Y | Y | 1. Document Details will be displayed.<br>2. The content of Document details will be the name-value pairs passed to AM UI from the product team using record type JTF_ASSIGN_PUB.DOC_ DETAILS_REC.<br>3. If DOC_DTLS_USER_ VALUES is set to Y but no data is passed in record, then the document details box will be displayed with null value. |

## Record Type JTFAMSR.DOC_DETAILS_REC_TYPE

The calling document can only customize the Document details section and display a set of name/value pairs in that section, if the JTFAMSR.DOC_DETAILS_REC_TYPE is populated with the appropriate values. The record type is defined as follows:

```
TYPE DOC_DETAILS_REC_TYPE IS RECORD_TYPE

 (

Field_prompt1varchar2 (20):= NULL,

Field_value1varchar2 (150) := NULL,

Field_prompt2varchar2 (20):= NULL,

Field_value2varchar2 (150) := NULL,
```

```
Field_prompt3varchar2 (20):= NULL,

Field_value3varchar2 (150) := NULL,

Field_prompt4varchar2 (20):= NULL,

Field_value4varchar2 (150) := NULL,

Field_prompt5varchar2 (20):= NULL,

Field_value5varchar2 (150) := NULL

)
```

## Selected Resource Details

When a user double clicks a resource from the list of resources, it is selected for assignment and the Resource Details fields subsequently contain the following:

- Resource Name
- Resource Type
- Start Time
- End Time

The Start Time and End Time display is determined by the value in the value SHOW_SELECTED_TIME column according to the following rules:

***Start Time and End Time Display Rules***

| SHOW_SELECTED_TIME | Remarks |
|---|---|
| N | The UI will show only Resource Name and Resource Type. |
| Y | The UI will show Resource Name, Resource Type, Start Time, and End Time. |

## Width and Height

The width and height of the Assignment Manager window is specified according to the following rules:

- The value of the WINDOW_WIDTH and WINDOW_HEIGHT columns cannot be a negative number or 0. When a negative number or 0 are entered as the value of these columns, Assignment Manager uses the default window size values.

- When valid values are populated in these columns, the Assignment Manager UI either resizes accordingly or reverts to the default values of 7 inches for width and 5 inches for height.

## Window Position

The position of the Assignment Manager window is specified according to the following rules:

- The value of the WINDOW_X_POSITION and WINDOW_Y_POSITION columns cannot be negative.
- If no values are specified for the WINDOW_X_POSITION and WINDOW_Y_POSITION columns, they revert to the default value of 0

### Customization Guidelines

The Assignment Manager UI must be customized according to specific guidelines.

## Add Required Values to LAST_UPDATED_BY Column

When customizing the Assignment Manager UI, the implementor or System Administrator should always update the LAST_UPDATED_BY column with the appropriate user ID. Customized rows must not have values of **0** or **1** in the LAST_UPDATED_BY column, otherwise the data will be lost when a new patch is applied.

**Example**

In the following example, text marked in **bold** will change depending on the value added by the implementor or system administrator. The LAST_UPDATED_BY column contains an appropriate values that is neither **0** or **1**:

```
UPDATE     JTF_AM_SCREEN_SETUPS_B
SET           mode_assist= 'N'
, last_update_date = sysdate
, last_updated_by = 100
, object_version_number = object_version_number + 1
        WHERE document_type = 'TASK'
/
```

## Populate the LAST_UPDATED_BY Column with the Required Sequence

To insert the data in the table JTF_AM_SCREEN_SETUPS_B, the sequence JTF_AM_SCREEN_SETUPS_S.NXTVAL should be used for SCREEN_SETUP_ID column. For inserts in the table, the data MUST be entered in both JTF_AM_SCREEN_SETUPS_B and JTF_AM_SCREEN_SETUPS_TL tableS.

## Modify Assignment Manager UI Seeded Data as Required

Seeded data for the Assignment Manger UI is stored in the tables JTF_AM_SCREEN_SETUPS_B and JTF_AM_SCREEN_SETUPS_TL. To customize the Assignment Manager UI, you must modify the seeded data as required. The following tables list the seeded Assignment Manager UI values for each calling document:

***Assignment Manager UI Seeded Data in JTF_AM_SCREEN_SETUPS_B***

| Columns | Tasks | Service Request | Escalations | Service Request Tasks |
|---|---|---|---|---|
| SCREEN_SETUP_ID | 1 | 2 | 3 | 4 |
| DOCUMENT_TYPE | TASK | SR | ESC | SR_TASK |
| MODE_ASSIST | Y | Y | Y | Y |
| MODE_UNASSIST | Y | Y | Y | Y |
| CONTRACTS | Y | Y | Y | Y |
| INSTALLED_BASE | Y | Y | Y | Y |
| TERRITORY | Y | Y | Y | Y |
| AVAILABILITY | Y | Y | Y | Y |
| DOC_DETAILS | Y | Y | Y | Y |
| WINDOW_WIDTH | 7.7 | 7.7 | 7.7 | 7.7 |
| WINDOW_HEIGHT | 6.4 | 6.4 | 6.4 | 6.4 |
| WINDOW_X_POSITION | 0 | 0 | 0 | 0 |
| WINDOW_Y_POSITION | 0 | 0 | 0 | 0 |
| DOC_DTLS_USER_VALUES | N | N | N | N |
| SHOW_SELECTED_TIME | Y | Y | Y | Y |
| CREATED_BY | 1 | 1 | 1 | 1 |
| CREATION_DATE | 1-OCT-02 | 1-OCT-02 | 1-OCT-02 | 1-OCT-02 |
| LAST_UPDATED_BY | 1 | 1 | 1 | 1 |

| Columns | Tasks | Service Request | Escalations | Service Request Tasks |
|---|---|---|---|---|
| LAST_UPDATE_DATE | 1-OCT-02 | 1-OCT-02 | 1-OCT-02 | 1-OCT-02 |
| OBJECT_VERSION_NUMBER | 1 | 1 | 1 | 1 |

***JTF_AM_SCREEN_SETUPS_TL***

| Columns | Tasks | Service Request | Escalations | Service Request Tasks |
|---|---|---|---|---|
| SCREEN_SETUP_ID | 1 | 2 | 3 | 4 |
| PREFERENCE_NAME | Default Task | Default Service Request | Default Escalations | Default Service Request Task |
| CREATED_BY | 1 | 1 | 1 | 1 |
| CREATION_DATE | 1-OCT-02 | 1-OCT-02 | 1-OCT-02 | 1-OCT-02 |
| LAST_UPDATED_BY | 1 | 1 | 1 | 1 |
| LAST_UPDATE_DATE | 1-OCT-02 | 1-OCT-02 | 1-OCT-02 | 1-OCT-02 |
| SOURCE_LANG | US | US | US | US |
| LANGUAGE | US | US | US | US |

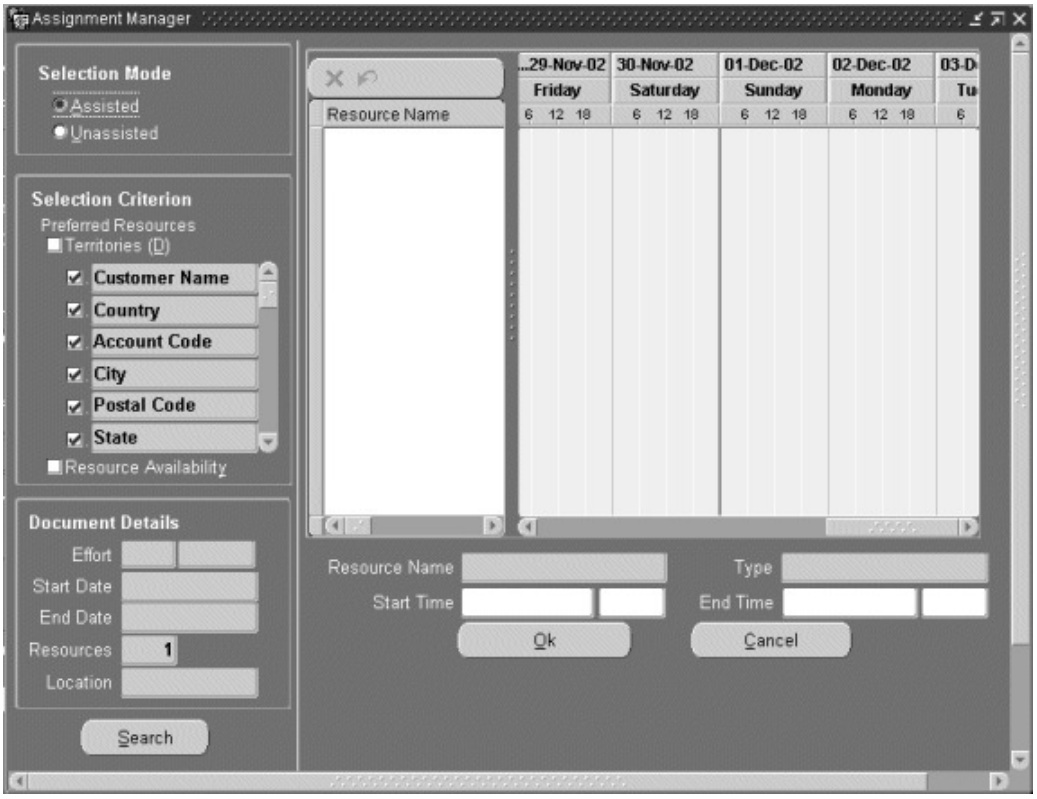
### Examples

This section provides examples of customizing the Assignment Manager UI for different calling documents.

## Service Request

When the calling document is a Service Request, the default Assignment Manager UI includes the Assisted Mode and Unassisted Mode radio buttons, the Start Time and End Time fields, as well as the default Document Details fields.

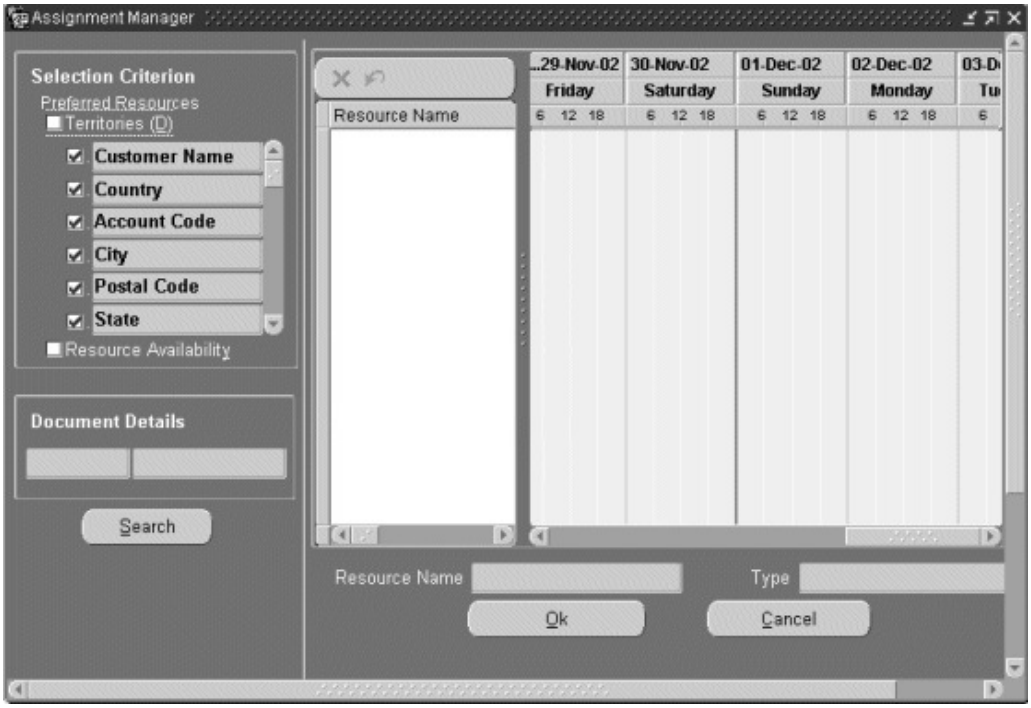
***Default Service Request Screen***




Since the Assisted Mode and Unassisted Mode radio buttons, the Start Time and End Time fields, are not required by the Service Request application, you can modify the table JTF_AM_SCREEN_SETUPS_B to render the Assignment Manager UI without these features. You can also modify the Document Details section with your own custom fields. The following SQL script customizes the Assignment Manager UI in this manner:

```
UPDATE jtf_am_screen_setups_b
SET    mode_unassist        = 'N'
      ,doc_dtls_user_values = 'Y'
      ,show_selected_time   = 'N'
      ,last_updated_by          = 123 -- userid of user who is upd
ating
      ,last_update_date         = SYSDATE
      ,object_version_number= object_version_number + 1
WHERE  document_type = 'SR'
```

***Customized Service Request Screen***

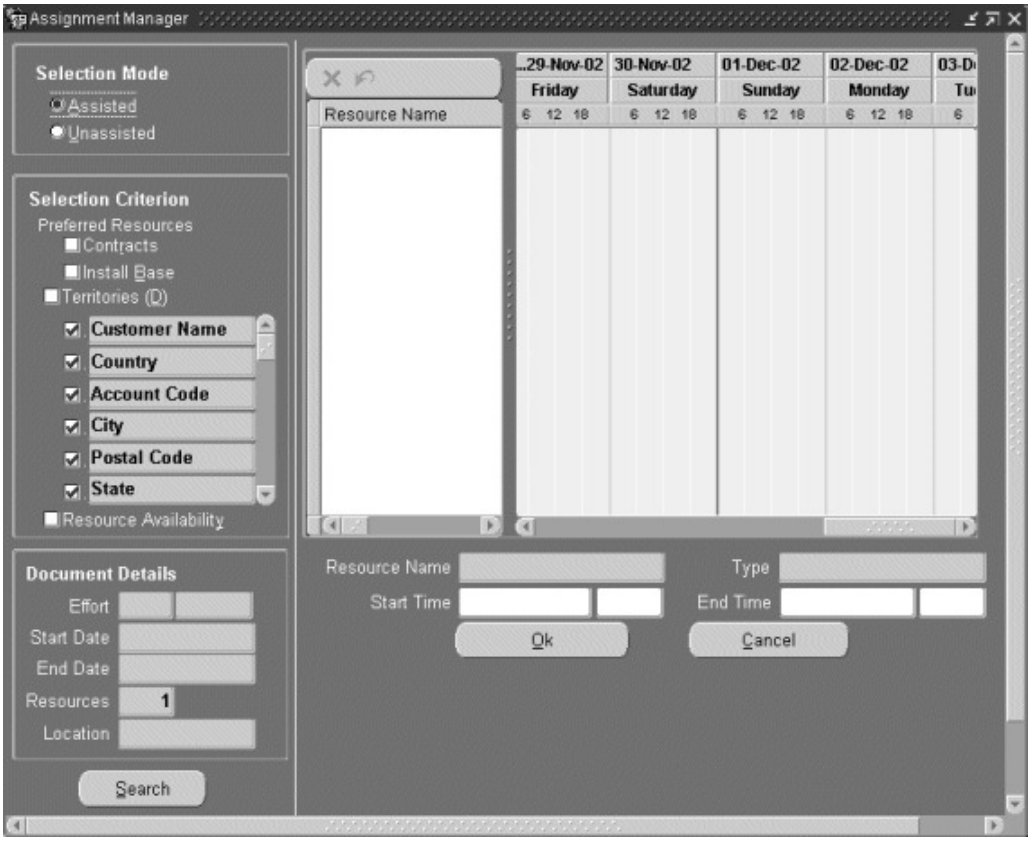



**Note:** Changing the **DOC_DTLS_USER_VALUES** column enables you to display custom fields in the Document Detail section. These fields will not appear, however, unless you populate the JTFAMSR.DOC_DETAILS_REC_TYPE with the appropriate name/value pairs.

## Service Request Task

When the calling document is a Service Request Task, the default Assignment Manager UI includes the Assisted Mode and Unassisted Mode radio buttons.

***Default Service Request Task Screen***

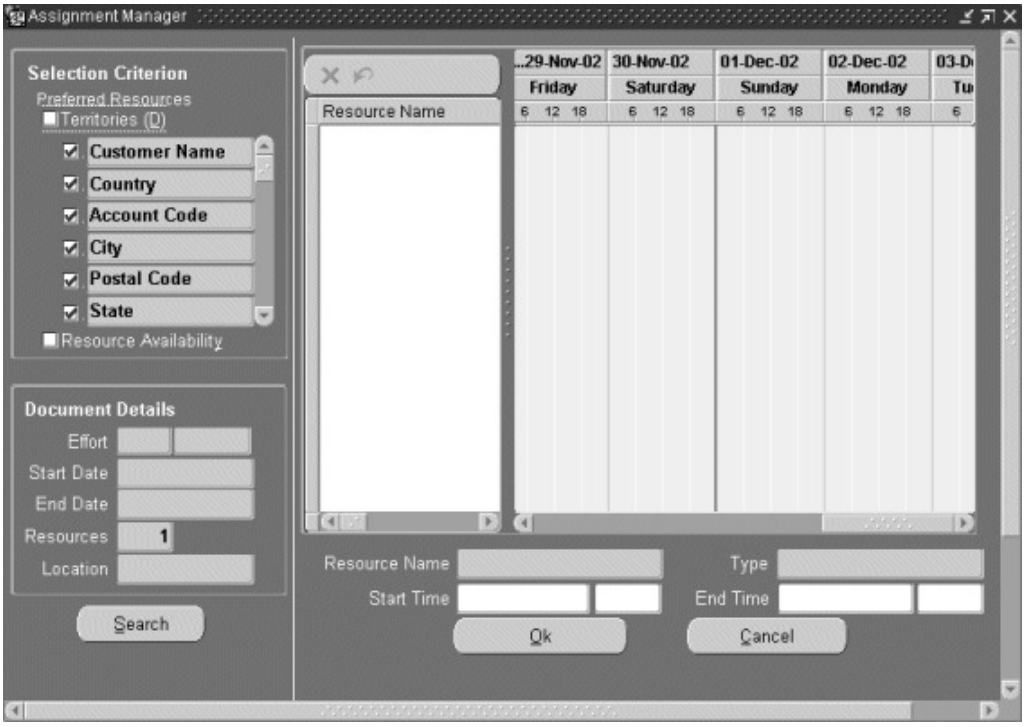



Since the Assisted Mode and Unassisted Mode radio buttons are not required by the Service Request application, you can modify the table JTF_AM_SCREEN_SETUPS_B to render the Assignment Manager UI without these features. The following SQL script customizes the Assignment Manager UI in this manner:

```
UPDATE jtf_am_screen_setups_b
SET     mode_unassist            = 'N'
 ,last_updated_by          = 123 -- userid of user who is updating

 ,last_update_date         = SYSDATE
 ,object_version_number= object_version_number + 1
WHERE  document_type = 'SR_TASK'
```

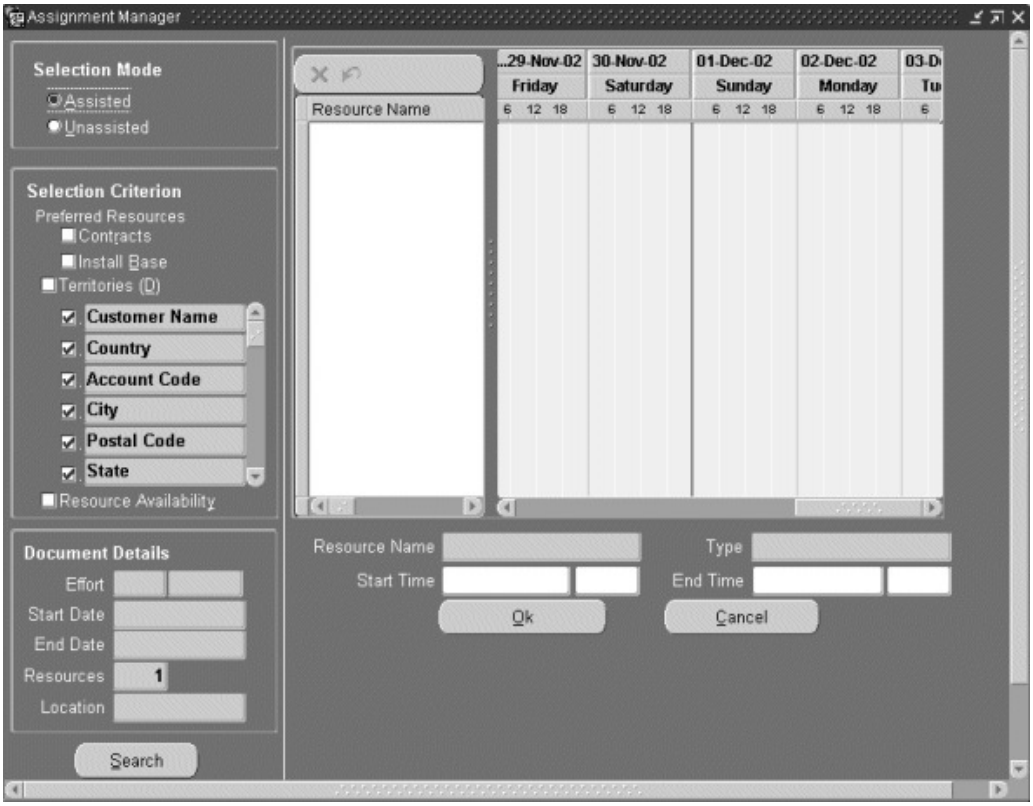
***Customized Service Request Task Screen***




## Escalations UI

When the calling document is an Escalation, the default Assignment Manager UI includes the Assisted Mode and Unassisted Mode radio buttons, the Start Time and End Time fields, selection criteria for Contracts, Install Base, Territories, and Resource Availability as well as the Document Details fields.

***Default Escalations Screen***



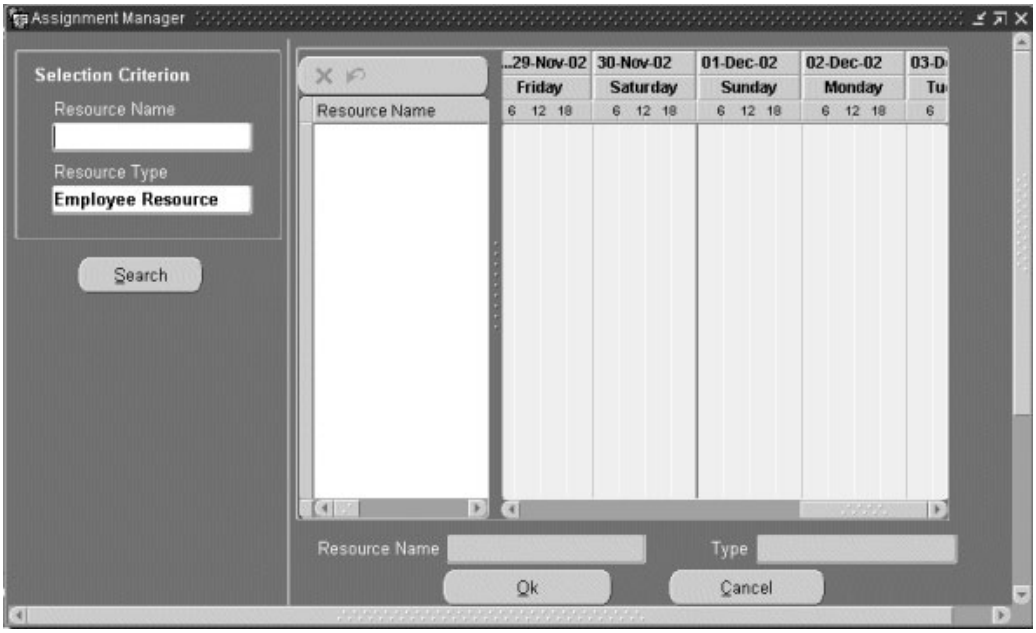

Since the Assisted Mode and Unassisted Mode radio buttons, the Start Time and End Time fields, selection criteria for Contracts, Install Base, Territories, and Resource Availability as well as the Document Details fields are not required by the Escalations application, you can modify the table JTF_AM_SCREEN_SETUPS_B to render the Assignment Manager UI without these features. The following SQL script customizes the Assignment Manager UI in this manner:

```
UPDATE jtf_am_screen_setups_b

SET     mode_assist                = 'N'

,contracts    = 'N'
,installed_base    = 'N'
,territory    = 'N'
,availability    = 'N'
,show_selected_time   = 'N'
,doc_details    = 'N'
      ,last_updated_by          = 123 -- userid of user who is upd
ating
      ,last_update_date         = SYSDATE
      ,object_version_number= object_version_number + 1
WHERE  document_type = 'ESC'
```

***Customized Escalations Screen***




## Backward Compatibility

For any document type not defined in the table JTF_AM_SCREEN_SETUPS_B, Assignment Manager uses its default values. A calling document can insert data into JTF_AM_SCREEN_SETUPS_B without altering the Assignment Manager UI, if it inserts the default values into the appropriate columns. For example, if the calling document inserts a new document type called DEFAULT_EXAMPLE into JTF_AM_SCREEN_SETUPS_B that retains the default UI settings, then the columns will contain the following values:

***Backward Compatibility Data Example: JTF_AM_SCREEN_SETUPS_B***

| Column Name | Column Value | Description |
|---|---|---|
| SCREEN_SETUP_ID | 1001 | Specifies a unique screen setup ID. |
| DOCUMENT_TYPE | DEFAULT_EXAMPLE | The name of the new document type that contains the default Assignment Manager UI values. |
| MODE_ASSIST | Y | Retains the Assisted Mode radio button. |
| MODE_UNASSIST | Y | Retains the Unassisted Mode radio button. |
| CONTRACTS | Y | Retains the Contracts checkbox |
| INSTALLED_BASE | Y | Retains the Install Base checkbox |
| TERRITORY | Y | Retains the Territories checkbox |
| AVAILABILITY | Y | Retains the Resource Availability checkbox |
| DOC_DETAILS | Y | Retains the Document Details component. |
| WINDOW_WIDTH | 7 | Specifies the default window width of 7 inches. |
| WINDOW_HEIGHT | 5 | Specifies the default window height of 5 inches. |
| WINDOW_X_POSITION | 0 | Specifies no X coordinate for positioning the window. |
| WINDOW_Y_POSITION | 0 | Specifies no Y coordinate for positioning the window. |
| DOC_DTLS_USER_VALUES | N | Retains the default Document Details fields by disabling the ability to add custom fields. |
| SHOW_SELECTED_TIME | Y | Displays the Start Time and End Time fields. |

The default values for a new document type appear in the table JTF_AM_SCREEN_SETUPS_TL as follows:

*JTF_AM_SCREEN_SETUPS_TL Sample Data*

| Column Name | Column Value | Description |
|---|---|---|
| SCREEN_SETUP_ID | 1001 | Specifies a unique screen setup ID. |
| PREFERENCE_NAME | User's Preference Name | Specifies the user's preference name. |
| SOURCE_LANG | US | Specifies the source language |
| LANGUAGE | US | Specifies the language. |

## Setting Up Enhanced Planning Options

Assignment Manager enables you to configure time panning options that use the SYSDATE and TIME functions to indicate the start of a shift instead of defaulting to the task's start date. Enhanced planning options are configured using the JTFAM:Use systime for Assignments profile option which is set to Yes or No at the site level. When set to Yes, the profile option enables the SYSDATE and TIME functions to determine the start of a shift. When set to No, the profile enables the task start date and time to represent the start of a shift.

### Examples

The following cases provide examples of setting up backward planning in Assignment Manager.

## Case 1

Case 1 assumes that the current SYSDATE value is 15 Aug 2003, 10:00:00. A resource, R1 is assigned a calendar for the month August 2003, with shifts starting from 8 am to 6 pm everyday of the week.

## Step 1: Assign a Resource and shift to a Calendar

Assign Resources and shifts to a calendar by performing the following:

- Create a calendar by performing the following:
- Creating a Calendar called Test Cal using the Define Calendar Form.
- Create a Shift called Test Shift using the Define Shifts Form. Shift should have working hours from Monday to Friday. Start time should be 8 am, duration 10 hours.
- Assigning the Resource R1 to the calendar Test Cal from 1st August 2003 to 30th December 2003, using the Assign Resource to Calendar form.
- Assigning Test Shift to the calendar Test Cal using the Assign Shift/Exception form.

## Step 2: Assign the Resource to a Territory

Assign resource R1 to a territory where Task Priority = High. To accomplish this, navigate to Territory Manager -> Territory Administration and enter the following values:

- Territory = Service Request and Task
- Transaction Qualifier = Task Priority
- Value = High
- Resource assigned = R1

## Step 3: Create the Service Request

Create Service Request SR1 with Task T1 using the Create Service Request form available with the Customer Support responsibility:

- Planned Start time for T1 = 1st Jan 2003,08:00:00
- Planned End Date = 30th Aug, 2003, 08:00:00
- Duration = 2 Hours.

## Step 4: View the Results in Assignment Manager

Invoke the Assignment Manager form by clicking the icon adjacent to the Assignee filed for the Service Request Task. Ensure that the Territories check box is selected while the remaining check boxes are not selected. Assignment Manager will perform the following:

- Search for Resource R1's availability from 15 Aug 2003, 10:00:00 to 29 Aug 2003, 10:00:00.
- Display resource R1 rendering the shifts in yellow and the first available slot in green.
- Double clicking the resource will select the resource, which can be returned to the SR Task by clicking OK.
- Assignment Manager will return resource R1, from 15 Aug 2003, 10:00:00 to 15 Aug 2003, 12:00:00.

## Case 2

Create a calendar and assign shifts in the same manner as Case 1, Step 1 and consider the following:

- SYSDATE = 15 Aug 2003, 10:00:00
- Resource R1 has been assigned a calendar for the month August 2003, with shifts starting from 8 am to 6 pm everyday of the week.
- R1 is assigned to a territory for Task Priority = High.
- Service Request SR1 has a Task T2. Planned Start time for T2 is 1st Aug 2003, 10:00:00and Planned End Date is 25 Aug 2003, 10:00:00 for duration = 2 Hours.

Assignment Manager will search for Resource R1's availability from 15 Aug 2003, 10:00:00 to 29 Aug 2003, 10:00:00, since the range from 29th Aug 2003, 10:00:00 - 15th Aug 2003 10:00:00 is greater than the range 25th Aug 2003, 10:00:00 - 15th Aug 2003 10:00:00.

Assignment Manager will subsequently return 15 Aug 2003, 10:00:00 to 15 Aug 2003, 12:00:00.

## Case 3

Create a calendar and assign shifts in the same manner as Case 1, Step 1 and consider the following:

- SYSDATE = 15 Aug 2003, 10:00:00
- Resource R1 has been assigned a calendar for the month August 2003, with shifts starting from 8 am to 6 pm everyday of the week.
- R1 is assigned to a territory for Task Priority = High.
- Service Request SR1 has a Task T3. Planned Start time for T3 is null, Planned End Date is null and for duration = null.

Assignment Manager will search for Resource R1's availability from 15 Aug 2003, 10:00:00 to 29 Aug 2003, 10:00:00 for a duration of 1 Hour and will return 15 Aug 2003, 10:00:00 to 15 Aug 2003, 11:00:00.

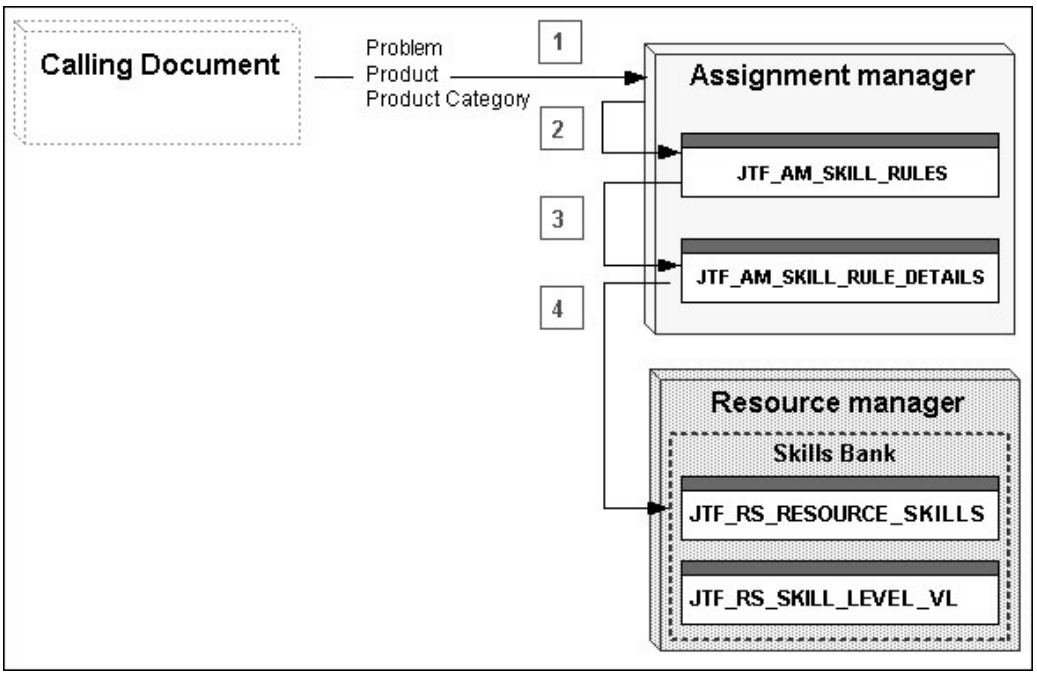
## Skills-based Filtering

When assigning a resource to a Service Request for a specific problem, product, or product category, Assignment Manager enables the most skilled resource to be selected for each. Assignment Manager filters the values of the problem, product, or product category that it receives from a Service Request. When Assignment Manager subsequently searches the Resource Manager Skills Bank for a resource skill to assign to the Service Request it uses search rules based on the filtered problem, product, or product category values. Assignment Manager ships with tables that contain seeded search rule data. When implementing Assignment Manager, you can create or modify these search rules by inserting or updating data in the tables that contain the seeded search rule information.

### Search Rules

Assignment Manager searches the Skills Bank for skilled resources based on search rules stored in tables JTF_AM_SKILL_RULES and JTF_AM_SKILL_RULE_DTLS. The following figure demonstrates how Assignment Manager applies the search rules when searching for skilled resources. The figure is explained in the text.

***Search Rules***




1. The calling document passes values into Assignment Manager which include a combination of the Problem Code, Product, or Product Category parameters.
2. If the calling document has passed a combination of these parameters into Assignment Manager, then Assignment Manager searches table JTF_AM_SKILL_RULES to determine if that combination has been seeded for the document type. This table stores the rule_id parameter for a specific set of values received by Assignment Manager.
3. If Assignment Manager locates seeded data for this combination, it accesses table JTF_AM_SKILL_RULE_DTLS to determine if rule exists that specifies at least one of the values for product, product category or problem code must be searched for in the Skills Bank.
4. If the Rule is found then Assignment Manager searches the Skills Bank based on that rule. The Skills Bank contains table JTF_RS_RESOURCE_SKILLS, which lists the Skill_level_id parameter for a resource's skills, and table JTF_RS_SKILL_LEVEL_VL, which lists the skill level for each Skill_level_id parameter.

## Table JTF_AM_SKILL_RULES

Table JTF_AM_SKILL_RULES contains the following definitions.

*Table JTF_AM_SKILL_RULES Definitions*

| Column Name | Values | Description |
|---|---|---|
| Rule_id | Unique seeded id | The unique ID for a specific combination of values passed to Assignment Manager. |
| Document_type | SR, TASK, SR_TASK, ESC, DEF, LEAD, OPPR, ACC | The document, such as SR (Service Request), from which Assignment Manager is called. This is a unique value for the table. These values are explained in the Supported Document Types section. |
| Product_id_passed | 1/0 | A value of 1 indicates that the calling document has passed the product_id and the product_org_id into Assignment Manager. |
| Category_id_passed | 1/0 | A value of 1 indicates that the calling document has passed the product_category_id into Assignment Manager. |
| Problem_code_passed | 1/0 | A value of 1 indicates that the calling document has passed the problem_code into Assignment Manager. |
| Component_id_passed | 1/0 | This column is currently not in use and the value is set to 0. |
| Active_flag | Y/N | Y indicates that the rule is active and should be considered in the search. |

## Table JTF_AM_SKILL_RULES Standard Columns

Table JTF_AM_SKILL_RULES contains the following Standard columns.

*Table JTF_AM_SKILL_RULES Standard Columns*

| Name | Null/Not Null | Type |
|---|---|---|
| RULE_ID | NOT NULL | NUMBER |
| DOCUMENT_TYPE | NOT NULL | VARCHAR2(30) |
| PRODUCT_ID_PASSED | NOT NULL | NUMBER |
| CATEGORY_ID_PASSED | NOT NULL | NUMBER |
| PROBLEM_CODE_PASSED | NOT NULL | NUMBER |
| COMPONENT_ID_PASSED | NOT NULL | NUMBER |
| ACTIVE_FLAG | NOT NULL | VARCHAR2(10) |

## Table JTF_AM_SKILL_RULES Who Columns

Table JTF_AM_SKILL_RULES contains the following Who columns.

*Table JTF_AM_SKILL_RULES Who Columns*

| Name | Null/Not Null | Type |
|---|---|---|
| CREATED_BY | NOT NULL | NUMBER |
| CREATION_DATE | NOT NULL | DATE |
| LAST_UPDATED_BY | NOT NULL | NUMBER |
| LAST_UPDATE_DATE | NOT NULL | DATE |
| LAST_UPDATE_LOGIN | NOT NULL | NUMBER |
| OBJECT_VERSION_ NUMBER | NOT NULL | NUMBER |
| ATTRIBUTE_CATEGORY | NOT NULL | VARCHAR2(150) |

## Table JTF_AM_SKILL_RULES Flexfield Columns

Table JTF_AM_SKILL_RULES contains the following Flexfield columns.

*Table JTF_AM_SKILL_RULES Flexfield Columns*

| Name | Null/Not Null | Type |
|---|---|---|
| ATTRIBUTE1 | NOT NULL | VARCHAR2(150) |
| ATTRIBUTE2 | NOT NULL | VARCHAR2(150) |
| ATTRIBUTE3 | NOT NULL | VARCHAR2(150) |
| ATTRIBUTE4 | NOT NULL | VARCHAR2(150) |
| ATTRIBUTE5 | NOT NULL | VARCHAR2(150) |
| ATTRIBUTE6 | NOT NULL | VARCHAR2(150) |
| ATTRIBUTE7 | NOT NULL | VARCHAR2(150) |
| ATTRIBUTE8 | NOT NULL | VARCHAR2(150) |
| ATTRIBUTE9 | NOT NULL | VARCHAR2(150) |
| ATTRIBUTE10 | NOT NULL | VARCHAR2(150) |
| ATTRIBUTE11 | NOT NULL | VARCHAR2(150) |
| ATTRIBUTE12 | NOT NULL | VARCHAR2(150) |
| ATTRIBUTE13 | NOT NULL | VARCHAR2(150) |
| ATTRIBUTE14 | NOT NULL | VARCHAR2(150) |
| ATTRIBUTE15 | NOT NULL | VARCHAR2(150) |
| SECURITY_GROUP_ID | NOT NULL | NUMBER |

## Table JTF_AM_SKILL_RULE_DTLS Table Definitions

Table JTF_AM_SKILL_RULE_DTLS contains the following definitions.

*Table JTF_AM_SKILL_RULE_DTLS Definitions*

| Column Name | Values | Description |
|---|---|---|
| Detail_id | Unique ID | The unique ID for a rule. |
| Rank | Number (Unique within a rule iD) | The order in which the rules are applied. |
| Rule_id | Header table ID | A value of 1 indicates that the product_id and the product_ org_id have been passed in to Assignment Manager. |
| Check_Product_Id | 1/0 | A value of 1 indicates that the product must match the skills bank product ID. |
| Check_Category_id | 1/0 | A value of 1 indicates that the category must match the skills bank category ID. |
| Check_Problem_code | 1/0 | A value of 1 indicates that the problem code must match the skills bank problem code ID. |
| Check_Component_id | 1/0 | A value of 1 indicates that the component must match the skills bank component ID. |
| Active_flag | Y/N | Y indicates that the skill is active and must be considered in the search. |

## Table JTF_AM_SKILL_RULE_DTLS Standard Columns

Table JTF_AM_SKILL_RULE_DTLS contains the following Standard columns.

*Table JTF_AM_SKILL_RULE_DTLS Standard Columns*

| Name | Null/Not Null | Type |
|---|---|---|
| DETAIL_ID | NOT NULL | NUMBER |
| RULE_ID | NOT NULL | NUMBER |
| RANK | NOT NULL | NUMBER |
| CHECK_PRODUCT_ID | NOT NULL | NUMBER |
| CHECK_CATEGORY_ID | NOT NULL | NUMBER |
| CHECK_PROBLEM_CODE | NOT NULL | NUMBER |
| CHECK_COMPONENT_ID | NOT NULL | NUMBER |
| ACTIVE_FLAG | NOT NULL | VARCHAR2(10) |

## Table JTF_AM_SKILL_RULE_DTLS Who Columns

Table JTF_AM_SKILL_RULE_DTLS contains the following Who columns.

*Table JTF_AM_SKILL_RULE_DTLS Who Columns*

| Name | Null/Not Null | Type |
|---|---|---|
| CREATED_BY | NOT NULL | NUMBER |
| CREATION_DATE | NOT NULL | DATE |
| LAST_UPDATED_BY | NOT NULL | NUMBER |
| LAST_UPDATE_DATE | NOT NULL | DATE |
| LAST_UPDATE_LOGIN | NOT NULL | NUMBER |
| OBJECT_VERSION_ NUMBER | NOT NULL | NUMBER |
| ATTRIBUTE_CATEGORY | NOT NULL | VARCHAR2(150) |

## Table JTF_AM_SKILL_RULE_DTLS Flexfield Columns

Table JTF_AM_SKILL_RULE_DTLS contains the following Flexfield columns.

*Table JTF_AM_SKILL_RULE_DTLS Flexfield Columns*

| | | |
|---|---|---|
| ATTRIBUTE1 | NOT NULL | VARCHAR2(150) |
| ATTRIBUTE2 | NOT NULL | VARCHAR2(150) |
| ATTRIBUTE3 | NOT NULL | VARCHAR2(150) |
| ATTRIBUTE4 | NOT NULL | VARCHAR2(150) |
| ATTRIBUTE5 | NOT NULL | VARCHAR2(150) |
| ATTRIBUTE6 | NOT NULL | VARCHAR2(150) |
| ATTRIBUTE7 | NOT NULL | VARCHAR2(150) |
| ATTRIBUTE8 | NOT NULL | VARCHAR2(150) |
| ATTRIBUTE9 | NOT NULL | VARCHAR2(150) |
| ATTRIBUTE10 | NOT NULL | VARCHAR2(150) |
| ATTRIBUTE11 | NOT NULL | VARCHAR2(150) |
| ATTRIBUTE12 | NOT NULL | VARCHAR2(150) |
| ATTRIBUTE13 | NOT NULL | VARCHAR2(150) |
| ATTRIBUTE14 | NOT NULL | VARCHAR2(150) |
| ATTRIBUTE15 | NOT NULL | VARCHAR2(150) |
| SECURITY_GROUP_ID | NOT NULL | NUMBER |

## Search Rules Examples

The following example demonstrates how Assignment Manager applies search rules for skills-based filtering based on sample data in tables JTF_AM_SKILL_RULES and JTF_AM_SKILL_RULE_DTLS.

***Table JTF_AM_SKILL_RULES Sample Data***

| Column Name | Values | Description |
|---|---|---|
| Rule_id | 1 | The rule is identified as 1. |
| Document_type | SR | The document type for the calling document is a Service Request |
| Product_id_passed | 1 | The calling document has passed the Product_id and the Product_org_id values to Assignment Manager. |
| Category_id_passed | 1 | The calling document has passed the Category_id value to Assignment Manager. |
| Problem_code_passed | 1 | The calling document has passed the Problem_code value to Assignment Manager. |
| Component_id_passed | 0 | The calling document has not passed the Compent_id value to Assignment Manager since Assignment Manager does not yet use the Component_id_ passed column. |
| Active_flag | Y | This rule is currently active and can be used. |

In the sample data for table JTF_AM_SKILL_RULES, Assignment Manager selects Rule 1 if it receives values for the product_id and product_org_id, category_id and problem_code from the calling document. When Assignment Manager selects Rule 1, it searches for details for that rule in table JTF_AM_SKILL_RULE_DTLS.

*Table JTF_AM_SKILL_RULE_DTLS Sample Data*

| Column Name | Values | Values | Values | Values | Values |
|---|---|---|---|---|---|
| Detail_id | 1 | 2 | 3 | 4 | 5 |
| Rank | 10 | 20 | 30 | 40 | 50 |
| Rule_id | 1 | 1 | 1 | 1 | 1 |
| Check_ Product_Id | 1 | 0 | 0 | 0 | 0 |
| Check_ Category_id | 0 | 1 | 0 | 0 | 1 |
| Check_ Problem_ code | 1 | 1 | 1 | 1 | 0 |
| Check_ Component_ id | 0 | 0 | 0 | 0 | 0 |
| Active_flag | Y | Y | Y | Y | Y |

In table JTF_AM_RULE_DTLS, Assignment Manager successively applies all of the search rules for a specific value in the Rule_id column, beginning with the lowest ranked one where the Active_flag is set to Y.

In the case of the sample data, Assignment Manager first selects the rule with the lowest value in the Rank column, which is 10. Where the value of Rank is 10, the value of check_product_id and check_problem_code are 1. Consequently, Assignment Manager searches the Skills Bank for qualified resources and marks the ones that are rated for product and problem code. When this process is completed, Assignment Manager selects the rule with the next lowest rank, which is 20. Where the value of Rank is 20, Check_Category_id, and Check_Problem_Code are 1. Consequently, Assignment Manager searches the Skills Bank for qualified resources and marks the ones that are rated for Product Category and Problem Code.

Assignment Manager continues this process until all of the rules are applied in succession and at least one of the given combination is returned. If no rules are defined for a particular combination of values passed in then no filtering occurs and all of the qualified resources are returned.

## Supported Document Types

Assignment Manager supports document types from the FND_LOOKUPS table where LOOKUP_TYPE = JTF_AM_DOCUMENT_TYPE. These document types do not pass a Component_id value to Assignment Manager, which consequently does not use it for skills-based filtering. Component_id is included as a column in the search rule tables for future requirements.

***Supported Document Types***

| Document Type | Calling Document |
|---|---|
| SR | Service Request |
| TASK | Tasks |
| SR_TASK | Service Request Task |
| ESC | Escalations |
| DEF | Defects |
| LEAD | Leads |
| OPPR | Opportunities |
| ACC | Accounts |

### Business Rules

The following skills-based filtering business rules are seeded for any document type recognized by Assignment Manager.

## No Rules Found in Table JTF_AM_SKILL_RULES

When the calling document passes values for Product, Product Category and Problem Code and no rule found in the table JTF_AM_SKILL_RULES, then all the qualified resources are returned without skills-based filtering.

## No Corresponding Rule Exists in Table JTF_AM_SKILL_RULE_DTLS

When the calling document passes values for Product, Product Category and Problem Code and a rule is found in the table JTF_AM_SKILL_RULES, but no related records exist in JTF_AM_SKILL_RULE_DTLS for the rule_id, then all the qualified resources are returned without any filtering based on skills.

## Additional Values Entered into 1/0 Columns for Table JTF_AM_SKILL_RULE_DTLS

If values other than 1 or 0 are passed into columns in table JTF_AM_SKILL_RULE_DTLS that only have valid values of 1 or 0, then these are treated as values of 0. For example if, if jtf_am_skill_rule_dtls.check_product_id is set to 5, this is programmatically equivalent to 0.

## Additional Values Entered into 1/0 Columns for Table JTF_AM_SKILL_RULES

If values other than 1 or 0 are passed into columns in table JTF_AM_SKILL_RULES that only have valid values of 1 or 0, then the rule is treated as an invalid rule. For

example, if jtf_am_skill_rules.product_id_passed is set to 5, Assignment Manager does not consider the rule at all.

## A Rule is Entered into

If a rule detail is found in JTF_AM_SKILL_RULE_DTLS for which the values of check_product_id, check_category_id and check_problem_code are all set to 0 then no filtering occurs for this rule. This rule is considered to be non-existent.

### Service Request Examples

This section contains skills-based filtering use cases in which a Service Request passes a combination of Product, Problem Code and Product category values to Assignment Manager and Assignment Manager executes search steps based on those values. In the following table, X indicates that a value is specified for the corresponding Product, Problem Code, or Product Category in the search step. Each search step is explained in the subsequent text.

***Steps Executed by Assignment Manager for Skills-based filtering***

| Skills | Combination 1 | Combination 2 | Combination 3 | Combination 4 | Combination 5 |
|---|---|---|---|---|---|
| Product Category | X | X | X | X | N/A |
| Product | X | X | N/A | N/A | N/A |
| Problem Code | X | N/A | X | N/A | X |

## Combination 1

The following table contains the rules for Combination 1:

***Rules for Combination 1***

| Skill | Combination 1 | Step 1 | Step 2 | Step 3 | Step 4 | Step 5 |
|---|---|---|---|---|---|---|
| Product Category | X | N/A | X | N/A | N/A | X |
| Product | X | X | N/A | N/A | X | N/A |
| Problem Code | X | X | X | X | N/A | N/A |

Combination 1 contains the following data in table JTF_AM_SKILL_RULES:

***Combination 1 Data in Table JTF_AM_SKILL_RULES***

| Column Name | Values |
|---|---|
| Rule_id | 1 |
| Document_type | SR |
| Product_id_passed | 1 |
| Category_id_passed | 1 |
| Problem_code_passed | 1 |
| Component_id_passed | 0 |
| Active_flag | Y |

Combination 1 contains the following data in table JTF_AM_SKILL_RULE_DTLS:

***Combination 1 Data in Table JTF_AM_SKILL_RULE_DTLS***

| Column Name | Values | Values | Values | Values | Values |
|---|---|---|---|---|---|
| Detail_id | 1 | 2 | 3 | 4 | 5 |
| Rank | 10 | 20 | 30 | 40 | 50 |
| Rule_id | 1 | 1 | 1 | 1 | 1 |
| Check_ Product_Id | 1 | 0 | 0 | 1 | 0 |
| Check_ Category_id | 0 | 1 | 0 | 0 | 1 |
| Check_ Problem_ code | 1 | 1 | 1 | 0 | 0 |
| Check_ Component_ id | 0 | 0 | 0 | 0 | 0 |
| Active_flag | Y | Y | Y | Y | Y |

With Combination 1, Assignment Manager accesses the following resource skill data in table JTF_RS_RESOURCE_SKILLS:

***Resource Skill Data in Table JTF_RS_RESOURCE_SKILLS***

| Resource_ id | Skill_ level_id | Product_ id | Product_ org_id | Category_ id | Problem_ code | Component_ id |
|---|---|---|---|---|---|---|
| R1 | 4 | N/A | N/A | N/A | EE01 | N/A |
| R2 | 3 | 149 | 204 | N/A | EE01 | N/A |
| R3 | 4 | N/A | N/A | 1390 | EE01 | N/A |

With Combination 1, Assignment Manager accesses the following resource skill level data in table JTF_RS_SKILL_LEVELS_VL:

.

***Resource Skill Data in Table JTF_RS_SKILL_LEVELS_VL***

| Skill_level_id | Skill_level |
|---|---|
| 4 | 60 |
| 3 | 80 |
| 2 | 100 |

The service request passes the following values to Assignment Manager.

- Product_id = 149, product_org_id = 204
- Category_id = 1390
- Problem_code = EE01

The following resources are returned as Qualified Resources in Assignment Manger:

- R1
- R2
- R4
- R5

Assignment Manager searches the Skills Bank and returns the following result. Unskilled resources are returned with their skill level set to 0:

***Combination 1 Skills Bank Search Result***

| Resource_ id | Skill_level |
|---|---|
| R1 | 60 |
| R2 | 80 |
| R4 | 0 |
| R5 | 0 |

## Combination 2

The following table contains the rules for Combination 2:

***Rules for Combination 2***

| Skill | Combination 2 | Step 1 | Step 2 |
|---|---|---|---|
| Product Category | X | N/A | X |
| Product | X | X | N/A |
| Problem Code | N/A | N/A | N/A |

Combination 2 contains the following data in table JTF_AM_SKILL_RULES:

***Combination 2 Data in Table JTF_AM_SKILL_RULES***

| Column Name | Values |
|---|---|
| Rule_id | 2 |
| Document_type | SR |
| Product_id_passed | 1 |
| Category_id_passed | 1 |
| Problem_code_passed | 0 |
| Component_id_passed | 0 |
| Active_flag | Y |

Combination 2 contains the following data in table JTF_AM_SKILL_RULE_DTLS:

***Combination 2 Data in Table JTF_AM_SKILL_RULE_DTLS***

| Column Name | Values | Values |
|---|---|---|
| Detail_id | 6 | 7 |
| Rank | 10 | 20 |
| Rule_id | 2 | 2 |
| Check_Product_Id | 1 | 0 |
| Check_Category_id | 0 | 1 |
| Check_Problem_code | 0 | 0 |
| Check_Component_id | 0 | 0 |
| Active_flag | Y | Y |

With Combination 2, Assignment Manager accesses the following resource skill data in table JTF_RS_RESOURCE_SKILLS:

***Resource Skill Data in Table JTF_RS_RESOURCE_SKILLS***

| Resource_ id | Skill_ level_id | Product_ id | Product_ org_id | Category_ id | Problem_ code | Component_ id |
|---|---|---|---|---|---|---|
| R1 | 4 | null | null | null | EE01 | null |
| R2 | 3 | 149 | 204 | null | EE01 | null |
| R3 | 4 | null | null | 1390 | EE01 | null |
| R4 | 2 | 149 | 204 | null | null | null |
| R5 | 3 | null | null | 1390 | null | null |

With Combination 2, Assignment Manager accesses the following resource skill level data in table JTF_RS_SKILL_LEVELS_VL:

.

***Resource Skill Data in Table JTF_RS_SKILL_LEVELS_VL***

| Skill_level_id | Skill_level |
|---|---|
| 4 | 60 |
| 3 | 80 |
| 2 | 100 |

The service request passes the following values to Assignment Manager.

- Product_id = 149, product_org_id = 204
- Category_id = 1390
- Problem_code = null

The following resources are returned as Qualified Resources in Assignment Manger:

- R1
- R2
- R3
- R4
- R5

Assignment Manager searches the Skills Bank and returns the following result. Unskilled resources are returned with their skill level set to 0:

***Combination 2 Skills Bank Search Result***

| Resource_ id | Skill_level |
|---|---|
| R1 | 0 |
| R2 | 100 |
| R3 | 0 |
| R4 | 0 |
| R5 | 80 |

## Combination 3

The following table contains the rules for Combination 3:

***Rules for Combination 3***

| Skill | Combination 3 | Step 1 | Step 2 | Step 3 |
|---|---|---|---|---|
| Product Category | X | X | N/A | X |
| Product | N/A | N/A | N/A | N/A |
| Problem Code | X | X | X | N/A |

Combination 3 contains the following data in table JTF_AM_SKILL_RULES:

***Combination 3 Data in Table JTF_AM_SKILL_RULES***

| Column Name | Values |
|---|---|
| Rule_id | 3 |
| Document_type | SR |
| Product_id_passed | 0 |
| Category_id_passed | 1 |
| Problem_code_passed | 1 |
| Component_id_passed | 0 |
| Active_flag | Y |

Combination 3 contains the following data in table JTF_AM_SKILL_RULE_DTLS:

***Combination 3 Data in Table JTF_AM_SKILL_RULE_DTLS***

| Column Name | Values | Values | Values |
|---|---|---|---|
| Detail_id | 8 | 9 | 10 |
| Rank | 10 | 20 | 30 |
| Rule_id | 3 | 3 | 3 |
| Check_Product_Id | 1 | 0 | 1 |
| Check_Category_id | 0 | 0 | 0 |
| Check_Problem_code | 1 | 1 | 0 |
| Check_Component_id | 0 | 0 | 0 |
| Active_flag | Y | Y | Y |

With Combination 3, Assignment Manager accesses the following resource skill data in table JTF_RS_RESOURCE_SKILLS:

***Resource Skill Data in Table JTF_RS_RESOURCE_SKILLS***

| Resource_ id | Skill_ level_id | Product_ id | Product_ org_id | Category_ id | Problem_ code | Component_ id |
|---|---|---|---|---|---|---|
| R1 | 4 | N/A | N/A | N/A | EE01 | N/A |
| R2 | 3 | 149 | 204 | N/A | EE01 | N/A |
| R3 | 4 | N/A | N/A | 1390 | EE01 | N/A |
| R4 | 2 | 149 | 204 | N/A | N/A | N/A |
| R5 | 3 | N/A | N/A | 1390 | N/A | N/A |

With Combination 3, Assignment Manager accesses the following resource skill level data in table JTF_RS_SKILL_LEVELS_VL:

.

***Resource Skill Data in Table JTF_RS_SKILL_LEVELS_VL***

| Skill_level_id | Skill_level |
|---|---|
| 4 | 60 |
| 3 | 80 |
| 2 | 100 |

The service request passes the following values to Assignment Manager.

- Product_id = 149, product_org_id = 204
- Category_id = null
- Problem_code = EE01

The following resources are returned as Qualified Resources in Assignment Manger:

- R1
- R2
- R3
- R4
- R5

Assignment Manager searches the Skills Bank and returns the following result. Unskilled resources are returned with their skill level set to 0:

***Combination 3 Skills Bank Search Result***

| Resource_ id | Skill_level |
|---|---|
| R1 | 60 |
| R2 | 80 |
| R3 | 0 |
| R4 | 0 |
| R5 | 0 |

## Combination 4

The following table contains the rules for Combination 4:

***Rules for Combination 4***

| Skill | Combination 4 | Step 1 | Step 2 |
|---|---|---|---|
| Product Category | X | N/A | X |
| Product | N/A | N/A | N/A |
| Problem Code | N/A | N/A | N/A |

Combination 4 contains the following data in table JTF_AM_SKILL_RULES:

***Combination 4 Data in Table JTF_AM_SKILL_RULES***

| Column Name | Values |
|---|---|
| Rule_id | 4 |
| Document_type | SR |
| Product_id_passed | 0 |
| Category_id_passed | 1 |
| Problem_code_passed | 0 |
| Component_id_passed | 0 |
| Active_flag | Y |

Combination 4 contains the following data in table JTF_AM_SKILL_RULE_DTLS:

***Combination 4 Data in Table JTF_AM_SKILL_RULE_DTLS***

| Column Name | Values |
|---|---|
| Detail_id | 11 |
| Rank | 10 |
| Rule_id | 4 |
| Check_Product_Id | 0 |
| Check_Category_id | 1 |
| Check_Problem_code | 0 |
| Check_Component_id | 0 |
| Active_flag | Y |

With Combination 4, Assignment Manager accesses the following resource skill data in table JTF_RS_RESOURCE_SKILLS:

***Resource Skill Data in Table JTF_RS_RESOURCE_SKILLS***

| Resource_ id | Skill_ level_id | Product_ id | Product_ org_id | Category_ id | Problem_ code | Component_ id |
|---|---|---|---|---|---|---|
| R1 | 4 | N/A | N/A | N/A | EE01 | N/A |
| R2 | 3 | 149 | 204 | N/A | EE01 | N/A |
| R3 | 4 | N/A | N/A | 1390 | EE01 | N/A |
| R4 | 2 | 149 | 204 | N/A | N/A | N/A |
| R5 | 3 | N/A | N/A | 1390 | N/A | N/A |

With Combination 4, Assignment Manager accesses the following resource skill level data in table JTF_RS_SKILL_LEVELS_VL:

.

***Resource Skill Data in Table JTF_RS_SKILL_LEVELS_VL***

| Skill_level_id | Skill_level |
|---|---|
| 4 | 60 |
| 3 | 80 |
| 2 | 100 |

The service request passes the following values to Assignment Manager.

- Product_id = null, product_org_id = null
- Category_id = 1390
- Problem_code = null

The following resources are returned as Qualified Resources in Assignment Manger:

- R1
- R2
- R3
- R4
- R5

Assignment Manager searches the Skills Bank and returns the following result. Unskilled resources are returned with their skill level set to 0:

***Combination 4 Skills Bank Search Result***

| Resource_ id | Skill_level |
|---|---|
| R1 | 0 |
| R2 | 0 |
| R3 | 0 |
| R4 | 0 |
| R5 | 80 |

## Combination 5

The following table contains the rules for Combination 5:

***Rules for Combination 5***

| Skill | Combination 5 | Step 1 |
|---|---|---|
| Product Category | N/A | N/A |
| Product | N/A | N/A |
| Problem Code | X | X |

Combination 5 contains the following data in table JTF_AM_SKILL_RULES:

***Combination 5 Data in Table JTF_AM_SKILL_RULES***

| Column Name | Values |
|---|---|
| Rule_id | 5 |
| Document_type | SR |
| Product_id_passed | 0 |
| Category_id_passed | 0 |
| Problem_code_passed | 1 |
| Component_id_passed | 0 |
| Active_flag | Y |

Combination 5 contains the following data in table JTF_AM_SKILL_RULE_DTLS:

***Combination 5 Data in Table JTF_AM_SKILL_RULE_DTLS***

| Column Name | Values |
|---|---|
| Detail_id | 12 |
| Rank | 10 |
| Rule_id | 5 |
| Check_Product_Id | 0 |
| Check_Category_id | 0 |
| Check_Problem_code | 1 |
| Check_Component_id | 0 |
| Active_flag | Y |

With Combination 5, Assignment Manager accesses the following resource skill data in table JTF_RS_RESOURCE_SKILLS:

***Resource Skill Data in Table JTF_RS_RESOURCE_SKILLS***

| Resource_ id | Skill_ level_id | Product_ id | Product_ org_id | Category_ id | Problem_ code | Component_ id |
|---|---|---|---|---|---|---|
| R1 | 4 | N/A | N/A | N/A | EE01 | N/A |
| R2 | 3 | 149 | 204 | N/A | EE01 | N/A |
| R3 | 4 | N/A | N/A | 1390 | EE01 | N/A |
| R4 | 2 | 149 | 204 | N/A | N/A | N/A |
| R5 | 3 | N/A | N/A | 1390 | N/A | N/A |

With Combination 5, Assignment Manager accesses the following resource skill level data in table JTF_RS_SKILL_LEVELS_VL:

.

***Resource Skill Data in Table JTF_RS_SKILL_LEVELS_VL***

| Skill_level_id | Skill_level |
|---|---|
| 4 | 60 |
| 3 | 80 |
| 2 | 100 |

The service request passes the following values to Assignment Manager.

- Product_id = null, product_org_id = null
- Category_id = null
- Problem_code = EE01

The following resources are returned as Qualified Resources in Assignment Manger:

- R1
- R2
- R3
- R4
- R5

Assignment Manager searches the Skills Bank and returns the following result. Unskilled resources are returned with their skill level set to 0:

***Combination 5 Skills Bank Search Result***

| Resource_ id | Skill_level |
|---|---|
| R1 | 60 |
| R2 | 0 |
| R3 | 0 |
| R4 | 0 |
| R5 | 0 |

## Task Examples

This section contains skills-based filtering use cases in which a Task passes a combination of Product, Problem Code and Product category values to Assignment Manager and Assignment Manager executes search steps based on those values. In the following table, X indicates that a value is specified for the corresponding Product, Problem Code, or Product Category in the search step. Each search step is explained in the subsequent text.

***Combination of Values Passed by a Task to Assignment Manager***

| Skill | Combination 1 | Combination 2 |
|---|---|---|
| Product Category | X | X |
| Product | X | X |
| Problem Code | X | N/A |

# Combination 1

The following table contains the rules for Combination 1:

***Rules for Combination 1***

| Skill | Combination 1 | Step 1 | Step 2 | Step 3 |
|---|---|---|---|---|
| Product Category | X | X | N/A | N/A |
| Product | X | N/A | X | N/A |
| Problem Code | X | N/A | N/A | X |

Combination 1 contains the following data in table JTF_AM_SKILL_RULES:

***Combination 1 Data in Table JTF_AM_SKILL_RULES***

| Column Name | Values |
|---|---|
| Rule_id | 6 |
| Document_type | TASK |
| Product_id_passed | 1 |
| Category_id_passed | 1 |
| Problem_code_passed | 1 |
| Component_id_passed | 0 |
| Active_flag | Y |

Combination 1 contains the following data in table JTF_AM_SKILL_RULE_DTLS:

***Combination 1 Data in Table JTF_AM_SKILL_RULE_DTLS***

| Column Name | Values | Values | Values |
|---|---|---|---|
| Detail_id | 12 | 13 | 14 |
| Rank | 10 | 20 | 30 |
| Rule_id | 6 | 6 | 6 |
| Check_Product_Id | 1 | 0 | 0 |
| Check_Category_id | 0 | 1 | 0 |
| Check_Problem_code | 0 | 0 | 1 |
| Check_Component_id | 0 | 0 | 0 |
| Active_flag | Y | Y | Y |

With Combination 1, Assignment Manager accesses the following resource skill data in table JTF_RS_RESOURCE_SKILLS:

***Resource Skill Data in Table JTF_RS_RESOURCE_SKILLS***

| Resource_ id | Skill_ level_id | Product_ id | Product_ org_id | Category_ id | Problem_ code | Component_ id |
|---|---|---|---|---|---|---|
| R1 | 4 | N/A | N/A | N/A | EE01 | N/A |
| R2 | 3 | 149 | 204 | N/A | EE01 | N/A |
| R3 | 4 | N/A | N/A | 1390 | EE01 | N/A |
| R4 | 2 | 149 | 204 | N/A | N/A | N/A |
| R5 | 3 | N/A | N/A | 1390 | N/A | N/A |

With Combination 1, Assignment Manager accesses the following resource skill level data in table JTF_RS_SKILL_LEVELS_VL:

.

***Resource Skill Data in Table JTF_RS_SKILL_LEVELS_VL***

| Skill_level_id | Skill_level |
|---|---|
| 4 | 60 |
| 3 | 80 |
| 2 | 100 |

The service request passes the following values to Assignment Manager.

- Product_id = 149, product_org_id = 204
- Category_id = 1390
- Problem_code = EE01

The following resources are returned as Qualified Resources in Assignment Manger:

- R1
- R2
- R3
- R4
- R5

Assignment Manager searches the Skills Bank and returns the following result. Unskilled resources are returned with their skill level set to 0:

***Combination 1 Skills Bank Search Result***

| Resource_ id | Skill_level |
|---|---|
| R1 | 60 |
| R2 | 80 |
| R3 | 0 |
| R4 | 0 |
| R5 | 80 |

## Combination 2

The following table contains the rules for Combination 2:

***Rules for Combination 2***

| Skill | Combination 2 | Step 1 | Step 2 | Step 3 |
|---|---|---|---|---|
| Product Category | X | X | N/A | N/A |
| Product | X | N/A | X | X |
| Problem Code | N/A | N/A | N/A | N/A |

Combination 2 contains the following data in table JTF_AM_SKILL_RULES:

***Combination 2 Data in Table JTF_AM_SKILL_RULES***

| Column Name | Values |
|---|---|
| Rule_id | 7 |
| Document_type | TASK |
| Product_id_passed | 1 |
| Category_id_passed | 1 |
| Problem_code_passed | 0 |
| Component_id_passed | 0 |
| Active_flag | Y |

Combination 2 contains the following data in table JTF_AM_SKILL_RULE_DTLS:

***Combination 2 Data in Table JTF_AM_SKILL_RULE_DTLS***

| Column Name | Values | Values |
|---|---|---|
| Detail_id | 15 | 16 |
| Rank | 10 | 20 |
| Rule_id | 7 | 7 |
| Check_Product_Id | 1 | 0 |
| Check_Category_id | 0 | 1 |
| Check_Problem_code | 0 | 0 |
| Check_Component_id | 0 | 0 |
| Active_flag | Y | Y |

With Combination 2, Assignment Manager accesses the following resource skill data in table JTF_RS_RESOURCE_SKILLS:

***Resource Skill Data in Table JTF_RS_RESOURCE_SKILLS***

| Resource_ id | Skill_ level_id | Product_ id | Product_ org_id | Category_ id | Problem_ code | Component_ id |
|---|---|---|---|---|---|---|
| R1 | 4 | N/A | N/A | N/A | EE01 | N/A |
| R2 | 3 | 149 | 204 | N/A | EE01 | N/A |
| R3 | 4 | N/A | N/A | 1390 | EE01 | N/A |
| R4 | 2 | 149 | 204 | N/A | N/A | N/A |
| R5 | 3 | N/A | N/A | 1390 | N/A | N/A |

With Combination 2, Assignment Manager accesses the following resource skill level data in table JTF_RS_SKILL_LEVELS_VL:

.

***Resource Skill Data in Table JTF_RS_SKILL_LEVELS_VL***

| Skill_level_id | Skill_level |
|---|---|
| 4 | 60 |
| 3 | 80 |
| 2 | 100 |

The service request passes the following values to Assignment Manager.

- Product_id = 149, product_org_id = 204
- Category_id = 1390
- Problem_code = null

The following resources are returned as Qualified Resources in Assignment Manger:

- R1
- R2
- R3
- R4
- R5

Assignment Manager searches the Skills Bank and returns the following result. Unskilled resources are returned with their skill level set to 0:

***Combination 2 Skills Bank Search Result***

| Resource_ id | Skill_level |
|---|---|
| R1 | 0 |
| R2 | 80 |
| R3 | 0 |
| R4 | 0 |
| R5 | 80 |

## Backwards Compatibility Considerations

If no rules are defined for a given combination of product category, product and problem code values that the calling document passes to Assignment Manager then all qualified resources are returned without any filtering.

For the qualifiers problem code, product and product category it is recommended that you use the Skills Bank to obtain the most qualified resources. Setting these qualifiers in territories is not advisable.

## Customization Guidelines

You can customize the Skills Bank search logic as required by modifying the seeded data in tables JTF_AM_SKILL_RULES and JTF_AM_SKILL_RULE_DTLS. When the data in these tables is customized for a particular product, the last_updated_by column should always be updated with the User_id value of the individual that modifies the data. Customized rows should not have values of 0 or 1 in the last_updated_by column, otherwise, if new patch is applied, the customized data will be lost.

## Sample Code for Preventing the Execution of a Step

The following SQL statement updates table JTF_AM_SKILL_RULE_DTLS to prevent the execution of Step 5 in Combination 1 of the Service Request examples:

```
UPDATE     JTF_AM_SKILL_RULE_DTLS
SET           active_flag = 'N'
, last_update_date = sysdate
, last_updated_by = 100
,            object_version_number = object_version_number + 1
             WHERE     detail_id = 5
/
```

**Note:** Text marked in bold will change depending on whether or not the rule is active.

## Sample Code for Preventing the Execution of a Combination

The following SQL statement updates table JTF_AM_SKILL_RULE_DTLS to prevent the execution of Combination 2 of the Service Request examples:

```
UPDATE     JTF_AM_SKILL_RULES
SET           active_flag = 'N'
, last_update_date = sysdate
, last_updated_by = 100
, object_version_number = object_version_number + 1
         WHERE     rule_id  = 2
/
```

**Note:** Text marked in bold will change depending on whether or not the rule is active.

## Sample Code for Adding a Search Rule

The following SQL statement inserts data in table JTF_AM_SKILL_RULE_DTLS to add a rule that searches for a resource rated for product and product category as the first step in Combination 2 of the Service Request examples:

```
INSERT      INTO JTF_AM_SKILL_RULE_DTLS

    (DETAIL_ID,

    RULE_ID,
    RANK,
    CHECK_PRODUCT_ID,
    CHECK_CATEGORY_ID,
    CHECK_PROBLEM_CODE,
    CHECK_COMPONENT_ID,
    ACTIVE_FLAG,
    CREATED_BY,
    CREATION_DATE,
    OBJECT_VERSION_NUMBER)
    VALUES       (DETAIL_ID,
     RULE_ID,
     RANK,
     CHECK_PRODUCT_ID,
     CHECK_CATEGORY_ID,
     CHECK_PROBLEM_CODE,
     CHECK_COMPONENT_ID,
     ACTIVE_FLAG,
     CREATED_BY,
     LAST_UPDATED_BY,
     CREATION_DATE,
     LAST_UPDATE_LOGIN,
     LAST_UPDATE_DATE,
     OBJECT_VERSION_NUMBER)
    VALUES (jtf_am_screen_setup_dtls_s.nextval,
     2,
     5,
     1,
     1,
     0,
     0,
     'Y',
     user id ,
     sysdate,
 user login  id,
 user id,
     sysdate,
 1)
/
```

**Note:** Text marked in bold must be substituted with the user id and user login id

### Seeded Data

Assignment Manager ships with seeded data in tables JTF_AM_SKILL_RULES and JTF_AM_SKILL_RULE_DTLS. These tables are created in the JTF schema and store the rules for searching the Skills Bank. Data in these tables can be modified to activate new rules for the Skills Bank search.

## Table JTF_AM_SKILL_RULES Seeded Data

The following table contains the seeded data stored in table JTF_AM_SKILL_RULES:

*Table JTF_AM_SKILL_RULES Seeded Data*

| Columns | Row1 | Row2 | Row3 | Row4 | Row5 | Row6 |
|---|---|---|---|---|---|---|
| RULE_ID | 1 | 2 | 3 | 4 | 5 | 6 |
| DOCUMENT_TYPE | SR | SR | SR | SR | SR | SR |
| PRODUCT_ID_PASSED | 1 | 1 | 0 | 0 | 1 | 1 |
| CATEGORY_ID_PASSED | 1 | 1 | 1 | 1 | 0 | 0 |
| PROBLEM_CODE_PASSED | 1 | 0 | 1 | 0 | 1 | 0 |
| COMPONENT_ID_PASSED | 0 | 0 | 0 | 0 | 0 | 0 |
| ACTIVE_FLAG | Y | Y | Y | Y | Y | Y |
| CREATED_BY | 1 | 1 | 1 | 1 | 1 | 1 |
| CREATION_DATE | 1-OCT-02 | 1-OCT-02 | 1-OCT-02 | 1-OCT-02 | 1-OCT-02 | 1-OCT-02 |
| LAST_UPDATED_BY | 1 | 1 | 1 | 1 | 1 | 1 |
| LAST_UPDATE_DATE | 1-OCT-02 | 1-OCT-02 | 1-OCT-02 | 1-OCT-02 | 1-OCT-02 | 1-OCT-02 |
| LAST_UPDATE_LOGIN | 1 | 1 | 1 | 1 | 1 | 1 |
| OBJECT_VERSION_NUMBER | 1 | 1 | 1 | 1 | 1 | 1 |

## Table JTF_AM_SKILL_RULE_DTLS

The following table contains the seeded data stored in table JTF_AM_SKILL_RULE_DTLS:

*Table JTF_AM_SKILL_RULE_DTLS Seeded Data*

| Columns | DETAIL_ID | RULE_ID | RANK | CHECK_PRODUCT_ID | CHECK_CATEGORY_ID | CHECK_PROBLEM_CODE | ACTIVE_FLAG |
|---|---|---|---|---|---|---|---|
| 1 | 1 | 1 | 10 | 1 | 0 | 1 | Y |
| 2 | 2 | 1 | 20 | 0 | 1 | 1 | Y |
| 3 | 3 | 1 | 30 | 0 | 0 | 1 | Y |
| 4 | 4 | 1 | 40 | 1 | 0 | 0 | Y |
| 5 | 5 | 1 | 50 | 0 | 1 | 0 | Y |
| 6 | 6 | 2 | 10 | 1 | 0 | 0 | Y |
| 7 | 7 | 2 | 20 | 0 | 1 | 0 | Y |
| 8 | 8 | 3 | 10 | 0 | 1 | 1 | Y |
| 9 | 9 | 3 | 20 | 0 | 0 | 1 | Y |
| 10 | 10 | 3 | 30 | 0 | 1 | 0 | Y |
| 11 | 11 | 4 | 10 | 0 | 1 | 0 | Y |
| 12 | 12 | 5 | 10 | 0 | 0 | 1 | Y |
| 13 | 13 | 6 | 10 | 1 | 0 | 0 | Y |

The standard Who columns and the check_component_id of the table JTF_AM_SKILL_RULE_DTLS contains the following data for all rows:

*JTF_AM_SKILL_RULE_DTLS Standard Who Columns and check_component_id*

| Columns | Row1 |
|---|---|
| CHECK_COMPONENT_ID | 0 |
| CREATED_BY | 1 |
| CREATION_DATE | 1-OCT-02 |
| LAST_UPDATED_BY | 1 |
| LAST_UPDATE_DATE | 1-OCT-02 |
| LAST_UPDATE_LOGIN | 1 |
| OBJECT_VERSION_NUMBER | 1 |

## Self-testing Framework

The Assignment Manager self-testing framework provides relevant parties such as support analysts and quality assurance engineers with a method for testing Assignment Manager that does not require input from calling documents. Normally, Assignment Manager fetches and displays a list of resources based on parameter values passed by a calling document such as a Service Request, Task, or Escalation. With the self-testing Framework, data from calling documents can be simulating for testing purposes. The Assignment Manager self-testing framework may only be used with JTA patch level 11.5.10 and higher.

### Assignment Manager Test form

The Assignment Manager Test Form is a tool that simulates the process of invoking Assignment Manager from a Service Request, using either the Service Request header or the Task tab, and a Task. To accomplish this, the parameters and record groups that require assigned values before calling Assignment Manager are exposed.

## Available Document Types

The Assignment Manager Test Form enables you to choose the following document types from the Document Type menu:

- Service Request
- Service Request and Task
- Task
- Escalations
- Depot Repair

The form opens with a default option of Service Request.

## Color Coded Labels For Fields

Assignment Manager Test Form fields contain color coded labels that are explained in a legend on the screen. Red labels indicated hidden fields and blue labels indicate fields that are no longer used as a qualifier to select a resource.

### Setting up the Test Form

Perform the following to set up the Assignment Manager Test Form:

1. For any version of Oracle Common Application Components (formerly known as CRM Application Foundation) that precedes version, 11.5.9, apply the patch for the test form to your environment. The Test Form ships with releases of Oracle Common Application Components that are subsequent to version 11.5.9.
2. Log in to Oracle Applications with Application Developer responsibility.
3. Navigate to the Application menu.
4. Perform a menu query for "CRM Administrator Main Menu".

5. Scroll down to the "Test Assignment Manager" entry. No prompts are entered for this entry and the function for the entry will is "Test Assignment Manager". Enter the value "Test Assignment Manager" for the prompt and save the changes.
6. Change to the CRM Administrator responsibility. The Test Assignment Manager option is now available for this responsibility.

### Document Type Behavior

This section describes how the Service Request, Service Request and Task, and Task document types behave in the Assignment Manager Test Form.

## Service Request

When Service Request is selected the Assignment Manager Test Form screen exposes the Service Request Qualifiers and the field labels display the labels from the Service Request screen. The qualifier values that are generated by base table values are associated with lists of values (LOVs). The qualifiers display the actual value that is passed to the record type. This value can either be selected from LOVs or entered directly by the user. The layout of this screen maps with the Service Request form regions. The block labels map to the tabs in the Service Request form.

## Service Request Task

When Service Request and Task is selected the Assignment Manager Test Form screen exposes the Service Request Qualifiers that are to be populated when a user invokes Assignment Manager from the Task tab of the Service Request form. The qualifier values that are generated by base table values are associated with lists of values (LOVs). The qualifiers display the actual value that is passed to the record type. This value can either be selected from LOVs or entered directly by the user. The layout of this screen maps with the Service Request form regions. The block labels map to the tabs in the Service Request form.

## Task

When a Task is selected, only the parameters are populated in the Assignment Manager Test Form screen. Parameters are described in the Parameters section.

### Parameters

You can populate the parameters for a Service Request, Service Request Task, or Task by clicking the Parameters button and entering the required information in the Parameters window.

The labels of each field denote the actual name of the parameters in the Assignment Manager UI. When the AM_CALLING_DOC_TYPE is set to SR, the calling document types are Service Request and Service Request and Tasks. When it is set to TASK, the calling document is a task. For details about values to be set for the parameters please refer to the Assignment Manager Integration Document.

After you set the parameters and qualifiers, you can invoke the Assignment Manager UI by clicking the Get Assigned Resource button. The AM UI is referenced in the same manner as the calling documents that reference it. Once the resource is selected

in the Assignment Manager UI, click OK and the selected resource will be fetched back to the test form. All the values of the returning record type are displayed in the Returned Resource block.

### Example

In this example, a tester such as a support analyst or quality assurance engineer uses the self-testing framework to determine whether or not Assignment Manager is working correctly.

## Set up Contracts, Installed Base, and Territories

The tester creates the following setup in Contracts, Installed Base, and Territories and then runs the concurrent program "Generate Territory Packages" for Service Request:

***Example Setup: Contracts***

| Customer | Preferred Engineer |
|---|---|
| AMC Consultants | John Dunne |

***Example Setup: Installed Base***

| Product | Preferred Resource |
|---|---|
| White Computer | A Smith |

***Example Setup: Territories***

| Qualifier Type | Resources |
|---|---|
| Service Request Severity = Urgent | Will Carry |
| Service Request Severity = Urgent | ABC Group |

## Create a Service Request

Next, the tester creates a Service request (SR id 12345) with the following information:

- Contract for AMC Consultants
- Product identified as White Computer
- Service Request type = Urgent

## Run the Test form

The tester then opens the test form from Applications and performs the following:

1. Select Service Request in the Document type field.
2. Select the Service Request Id and Service Request Type in the Qualifiers list.

3. Click the Parameters button and check the Installed Base, Contracts and Territories check boxes.
4. Close the Parameters window by clicking OK
5. Click on the Get Assigned Resource button to launch the Assignment Manger UI.
    1. If only the Contracts checkbox is selected then Assignment Manger searches and retrieves John Dunne.
    2. If only the Installed Base checkbox is selected then Assignment Manger searches and retrieves A Smith.
    3. If only the Territory checkbox is selected then Assignment Manger searches and retrieves Will Carry and ABC Group.
    4. If the resources are retrieved as expected then the tester concludes that Assignment Manager works correctly.

## Support for Excluded Resources

Assignment Manager provides support for excluded resources in the assignment process for Service Requests, Service Request Tasks, and Tasks. Installed Base uses this feature to maintain a list of excluded contacts in addition to preferred ones that are associated with a party. Contracts uses this feature to track excluded resources in the task assignment process. Assignment Manager extracts information from these applications and filters it to exclude the appropriate resources from being dispatched for an assignment.

### Filtering Excluded Resources from Installed Base and Contracts

Assignment Manager filters excluded resources from Installed Base and Contracts based on information provided by each application and optionally applies it to the list of territory qualified resources. The Assignment Manager UI contains an attribute that optionally displays the option to exclude resources. This functionality is displayed by default.

## Installed Base Excluded Resources

When Installed Base marks an excluded resource as "E", the Preferred_flag attribute of the Installed Base Contact contains the following possible values:

- **Y**. This value indicates that the contact is a preferred contact for the specified party.
- **N** or **NULL**. This is the default value and indicates that the contat is a 'Non-Preferred' contact.
- **E**. This value indicates that the contact is an Excluded contact for the specified party.

Contacts in Installed Base may be marked as Preferred, Preferred and Primary, Primary, and Excluded.

## Preferred

If a contact has the Preferred_flag set to "Y", then the resource is treated as an Installed Base Preferred Resource. Assignment Manager subsequently returns the resource as an Installed Base Preferred Engineer.

## Preferred and Primary

If a contact has the Preferred_flag set to "Y" and Primary_Flag set to "Y", the resourceis treated as an Installed Base Preferred Engineer who is also a Primary Contact. Assignment Manager subsequently returns the resource as an Installed Base Preferred Engineer and the Primary Flag displays "Yes" in the User Interface.

## Primary

Contacts marked as Primary only will are not fetched by Assignment Manager.

## Excluded

Excluded Resources are applied as a filter on the list of resources available for assignment by Assignment Manager which uses the filter if the "Filter Excluded Resources" checkbox is selected.

## Contracts Excluded Resources

The Contracts Entitlements APIs communicate the resource type, resource names and classification, through the Contracts Entitlements process. Contracts can mark Resources as preferred and excluded.

## Preferred

If in a Contract, a Resource is classified as 'Preferred', the resource is treated as a Contracts Preferred Resource and is returned by Assignment Manager. If the Resource is marked as 'Primary', then Assignment Manager displays that information in the user interface. Contracts resources of Type = 'Preferred Engineer' and 'Resource Groups' are considered returned to Assignment Manager.

## Excluded

A Contract Resource classified as 'Excluded' is applied as a filter on the list of resources available for assignment by Assignment Manager. The filter is applicable if the 'Filter Excluded Resources' checkbox is selected. Contracts resources of Type = 'Preferred Engineer' and 'Resource Groups' that are marked as excluded are returned to Assignment Manager as excluded resources.

## Process Flow

The following is the process flow with which Assignment Manager filters excluded resources.

1. A Service Request, Service Request Task, or Task document calls Assignment Manager.
2. Assignment Manager obtains a list of resources from Installed Base, Contracts, or Territories.
3. Assignment Manager obtains a list of excluded resources from Installed Base and Contracts.

4. Assignment Manager filters the excluded resources if the user has selected the "Filter Excluded Resources" check box in the Assignment Manager user interface.

   **Note:** Resources that have been excluded in one application such as Installed Base or Contracts will be filtered out from the list of Preferred Resources in the other. In such cases, a resource that has been excluded in Installed Base or Contracts will be filtered out in the Assignment Process. As a result, a resource that qualifies as a Preferred Contracts Engineer may be filtered out as an excluded Installed Base contact and a preferred Installed Base contact can be filtered out as excluded Contract preferred engineer.

### Business Rules

This feature contains the following business rules:

1. Excluded Resource for Contracts are considered to be in the Assisted Mode, when the Contracts and the Filter Excluded Resources check boxes are both selected.
2. Excluded Resource for Installed Base are considered to be in the Assisted Mode, when the Installed Base and the Filter Excluded Resources check boxes are both selected.
3. Excluded Resources from Contracts will be filtered from:
   - Contracts Preferred Engineers
   - Installed Base Preferred Resource
   - Territory Qualified Resource
4. Excluded Resources from IB will be filtered from:
   - Contracts Preferred Engineers
   - Installed Base Preferred Resource
   - Territory Qualified Resource
5. In the "Unassisted Mode" of the Assignment Manager user interface, excluded resources are not filtered. If an excluded resource is selected for assignment from the list of Resources, the user receives a warning that a Contract or Installed Base Excluded resource has been selected.

### User Interface Functionality

The Assignment Manager user interface enables users to filter excluded resources.

## Filter Excluded Resource Parameter

The Assignment Manager user interface contains a new parameter, AM_FILTER_EXCLUDED_RESOURCE. The calling module can set the value of the parameter to "Y" or "N".

## Assisted Mode

In assisted mode the "Selection Criteria" region contains a check box labeled 'Filter Excluded Resource'. The value set for the parameter

AM_FILTER_EXCLUDED_RESOURCE isused to select (=Y) or remove the selection (=N) for this checkbox. If the checkbox is selected, then the Excluded Resources is filtered from the list of Preferred or Qualified Resources based on the business rules for this feature.

## Unassisted Mode

In unassisted mode, the Excluded Resources is not filtered. If an excluded resource is selected for assignment from the list of resources, the user receives a warning to this effect.

### Backward Compatibility

If the check box for Exclude Resources is NOT selected, then Assignment Manager behavior remains unchanged and it does not filter excluded resources. The specification of the API JTF_ASSIGN_PUB.GET_ASSIGN_RESOURCES includes a new parameter. Because the default value of the parameter is set to "N", Assignment Manager does not filter the excluded resources if the calling module does not pass the parameter.

## Publishing Assignment Manager Business Events

Assignment Manager publishes a business event for assignments generated by the Service Request application using the Oracle Workflow Business Event System. When Assignment Manager is called by a service request document, it fetches a resource list. Assignment Manager then publishes resources that it fetches from the list and relevant context information. Applications that subsequently subscribe to this event can modify its content based on the context information and fetched resources, or by plugging in their own custom logic.

### The Oracle Workflow Business Event System

The Oracle Workflow Business Event System is an application service that leverages the Oracle Advanced Queuing (AQ) infrastructure to communicate business events between systems. The Business Event System consists of the Event Manager and workflow process event activities.

The Event Manager contains a registry of business events, systems, named communication agents within those systems, and subscriptions indicating that an event is significant to a particular system. Events can be raised locally or received from an external system or the local system through AQ. When a local event occurs, the subscribing code is executed in the same transaction as the code that raised the event, unless the subscriptions are deferred.

### Assignment Manager Events

Assignment Manager currently raises a single event when it is called from a Service Request document.

***Assignment Manager Events***

| Name | Status | Display Name | Description | Owner Name | Owner Tag |
|---|---|---|---|---|---|
| Oracle.apps.jtf.jasg.sr.assign | Enabled | Assignment Manager is called for document_type 'SR | 'Assignment for Service Request or Service Request task. | ATG Assignment Manager | JTF |

## Process Flow

The following events occur in sequence to publish and subscribe to an Asignment Manager business event.

1. Assignment Manager is called from a Service Request.
2. Assignment Manager executes the process for obtaining preferred and qualified resources.
3. Assignment Manager raises the business event Oracle.apps.jtf.jasg.sr.assign.
4. Other applications subscribe to the business event and process their subscriptions.
5. The applications return a list of resource to the Assignment Manager user interface. If they are calling the Assignment Manager API, then the list of resources are returned to the calling document.
6. Assignment Manager returns the newly processed values to the Service Request.

## Parameter List

The following parameters are passed to the event Oracle.apps.jtf.jasg.sr.assign:

***Oracle.apps.jtf.jasg.sr.assign Parameters***

| Parameter | Description |
|---|---|
| SERVICE_REQUEST_ID | The Service Request ID |
| CONTRACT_ID | The contract ID |
| CUSTOMER_PRODUCT_ID | The customer product ID |
| TASK_ID | The task ID |
| PARTY_ID | The party ID |
| COUNTRY | The country |
| PARTY_SITE_ID | The party site ID |
| CITY | The city |
| POSTAL_CODE | The postal code |

| Parameter | Description |
|---|---|
| STATE | The state |
| AREA_CODE | The area code |
| COUNTY | The country |
| COMP_NAME_RANGE | The comp name range |
| PROVINCE | The province |
| TASK_TYPE_ID | The task type ID |
| TASK_STATUS_ID | The task status ID |
| TASK_PRIORITY_ID | The task priority ID |
| INCIDENT_SEVERITY_ID | The incident severity ID |
| INCIDENT_URGENCY_ID | The incident urgency ID |
| PROBLEM_CODE | The problem code |
| INCIDENT_STATUS_ID | The incident status ID |
| PLATFORM_ID | The platform ID |
| SUPPORT_SITE_ID | The support site ID |
| CUSTOMER_SITE_ID | The customer site ID |
| SR_CREATION_CHANNEL | The Service Request creation channel |
| INVENTORY_ITEM_ID | The inventory item ID |
| SQUAL_NUM12 | Inventory item ID/Service Request platform |
| SQUAL_NUM13 | Oraganization ID/Service Request Platform |
| SQUAL_NUM14 | Category ID/Service Request Product |
| SQUAL_NUM15 | Inventory Item ID/Service Request Product |
| QUAL_NUM16 | Organization ID/Service Request Product |
| SQUAL_NUM17 | Service Request Group Owner |
| SQUAL_NUM18 | Contract Support Service Item |
| SQUAL_NUM19 | Organization ID |
| SQUAL_CHAR11 | VIP Customers |
| SQUAL_CHAR13 | Service Request customer contact preference |

| Parameter | Description |
|---|---|
| SQUAL_CHAR20 | Service Request language ID for Territories Requirement |
| SQUAL_CHAR21 | Service Request Service Contract Coverage |

## Example

In this example a Service Request Task calls Assignment Manager and Assignment Manager subsequently raises a business event after first meeting the following conditions:

- Priority = High(2),
- Resource_id = 100001733,
- Resource_Type = RS_EMPLOYEE
- Resource_Name = Bond, James

## Step 1

Create a Service Request with Contract_Number: 5412.

## Step 2

Create a Service Request Task "Fix Customer desktop", with task Priority = High.

## Step 3

The Assignment Manager UI is invoked. Click **Search**.

## Step 4

When Assignment Manager completes its process, table JTF_ASSIGN_PUB. G_assign_resources_tbl contains the following resources:

***Resources Fetched From Resource List***

| Rec # | Resource_id | Resource_type | Terr_id |
|---|---|---|---|
| 1. | 21 | RS_EMPLOYEE | 1001 |
| 2. | 5 | RS_GROUP | 1001 |

## Step 5

Assignment Manager raises the event Event Oracle.apps.jtf.jasg.sr.assign. The event is populated with the following values:

***Values Received by Event Oracle.apps.jtf.jasg.sr.assign***

| Parameter Name | Value |
|---|---|
| SERVICE_REQUEST_ID | 12999 |
| CONTRACT_ID | 27864402157149017316076335980747094804 5 |
| CUSTOMER_PRODUCT_ID | null |
| TASK_ID | 4561 |
| PARTY_ID | 4429 |
| COUNTRY | Null |
| PARTY_SITE_ID | Null |
| CITY | Null |
| POSTAL_CODE | Null |
| STATE | Null |
| AREA_CODE | Null |
| COUNTY | Null |
| COMP_NAME_RANGE | Null |
| PROVINCE | Null |
| TASK_TYPE_ID | 3 |
| TASK_STATUS_ID | 2 |
| TASK_PRIORITY_ID | 2 |
| INCIDENT_SEVERITY_ID | 2 |
| INCIDENT_URGENCY_ID | 6 |
| PROBLEM_CODE | HDWR |
| INCIDENT_STATUS_ID | 9 |
| PLATFORM_ID | Null |
| SUPPORT_SITE_ID | Null |
| CUSTOMER_SITE_ID | Null |
| SR_CREATION_CHANNEL | Null |
| INVENTORY_ITEM_ID | Null |

| Parameter Name | Value |
|---|---|
| SQUAL_NUM12 | Null |
| SQUAL_NUM13 | Null |
| SQUAL_NUM14 | Null |
| SQUAL_NUM15 | Null |
| SQUAL_NUM16 | Null |
| SQUAL_NUM17 | Null |
| SQUAL_NUM18 | Null |
| SQUAL_NUM19 | Null |
| SQUAL_CHAR11 | Null |
| SQUAL_CHAR13 | Null |
| SQUAL_CHAR20 | Null |
| SQUAL_CHAR21 | Null |

## Step 6

The function Add_Resource is executed and adds resources to JTF_ASSIGN_PUB. G_assign_resources_tbl.

## Step 7

Assignment Manager provides the calling application with the following resources

***Resource Information Returned to Calling Application***

| Rec # | Resource_id | Resource_type | Terr_id |
|---|---|---|---|
| 1. | 21 | RS_EMPLOYEE | 1001 |
| 2. | 5 | RS_GROUP | 1001 |
| 3. | 100001733 | RS_EMPLOYEE | |

## Backward Compatibility

If there are no subscriptions to the workflow event Oracle.apps.jtf.jasg.sr.assign', or if the subscription is disabled, then Assignment Manager does not alter its processing. This functionality does not alter calls made to the Assignment Manage API or user interface.

## Using Business Events to Generate Custom Logic

Assignment Manager provides a plug-in facility that enables organizations to supplement the predefined logic that Assignment Manager uses to return preferred or qualified resources to calling modules. This enables organizations to extend, and customize Assignment Manager for specific routing and assignment requirements. Assignment Manager accomplishes this by publishing business events for the assignment process. These events are defined in the Oracle Workflow Event Manager and are raised from the Assignment Manager API for the Service Request (SR) document type. Subscriptions to these events may perform the custom processing logic. The Assignment Manager API subsequently returns a PL/SQL table of resources to the UI or to the calling module.

### Workflow Background Information

The Publishing Assignment Manager Business Events, page 18-85 section contains most of the required Workflow background information for this feature, however, it is useful to know the additional terminology in this section.

## WF_PARAMETER_LIST_T

Oracle Workflow uses the named varying array (varray) WF_PARAMETER_LIST_T to store a list of parameters in a form that can be included in an event message. WF_PARAMETER_LIST_T enables custom values to be added to the WF_EVENT_T event message object. The WF_PARAMETER_LIST_T datatype can include up to 100 parameter name and value pairs.

## WF_ EVENT _T

WF_EVENT_T defines the event message structure that the Business Event System and the Workflow Engine use to represent a business event. Internally, the Business Event System and the Workflow Engine can only communicate events in this format. This datatype contains all the header properties of an event message as well as the event data payload, in a serialized form that is suitable for transmission outside the system.

### Rules

The following rules apply to the successful operation of this feature:

- The PL/SQL table of resources is available as a global parameter to the function/procedure that is subscribed to the event.
- More resources may be added to this table based on the customized logic.
- Resources may be removed from the PL/SQL table.
- The overall list of resources are subsequently returned to the Assignment Manage UI or calling module.
- The subscription to the workflow event must have a phase < 100. This ensures immediate execution of the subscription.
- If an error is raised by a subscription, the error message is stacked but the Assignment Manager API does not error out.

- If any one of the subscriptions fail, Assignment Manager does not uptake any changes by other subscriptions. Instead, the Assignment Manager API returns the table of resources that were obtained before raising the business event.
- Commit and Rollback ARE NOT allowed in subscriptions.

### Subscribed Function to event Oracle.apps.jtf.jasg.sr.assign

The function that is subscribed to the event requires the following parameters:

- p_subscription_grid in raw
- p_event in out wf_event_t, page 18-91

Please see the Assignment Manager Events, page 18-85 section for a description of this function.

### Use Case: Get Preferred/Qualified Resources for a SR Task

For cases in which the Service Request Task has a Priority = High(2), the Service Online team wants to plug in a specific resource with the following parameters:

***Use Case Parameters***

| Parameter | Value |
|---|---|
| Resource_id | 100001733 |
| Resource_Type | RS_EMPLOYEE |
| Resource_Name | Bond, James |

## Subscriptions

Function Add_Resource is subscribed to event "Oracle.apps.jtf.jasg.sr.assign".

## Add_Resource Function Sample Code

The following is sample code for the Add_Resource function:

```
Create Or Replace FUNCTION JASG_AM_ASSIGN_RESOURCE

            (p_subscription_guid  in           raw,

             p_event              in out nocopy wf_event_t)

return varchar2 IS

   l_event_key              varchar2(240) := p_event.GetEventKey(
);
```

```
   l_event_name             varchar2(240) := p_event.GetEventName
();

   i                        NUMBER := 0;

   l_task_priority_id       NUMBER;

BEGIN

   -- Get the task priorty id from the p_event in parameter

   l_task_priority_id        := p_event.GetValueForParameter('TAS
K_PRIORITY_ID');

   if(jtf_assign_pub.g_assign_resources_tbl.count > 0)

   then

     i := jtf_assign_pub.g_assign_resources_tbl.last + 1;

   else

     i := 0;

   end if;



   If(l_task_priority_id = 2) -- if task priority is High then ad
d the resource to the global pl/sql table

   THEN

      jtf_assign_pub.g_assign_resources_tbl(i).resource_id := 100
001733;

      jtf_assign_pub.g_assign_resources_tbl(i).resource_type := '
RS_EMPLOYEE';
```

```
   END IF;

   return 'SUCCESS';



Exception

  when others then

        WF_CORE.CONTEXT('JASG_AM_ASSIGN_RESOURCE',  p_event.getEv
entName( ), p_subscription_guid);

        WF_EVENT.setErrorInfo(p_event, 'ERROR');



       return('ERROR');

END JASG_AM_ASSIGN_RESOURCE;
```

## Step 1

A Service Request is created with Contract_Number: "5412"

## Step 2

A Service Request Task "Fix Customer desktop" is created with task Priority = "High".

## Step 3

The Assignment Manager UI is invoked and 'Search' button pressed.

## Step 4

Assignment Manager completes its normal flow and populates table JTF_ASSIGN_PUB. G_assign_resources_tbl with the following values:

***Values in Table JTF_ASSIGN_PUB. G_assign_resources_tbl Before Rasing Business Event***

| Rec # | Resource_id | Resource_type | Terr_id |
|---|---|---|---|
| 1. | 21 | RS_EMPLOYEE | 1001 |
| 2. | 5 | RS_GROUP | 1001 |

## Step 5

Assignment Manager raises the event "Oracle.apps.jtf.jasg.sr.assign" which receives the following values:

***Parameters passed to event Oracle.apps.jtf.jasg.sr.assign***

| Parameter Name | Value |
|---|---|
| SERVICE_REQUEST_ID | 12999 |
| CONTRACT_ID | 27864402157149017316076335980747094804 5 |
| CUSTOMER_PRODUCT_ID | null |
| TASK_ID | 4561 |
| PARTY_ID | 4429 |
| COUNTRY | Null |
| PARTY_SITE_ID | Null |
| CITY | Null |
| POSTAL_CODE | Null |
| STATE | Null |
| AREA_CODE | Null |
| COUNTY | Null |
| COMP_NAME_RANGE | Null |
| PROVINCE | Null |
| TASK_TYPE_ID | 3 |
| TASK_STATUS_ID | 2 |
| TASK_PRIORITY_ID | 2 |
| INCIDENT_SEVERITY_ID | 2 |
| INCIDENT_URGENCY_ID | 6 |

| Parameter Name | Value |
|---|---|
| PROBLEM_CODE | HDWR |
| INCIDENT_STATUS_ID | 9 |
| PLATFORM_ID | Null |
| SUPPORT_SITE_ID | Null |
| CUSTOMER_SITE_ID | Null |
| SR_CREATION_CHANNEL | Null |
| INVENTORY_ITEM_ID | Null |
| SQUAL_NUM12 | Null |
| SQUAL_NUM13 | Null |
| SQUAL_NUM14 | Null |
| SQUAL_NUM15 | Null |
| SQUAL_NUM16 | Null |
| SQUAL_NUM17 | Null |
| SQUAL_NUM18 | Null |
| SQUAL_NUM19 | Null |
| SQUAL_CHAR11 | Null |
| SQUAL_CHAR13 | Null |
| SQUAL_CHAR20 | Null |
| SQUAL_CHAR21 | Null |

## Step 6

Assignment Manager executes the Add_Resource function which addes a resource to JTF_ASSIGN_PUB. G_assign_resources_tbl.

## Step 7

Assignment Manager generates the following out table to the calling module:

***Values in JTF_ASSIGN_PUB. G_assign_resources_tbl after Oracle.apps.jtf.jasg.sr.assign has been executed***

| Record Number | Resource_id | Resource_type | Terr_id |
|---|---|---|---|
| 1. | 21 | RS_EMPLOYEE | 1001 |
| 2. | 5 | RS_GROUP | 1001 |
| 3. | 100001733 | RS_EMPLOYEE | N/A |

## Backward Compatibility"

If there are nosubscriptions to the workflow event Oracle.apps.jtf.jasg.sr.assign", or if the subscription is disabled, then the processing does not change. This functionality does not alter calls made from the calling module to the Assignment Manger UI or API.

# 19

# Troubleshooting Assignment Manager

This chapter covers the following topics:

- Common Implementation Errors for Assignment Manager
- Error Messages for Assignment Manager
- Troubleshooting Tips for Assignment Manager
- Troubleshooting Tips for Gantt
- Gantt Frequently Asked Questions (FAQs)

## Common Implementation Errors for Assignment Manager

In order to use the full functionality of the Assignment Manager selection criteria, Assignment Manager depends on other setup tasks outlined in the Setting up other dependencies section, page 18-13.

This section contains information on some of the common implementation errors associated with implementing Assignment Manager.

### Unable to Find Resources

**Action**: Use the following solutions to return resources:

- Verify If Territories Are Set Up Correctly, page 19- 1
- Recompile JTSEEDED_QUAL_USGS_V View, page 19- 2
- Delete Duplicate Qualifiers, page 19- 3

## Verify If Territories Are Set Up Correctly

1. Create new territories for your testing and have a test plan.

   For example, Which territories and resources should be returned? This will help in debugging real problems.

2. Make sure that territories are ranked correctly. Territory Manager uses rank to determine the picking order for territories.

3. Make sure that you have the correct transaction types defined for the territories. If you want a territory to be used for service request and task, then make sure you have "Service Request" and "Task" as transaction types. If a territory is used for a

task created within a service request, then you need to select "Service Request and Task" as the transaction type.

4. Make sure that you have resource(s) attached to the territory.

   **Rules of Territories:** If there are no resources attached to a territory and the effective dates are active, then the territory will be considered a place holder territory. That is, it will not qualify as a winning territory.

   > **Note:** If you make changes to territories, make sure that you run the Generate Territory Package concurrent program to reflect the changes made to the territories.

5. Make sure that you have given the right access to resources, if you have decided to make use of the Access Type feature.

   For example: A "CA Territory" with transaction types "Service Request" and "Task". If you add a resource "John Doe" and select "Service Request" only in the Access Type field, then even if this territory qualifies for a task assignment, it will not return the resource "John Doe", since he does not have "Task" access type selected, but "Service Request" access only.

   However, if the Access Type field is left blank, then this resource is eligible for receiving both task and service request assignments. Notice that this resource will not be selected for a task assignment created within a service request because the transaction type "Service Request and Task" is not selected in the Overview tab when defining the territory.

6. Make sure that you run the Generate Territory Package concurrent program once you are satisfied with your territory setup and updates. Unless you do this, changes will not take effect.

7. Make sure to delete and re-attach the resources again to the territories that have resource roles added later in the Resource Manager after territory creation.

   For a resource attached to a territory, we store the resource-id, resource type, and role associated with that resource. However, for few of them, the role is blank (NULL), as there was no role defined in Resource Manager at the time you created the territory. But at some point later, someone added roles to these resources in Resource Manager and then the Territory stopped returning these resources as there was no corresponding record in Resource View (Join Failed). In order to fix the problem, you need to delete and re-attach the resources to the territory.

   The API will return the resource, but the role will be blank even though you may see a role in Resource Manager for that resource.

8. Make sure that TCF server is up and running by using the script - adtcfctl.sh stop/start.

## Recompile JTSEEDED_QUAL_USGS_V View

Ask your database administrator to recompile the form where Assignment Manager is invoked if an error messageFRM-92000:ORA:1403, page 19- 5  occurs. This refreshes the view so that data could be populated in JTSEEDED_QUAL_USGS_V view.

## Delete Duplicate Qualifiers

It is possible that all of the territory qualifiers were duplicated.

**Action:** Clear the duplicate Transaction Type field in the Overview tab and manually delete duplicate qualifiers. Test this action first by copying one of the existing territories and then use the following steps to delete duplicate qualifiers:

1. Log in with the CRM Administrator responsibility. Select **Territory Manager > Territory Administration** to open the Navigator window.
2. Open your territory and clear one of the duplicate transaction types in the Type field on the Overview tab.
3. Select the Transaction Qualifiers tab and manually delete one of the duplicate qualifiers.
4. Save your changes.
5. Close the Territory Details window and then re-open it.
6. Click the Transaction Qualifiers tab and see if there are still have duplicated qualifiers.
7. Repeat the previous steps for all territories.

## Displaying Start and End Date Time Incorrectly for a Selected Resource

The Assignment Manager displays the start and end date/time incorrectly for a selected resource.

**Cause:** This will happen on all 11*i* CRM products if Oracle Inventory setup steps aren't performed properly.

**Action**: Use the following steps for resolution:

1. In the Task tab of the Service Requests window, select Hour in the Planned Efforts field.
2. Click the Assignment Manager icon in the Task tab of the Service Requests window to launch the Assignment Manager.
3. In the Document Details region of the Assignment Manager window, make sure that you see "HR" populates in the Duration field after the number information, such as 9 "HR" for 9 hours.

   **Note:** The Units of Measure (UOM) "HR" is the only value used for task assignment.

   If you do not see "HR" as the value in the Duration field, then follow the given steps to set up correct units of measure information:

   1. Log in with the Inventory Superuser responsibility. Select **Setup > Units of Measure > Units of Measure**.
   2. Choose your organization.
   3. Query for Time in the Class field.
   4. Add the following record:
      - Enter Hour-Task in the Name field.

- Enter HR in the UOM field.
- Enter Hour-Task in the Description field.
- Leave the Base Unit field bank.
- Enter Time in the Class field.

5. Save the record.

   After changing the setting of UOM, use the following steps for verification:

6. In the Task tab of the Service Requests window, select Hour-Task in the Planned Efforts field.
7. Try to assign this task to a resource using Assignment Manager. In the Document Details region of the Assignment Manager window, make sure that you see "HR" populates in the Duration field after the number information.

4. Double-click the resource that you want to assign to a task.
5. Verify if the start and end date/time information are properly displayed in the Assignment Manager window as you expected.

## Returning Individual Resources for a Group Owner

**Cause:** This problem can be caused by the following reasons:

- The selected group resource does not have Support group usage defined in Resource Manager.
- After selecting a group type in the Service Requests window, your cursor is not placed in the Group Owner field so that the **Assign Group** button is not enabled. Therefore, click **Assign Owner** instead to launch the Assignment Manager.

**Background Analysis**: When Assignment Manager tries to retrieve group or team resources, it checks the usage value (such as Support usage) set in the JTFAM: Usage for Groups and Teams profile option. Based on the value (Support usage), Assignment Manager then searches for the matched groups or teams with the same usage identified in Resource Manager. Those matched group or team resources can then be displayed in the Assignment Manager. However, if there is no Support usage specified in Resource Manager for any groups or teams, then Assignment Manager returns no group resource.

Additionally, make sure to position your cursor in the Group Owner field after selecting a group type so as to enable the **Assign Group** button. Otherwise, the **Assign Owner** is enabled if your cursor is in the Owner field. Click **Assign Group** to launch Assignment Manager to retrieve group resources.

**Action:** Perform the following steps to set up Support group usage in Resource Manager:

1. Log in with the CRM Administrator responsibility.
2. Select **Resource Manager > Maintain Resources > Groups** to open the Define Groups window.
3. Query up your group first.
4. Select the Usages tab.
5. Use the LOV in the Usage field and select Support for the group usage.
6. Save your information.

## Error Messages for Assignment Manager

This section contains information on some of the error messages associated with implementing Assignment Manager.

### APP-JTF-210807

**APP-JTF-210807: No Resource Found. Please try again.**

**Cause**: This error usually occurs because the territories are not set up correctly.

**Action**: Verify territory setup process by using the procedure outlined in the Verify If Territories Are Setup Correctly section, page 19- 1 .

### FRM-92000:ORA:1403

**FRM-92000: ORA:1403: No data found**

**Cause:** This error occurs while invoking Assignment Manager. This may happen when data is missing from the JTSEEDED_QUAL_USGS_V view.

**Action:** Ask your database administrator to recompile the form where Assignment Manager is invoked. This refreshes the view so that data could be populated in JTSEEDED_QUAL_USGS_V view.

## Troubleshooting Tips for Assignment Manager

1. Assignment Manager supports the following resource categories used in Resource Manager:
   - Employees
   - Parties
   - Partners
   - Groups
   - Teams
   - Supplier Contacts
2. If the Unassisted assignment option is selected, predefined search criteria such as preferred resources, territories, and resource availability will not be available.
3. Shift schedules displayed in the Gantt chart with yellow background are defined in the Forms-based Calendar module.
4. No end dated resources are selected in the Assignment Manager with the Unassisted and Assisted assignment options. All the resources that are displayed in the Assignment Manager are valid and active resources.

## Troubleshooting Tips for Gantt

In many cases, if the Gantt chart in the Assignment Manager window does not work properly, the problem stems from an incorrect configuration of the TCF server.

> **Note:** If patch FND.D or higher is installed, first consult
> **Note: 164766.1**, available on MetaLink.

## Common Issues

In general, problems with the configuration and setup of the Gantt chart fall into the following categories. They are:

- Gantt Chart Does Not Appear, page 19- 7
- Cannot Connect To TCF Server, page 19- 8
- No Resources Are Visible, page 19-11

# Resolution

If you are experiencing problems with the Gantt chart, then do the following:

1. First perform the steps listed under General Advice, page 19- 6 .
2. If this does not clear up the problem, then see the individual sections for the listed problems.

   **Warning:** These instructions for implementing the TCF servers are NOT valid if the AOL TCF Server patch (bug # 1699404) has been installed.

   **Warning:** This patch is owned by the Oracle Applications Object Library (AOL). Contact AOL support for issues with this patch.

## General Advice

The following items are general suggestions to follow in troubleshooting problems relating to the Gantt chart.

1. Clear out the JInitiator jcache directory, close and restart the browser, and try again. Old, cached JAR files could be causing the problem.
2. Shut down and restart the TCF server. If a patch is applied, then the new code is not picked up by the runtime engine until the TCF server is restarted.
3. Check the JInitiator Console Window for exceptions or informational messages. You can activate the Console Window by selecting the "Show Console" check box in the JInitiator Control Panel. You must then close and restart the browser.
4. Ensure that there are no invalid objects in the database. You can use the adadmin utility for this purpose.
5. If an invalid object is found, correct the problem, then make sure that the offending form is recompiled (along with its libraries). This can be done through the adadmin utility.
6. If problems continue, then perform the steps listed in the following sections as appropriate:
   - Gantt Chart Does Not Appear, page 19- 7
   - Cannot Connect To TCF Server, page 19- 8
   - No Resources Are Visible, page 19-11

### Gantt Chart Does Not Appear

One of the most common problems is that a Form does not display the Gantt chart properly. One, or both, of the following symptoms can occur:

1. The Form displays an empty blue or gray area where the Gantt chart should reside.
2. The JInitiator console window throws a ClassNotFoundException, referring to classes in oracle.apps.jtf.gantt.

## Causes

The following are some of the possible causes for this condition:

1. The jtfgantt.jar file has not been downloaded onto the client machine. The JInitiator console window **must** include a line similar to the following:

   ```
   Opening http://<serverHost>/OA_JAVA/oracle/apps/jtf/jar/jtfgantt.
   jar no proxy
   ```

   It should **not** read:

   ```
   Unable to contact http://<serverHost>/OA_JAVA/<some path>/jtfgant
   t.jar
   ```

2. Class files are missing from jtfgantt.jar or fndlist.jar.
3. An old version of jtfgantt.jar resides in the JInitiator jcache directory.
4. The appsweb.cfg file is customized and does not include an entry for /OA_JAVA/oracle/apps/jtf/jar/jtfgantt.jar.
5. The appsbase.html file, or the HTML page used to launch applications, is customized and does not pick up the archive tag from appsweb.cfg.

## Actions to Take

1. Clear out the JInitiator jcache directory on the client and restart browser.
2. Verify that jtfgantt.lst is included in fndlist.jar.
   1. First take a copy of fndlist.jar, then rename it to fndlist.zip, and use Win Zip to open the file.
   2. Verify that jtfgantt.lst in fndlist.jar lists approximately 26 class files.
3. Perform the actions described in step 2, but for jtfgantt.jar and verify that it contains the files listed in jtfgantt.lst.
4. Ensure that the JInitiator console window does not list any class files as being individually downloaded.

   If this is the case something is wrong in the installation. Class files should be downloaded within JAR files and nowhere else.
5. If Actions 2 through 5 do not verify properly, then perform the following additional actions:
   1. Force the regeneration of the FND and JTF JAR files through the adadmin utility.

2. Restart the Forms (web) listener and the Forms server. Clear out the JInitiator cache directory, and restart the browser.
3. Try Actions 2 through 5 again.

6. **Critical!** Verify that all high priority FND (AOL) patches as listed in Metalink are applied.
7. For the items listed as 4 and 5 in this section, launch the applications. In Netscape Navigator, select "View Source" and verify that /OA_JAVA/oracle/apps/jtf/jar/jtfgantt.jar is included in the archive tag.

   If it is not included, then add the entry to files appsweb.cfg and appsbase.html.

### Cannot Connect to TCF Server

> **Note:** If you are unable to establish a TCF connection, then a generic TCF setup problem could exist. Contact your System Administrator or Oracle Support representative to resolve the issue. Until this issue is resolved, Gantt will not work properly.

There are several different errors that you could encounter when attempting to connect to the TCF server, and several different reasons each error could occur.

In general, there are three basic types of errors that can affect server connection:

- The client application is unable to connect to the TCF server., page 19- 8
- The TCF server is unable to connect to the database., page 19- 9
- The application hangs upon connecting to the TCF server., page 19-10

Each type of error is discussed in the following sections.

## Unable to Connect to the TCF Server

The standard error message for this is:

**"The application was unable to establish a network connection with the TCF SocketServer listening on port: <port> on host: <host>. Contact your system administrator."**

The exact message may vary slightly between versions and products.

You may also see the following:

**"Unable to connect to dispatcher."**

Items to check:

- Was the TCF server ever started?

  The system administrator should be able to check if the process is running.

- What host and port names were used to start the server?

  Verify that the profiles TCF:HOST and TCF:PORT on the client point to the TCF server to which you are trying to connect. The best way to check them is to use the **Help > Diagnostics > Examine** utility to check profiles just before launching the TCF application. Verify the user-level profiles, also, as well as the site-level profile

options. For details of this process, see Step 4b: Verify the TCF Host Name and Port Number, page 18- 7 .

- Is the TCF server host machine accessible from the client?

  Open a TELNET to the host to see if it is reachable.

## Unable to Connect to the Database

The standard error message for this is:

**"The TCF SocketServer running at <host>:<port> was unable to make a JDBC connection to database <dbname>. This may reflect heavy load on the system, or a problem with the indicated database. If this problem persists, contact your system administrator."**

You may also see the following:

**"Unable to set context."**

Items to check:

- Is there a ClassNotFoundException or OutOfMemoryError raised?

  Check the server logs to see if either of these errors occurred. Sometimes a ClassNotFoundException or a OutOfMemoryError is raised while the server is attempting to connect will result in this error. The former are usually configuration issues, the latter suggests that it is advisable to start your TCF server with more memory.

- Is the database actually up and running?

  Try connecting from SQL*Plus to verify.

- Are you connecting using DBC files?

  For release 11.5 versions and above, it is now required that DBC files be used to connect to the database. The TCF server must be started with a new argument "DBC=", pointing to a .dbc file that should be located under $FND_TOP/secure. This command should read:

  ```
  jre oracle.apps.fnd.tcf.SocketServer <port#> DBC=$FND_TOP/secure/
  xxx.dbc
  ```

  It is important that the path to the .dbc file be specified. Because the TCF server can connect to multiple databases, it does not depend on the specific .dbc file you pass in, rather it relies on the path where those .dbc files are located to look up multiple .dbc files.

  If the TCF server is not started with the DBC argument or it cannot find the .dbc file in the specified directory, this type of error might occur. Remember that the TCF server could be looking for a different .dbc file than that with which you started it. Check the server logs and see if it reports any errors while trying to load the .dbc file.

- Are the .dbc files properly formatted?

  A similar type of error can also occur if the .dbc file was improperly formatted.

  A very common error to see on the server when this happens is:

```
ld.so.1: ... libocijdbc8.so: open failed: No such file or directo
ry (libocijdbc8.so)
```

This indicates that the server is attempting to use the THICK JDBC drivers to connect to the database, which is not supported. Verify that the .dbc file specifies that the THIN drivers be used. The .dbc file must contain the line:

```
APPS_JDBC_DRIVER_TYPE=THIN
```

The .dbc file also needs to contain the following variables that identify the database to use:

```
DB_HOST=
```

```
DB_PORT=
```

```
DB_NAME=
```

These variables correspond to the database information in the tnsnames files. The THIN drivers cannot use the TWO_TASK to resolve the database name, you must provide this information explicitly. (The DB_NAME is actually optional if the TWO_TASK variable and database SID are the same, but it's good practice to use it, in any case.)

## Application Hangs Upon Connecting to the TCF Server

Try connecting using the ServerControl class if hanging problems are reported. If it still hangs, then typically this indicates one of the following:

1. There is a bug in the code, or that there is an environment setup problem.

   Check the debug output on the server to see if there is anything obvious that needs to be corrected, and check the bug database to see if this type of problem has been previously reported.

2. The wrong protocol was used to establish the connection.

   Ensure the TCF server is speaking the same protocol as the client. Supported protocols are SOCKETS, HTTP, and SSL. The client must use the same protocol as the Forms server.

3. The TCF server attempts to exit the loop in which it accepts connections from the client, but does not really do so.

   This type of error is probably the most common. In release 11.5.2 and beyond, if the TCF server stops accepting connections from the client, then it closes the socket and exits immediately.

   Unfortunately, this does not explain why the TCF server stopped accepting connections in the first place. Determining the reason is a more involved process. One very possible reason is the TCF server ran out of memory. The most useful thing to do in this case is to check the debug output and see if any errors are logged.

## No Resources Are Visible

If you experience problems with the proper display of resources in the Gantt chart, then perform the steps listed in the following table.

***Trouble Shooting the TCF Server***

| Tip | Description |
|---|---|
| View the JInitiator console window , page 19-11error messages. | View the JInitiator console window error messages and the exceptions thrown. |
| Consult the TCF server log file., page 19-12 | View the TCF server log file for relevant information. |
| Verify the TCF server status., page 19-13 | Use the ServerControl class to check whether or not the TCF server is accepting connections on the host and port on which it was started. |

## View the JInitiator Console Window Error Messages

The single most useful thing that you can do to do to troubleshoot server problems is check the JInitiator Console window on the client machine. Some debug information is output by default, and errors raised here are often very descriptive and give a good indication of what the problem is.

If that window is no longer available, then restart the browser, set the "Show Console" check box in the JInitiator control panel, and restart the application.

The following listed items are a few of the exceptions that can be thrown, and reported in the JInitiator Console window.

1. **java.net.ConnectException: Connection refused**

   Usually this means that the TCF server is not running, or that the TCF:HOST / TCF:PORT profile options are pointing to a wrong server or port.

2. **Gantt TCF HOST:<http://hostname> PORT:<port#>**

   This refers to the TCF:HOST/PORT settings passed into the Gantt chart.

   As described in Step 4b: Verify the TCF Host Name and Port Number, page 18- 7 :

   - If the host name is prefixed with "http://", then the client attempts to connect to the TCF server using the HTTP protocol.
   - If this prefix is missing, then the client attempts to contact the server using the SOCKETS protocol.

     **Note: If the TCF server and client do not use the same mode, then the client cannot establish a connection.**

3. **gantt: tcfSetAppsContext <filename>.dbc**

   The <filename> listed in the error must exactly match the filename that was specified in the DBC parameter when starting the TCF server. If this is not the case, then rename the file to match that specified in the DBC parameter.

4. **java.lang.ClassNotFoundException:javax.net.ssl.SSLSocket**

The client side SSL libraries are meant to be included with JInitiator. However, in some older versions of JInitiator, this did not happen due to US export restrictions that have since been lifted.

If this exception occurs, then you must install the latest version of JInitiator (1.1.7.32 or higher). If necessary, contact Oracle Support for help with this step.

5. **java.io.EOFException .... < 3-5 lines of text> at oracle.apps.fnd.tcf.net. SocketServerConnection.readBigUTF( SocketServerConnection.java)**

   This exception usually occurs after the client tries to connect to the TCF server using the wrong communication protocol. The message indicates that the TCF:HOST profile is not set correctly. For details, refer to Step 4b: Verify the TCF Host Name and Port Number, page 18- 7 .

6. **gantt: addbar failed, resource not found (<Resource Type> - <Resource Id>)**

   One common cause for this exception is described in bug 1414546, which is dependant on the Forms-based Calendar bug 1415863 for resolution. If this is the case, then ensure that the resource does not have a Calendar Exception assigned that spans the entire duration of a shift.

7. **java.net.UnknownHostException: <host>**

   This exception is thrown when the TCF:HOST profile is set to a server that is not recognized by the client.

   Verify that the TCF:HOST profile is set correctly, and that the client machine can access the server using the <host> displayed in the exception.

   One way to check is to open a DOS window (on a Microsoft Windows machine) and type in "ping <host>." If the host is inaccessible from the client, then the response returns a "Bad IP address <host>" message.

## Consult the TCF Server Log

You can view the TCF server log to obtain further information. To set up the log file for automatic logging, perform the following steps:

1. Add the following to the command line:

   ```
   OUTPUTFILE=/tmp/<logfile>.log LOGLEVEL=STATEMENT
   ```

2. Bounce (stop and restart) the TCF server.
3. Run the application again.
4. Check the log file to see if there is anything in the log file that may indicate what the problem may be.

   Errors of the following type can be due to bug 1510941. For details on how to correct this problem, view the AIX Port , page 18- 4 Instructions, in Step 2: Performing the Post Install Steps section, page 18- 4 .

```
java.lang.NullPointerException
at oracle.jdbc.oracore.OracleTypeNUMBER.unpicklerec(Compiled Code)
at oracle.jdbc.oracore.OracleType.unpicklerec(Compiled Code)
at oracle.jdbc.oracore.OracleTypeCOLLECTION.unpicklerec(Compiled C
ode
at oracle.jdbc.oracore.OracleTypeCOLLECTION.unpickle(Compiled Code
)
at oracle.jdbc.oracore.OracleTypeCOLLECTION.unpickle(Compiled Code
)
at oracle.jdbc.oracore.OracleTypeADT.unlinearize(Compiled Code)
at oracle.sql.ArrayDescriptor.length(Compiled Code)
at oracle.sql.ARRAY.length(Compiled Code)
at oracle.sql.ARRAY.getArray(Compiled Code)
at oracle.apps.jtf.gantt.server.GanttDataServer.getShifts
```

## Verify the TCF Server Status

You can also use the ServerControl class to check whether or not the TCF server is accepting connections on the host and port on which it was started.

To do this, log onto the machine where it was started and run:

```
jre oracle.apps.fnd.tcf.ServerControl STATUS <port#>
```

One of the following can occur:

- If the result is some variant of "Unable to connect," the server most likely was not started properly. For details of how to solve this problem, see: Cannot Connect To TCF Server, page 19- 8 and Unable to Connect to the Database, page 19- 9 .
- If the application hangs upon connecting, the server has stopped accepting connections for some reason and must be bounced. See Application Hangs Upon Connecting to the TCF Server, page 19-10.
- If you are able to connect from the ServerControl but not from an application, it might be an application-specific problem, or it may be that the client JAR files are not set up correctly.

## TCF Server and Forms Server Mode

Make sure the TCF Server and Forms Server runs in the same mode (Socket or Http) to get the Gantt and Assignment Manager to work properly.

**Resolution:**

To check what modes they are running in check the following files in the $COMMON_TOP/admin/scripts:

- adtcfctl.sh for TCF Server

  adfmsctl.sh for Forms Server (The Forms Server should run in the mode that is defined in appsweb.cfg)

  > **Note:** Remember to bounce the Apache Server after changes are made for the changes to take effect.

## Gantt Frequently Asked Questions (FAQs)

The following are frequently asked questions. Answers to these questions may help you in troubleshooting problems with TCF Server.

### How to Check the Status of the TCF Server?

**Answer**: Execute the script 'adtcfctl.sh status' or use the server control class to check jre oracle.apps.fnd.tcf.ServerControl STATUS

### How Do I Start or Stop the TCF Server?

If TCF Server is not running it could be the reason the Assignment Manager will not function properly

**Action**: In Unix under $OAH_TOP/admin/script execute adtcfctl.sh stop/start.

**Checking the TCF:HOST and TCF:PORT profile options**

What type of values should they contain?

**Resolution:**

1. If connectMode=http, set profile option TCF:Host to 'http://.' TCF:Host http://:/oa_servlets TCF:HOST is automatically updated to the same value as the APPS_SERVLET_AGENT Profile option. If the APPS_SERVLET_AGENT profile contained a value ending with the virtual directory OA_HTML, it should end with the name of a valid servlet zone.
2. If connectMode=socket, set profile option TCF:Host to just '.' -- omit 'http://'
3. Make sure that the profile option value of TCF:Port is the port that the TCF Socket Server is listening on. TCF:PORT -1.

# 20

# Task Manager Implementation Overview

This chapter covers the following topics:

- Overview
- Steps

## Overview

Task Manager provides an effective mechanism for organizations to create tasks, assign resources to tasks, schedule tasks, and manage tasks, as well as to track task assignments.

Depending on your business needs, Task Manager can be used as a standalone module to create personal tasks and private to dos, or it can be integrated with other applications in the Oracle E-Business Suite to create context sensitive tasks, such as tasks created for a sales opportunity. No matter how Task Manager is used, the implementation steps for Tasks would be the same.

In general, to implement Task Manager, the implementor or system administrator need to set up basic task components, such as task types, priorities, statuses, reference mapping, date types, profile options, concurrent programs, and metadata objects if necessary. If task templates or task template groups will be used later in the application, then the implementor can create them first so that users can have an option to create multiple tasks simultaneously. In addition, Task Manager allows implementors or system administrators to further customize the task security rules so that appropriate users can be authorized with right access privileges to particular tasks.

Before implementing Task Manager, it is necessary to understand the following concepts:


- Setup Dependencies, page 20- 1
- Forms-based and HTML Versions of Task Manager, page 20- 2


### Setup Dependencies

To be able to use the full functionality of Task Manager, the following components must be set up properly:

- **Trading Community Architecture (TCA)**. Use TCA to locate the customer contact information when creating a task against a customer.
- **Oracle Workflow**. Use Oracle Workflow to send workflow notifications in order to notify personnel about task creation and changes.
- **Notes**. Use Notes to add additional information attached to a task.

- **Resource Manager**. Use Resource Manager to locate resources (task owner and assignee) for a task.
- **HTML Calendar**. Use HTML Calendar to define personal preferences for tasks including task category and other calendar preferences.
- **Escalation Manager**. Use Escalation Manager to escalate a task created in the Forms-based Task Manager.
- **Assignment Manager**. Use Assignment Manager to assist in locating the qualified resources (task owner and assignee) for a task created in the Forms-based Task Manager.

### Forms-based, and HTML Versions of Task Manager

Task Manager was initially a Forms-based application and was subsequently expanded to include an HTML version.

A number of features are available in both versions; however, some features are available in only Forms, or HTML based Tasks. As a result, most of implementation steps for each version are nearly identical and performed in Forms. Additional steps that apply only to Forms or HTML Tasks are discussed in the next section.

> **Note:** With recent expansion, Task Manager developed for Oracle Common Application Calendar adopts Oracle Applications Self–Service Framework, the standard HTML development and deployment platform for Oracle Self–Service Applications, to provide another HTML version of essential task screens for integrated applications to uptake these features while re-building their functions. Task Manager in Oracle Applications Framework is not fully compatible with HTML Tasks user interface. For basic implementing tasks, see Implementing the Oracle Applications Framework Based Task Manager chapter. For detailed implementation and use features of the integrated applications, please consult product specific documentation.

## Steps

This section provides an overview of the required steps for implementing Task Manager including setting up basic task components, defining task templates, customizing Task security, and troubleshooting Task Manager. Detailed instructions for these steps are contained in the subsequent chapters.


- Setting Up Task Manager, page 20- 3
  - Defining Task Types, page 20- 3
  - Defining Task Statuses and Status Transition Rule, page 20- 3
  - Defining Task Priorities, page 20- 3
  - Defining Task Date Types (Forms only), page 20- 3
  - Defining Task and Notes Reference Mapping (HTML only), page 20- 3
  - Registering Mass Task Reassignment Window (HTML only), page 20- 4
  - Setting Profile Options, page 20- 4
  - Running the Task Manager Concurrent Program, page 20- 4

- Setting Up Metadata Objects, page 20- 4
- Publishing Task Business Events, page 20- 4

- Working with Task Templates (Forms only), page 20- 4
- Customizing Task Data Security, page 20- 5
- Troubleshooting Task Manager, page 20- 5


### Setting Up Task Manager

This chapter provides instructions for setting up essential task elements in the following topics:

## Defining Task Types

In addition to the seeded task types, the implementor or system administrator can create new task types to specify the purpose of a task creation, such as a Follow-up task or an Appointment task. They can also map task types to a source object. This way, users will see the task types that are mapped to the source object from the Task Type list of values when creating a task.

## Defining Task Statuses and Status Transition Rules

The implementor or system administrator can create new task statuses to specify the progress of a task, such as "Completed", or "Working".

To regulate status change at the task level, the implementor can set the task status rules in the status transition window, and define appropriate rule access through responsibilities.

## Defining Task Priorities

The implementor or system administrator can create additional task priorities to determine an importance rating for a task, such as Low, High, and Critical. In addition, like task types, task priorities can be mapped to a source object. This allows users to see only the task priorities that are mapped to the source object from the Task Priority list of values when creating a task.

## Defining Task Date Types (Forms only)

In addition to the planned, scheduled, and actual dates, the implementor or system administrator can create new date types for users to track task progress, such as setting a date for a major milestone (like task creation, or completion). Date Types can also be mapped to a source object.

Users can see the additional date types shown in the list of values only in the Dates tab of the Forms-based Task Details window.

## Mapping Task and Notes Reference Mapping (HTML only)

The implementor or system administrator can map reference types to a source object, such as Task Manager. This limits the selection of Reference Type list of values shown in the HTML Task Manager.

To implement Task Manager developed for Oracle Common Application Calendar, implementor needs to map task assignee types to a source to limit the selection of assignee and owner types for a mapped source object. See: Mapping Task Assignee Types to a Source, page 9- 5 .

## Registering Mass Task Reassignment Window (HTML only)

The functionality for performing mass reassign tasks is only available in the HTML Task Manager. Therefore, the implementor or system administrator must register the Task Mass Reassignment window in business flows if the HTML Task Manager is used.

## Setting Profile Options

The implementor must set necessary profile options used in Task Manager to set default values for task status, priority, types, as well as owner and assignee statuses. Other profile options determine the client time zone, unit of measure, data truncation, and task security access.

## Running the Concurrent Program

In order to retrieve new and updated tasks from quick find search, the system administrator must run the Rebuilding Intermedia Index for Task Names concurrent program periodically.

## Setting Up Metadata Objects

The implementor or system administrator can add additional data in the JTF objects table if necessary. For example, if a document (such as Service Request) is newly defined or integrated with Task Manager, then the new document must be associated with Tasks usage.

## Publishing Task Business Events

Task Manager, leveraging the Oracle Workflow Business Event System, publishes business events such as creating, updating, and deleting a task or an assignment when a task or an assignment is created, updated, and deleted from APIs, or application user interfaces (UIs) regardless of the Forms, HTML, or Oracle Applications Framework based applications. Applications that contain data directly affected by these events can subscribe to them and synchronize or modify their data accordingly.

Task business events will not be raised when an escalation or appointment is created even the data is saved in the same tables.

For detailed information about escalations business events, see Publishing Escalations Business Events in Escalation Manager of the *Oracle Common Application Components Implementation Guide*.

### Working with Task Templates (Forms only)

The Forms-based Task Manager allows implementor or system administrator to create task templates or task template groups. Instead of creating tasks individually, users can

have an option to create multiple tasks simultaneously based on a selected template or template group.

## Customizing Task Data Security

With the continuous support of task security rules granted implicitly or explicitly, HTML Task Manager has leveraged Application Object Library (AOL) data security model to provide a flexible mechanism for task security access. This AOL security model allows implementors or system administrators to customize task data, and then grant specific tasks to appropriate users or user groups with right access privileges. It includes customizing contextual task rules by using a profile option, building security around the resource list of values, and allowing group managers to access their direct's tasks.

To extend the security offerings by allowing applications, such as Service Applications, to set product specific security context to the existing rules, Task Manager enhances the AOL data security based on Virtual Private Database (VPD) policy, a feature implemented in database to allow another layer of security dynamically created at run time to all queries issued against a database table or view, for building the security around the resource list of values for Tasks in Forms and in Oracle Applications Framework that is recently developed for Oracle Common Application Calendar.

Be aware that this security model with VPD feature is not used in HTML Tasks.

## Troubleshooting Task Manager

The troubleshooting chapter includes common implementation errors and frequently asked questions (FAQs) for implementing Task Manager.

# 21

# Setting Up Task Manager

This chapter covers the following topics:

- Defining Task Types
- Defining Task Statuses and Status Transition Rules
- Defining Task Priorities
- Defining Task Date Types
- Mapping Task and Notes References, and Task Assignee Types to a Source
- Registering Task Mass Reassignment Screen
- Setting Profile Options
- Running the Task Manager Concurrent Program
- Setting Up Metadata Objects
- Publishing Task Business Events

## Defining Task Types

In addition to seeded task types, the system administrator can define new task types in the Forms-based Task module.

The section covers the following topics:


- Defining Task Types, page 21- 1
- Mapping Task Types to a Source Object, page 21- 2
- Associating Task Types to Resources, page 21- 3
- Enabling Task Workflows, page 21- 3


### Defining Task Types

Task types are used to further classify tasks. For example, a task can be created relating to a meeting regarding a service request. It can be a follow-up task for a sales or a marketing campaign or a callback to an existing customer. The “Meeting,” “Follow up action,” and “Callback” can be the task type used to categorize similar tasks with the same creation purposes.

After specifying the task type name, description, effective dates, unit of measure, and duration effort, the administrator can also specify appropriate type flags for the new types.

*Task Type Flag Definitions*

| Flag | Description/Action |
|---|---|
| Notification | This flag launches the notification workflow automatically. |
| Schedulable | This flag reserves the resource through the Scheduler. |
| Private | This flag is reserved for future use. |
| Seeded | This flag is seeded task type and is not editable. |

Please note that the Private task flag in the Forms-based version of Task Manager is not supported at this time. This functionality will be removed in a future release. The new HTML-based Task Manager does support both Private and Public tasks.

# Task Rules

**WARNING:** Do not try to define new task rules. Task type rules that are available in the system (Field Service and Oracle Marketing) are the only rules that can be used in Task Manager.

You can modify or delete items that you created, but not those that are seeded.

## Mapping Task Types to a Source Object

Use the task type mapping functionality to map task types to a source object. This limits the visibility of task types shown in the task type list of values for a mapped source object. After mapping types to a source, you will see only the mapped task types displayed in the list of values. All other unmapped types will not be in the list. The Application field is used internally, it is not used for mapping purposes.

For example, after mapping task types to an object, you can only see the task types that are mapped to your source object displayed in the list of values. Any unmapped task types to your source object are now dynamically excluded from the list. In addition, if none of the types is mapped to your source object, then you will see all task types from the list of values. Therefore, any user-defined task types need to be mapped to your source object. Otherwise, you will not see them from the list after defining them.

Since the task type mapping feature will retrieve mapped task types for your source object, if you do not want certain task types displayed from the list of values for your source object, do not map these types to a source object. Instead, you should remove all your mapped task types for a source from the mapping window.

> **Note:** The Application field in the mapping window is used internally, it is not used for task type mapping purposes. The Source Object field defines what task types appear in the Task Type list of values.

For example, if you map a type "Appointment" to the source "Task Manager" under any application, then that type "Appointment" will appear in the type list of values wherever the source is "Task Manager" no matter which application you are running. If you do not want this type "Appointment" used for standalone tasks (tasks with source "Task

Manager"), then remove ALL mappings where source is "Task Manager" and type is "Appointment".

### Associating Task Types to Resources

After defining your new task type, use the Resource Requirements window to associate a specific resource requirement that is necessary to complete a task with the specified task type.

### Enabling Task Workflows

Task Manager contains one pre-defined workflow, JTFTASK, which is used to send workflow notifications automatically to notify personnel about task creation and changes. This workflow can also send notifications to employee resources, groups, and teams. If you do not want to use the default workflow process, you can define a new workflow for Task Manager by using Oracle Workflow.

JTFTASK is automatically launched under the following circumstances:

- In HTML, the preferences are set to Yes in the Issue Notification drop-down list.
- The Task Type Notification flag is set to Y (Yes).
- The Auto Notification flag in the Task window is set to Y (Yes).
- Task creations or updates use the task type with the Notification flag checked.

By turning on or off the Notification flag for each task type in the Task Types window, you can control whether or not tasks of that task type should launch a workflow process automatically. For more information, see Starting Workflow Processes, page 26-12.

If workflow fails to launch automatically, verify that both the task **Auto Notification** check box in the Tasks window and the **Notification** check box in the Task Types window are selected. If you do not set the workflow process, notifications are not sent. The workflow is set using the standard applications concurrent manager.

> **Note:** For more information on setting up Oracle Workflow, see the *Oracle Workflow Administrator's Guide 2.5.*

Perform the following steps to define a new task type.

## Prerequisites

None

## Responsibility

CRM Administrator

## Navigation

Navigate to **Task and Escalation Manager > Setup > Define Task Types**.

## Steps

1. Select **File > New**.
2. In the Task Types window, enter a name for the new task type.
3. Select from the list of values (LOV) in the Workflow field. This field is used to assign the workflow process to a task.

   The corresponding workflow process information populates the Task Workflow and Description fields. If you do not want to use the default process, you can define a new workflow process for JTFTASK using Oracle Workflow.
4. You can associate a task type with a seeded task rule but you cannot define new rule. You can only use seeded task rules in Task Manager.
5. Enter the effective dates in the From and To fields.

   The Effective To field is read-only for seeded task types. This field is only active if you are defining a new task type.
6. Select a unit of measurement for effort from the UOM LOV. Options include day, hour, minute, month, week, and year.

   Use a measure of time to determine the UOM value.
7. Enter a number for the quantity of effort in the Qty field.
8. Select task type flags.
9. Select the Notification check box if you want notifications to be sent automatically when a task is created with the new task type.

**Mapping Task Types to a Source Object**

1. If you want the new task type to appear in the task type LOV for a specific source object, you must map the task type to that source.
   1. Click **Map Types** in the Task Types window to open the Mapping Objects window.
   2. Select the source object from the list of values (LOV), for example, appointment.
   3. Select the task type from the LOV, for example, critical.
   4. Select the end date from the LOV.
   5. The **Seeded** check box is not editable.
   6. Click **Save**.

**Associating Task Types to A Resource Type**

1. In the Task Types window, select the newly created task type and click **Resource Requirement**.

   The Resource Requirements window opens.
2. Select a resource type from the list of values (LOV).
3. Enter the number of resources needed in the Required Units field.

   Selecting the Enabled Flag activates the resource type for the corresponding task type.
4. Click **OK**.

The required resource information is saved.

5. Save your task type.

## See Also

- Defining Task Statuses and Status Transition Rules, page 21- 5
- Defining Task Priorities, page 21-13
- Defining Task Date Types, page 21-15
- Designing Task Templates, page 22- 1
- Defining Template Details, page 22- 4
- Setting Up Metadata Objects, page 21-27
- Defining Task and Notes Reference Mapping, page 21-16
- Setting Profile Options, page 21-18
- Running the Task Manager Concurrent Program, page 21-26

## Defining Task Statuses and Status Transition Rules

Use the Forms-based Task Manager to define task statuses and task status transition rules.

Task statuses define the progress of tasks, such as "Open", "Working", and "Completed". To regulate status change both at the task level, Task Manager uses status transition window to set the task status rules and to assign each rule to responsibilities to restrict the rule access to certain users or applications.

After defining task status transition rules, the implementor or system administrator must associate the rules with appropriate profile options to ensure the default profile value comply with the rules. As a result, the default task status will match the status rule for a specific application.

The section covers the following topics:

- Defining Task Statuses, page 21- 5
- Defining Task Status Transition Rules, page 21- 7
  - Defining Status Transition Rules, page 21- 8
  - Associating the "Task Manager: Default Task Status" Profile Option with the Rules, page 21- 9

In addition, in order to quickly retrieve open tasks from a query, and to find the start and due dates of each task, Task Manager updates the Task Status table in the following ways:

- Denormalizing Open Status Column into Task Table, page 21- 9

### Defining Task Statuses

In addition to the seeded statuses, the system administrator can use the Forms-based Task Manager to define new task statuses for specific business needs.

When defining a status, implementors or system administrators need to specify the status information including its name, description, effective dates, status usage, date

type fields, task or assignment status flag, and other additional status flags. In addition, descriptive flexfield information can also be added for seeded task statuses.

**Usage**

Task Manager and Escalation Manager use the same window to define task or escalation statuses. Therefore, if the status is used in Tasks, then select Task Manager for its usage. Otherwise, select Escalation Manager instead.

See the Setting Escalation Statuses, page 19-13 section for information regarding Escalation Manager.

**"Start By" and "Due Date" Date Type Fields**

Implementors or system administrators need to select appropriate values that correspond to the newly defined status for the Start By and Due Date fields from the list of values:

- Creation Date
- Planned Start (or End) Date
- Scheduled Start (or End) Date
- Actual Start (or End) Date

Task Manager uses a task status to define the progress of a task, such as "Open", "In Planning", and "Completed". These statuses constitute the life cycle of a task. With these two fields added to the status table, task start date and end date can be easily identified.

For example, if a task's status is "In Planning", then the "Start By" field can be "planned start date" and the "Due Date" field can be "planned end date". If a task's status is "Assigned" or "Planned", then the task must have scheduled start and end dates. If the task is closed, then the actual start and end dates must be populated. Therefore, depending on the status of each task, the due date for the task can be planned end date or scheduled end date. The task's "Start By" date can also be derived based on the same method.

**Task or Assignment Status Flags**

Task Manager uses the Task or Assignment Status flag to differentiate the usage of a status. Therefore, after defining a new status, the implementor needs to further identify where it is used for by selecting an appropriate status flag or both if it can be used in both places.

This flag is particularly useful when defining status transition rules. For example, when defining a task status rule, the implementor will see only task statuses, not assignment statuses, from the list of values for status selection.

**Additional Status Flags**

The implementor or system administrator also need to identify appropriate status flags for the new status.

*Task Status Flag Definitions*

| Flag | Description |
|---|---|
| Assignment Status | The status is displayed in the Assignment Status field. |
| Task Status | The status is displayed in the Task Status field. |
| Assigned | The task is assigned to a resource. |
| Working | The task is in progress. |
| Schedulable | The task can be used through Scheduler. |
| Accepted | The task is accepted. |
| Rejected | The task is rejected. |
| On Hold | The task is currently not active. |
| Approved | The task is approved. |
| Completed | The task is completed. |
| Cancelled | The task is cancelled. |
| Delete Allowed | The task can be deleted without cancellation. |
| Closed | The task is completed and closed. |
| Seeded | The task status is pre-defined and cannot be updated. |

**Descriptive Flexfields**

Task Manager provides descriptive flexfields to allow additional information for each status including seeded one to be entered.

For example, if your application needs to interact with paging system, then your implementors can assign a three-digit code to each status so that paging can go through using the three-digit code.

To enter additional information for your statuses, click the descriptive flexfield to launch the Task Statuses additional information window.

## Defining Task Status Transition Rules

Use a task status transition rule to define possible task status changes by identifying a set of current and next statuses which are assigned to a rule, as well as to define appropriate access to the rule by assigning the rule to responsibilities.

As each status change sequence is identified in a rule, it limits a user's selection of possible task statuses that appear in the list of status options. When a user logs in to an application with the responsibility that has a rule assigned, the first initial status

associated to the rule is displayed in the task Status field. After the task creation, the user can see the next status for that rule.

For example, a task rule is defined with initial status "Open" to "Assigned", and from "Assigned" to "Closed". You can change a task status from "Open" to "Assigned", or from "Assigned" to "Closed" based on the rule. However, you cannot change the task status from "Open" directly to "Closed" without first changing it to "Assigned".

After defining the status change sequences for a rule, you can also associate the rule with certain responsibilities. As a result, a manager may have more privileges than an agent to access or change certain statuses, such as "Approved" or "Cancelled", if defined in the rule.

Use the following steps to define task status transition rules:

1. Defining Status Transition Rules, page 21- 8
2. Associating the "Task Manager: Default Task Status" Profile Option with the Rules, page 21- 9

## 1. Defining Status Transition Rules

System administrator or implementor can define task status transition rules by selecting the Define Transition button in the status setup form to launch the Status Transition window to define task transition rules.

Use the following two tabs in each window to specify your rules:

- **Rule tab**: It defines the rule's name, its associated application, and status transition values.

For example, Oracle Field Service uses the rule to regulate the status transition for a service request. Therefore, "Service Request Rule" can be the task rule name, and "Field Service Application" can be the associated application. In addition, identify the appropriate status for the Current Status and Next Status for the rule. The Next Status is the status that immediately follows the status in the Current Status field, such as from current status "Open" to next status "Assigned", and from current status "Assigned" to next status "Closed".

> **Note:** Do not confuse the status transition rule that you define here with the task type rule. The task type rule can only be associated with the task type while defining a new task type.

- **Responsibility tab**: It associates your rules with specific responsibilities.

For example, you can associate the task rule "Service Request Rule" with the Field Service Dispatcher, Field Service Manager, or Customer Support responsibility. The Field Service Manager responsibility can also be associated with another transition rule if necessary. As a result, a field service manager may have more privileges than a support agent to access or change certain statuses if defined in the rules.

## 2. Associating the "Task Manager: Default Task Status" Profile Option with the Rules

In order for the status transitions to work, after defining a transition rule and assigning it to responsibilities, implementors must associate the following profile option to the initial status, the first current status, of the rule at site, responsibility or user level:

- "Task Manager: Default Task Status" for Task Status Rules

**Setting the "Task Manager: Default Task Status" profile option**

Implementors can define the following task status transition rule and assign it to the CRM Administrator responsibility:

***Task Status Transition Rule Example***

| Current Status | Next Status |
|---|---|
| Open | Approved |
| Approved | Working |
| Working | Closed |

Implementors must also set the “Task Manager: Default Task Status” profile option value to "Open", the initial status of the rule.

**Impact of the Rules**

- Create Tasks in Forms, HTML, or the Oracle Application Framework based Tasks

When a user logs in to an application with CRM Administrator responsibility, the user will see the status "Open", the initial status of the rule, displayed in the status field. If logging in with other responsibilities, the user will still see "Open" in the status field because of the default value in profile option.

However, if no rules have ever defined, then the value specified in the profile option will not necessarily be the initial status of a rule.

- Update Tasks in Forms, HTML, or the Oracle Applications Framework based Tasks

With the CRM Administrator responsibility, the user can only see the statuses "Open" and "Approved" displayed in the list of values. If changing the status from "Approved", the user will only see "Open" and "Working", the previous and next statuses, listed in the selection.

If logging in with other responsibilities, all task statuses are displayed in the list because the rule is only associated with the CRM Administrator responsibility.

## Denormalizing Open Status Column into Task Table

In order to quickly retrieve open tasks from a query, Task Manager modifies the task table JTF_TASK_B by adding a new column OPEN_FLAG which is denormalized from the status lookup table to determine if a task is an open task. This filters out any task with a status of "Cancelled", "Rejected", "Closed", or "Completed" while performing a search for open tasks.

Whether a task is an open task that is dependent on the task status. If a task with any of the following task statuses, then the task is not an open task which means the OPEN_FLAG is set to "N":

- Cancelled (CANCELLED_FLAG is checked)
- Rejected (REJECTED_FLAG is checked)
- Closed (CLOSED_FLAG is checked)
- Completed (COMPLETED_FLAG is checked)

Otherwise, the value of the OPEN_FLAG is set to "Y" which means the task is an open task.

The following table depicts the denormalized value for the OPEN_FLAG in the task table JTF_TASK_B:

***Denormalized Value for the Open Flag in the Task Table***

| Status | Denorm. Open Flag | Completed Flag | Cancelled Flag | Rejected Flag | Closed Flag |
|---|---|---|---|---|---|
| Accepted | Y | | | | |
| Approved | Y | N | N | N | N |
| Assigned | Y | N | N | N | N |
| Auto In Planning | Y | N | N | N | N |
| Auto In Planning | Y | N | N | N | N |
| AutoReject | Y | N | N | N | N |
| Cancelled | N | | Y | | |
| Close | N | Y | | | Y |
| Closed | N | | | | Y |
| Completed | N | Y | | | |
| Failed | Y | N | N | N | N |
| In Planning | Y | N | N | N | |
| In Progress | Y | | | | |
| Interrupted | Y | | | | |
| Invited | Y | N | N | N | N |
| Not Started | Y | | | | |
| On hold | Y | | | | |
| Open | Y | N | | | |
| Planned | Y | | | | |
| Rejected | N | | | Y | |
| Unassigned | Y | N | N | N | N |
| Waiting for Approval | Y | N | N | N | N |
| Working | Y | | | | |

Perform the following steps to define a new task status.

## Prerequisites

None

## Responsibility

CRM Administrator

## Navigation

Navigate to **Task and Escalation Manager > Setup >Define Task Status**.

## Steps

**Defining a New Task Status**

1. Select **File > New** to enter new task status in the Task and Escalation Status window.
2. Enter a status name, and description information.
3. Enter the effective dates in the From and To fields.

   The Effective To field is read-only for seeded statuses. This field is only active if you are defining a new task status.
4. The usage is automatically set to Task and cannot be changed. If you are defining an Escalation status, you must access the window from the Define Escalation Status link in the navigator.
5. Select an appropriate value for the Start By and Due Date fields.
6. Select an appropriate Task Status flag or Assignment Status flag.
7. Select additional status flags.

**Defining a Task Status Transition Rule**

1. In the Task and Escalation Status window, click **Task Transition** to define task status transition rules.
2. In the Rule tab, enter a name in the Rule Name field.
3. Enter appropriate application name for the rule.
4. Enter appropriate values for the current and next statuses for the rule.
5. Click the Responsibility tab to assign a rule to a responsibility and click **OK**.

**Associating Task Status Profile Option with the Rule**

1. Log in with the System Administrator responsibility, select **Profile > System**.
2. Set the Task Manager: Default Task Status profile option value to the initial status of the task status transition rule.
3. Set the Task Manager: Default Assignee Status profile option value to the initial status of the assignment status transition rule.
4. Save your work.

## See Also

- Defining Task Priorities, page 21-13
- Defining Task Types, page 21- 1
- Defining Task Date Types, page 21-15
- Designing Task Templates, page 22- 1
- Defining Template Details, page 22- 4
- Setting Up Metadata Objects, page 21-27
- Defining Task and Notes Reference Mapping, page 21-16
- Setting Profile Options, page 21-18
- Running the Task Manager Concurrent Program, page 21-26

## Defining Task Priorities

In addition to seeded task priorities, the system administrator can define new task priorities in the Forms-based Task module. Task priorities are used to determine an importance rating for a task. Priorities define varying levels of urgency for tasks, such as low, high, and critical.

Please note that you can modify or delete items that you created, but not those that are seeded.

## Mapping Task Priorities to A Source Object

Use the task priority mapping functionality to map task priorities to a source object. This limits the visibility of task priorities shown in the task priority list of values for a mapped source object. After mapping priorities to a source, you will see only the mapped task priorities displayed in the list of values. All other unmapped priorities will not be in the list.

For example, after mapping task priorities to an object, you can only see the task priorities that are mapped to your source object displayed in the list of values. Any unmapped task priorities to your source object are now dynamically excluded from the lists. In addition, if none of the priorities is mapped to your source object, then you will see all task priorities from the list of values. Therefore, any user-defined task priorities must be mapped to your source object. Otherwise, you will not see them from the list after defining them.

Perform the following steps to define a new task priority:

## Prerequisites

None

## Responsibility

CRM Administrator

## Navigation

Navigate to **Task and Escalation Manager > Setup >Define Task Priority**.

## Steps

1. Select **File > New** to enter a new task priority in the Task Priority window.
2. Enter a name in the Priority field.
3. Enter a numerical value in the Importance field.
4. Enter a brief description for the priority.
5. Enter the effective dates in the From and To fields.

   The Effective To field is read-only for seeded priorities. This field is only active if you are defining a new task priority.
6. Save your task priority.

   The new task priority appears in the Priority list of values LOV in the UI.
7. To map task priorities to a source:
   1. In the Map Priority window, click **Map Priority** to open the Mapping Objects window.
   2. Select the source object from the LOV, for example, appointment.
   3. Select the task priority from the LOV, for example, critical.
   4. Select the end date from the LOV.
   5. Select the application from the LOV, for example, FND, Application Object Library.

      The **Seeded** check box is not editable.
   6. Click **Save**.

## See Also

- Defining Task Statuses and Status Transition Rules, page 21- 5
- Defining Task Types, page 21- 1
- Defining Task Date Types, page 21-15
- Designing Task Templates, page 22- 1
- Defining Template Details, page 22- 4
- Setting Up Metadata Objects, page 21-27
- Defining Task and Notes Reference Mapping, page 21-16
- Setting Profile Options, page 21-18
- Running the Task Manager Concurrent Program, page 21-26

## Defining Task Date Types

In addition to the seeded date types (planned dates, scheduled dates and actual dates), you can use task date types to define other dates to track task progress, such as milestone and follow up dates. This functionality is used in the Forms-based Tasks only.

## Mapping Task Date Types to A Source

You can limit the selection of the LOV shown in the Date Type field by mapping them to a source. For example, you can set the selection of date types from the LOV for a service request (source object) to be only “Due Date” and “Follow Up Date.”

## Where to Use These Date Types

After defining additional date types, you can identify more date types from the LOV if clicking the Dates tab in the Task Details window in Tasks Forms.

Perform the following steps to define a task date type.

## Prerequisites

None

## Responsibility

CRM Administrator

## Navigation

Navigate to **Task and Escalation Manager > Setup > Define Task Date Types**.

## Steps

1. In the Task Date Types window, enter the task date type.
2. Enter a description for the task date type.
3. Enter a numeric value for the Sequence.
4. Define the Application field as the application that is seeding the data, for example, FND (Application Object Library). This field is not relevant to external customers.
5. If you want to limit the selection of the LOV shown in the Date Type field by mapping the task date types to a source:
    1. In the Task Date Types window, click **Map Date Types** to open the Mapping Objects window.
    2. Select the source object from the list of values (LOV).
    3. Select the task type from the LOV.
    4. Optionally set the end date for the task date type.

5. Define the application field as the application that is seeding the data, for example, FND (Application Object Library). This field is not relevant to external customers.

   The **Seeded** check box is not editable.

6. Click **Save**.

## See Also

- Defining Task Statuses and Status Transition Rules, page 21- 5
- Defining Task Priorities, page 21-13
- Defining Task Types, page 21- 1
- Designing Task Templates, page 22- 1
- Defining Template Details, page 22- 4
- Setting Up Metadata Objects, page 21-27
- Defining Task and Notes Reference Mapping, page 21-16
- Setting Profile Options, page 21-18
- Running the Task Manager Concurrent Program, page 21-26

## Mapping Task and Notes References, and Task Assignee Types to a Source

Task Manager uses the Mapping Objects window to map the following components to a source:

- Map Task and Notes References to a Source
- Map Task Assignee Types to a Source

### Mapping Task and Notes References To a Source

Use the Mapping Objects window to map a reference type to a source object. This allows you to narrow down the References drop-down list to objects that are actually relevant to a document's source object.

For example, you can map a sales lead to Task Manager (or Note Type). This limits the selection of list of values shown in the Reference Type (or Relate To) field in the HTML Task Manager (or HTML Notes) when you relate a task (or a note) to a business object. In addition, when creating a note for a Sales Opportunity, users typically don't want to see such objects as Service Request or Defect in the References drop-down list. Instead, they would only want to see Lead, Forecast, Quote, and Sale Organization. Therefore, Notes implementors can map Lead, Forecast, Quote, and Sales Organization to the source object Sales Opportunity.

Please note that new task references for the Forms-based Task Manager can be created by logging with the CRM Administrator responsibility and selecting Task and Escalation Manager > Setup > Define Reference Type. These new task references are visible from the LOV in the Type field of the References tab located in the Task Details window (Forms version).

> **Note:** This window defines reference mapping for both the Task Manager and the Notes module.

## Mapping Task Assignee Types to a Source

Use the Mapping Objects window to map both task assignee types and owner types to a source object. This limits the visibility of task assignee and owner types shown in the resource type list of values for a mapped source object. After mapping assignee and owner types to a source, you will see only the mapped assignee and owner types displayed in the list of values. All other unmapped types will not be in the list.

Currently, only the Oracle Applications Framework based Task Manager uses this functionality. See Mapping Task Assignee Types to a Source, page 9- 5 section in the Implementing the Oracle Applications Framework Based Task Manager chapter for details.

Perform the following steps in Forms to map reference types to a source.

# Prerequisites

Your source object must exist.

# Responsibility

CRM Administrator

# Navigation

Navigate to **CRM Administrator > Task and Escalation Manager > Setup > Task & Note References**

# Steps

1. In the Mapping Objects window, select your source object from the LOV, for example, Sales Opportunity.
2. Select the References you want to appear in the drop-down list from the LOV.
3. Select an end date from the LOV.
4. Select the application where you want to extract your additional data from and click **Save**.
5. Repeat these steps for every object that you want to appear in the References LOV for your source object.

# See Also

- Mapping Note Types to a Source, page 12- 2
- Setting Up Note Types, page 12- 1
- Defining Task Statuses and Status Transition Rules, page 21- 5
- Defining Task Priorities, page 21-13
- Defining Task Types, page 21- 1
- Defining Task Date Types, page 21-15
- Designing Task Templates, page 22- 1

- Defining Template Details, page 22- 4
- Setting Profile Options, page 21-18
- Running the Task Manager Concurrent Program, page 21-26

## Registering Task Mass Reassignment Screen

The Task Mass Reassignment window used to mass reassign tasks to different resources is Declarative Page Flows (DPF) enabled. It can link several pages together to represent a business flow. The Task Mass Reassignment window needs to be registered in business flows.

How to register the screen in business flows, see *Oracle Applications CRM System Administrator's Guide*.

## Setting Profile Options

Task Manager has a number of optional profile options. You can set default statuses, priorities, dates, and types, as well as defaults for owner and assignee statuses. Other profile options determine the client time zone, unit of measure, data truncation, and workflow. Profile values must be set in the Profile Values window by a System Administrator.

The following table describes the profile options that are specific to Task Manager.

***Task Manager Profile Options***

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| Task Manager: Default Task Type | Meeting | Site | Use the Default Task Type profile option to set the default task type. Possible values include appointment and lead. | Set the value to the task type that you want to appear in the task type drop-down list when you are creating a task. |
| Task Manager: Default Task Status | Open | Site | Use the Default Task Status profile option to set the default task status. Possible values include open and completed. | Set the value to the task status that you want to appear in the task status drop-down list when you are creating a task. |
| Task Manager: Default Priority | Medium | Site | Use the Default Priority profile option to set the default task priority. Possible values include critical and medium. | Set the value to the task priority that you want to appear in the task priority drop-down list when you are creating a task. |

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| Task Manager: Default Task Owner | No default value | Site | Use the Default Task Owner profile option to set the default task owner. | Set the value to the name of the default task owner. |
| Task Manager: Owner Type for Task | No default value | Site | Use the Owner Type for Task profile option to set the default owner type. Possible values include employee resource and party. | Set the value to the owner type for the task. |
| Task Manager: Default Assignee Status | Accepted | Site | Use the Default Assignee Status profile option to set the default assignee status. | Set the value to the assignee status that you want to appear in the Assign To Status drop-down list when you are creating a task. |
| Task Manager: JTF Tasks Default Date Selected | Scheduled | Site | Use the JTF Tasks Default Date Selected profile option to set the default date selected. Possible values include Planned, Scheduled, or Actual. | Set the value to the default date that you want to default in the Create Task window. |
| Task Manager: Task APIs to Determine if Security is Implemented | No default value | Site | The Task APIs to Determine if Security is Implemented profile option is reserved for future use. | The value of this profile option should always be set to No. |

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| Time Unit of Measure Class | Time | Site | Use the Time Unit of Measure Class profile option to define the time unit of measure class in the inventory module.<br>Depending on the time unit of measure class, you will see the list of UOM codes in the Tasks module. | Depending upon the value of this profile, the Time UOM codes are shown in the list of values. If the value of this profile changes, then there will be a discrepancy between the existing data and the new LOV shown for the new Time UOM class.<br>Oracle strongly recommends the value of this profile should NOT be changed after the system in the production |
| Task Manager: View All Task Privileges | Yes | Site | The View All Task Privileges profile option is reserved for future use. | Do not change the value of this profile option. |
| Task Manager: Delete Any Task Privileges | No | Site | The Delete Any Task Privileges profile option is reserved for future use. | Do not change the value of this profile option. |

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| Task Manager: Use the Indicator of Data Truncation | "..." | Site | Use the Indicator of Data Truncation profile option to store a three-character code which is appended to the source object name of a Task when it has been truncated. The default value of this profile option is '...'.<br>For example, if the source of a Task is a Party, the name may be too large to store in the source_object_ name column. If the name: "This is a very long name to test the truncation indicator functionality" (71 chars) is passed to the Task API as the source object name, it is written to the Task record as: "This is a very long name to test the truncation indicator..." (60 chars). The default value of this profile option is '...'. | Set the value that is appended to the source object name of a Task when it has been truncated. |
| Task Manager: Create Quick Task | No default value | Site | Use the Create Quick Task profile option to display the "Create Quick Task" button on the Tasks Summary window. | Set the value to **Yes** if you want the "Create Quick Task" button to appear in the Task Summary.<br>Set the Value to **No** if you do not want the button to appear in the window. |

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| Client Timezone | America/Los_ Angeles | Site | The Client Time zone profile option is used by Calendar to set the default time zone for the client in the Create Appointment window. | Set the value to the location where your appointments take place.<br>Setting the time zone from the profile link in the Calendar UI is another way to set and update this profile value. |
| Task Manager: Send Notifications to Group or Team Members | No | Site | The Task Manager: Send Notifications to Group and Team Members profile option provides the ability to notify either the Owner or the Assignee of a Group or Team resource, when a task is modified.<br>This profile option is for workflow only. | If the value is set to **No**, then no notification will be sent to group or team members.<br>If the profile option is set to **Yes**, then the system looks at any resources of type Group or Team and expand them to include any of their members whose resource type is RS_EMPLOYEE, RS_PARTY or PARTY_ PERSON.<br>When adding a resource to the notify list, the system checks to see if the resource is already on the list before adding it. |
| Task Manager: Automatically Launch Workflow | No | Site | The Task Manager: Automatically Launch Workflow profile option is used to determine whether to send the automatic notifications or not. | Set the value to **No**, for the task workflows not to be initiated by the API.<br>If the value is set to **Yes**, then task workflows are initiated by the API. The default value is No. |

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| Task Manager: Abort Previous Task Workflow if it is still active | No | Site | The Task Manager: Abort Previous Task Workflow if it is still active profile option is used to determine whether to abort the previous workflow processes before starting the next one. | If the value is set to **No**, then the previous Task Workflows that are still active are not aborted.<br>If the value is set to **Yes**, then the previous Task Workflows that are still active are aborted. |
| JTF_TASK_ SUMMARY_ SOURCE | Source | User | The JTF_TASK_ SUMMARY_ SOURCE profile option sets the view drop-down list value in the Task Summary context sensitive window. Possible values are Source and All. | Set the value to **Source** to have all tasks created with a particular source appear by default in the contextual window.<br>Set the value to **All** to have all tasks created with a source as well as those which refer to that source appear by default in the context sensitive Task Summary. |
| Task Manager: Mass Task Reassign Access | No | Site | Use the Task Manager: Mass Task Reassign Access profile option to display the Task Reassignment window. | If the profile option is set to **Yes**, the Task Reassignment window is accessible and the administrator is able to reassign tasks. If the value is set to **No**, then the Task Reassignment window is not accessible and a relevant message is shown. |

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| JTF Sync: Category Value | Oracle Business | System | This profile option is used in the Palm and Outlook synchronization process.<br>It is to set the default value for the category while trying to download business contacts to the offline device. | All business contacts downloaded to the offline device will be created with this category. If the category does not exist in the offline device, then it will be created upon synchronization. |
| Task Manager: Copy Task Start Date to End Date | Yes | Site | This profile option is used to control the task start and end date for the Palm and Outlook synchronization. | If it is set to **Yes**, the task start date is defaulted from the system date and the task end date is defaulted to the task start date.<br>For example, if it is set to Yes, then any changes the user made to the task start date while the user is in the task creation screen will automatically be populated to the task end date field. |
| Task Manager: Set Context Data Security | Full Access | Site | Use the Task Manager: Set Context Data Security profile option to set task data security for the context sensitive task instances. | If Full Access is selected, then all the tasks related to the context can be viewed, updated, and deleted. If Security Access is selected, then whether the task for that context can be updatable is based on the privileges granted to the user. |

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| Task Manager: automatically launch workflow | Yes | Site | Use the Task Manager: automatically launch workflow profile option to disable the task subscription workflow events. | If it is set to **Yes**, then workflow notification will be sent when subscribed events are raised. If it is set to **No** which disables the workflow event, then no workflow notifications will be sent when subscribed events are raised. |
| Task Manager: Default Duration | No Duration | Site | Use the Task Manager: Default Duration profile to set the default value of the duration field. | If this profile is set, then the task end date can be automatically calculated based on start date and time plus the duration.<br>This profile option overrides the profile "Task Manager: Copy Start Date to End Date" if both profiles are set. |
| Task Manager: Restricted Task Update | Yes | Site | Use the Task Manager: Restricted Task Update profile option to allow task updates in the standalone Forms-based Tasks. | If it is set to the default value "Yes", then tasks created from other sources cannot be updated in the standalone Forms-based Tasks to avoid breaking product specific business rules enforced on the task. If it is set to "No", then users can update contextual tasks. |

**Note:** See Appendix A, Profiles Options, page A- 4 , for details on how these profile options can be set.

## Running the Task Manager Concurrent Program

Task Manager uses one concurrent program, Rebuilding Intermedia Index for Task Names. This concurrent program rebuilds the intermedia index. In order for a user to see new and updated tasks and appointments when they use the quick find search, or have the ability to search on a task name, system administrator must run this concurrent program periodically.

Perform the following steps in Forms to run the Rebuilding Intermedia Index for Task Names concurrent program.

## Prerequisites

None

## Responsibility

CRM Administrator

## Navigation

Navigate to **Requests > Run.**

## Steps

1. In the Find Request window, click **Submit a New Request**.

   The Submit a New Request window opens.

2. Select the Single Request option button and click **OK**.

   The Submit Request window opens.

3. Select the concurrent program: Rebuilding Intermedia Index for Task Names from the list of values (LOV).

   The Parameters window opens.

4. Enter the following information in the window:
   - JTF User's password
   - Apps User's password
   - CTX User's password
5. Click **Schedule** in the At These Times region.
6. Select the job to run periodically, in the Run the Job region.
7. Enter the start date and leave the end date blank to run the program indefinitely.
8. Define the interval in minutes, that you want the program to run and click **OK**.
9. Click **Yes** in the caution window if you selected for the program to run indefinitely.
10. Click **Submit** to confirm.
11. Click **No** to exit.

## Guidelines

The following table describes the Rebuilding Intermedia Index for Task Names concurrent program.

***Task Manager Seeded Concurrent Programs***

| Name | Description | Frequency |
|---|---|---|
| Rebuilding Intermedia Index for Task Names | This program is used to rebuild the intermedia index so a user can use the quick find to search for new and updated tasks as well as to search by task name. | As needed |

## Setting Up Metadata Objects

You can add additional data in the JTF objects table. Metadata source objects have static definitions to dynamically retrieve data during runtime. This allows for the code to call the metadata source name, instead of writing the code out in every location.

> **Note:** In some instances, Customer Profiles and Service Request notes, require a specific prefix or code name.

Perform the following steps to add data in JTF objects for use in Tasks Manager.

## Prerequisites

None

## Responsibility

CRM Administrator

## Navigation

Navigate to **Task and Escalation Manager > Setup > Objects Meta-data.**

## Steps

1. Enter a name, description, and unique object code.
2. Enter or select information in the fields for all sections that are needed for this source.
   - Seeded check box: It indicates that the data is seeded. It cannot be updated by users.
   - From task check box: Select this check box if tasks can be created, updated, and deleted using the standalone Task Manager. Otherwise, tasks can only be queried in read-only format.
   - Start Date: Enter a start date that the object code is available in the text field.
   - End Date: Enter an end date that the object code is unavailable in the text field.

- Application: Select the Application name from the list of values.

3. Enter the following information in the Lunch Details tab:
   - Function Name: Select the form function name registered as type, "FORM" from the LOV.
   - Parameter: Enter the parameters to be passed to the form function to open the source form. The following parameters are passed to open the source form.
   - ID - Source_object_id
   - NAME - Source_object_name

     The rest of the parameters should be hard coded.
   - Launch Method: Use the drop-down list to select the Launch method. The Launch method is only for forms. They are:
   - FND_FUNCTION: Executes a specified form function only if the form is attached. It always starts a new instance of the form.
   - APP_NAVIGATE: Executes a specified form function only if the form is attached and also allows a form to be restarted if it is invoked a second time.
   - URL: Enter the URL for the application.
   - Web Function: Select the web function from the LOV. This is the JSP Function Name. It should be registered in Functions as type JSP.
   - Web Parameters: Enter the web parameters in the text field. These are the parameters to be passed to the JSP page. The following parameters are passed to open the source form.
   - ID - Source_object_id
   - NAME - Source_object_name

     The rest of the parameters should be hard coded.
4. Enter the following database information in the Select Statement Details tab:
   - ID Column: Enter the ID value to be fetched from a given table in the text field, such as task_id. The ID identifies the unique column that is stored as the records place holder.
   - Name Column: Enter the NAME value to be fetched from a given table in the text field, such as task_number. This column shows as the main search/result column value a user uses to select data.
   - Details Column: Enter the details value to be fetched from given a table, such as description. The details column gives user more information on the column to choose from in the LOV listing.

     Enter your select statement:
   - From: Enter the name of the table where the data is obtained, such as jtf_tasks_vl.
   - Where: Enter any Conditions of the selected data in the where clause, such as source_object_type_code = "TASK".
   - Order By: Enter the order by which the records should be sorted, such as task_number.

- Select Statement: This read-only text field displays your select statement when clicking the **Check Syntax** button to validate the syntax of your statement before it is saved.

5. Enter the following information in the LOV and Data Security tab:

   In the LOV region:

   - Window: Enter a title for the List of values window in the text field. This is the Title that appears for the LOV generated for this source object.
   - Name: Enter the column name for List of values specified in the Select Statement Detail's "Name Column" field.
   - Details: Enter the Title for details column for List of values specified in the Select Statement Detail's "Detail Columns" field.

     In the Data Security Setup region:

   - Object Name: The name for a corresponding JTF_OBJECTS code. This name serves as the foreign key to FND_OBJECTS. This field is not required and can be empty (null).
   - Predicate Alias: This field adds security information to application query. It should only be used to avoid ambiguity when LOV query contains more than one table joined by data object primary key(s) values. For example, two tables ("jtf_tasks_b" and "jtf_tasks_tl") are used, then it must be entered with either "jtf_tasks_b" or "jtf_tasks_tl". Otherwise Oracle DBMS will report ambiguous task_id reference at the run time.

     If it is entered and the object name is not null, the value will be passed to an internal API to add security to a generated query for the LOV. However, if the object name is empty, then security predicate will not be added to the generated query.

     Refer to Customizing the List of Values (LOV) Security Access, page 23-12, Customizing Task Security chapter for details.

6. Define the object user in the Usage tab:

   - Object User: Select the object user from the list of values.

     The **Seeded** check box is not editable. It indicates that the data is seeded.

     Usage users are specified access locations where an object can be used. As long as the object is not seeded, all usages can be assigned.

## See Also

- Setting Up the Source Object Code and Context, page 12- 4
- Defining Task Statuses and Status Transition Rules , page 21- 5
- Defining Task Priorities, page 21-13
- Defining Task Types, page 21- 1
- Defining Task Date Types, page 21-15
- Designing Task Templates, page 22- 1
- Defining Template Details, page 22- 4

- Defining Task and Notes Reference Mapping, page 21-16
- Setting Profile Options, page 21-18
- Running the Task Manager Concurrent Program, page 21-26

## Publishing Task Business Events

Task Manager, leveraging the Oracle Workflow Business Event System, publishes business events such as creating, updating, and deleting a task or an assignment when a task or an assignment is created, updated, and deleted from APIs, or application user interfaces (UIs) regardless of the Forms, HTML, or Oracle Applications Framework based interfaces. Task business events replace the functionality provided by "user hooks". User hooks will not be supported in future; therefore, applications that contain data directly affected by these events should subscribe to the events and synchronize or modify their data accordingly.

For example if the actual start date for a task assignment is updated for a service request, this action is published or "raised" as a business event. Oracle Field Service for Palm that subscribes to this business event using its workflows can capture the update event and maintain the information for palm synchronization. Next time when field sales representatives synchronize data from Oracle Applications to their palms, this updated start date of a task assignment will be downloaded to their palms.

Be aware that when an escalation or appointment is created, relevant escalation or appointment business events will be raised. See Publishing Business Events, page 29-11 in Escalation Manager for escalation events and Publishing Business Events for Appointments, page 26-14 in the Implementing the HTML Calendar chapter, *Oracle Common Application Components Implementation Guide*.

Relevant information for task business events and event subscription are contained in the following sections:

- The Oracle Workflow Business Event System, page 21-30
- Task Business Events, page 21-31
- Event Publishing Rules and Event Attributes, page 21-32
- Event Use Examples, page 21-34
- Event Subscription Guidelines, page 21-35
- Subscription Workflow Events, page 21-36

### The Oracle Workflow Business Event System

The Oracle Workflow Business Event System is an application service that leverages the Oracle Advanced Queuing (AQ) infrastructure to communicate business events between systems. The Business Event System consists of the Event Manager, which allows you to register subscriptions to significant events, and workflow process event activities, which allow you to model business events within workflow processes.

The Event Manager contains a registry of business events, systems, named communication agents within those systems, and subscriptions indicating that an event is significant to a particular system. Events can be raised locally or received from an external system or the local system through AQ. When a local event occurs, the subscribing code is executed in the same transaction as the code that raised the event, unless the subscriptions are deferred.

See *Oracle Workflow Developer's Guide* for detailed information about Oracle workflow business event system, and subscriptions.

## Task Business Events

Task Manager publishes the following business events when a task or a task assignment is created, updated, and deleted from APIs, or application user interfaces (UIs) regardless of the Forms, HTML, or Oracle Applications Framework based interfaces:

***Task Business Events***

| Event Name | Description |
|---|---|
| oracle.apps.jtf.cac.task.createTask | Task is created. |
| oracle.apps.jtf.cac.task.updateTask | Task is updated. |
| oracle.apps.jtf.cac.task.deleteTask | Task is deleted. |
| oracle.apps.jtf.cac.task.createTaskAssignment | Task assignment is created. |
| oracle.apps.jtf.cac.task.updateTaskAssignment | Task assignment is updated. |
| oracle.apps.jtf.cac.task.deleteTaskAssignment | Task assignment is deleted. |

The following terms are used in the Task Business Events table:

**Event Name.** Event name represents the name of a business event that is an occurrence in an application or program that might be significant to other objects in a system or to external agents. Event name must be unique and is case-sentitive.

Subscribers must use Event Name for subscription purposes.

**Display Name.** Display name is the name appearing in the event list.

**Description.** Description is the descriptive information of a business event.

Additionally, for each task event, the owner name is "Task Manager", the owner tag is "JTF" and the default status is "Enabled".

# How Event Key is Generated

When the actual start date for a task assignment is updated for a service request, the updated record is created in the table JTF_TASK_ASSIGNMENTS. The relevant subscription event that contains workflow related codes calls wrapper APIs that raise the Update Task Assignment event in the Oracle workflow Event Manager with the following information.

- Event Name: oracle.apps.jtf.cac.task.updateTaskAssignment

  Each subscription will have event name and subscription ID passed with function.

  **Event Key.** Event key is a string that uniquely identifies an instance of an event. Event key will be generated by the concatenation of the following:

  - EVENT_NAME

- Value of the sequence

  By default, Oracle Workflow uses the event key as the item key for the workflow process that is launched.

Task business events will be raised only when changes made in certain task records. For example, the Update Task event will be raised if an update made in task priority, instead of task description.

When a change results in an event raised, in order to pass the related task records and other information to event subscribers, Task Manager also publishes event attributes in the parameter list.

### Event Publishing Rules and Event Attributes

Only the majority of the attributes are published in the parameter list. For the rest of the attributes changed during Update, TASK_AUDIT_ID enables the subscribers to obtain the value of remaining attributes from audit tables.

In addition, the following rules are used to publish event attributes:

- During Create process for event names "oracle.apps.jtf.cac.task.createTask" and "oracle.apps.jtf.cac.task.createTaskAssignment", the parameter is not set on the list if the null value is inserted into the column. Therefore, the API WF_EVENT.GetValueForParameter returns a NULL value.
- During Update process for event names "oracle.apps.jtf.cac.task.updateTask" and "oracle.apps.jtf.cac.task.updateTaskAssignment", the parameter will not be set on the list if the value of the parameter is not changed. Therefore, the API WF_EVENT.GetValueForParameter returns a NULL value.

  If the value of the parameter is changed, then the parameter name of the old value will be prefixed with "OLD_"+<Parameter Name>. The parameter name of the new value will be "NEW_"+<Parameter Name>.

## Event Attributes for the Create, Update, and Delete Task Events

The following table depicts the published attributes for the create, update, and delete task events. "Yes" indicates that an attribute is published and "No" indicates that it is not.

*Published Attributes for the Create, Update, and Delete Task Events*

| Parameter Name | Create Task | Update Task | Delete Task | Comments |
|---|---|---|---|---|
| TASK_ID | Yes | Yes | Yes | |
| SOURCE_ OBJECT_TYPE_ CODE | Yes | Yes | Yes | |
| SOURCE_ OBJECT_ID | Yes | Yes | Yes | |
| ENABLE_ WORKFLOW | Yes | Yes | Yes | |
| ABORT_ WORKFLOW | Yes | Yes | Yes | |
| DATE_ SELECTED | No | No | No | |
| TEMPLATE_ID | No | No | No | The value of this field cannot be changed. |
| TEMPLATE_ GROUP_ID | No | No | No | |
| RECURRENCE_ RULE_ID | No | No | No | |
| TASK_AUDIT_ ID | No | Yes | No | This value is put on the parameter list, so that the subscriber can find out the remaining fields which are not published from the audits table. |
| OBJECT_VERS ION_NUMBER | No | No | No | This is the new object version of the task. For create, the object version number is always 1, hence it is not published on the parameter list. |

## Event Attributes for the Create, Update, and Delete Task Assignment Events

The following table depicts the published attributes for the create, update, and delete task assignment events. "Yes" indicates that an attribute is published and "No" indicates that it is not.

*Published Attributes for Create, Update, and Delete Task Assignment Events*

| Parameter Name | Create Task Assignment | Update Task Assignment | Delete Task Assignment |
|---|---|---|---|
| TASK_ID | Yes | Yes | Yes |
| ENABLE_ WORKFLOW | Yes | Yes | Yes |
| ABORT_ WORKFLOW | Yes | Yes | Yes |
| TASK_ASS IGNMENT_ID | Yes | Yes | Yes |
| RESOURCE_TYPE_ CODE | Yes | Yes | Yes |
| RESOURCE_ID | Yes | Yes | Yes |
| ASSIGNMENT_ STATUS_ID | Yes | Yes | Yes |
| ACTUAL_START_ DATE | Yes | Yes | No |
| ACTUAL_END_ DATE | Yes | Yes | No |
| ASSIGNEE_ROLE | Yes | Yes | Yes |
| SHOW_ON_ CALENDAR | Yes | Yes | No |
| CATEGORY_ID | Yes | Yes | No |
| OBJECT_VERSION_ NUMBER | No | No | No |

## Event Use Examples

When users perform an action in Task Manager, it might trigger more than one business events depending on which task records are affected. In addition, each event can be raised many times before the action completed.

For example, when a task is deleted, at the same time the task assignment is also deleted as well. This action raises two task events, "oracle.apps.jtf.cac.task.deleteTask" and "oracle.apps.jtf.cac.task.deleteTaskAssignment". The delete task assignment event "oracle.apps.jtf.cac.task.deleteTaskAssignment" can be raised whenever each row in the assignment table is deleted.

The following table describes the events that are published for the possible scenarios. Since the subscriptions to the task events must be asynchronous, the orders of these events being published are not important.

***Published Task Events Details for Possible Scenarios***

| Functional Scenario | Published Event Names | Number of Times the Event Is Published |
|---|---|---|
| Task is created. | oracle.apps.jtf.cac.task.createTask | Once |
| | oracle.apps.jtf.cac.task.createTaskAssignment | Once |
| Owner is changed. | oracle.apps.jtf.cac.task.updateTask | Once |
| | oracle.apps.jtf.cac.task.updateTaskAssignment | Once |
| Task is deleted | oracle.apps.jtf.cac.task.deleteTask | Once |
| | oracle.apps.jtf.cac.task.deleteTaskAssignment | Once for each row in the assignment table |
| Assignment is updated. | oracle.apps.jtf.cac.task.updateTaskAssignment | Once |
| Assignment is added. | oracle.apps.jtf.cac.task.createTaskAssignment | Once |
| Assignment Status/Dates are changed. | oracle.apps.jtf.cac.task.updateTaskAssignment | Once |

Since the task owner change will raise two events, if the subscriber is interested in tracking the task owner, then the subscriber must subscribe to both the update task event and update task assignment event.

## Event Subscription Guidelines

All event subscriptions must follow the guidelines mentioned in the workflow development standards. For example, any subscription cannot commit inside the rule function. This can cause unexpected behavior in the workflow or task APIs.

In addition, the following subscription guidelines are also used in publishing Task business events:

- Asynchronous Subscriptions

  All subscriptions to the events should be asynchronous. The UIs call the APIs, which in turn publish events. Therefore, if the subscriptions are synchronous, the transaction time for the UI will increase.

- Returning with success or warning

  The rule function of the subscriptions should return success or a warning. It should not return an error. Returning an error disrupts the processing of other subscriptions; therefore, an error should not be returned.

## Subscription Workflow Events

Since Task Manager now publishes business events using the Oracle Workflow Business Event System, all workflow related codes in the Task APIs are moved to the newly created Subscription events.

With this change, when a task is created, the create task subscription event, instead of Task APIs, will call wrapper APIs that raise the create task event. In addition, this also allows event subscribers to optionally disable the subscription workflow events by using a profile option so that no workflow notifications will be sent when subscribed events are raised.

The following table describes the Subscription workflow events in Task Manager:

***Subscription Workflow Events in Task Manager***

| Event Name | Display Name | Owner Name | Owner Tag |
|---|---|---|---|
| oracle.apps.jtf.cac.task.CreateTask | Send notification when task is created. | Task Manager | JTF |
| oracle.apps.jtf.cac.task.UpdateTask | Send notification when task is updated. | Task Manager | JTF |
| oracle.apps.jtf.cac.task.DeleteTask | Send notification when task is deletd. | Task Manager | JTF |
| oracle.apps.jtf.cac.task.CreateTaskAssignment | Send notification when task assignment is created. | Task Manager | JTF |
| oracle.apps.jtf.cac.task.UpdateTaskAssignment | Send notification when task assignment is updated. | Task Manager | JTF |
| oracle.apps.jtf.cac.task.DeleteTaskAssignment | Send notification when task assignment is deleted. | Task Manager | JTF |

# Disabling Subscription Workflow Events

Task event subscribers can optionally disable the subscription workflow events by changing the default value in the profile option "Task Manager: automatically launch workflow":

- YES (default value): This enables the workflow event so that workflow notifications will be sent when subscribed events are raised.
- NO: This disables the workflow event so that no workflow notifications will be sent when subscribed events are raised.

# 22

# Working with Task Templates

This chapter covers the following topics:

- Designing Task Templates
- Defining Template Details

## Designing Task Templates

A task template is a skeleton task and a task template group is a grouping of various task templates. Creating a template eliminates the user's interaction with the specific properties of a task which simplifies the task creation process.

For example, a service department is constantly requested to have computer problems fixed. John Smith, a service director, requests the creation of a task template group called PC Repair that is specifically used for a service request. This template group consists of a set of required tasks, including customer appointment, computer repair, and progress update. These tasks are defined in a template format with task type, priority, and status information specified.

## How to Create Task Template Groups

The implementors or system administrators can define task template groups only in the Forms-based Task Manager.

Use the following three regions in the Setup Task Template Groups window to enter task template group information:

- **Template Group region**. Enter task template group name, description, effective date, document type, start and end dates, and descriptive flexfields. Task Manager uses document type to specify the purpose of a template group created for. For example, if a template group is created for service request related documents, then Service Request is the document type.

  Enter descriptive flexfield in the Task template groups additional information window if you have predefined additional information specifically for your template group. If the Start and End Dates are left blank, the template will be effective forever.

- **Related Task Templates region**. Enter information for each task within this template group including each task's name, task type, task status, task priority, description, and descriptive flexfield information specifically for each task template. For example, you can enter the three required tasks, such as customer appointment, computer repair and progress update, here for the PC Repair template group.

The descriptive flexfield information in the Task Templates additional information window is located at the end of the horizontal scroll bar. This flexfield is used specifically for each task template; therefore, its values can be passed to the tasks that are created based on the task template.

Optionally, you can enter just one task in this region if you want to create a single task template, instead of multiple tasks in a task template group.

- **Task Template Details region**. Enter task duration, planned effort, and task flags information for each task you entered in the Related Task Template region. Task Manager uses the following task flag to specify additional task information:
  - The Publishable flag indicates that the task is publishable over the web.
  - The Billable flag signifies a task as a service that requires billing.
  - The Holiday flag will be used in a future release.
  - The Multibook flag indicates whether the task can book resources that are already assigned to other tasks.
  - The Milestone flag indicates that the task is a milestone.
  - The Restrict Close flag indicates whether it is necessary to close the task in order for the source object to be closed. For example, if this task references a service request, the task must be closed to close the service request.

    For example, you can enter about five hours work for task duration and effort, as well as select the Billable task flag for the Computer Repair task, as this task requires a service charge to a customer.

After saving this template group, the Number field for each task you defined in the Related Task Templates region populates automatically.

In addition, you can define additional assignee resource types and unit information, dependencies and the offset information among task templates, and task recurrence information for a task template. See Defining Template Details, page 22- 4 .

Once a template or template group is created, users are able to create multiple tasks simultaneously based on the selected template or template group.

> **Note:** The Private task flag in the Forms-based version of Task Manager is not supported at this time. This functionality will be removed in a future release. HTML Task Manager does support both Private and Public tasks.

Perform the following steps to design a task template.

## Prerequisites

None

## Responsibility

CRM Administrator

## Navigation

Navigate to **Task and Escalation Manager > Task > Task Templates**.

## Steps

1. In the Setup Task Template Group window, define and enter the following information in the Template Group region:
   - Template group name
   - Description
   - Effective dates
   - Descriptive flexfield information for the template group
   - Document type
2. Enter the following information in the Related Task Templates region:
   - Template name
   - Description
   - Task Status
   - Task type and priority

     Please note that the available task Type and Priority list of values are populated based on your selected document type. For example, if a template group is created for Service Request, then you should see only the service request related task types and priority information listed in the list of values.
   - Descriptive flexfield in the Task Templates additional information window
3. Enter the following information in the Task Template Details region:
   - Task duration
   - Task effort
   - Task flags
4. Optionally, click **Resources** to specify assignee resource type and unit information, **Dependencies** to set task dependencies, and **Recurrences** to set task recurrences for the template group in the Task Template Details window. For more information on how to define resources, dependencies, and recurrences, see the Defining Template Details, page 22- 4 .
5. Save your template.

   After saving the template, the Number field for each group you defined in the related task template region populates automatically. A task template now exists and task creation from the template is possible.

## See Also

- Defining Task Priorities, page 21-13
- Defining Task Types, page 21- 1
- Defining Task Statuses and Status Transition Rules, page 21- 5

- Defining Task Date Types, page 21-15
- Setting Up Metadata Objects, page 21-27
- Defining Task and Notes Reference Mapping, page 21-16
- Setting Profile Options, page 21-18
- Running the Task Manager Concurrent Program, page 21-26

## Defining Template Details

Additionally, you can define assignee resource types and unit information, dependencies, and task recurrences by clicking the appropriate buttons to bring up the following tabs shown in the Task Details window:

- Resources: Enter assignee resource type, such as employee resource, and required unit information for each task you specified in the Related Task Templates region.
- Dependencies: Enter task dependency information if necessary.

Use this tab to set the order among task templates and to separate the sequence between task templates using time-sensitive restrictions. Use the Offset field to enter a numeric value plus an appropriate unit of measure, such as one hour or 30 minutes, to separate the initial task template from a subsequent task template. For example, you can have "one day" (offset) time frame between the first template, customer appointment, and the next template, computer repair. This allows a service agent to have one-day preparation after the appointment and before the computer repair.

- Recurrences: Enter task recurrence information for tasks you want to repeat on a regular basis.

Perform the following steps to define task template details.

## Prerequisites

A task template must be created and saved.

## Responsibility

CRM Administrator

## Navigation

Navigate to **Task and Escalation Manager > Task > Task Templates**.

## Steps

1. In the Task Template Details window, with your template information defined, click **Resources**.

   The Task Template Details window opens.
2. Select a resource type from the list of values (LOV).
3. Enter the number of resources needed in the Required Units field.

Selecting the Enabled Flag activates the resource type for the corresponding task template.

4. Any information defined in the Dependencies tab is not supported at this time.
5. In the Recurrence tab, select how you want the task to repeat, daily, weekly, monthly, or yearly, and provide information in the corresponding required fields.
6. Click **OK** to save your information.

## See Also

Designing Task Templates, page 22- 1

# 23

# Customizing Tasks Security

This chapter covers the following topics:

- Task Security Overview
- Customizing Tasks Data Security
- Setting the Security Profile Option
- Customizing the List of Values Security Access
- Customizing the List of Values Security for HTML Tasks
- Customizing the Resource List of Values Security for Tasks in Oracle Applications Framework and Forms
- Granting Manager-Directs Security Access
- Troubleshooting Task Data Security

## Task Security Overview

To continuously support the existing Application Object Library (AOL) task security rules used in HTML Task Manager, and to extend the task data security offerings specifically for task related resource assignments to the Forms-based Tasks and to the Oracle Application Self-Service Framework based Tasks recently developed for Oracle Common Application Calendar, Task Manager leverages the AOL data security based on Virtual Private Database (VPD) policy, a feature implemented in database to allow security dynamically created at runtime to all queries issued against a database table or view. This new security model with VPD feature provides more flexibility in task security for resource assignments by allowing any applications to set product specific security rules around the existing task security.

For example, only the resources that have privileges to access certain types of service request can be assigned to these types of service related tasks as assignees. Therefore, with this enhanced security model, Oracle Service Online can pass its own security functions to Tasks in Forms or in Oracle Applications Framework to allow qualified resources to be retrieved from the resource list of values when assigning them to a service request of certain types.

Be aware that this new enhanced security model with VPD feature only applies to task security for resource assignments in the Forms-based and Oracle Applications Framework based Task Manager. It is not implemented in task security rules currently used in HTML Tasks, such as customizing contextual task rules using a profile option, building security around the resource list of values, and allowing group managers to access their direct's tasks.

To better understand the Task security rules used in all formats of Task Manager including AOL security model in HTML Tasks, and new security model with VPD feature for Tasks in Forms and Oracle Applications Framework specifically for resource assignments, the following topics are introduced in this section:


- Understanding AOL data security in HTML Tasks, page 23- 2
- New Security Model with VPD for Tasks in Forms and Oracle Applications Framework, page 23- 8


## Understanding AOL Data Security in HTML Tasks

Before implementing AOL data security model, Task Manager can implicitly grant users with the following task security access:

- For the standalone tasks:
  - The owner or assignee of a task has full access to the task.
  - If a group or team is the owner or the assignee of the task, then all the group or team members have full access to that task.

    Two security access privileges are used in Tasks:
  - Read Only Access: Resources can only view tasks.
  - Full Access: Resources can view, update, and delete tasks.

    In addition, a resource can explicitly grant another resources full access or read only access to his or her tasks except the private tasks. This can be done through the calendar grant functionality.
- For the context sensitive tasks, Task Manager allows any users who can access the business object to have full access to all contextual tasks related to the object.

By leveraging AOL data security model, HTML Task Manager not only can continue supporting the task security rules granted implicitly or explicitly, but also can provide a flexible mechanism for task security access. This security model provides the ability to restrict data access to appropriate users through a specific authorization process.

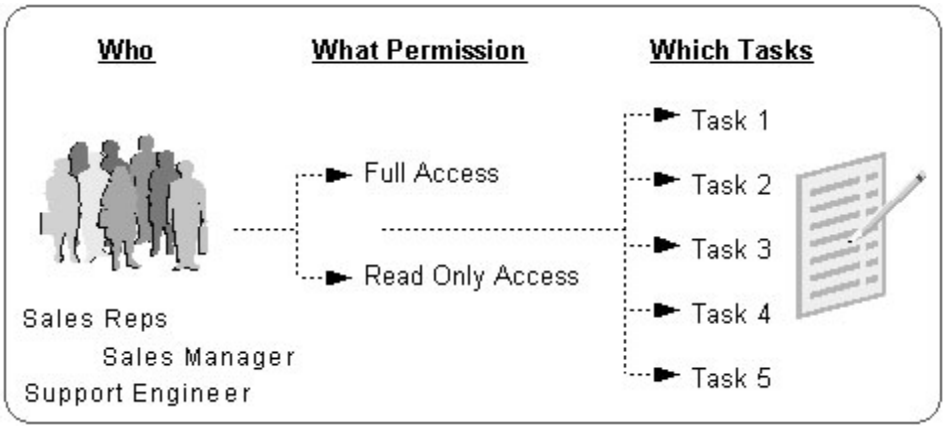
For example, if a company only wants certain tasks to be viewed or updated by a particular user or user groups, then, with the AOL security model, this can be achieved by granting a security access privilege (full access or read only) to the particular user or user groups to access specific tasks.

In other words, the task security authorization process can be considered as an analysis around

- *"**Who** (users or user groups) has **what permission**(full or read only access) to access **which tasks**(specific tasks)"*

The following figure illustrates the high level picture of the task security rule analysis.

***Task Security Rule Analysis***




- *For example, appropriate users who can be either sales representatives, sales managers, or support managers are granted with full access or read only access permission to access certain tasks, such as from Task1 to Task5.*

HTML Tasks Data Security Allows Further Customization

In order to authorize specific tasks access for particular users or user groups, the task security model in HTML Tasks leveraging the concept of AOL data security can further allow users to customize task data for security authorizations. This includes customizing contextual task rules by using a profile option, building security around the resource list of values, and allowing group managers to access their direct's tasks for HTML Tasks.

Before introducing how to customize the HTML task security rules, page 23-10, it is necessary to understand the Task data security concepts based on AOL data security and its relevant terminology.

This section covers the following topics:

- What is AOL Data Security Model?, page 23- 3
- Terms and Definitions, page 23- 4
- How Does the New Security Model Work?, page 23- 7

## What is AOL Data Security Model?

There are four different aspects of security access used in the AOL security model:

- **User security** is about determining the user identify and preventing access from unauthorized users.
- **Network security** is about ensuring that communications over the network are secure.
- **Function security** is about controlling what people can do on the system. It focuses on which applications and modules you have access to.
- **Data security**, like function security, is also about controlling what people can do on the system. However, it focuses on what rows or columns of data you can look at as well as what operations can be carried out on those rows or columns.

The Data Security is comparatively a new feature in AOL security model. It is used to model and enforce security authorizations for access and modification of specific data

records. In other words, data security is the finest security level that allows users to customize records in the data level.

To be able to customize task security in the data level, AOL data security model uses the concepts of object, object instance, and object instance sets to represent task features and possible modification, the concepts of privileges and roles to translate data access permissions, and the concepts of grants or global grants to represent the authorization process.

Take one of the existing task rules, for example, to further explain the AOL data concepts used for task rule customization:

- The owner or assignee of a task has full access to the task.

In the AOL data security framework, owner or assignee can be translated as a user or user group. Full access is an access privilege that a user can act upon or perform on a task. As to "the task", Task Manager uses the concepts of objects, object instances, and object instance sets to explain the features of a task. For example, a task is considered as an object, task with number 1234 can be considered as an object instance. A grouping of multiple object instances is an object instance set. Therefore, tasks with number starting at 1000 to 1999 can be an object instance set.

With this security model, the HTML Tasks module enable users to define and further customize the security rules for various business needs.

Detailed information on AOL data security framework, refer to *Oracle Applications System Administrator's Guide*.

## Terms and Definitions

HTML Task Manager uses the following concepts, based on AOL data security model, to provide the flexibility to cover a wide range of data security scenarios:


- Users (User Groups), page 23- 4
- Objects, page 23- 5
- Object Instances, page 23- 5
- Object Instance Sets, page 23- 5
- Privileges (Functions), page 23- 5
- Roles (Menus), page 23- 6
- Grants (Authorizations), page 23- 6
- Global Grants, page 23- 7


## Users (User Groups)

A user is a single person with an account on the system (represented by a row entry in FND_USER). Users can be grouped into groups. Therefore, a user role may represent a user or group of users. A user group is any grouping of FND_USERS who are exposed through the WF_ROLES view.

Users and user groups can be referred as **Grantee** if they are the subjects of a data security grant. These users and user groups must be exposed in the WF_USER/WF_ROLES.

## Objects

An object is a type of thing on which security can be managed. For example, a task is considered as an object.

In a technical definition, each object must be registered in the FND_OBJECTS tables. Every object definition will contain related database object (table or view) and primary key information for the object.

## Object Instances

An object instance is a particular instance of an object. This generally corresponds to a row (or related set of rows) in the database. If Tasks is considered as an object, then Task with number 1234 is an object instance.

In a technical explanation, object instances are derived from the primary key values. The primary key values should be set for the registered object in the FND_GRANTS.

## Object Instance Sets

An object instance set is a group of multiple object instances. For example, all tasks assigned to a user or all tasks with a number smaller than 5 could be considered an object instance set.

In a technical definition, object instance set definition is stored in the FND_OBJECT_INSTANCE_SET and FND_OBJECT_INSTANCE_SET_TL tables. The definition contains a SQL where clause by a predicate that combined with the object definition will return all the object instances that are part of the object instance set.

An object instance set can be expressed in the following predicate for all tasks with a number smaller than 5. To avoid processing issues, all the columns used in the predicate should be prefixed with &TABLE_ALIAS in the object instance set definition. Then, this predicate can be added to the where clause.

```
SELECT *
FROM jtf_tasks_b
WHERE Owner_id = FND_GLOBAL.USER_ID
AND &TABLE_ALIAS.task_id < 5
```

**Note:** Referencing PARAMETERx values from the grants can also parameterize the predicate.

## Privileges (Functions)

A function is an action that can be performed on an object or object instance. It is the smallest unit of secured product functionality. It can be granted to a user or user group which means gives them permission to perform that function. Therefore, it can also be referred as a permission or privilege from a user's point of view.

There are two seeded security privileges currently used in the Task Manager:

- JTF_TASK_READ_ONLY (view only)
- JTF_TASK_FULL_ACCESS (update and delete)

Since these privileges are registered in the FND_FORM_FUNCTIONS and FND_FORM_FUNCTIONS_TL tables and they are referenced in the actual code so that they cannot be changed or extended.

In addition, privileges (functions) can be grouped into roles (menus) to reduce the granting overhead.

## Roles (Menus)

A menu is a grouping of functions. Menus are used as roles for data security. It is required to group functions into related sets of menus necessary to perform a particular data security role on an object instance. A good example is an "Administrator" role, which might include many privileges required for a user with an administrator role to access the data.

Currently, there are two roles registered in the FND_MENUS and FND_MENUS_TL tables specifically for task security:

- JTF_TASK_READ_ONLY: This role contains one privilege, JTF_TASK_READ_ONLY.
- JTF_TASK_FULL_ACCESS: This role contains two privileges, JTF_TASK_READ_ONLY and JTF_TASK_FULL_ACCESS.

The role privileges can be registered in the FND_MENU_ENTRIES and FND_MENIU_ENTRIES_TL tables.

> **Note:** Roles are user definable, the seeded roles only exist to ensure backward compatibility.

## Grants (Authorizations)

A grant is an authorization for the grantee (a user, or group of users) to perform the specified security role on the specified object instance or object instance set. Therefore, grants are what tie the whole thing together. A grant consists of the following three components:

- Object: Any object instance or object instance set, for instance, all non-private tasks (object: JTF_TASKS and object instance set: JTF_TASK_RESOURCE_TASKS)
- Grantee: Any user or user group, for instance, "JDOE" for John Doe
- Role (Menu): Any role, for instance, "JTF_TASK_FULL_ACCESS"

This grants the user, John Doe, the privilege to have full access to all non-private tasks.

In addition, all grants should be registered in table FND_GRANTS.

- **Calendar Grants**

  Task Manager still supports the calendar grant functionality, which means that when a user gives calendar access to another user, the access for tasks is also given. Since Task Manager uptakes AOL data security model, task security can be further customized. Granting calendar access to another user will still result in granting task access to the user. However, the access to the tasks can be restricted by additional data security implemented for tasks.

  In the backend, the data that is being entered into FND_GRANTS table is not compatible with the way the FND_APIs work. In order to solve the backward compatibility issue, a new row for the task security is created while the same row for calendar is still kept. Therefore, on every grant, there would be two rows created (instead of one row). The same is true for every revoke. Two rows will be deleted.

## Global Grants

To reduce the administration of grants, authorizations can be granted globally to the following:

- The "Global" user or user group
- The "Global" object instance

For example, any user will have full access to tasks where she or he is the owner or assignee. The seeded global grant uses the following values and customer cannot revoke this grant:

```
FND_GRANTS
GRANTEE_TYPE = "GLOBAL"
GRANTEE_KEY = "GLOBAL"
MENU_NAME = "JTF_TASK_FULL_ACCESS"
OBJECT_NAME = "JTF_TASKS"
INSTANCE_TYPE = "SET"
INSTANCE_SET_NAME = "JTF_TASK_USER_TASKS"
```

Another global grant example can be that any user can see any resource team:

```
FND_GRANTS
GRANTEE_TYPE = "GLOBAL"
GRANTEE_KEY = "GLOBAL"
MENU_NAME = "JTF_TASK_RESOURCE_ACCESS"
OBJECT_NAME = "JTF_RS_TEAMS"
INSTANCE_TYPE = "GLOBAL"
```

## How Does this AOL Security Model Work?

With the leverage of AOL data security model, Task Manager adds the following two security functions to the security model:

- **Predicate**: Adding a security predicate, the "where" clause, to an application query limits the task instance access for users. The predicate can be considered as the add-on new security rule to Tasks. To avoid processing issues, all the columns used in the predicate should be prefixed with &TABLE_ALIAS in the object instance set definition. As a result, a user will be only able to see certain task instances (such as all tasks with task id less than 5) that she or he has any kind of privileges.

  For example, add a predicate (where clause) to an existing query:

  ```
  SELECT *
  FROM jtf_tasks_b
  WHERE Owner_id = FND_GLOBAL.USER_ID
  AND &TABLE_ALIAS.task_id < 5
  ```

  > **Note:** In the new security model, a user can have access to an object instance in many ways, such as access to an instance may be granted to the user, to the user's group(s) or to all users. Consequently the predicate might return duplicate instances

- **Check Function**: This allows the system to check whether or not a particular user has an appropriate access privileges (full or read only access) on a specific task instance.

With the two new functions added to Tasks, appropriate task instances are presented in the following logic:

For example, for the standalone task screens:

1. Add predicate to the main query.
2. Check full access privilege for retrieved task instances.
3. Display task instance(s) as updatable or read-only.
4. Check corresponding privilege before accessing the detail page.

### New Security Model for Tasks in Forms and Oracle Applications Framework for Resource Assignments

To support existing task AOL data security around the assignment of resources for Tasks in Forms and Oracle Applications Framework, Task Manager enhances the existing AOL security model by implementing Virtual Private Database (VPD) policy which allows various applications to set product specific security rules on top of the task rules for the resource list of values security access to meet their business needs.

> **Note:** The resource list of values security access discussed here is restricted to the assignee list of values with resource types of employee, group, and team only.

**Business Reason**

For example, a service agent in Oracle Service Online needs to assign a service related task with request type of network service only to the service representatives who can handle the network issues. These limited resources can only access to certain types of request based on security access privileges. With this enhanced security model, Service Online can pass its own security functions to Tasks in Forms or in Oracle Applications Framework to allow qualified resources to be retrieved from the resource (assignee) list of values when assigning them to a service related task of certain types.

To better understand this new security model, the following topics are introduced:


- What is Virtual Private Database?, page 23- 8
- How Does This VPD Model Work?, page 23- 8


## What is Virtual Private Database?

Virtual Private Database (VPD), also known as Fine Grained Access Control (FGAC) and Row Level Security (RLS), can dynamically attach a predicate at run time to all queries issued against a database object, such as a table or view.

## How Does This VPD Model Work?

As mentioned earlier, the VPD policy is implemented based on existing AOL security model. A security policy or predicate with the "where" clause added to an application query is still be generated by the existing AOL data security infrastructure which can provide backward compatibility and future customization method for integrated applications. With the VPD policy added to the existing model, an arbitrary "where" clause can be appended to a table, view, or synonym which further restricts the rows or data availability. A security policy, a PL/SQL function such as SELECT, INSERT, UPDATE, or DELETE bounded to a table or view, is used to return the predicate added by VPD to a query. For example, the VPD data security can be

added to a resource table with SELECT function which returns a view or synonym with limited rows (resources) being selected from the table with appropriate privileges granted through AOL data security. Therefore, VPD policy or function is used to enforce data security rules with more flexibility by adding another implementation of AOL data security model.

Based on the concept of VPD policy, Task Manager develops a java interface for Tasks in Oracle Applications Framework and parameters for Tasks in Forms to allow integrated applications to pass their product specific security context such as security related attribute sets or value pairs, privilege (view or synonym) names, or implementation classes to the existing Tasks rules based on AOL security model.

To react to the parameters passed by product specific security context, Task Manager needs to perform the following tasks to support the product specific resource list of values security:

- For Tasks in Oracle Applications Framework

  First translate the class name into a class object, then instantiate the class using **TaskAssigneeSecurity** interface, and then use the object methods to set the context and get function name to build an LOV query before executing the query.

- For Tasks in Forms

  Translate the privilege name (view or synonym) if it is not null to the LOV query. Otherwise, the JTF Objects metadata will be used.

## Business Process Change to Support New VPD Security Model

As a result, Task Manager changes the process flow of accessing resources of different categories through the LOV queries as follows:

Process Change From the Process used in HTML Tasks

1. Select the object type, such as Employee (RS_EMPLOYEE) for assignee or owner type
2. Find related JTF Object
3. Create query from metadata
4. Find related FND Object if any
5. Generate a predicate for the FND Object and Task's standard privilege (data security function)
6. Add predicate to the query
7. Execute the query

Process Change To the New Model with VPD Policy for the Oracle Applications Framework and the Forms based Tasks

There are two ways to retrieve resources from the list of values:

- Standard Resource Security in HTML Tasks, Forms, and Oracle Applications Framework based Tasks

  This is the usual business flow of selecting a resource.

  1. Select a resource object type or category, such as RS_EMPLOYEE
  2. Create a query by using the appropriate security view

3. Execute the query (database kernel runs policy function) for Tasks in Forms and in Oracle Applications Framework

   For HTML Tasks, first get the predicate, add the predicate to a query, and then execute the query.

- Non-Standard (Product Specific) Resource Security in Task Forms and the Oracle Applications Framework based Tasks

  Compared to the standard resource security, this method requires one additional step to support product specific resource security by using parameters to carry the privilege name for Tasks in Forms or class name for Tasks in Oracle Applications Framework. If the name is passed, Tasks will use it instead of default resource privilege(s). The process of selecting a task resource is as follows:

  1. Select a resource object type or category, such as RS_EMPLOYEE
  2. If a privilege (view/synonym) or class name has been passed:
     - Set provided view/synonym to the query for Tasks in Forms
     - Instantiate the class and use the object methods to set the context and get function name for Tasks in Oracle Applications Framework
  3. Create a query by using the appropriate security view
  4. Execute the query (database kernel runs policy function)

     **Note:** The VPD security model currently is only implemented in the resource list of values security access for Tasks in Forms and Oracle Applications Framework, and it is not available in HTML Tasks. See Customizing the Resource List of Values Security for Tasks in Oracle Applications Framework and Forms, page 23-19 for more details.

## Customizing Tasks Data Security

Based on the task security model, Task Manager allows task security rules to be further customized in the following ways:

- Set the security profile option for the context sensitive tasks, page 23-10
- Customize list of values (LOV) security, page 23-12
- Grant manager-directs security access, page 23-24

  **Note:** Be aware that the only security rule currently used in the Forms-based Tasks is the resource list of values security. Security rules for contextual tasks and manager-directs security are applied to both HTML Tasks and the Oracle Applications Framework based Tasks.

## Setting the Security Profile Option

HTML Tasks and Tasks in Oracle Applications Framework use the *Task Manager: Set Context Data Security* profile option to control task data security for the context sensitive task instances, such as tasks attached to an opportunity or a lead. By using the profile option, you can choose to turn the task security function on or off based on the following profile values:

- If **Full Access** is selected (default value), then all the tasks related to the context can be viewed, updated, and deleted.

This value turns the security OFF so as to support existing task security (backward compatibility), which allows any users with access to related object instance to update (full access) any task instance for that object.

- If **Security Access** is selected, then whether the task for that context can be updated is based on the privileges granted to the user.

  This value turns the security ON for all task instances within context and only allows task accessible to the user with appropriate privileges.

### Task Security Access Example

Three tasks (T1, T2, and T3) are created for an opportunity. User 1 is the owner of the task T1 and T2. Task T2 is also assigned to User 2. User 2 owns the Task T3.

Task Data Security Condition:

- Grant read only access on task T3 (task id = 120087) to User 1.

```
FND_GRANTS
GRANTEE_TYPE = "USER"
GRANTEE_KEY= "USER1"
MENU_NAME = "JTF_TASK_READ_ONLY"
OBJECT_NAME = "JTF_TASKS"
INSTANCE_TYPE = "INSTANCE"
INSTANCE_PK1_VALUE = "120087"
```

If Security Access is selected which turns the security function on, then the access privileges are changed to:

- User 1 can have full access to task T1 and T2, but has read only access to T3.
- User 2 can have full access to task T2 and T3.

In the past, all users who have access to a business object can have full access to all contextual tasks attached to that object. Therefore, both User 1 and User 2 can have full access to all three tasks attached to that opportunity.

If Full Access is selected which turns the security function off, then the task access privileges for User 1 and User 2 are changed to:

- Both User 1 and User 2 can have full access to Task T1, T2, and T3.

This is because if both users can access the opportunity business object, then they should all be able to access all contextual tasks for that object.

## How Does the Context Sensitive Task Screen Generate?

Since the profile option controls the security access for contextual tasks, before displaying the task detail page, Task Manager will:

1. Check the profile value first to determine whether to display task instance(s) as updatable or read-only; then
2. Check corresponding privilege to determine whether the logged-in user has any particular privilege on the particular task instance before the user can access any task detail page.

## How to Set the Profile Option

Login with the System Administrator responsibility, and navigate to **Profile > System** to access the Find System Profile Values window.

See Appendix A, Profiles Options, page A- 4 , for details on how these profile options can be set.

## See Also

- Customizing List of Values Security Access, page 23-12
- Granting Manager-Directs Security Access, page 23-24
- Task Security Overview, page 23- 1
- Troubleshooting Task Data Security, page 23-30

## Customizing the List of Values Security Access

In addition to restricting task data access using the profile option for HTML Tasks and Oracle Applications Framework based Tasks, Task Manager also allows you to build security around the resource list of values (LOV) by using the concepts of the AOL data security for HTML Tasks, and using the VPD security model for Tasks in Forms and Oracle Applications Framework.

To further describe the resource LOV security rule for Tasks in different formats, this section includes the following topics:

- Customizing the List of Values Security for HTML Tasks, page 23-12
- Customizing the List of Values Security for Tasks in Oracle Applications Framework and Forms, page 23-19

## Customizing the List of Values Security for HTML Tasks

Based on the existing AOL data security model, HTML Task Manager allows you to customize security for the resource list of values by using the concepts of object instances or object instance sets.

> **Note:** The resource list of values can be resources of any category (employee, party, partner, supplier contact, group, team, other, and to be hired).

> **Note:** In addition, resource LOV security functionality is based on resources. Therefore, it applies to owner, assignee, and reference (relate to) if it is defined based on resources. It does not apply to any customer/contact LOV (such as organization, person, or relationships) and reference other than resources (such as customer/contact and lead.)

**Business Reason**

For example, a sales manager is responsible for a special deal that only involves limited resources. To make sure that relevant tasks created for that deal are only restricted to certain people, the system administrator can create a specific set of resources and then

grant them to the sales manager. Thus, the manager will only see those resources shown in the resource (owner or assignee) list of values when creating a task.

For the similar reason, another set of resources can be granted to sales representatives. As a result, the sales representatives will not be able to see the resources granted to the sales manager, and the manager will not see the resources granted to the representatives.

Before introducing necessary steps to customize resource LOV, it is important to understand JTF object changes and other seeding strategy made in Task Manager to support the LOV security.

## JTF Object

In order to support the LOV data security, Task Manager modifies the JTF object metadata form by adding two extra columns grouped in the Data Security Setup region of the LOV and Data Security tab. This establishes the link between JTF_OBJECTS for existing LOV and FND_OBJECTS for all task data security objects.

Because in Tasks, on one hand, all LOVs are rendered using the common LOV Renderer. The LOV Renderer uses JTF_OBJECTS as metadata repository providing input to all needed data when generating the LOV in a query. This query may be defined at design time or generated dynamically from JTF_OBJECTS. The LOVs addressed here are all generated dynamically.

On the other hand, all data security objects are newly defined in the FND_OBJECTS.

In order to build connection between these two so that the existing LOV could have an extra security build on top of it, Task Manager uses the Data Security Setup region in the JTF object metadata form to establish the link.

To access the security set up region, log on with the CRM Administrator responsibility, select the Task and Escalation Manager > Setup > Objects Meta-data.

There are two new fields in the LOV and Data Security tab:

- **Object Name**: It is the object name for a corresponding JTF_OBJECTS code and serves as the foreign key to FND_OBJECTS. This field is not required and can be empty (null).
- **Predicate Alias**: It adds security information to application query. It should only be used to avoid ambiguity when LOV query contains more than one table joined by data object primary key(s) values. For example, if two tables ("jtf_tasks_b" and "jtf_tasks_tl") are used, then it must be entered with either "jtf_tasks_b" or "jtf_tasks_tl". Otherwise Oracle DBMS will report ambiguous task_id reference at the run time.

  If this field is entered and the object name is not null, the value will be passed to an internal API to add security to a generated query for the LOV. However, if the object name is empty, then security predicate will not be added to the generated query.

## Other Seeding Strategy

In addition to the JTF object change, HTML Task Manager also makes the following changes in order to support the LOV security:

## Creating Privilege (Function) and Role (Menu)

- JTF_TASK_RESOURCE_ACCESS privilege (registered in the FND_FORM_FUNCTIONS table)
- JTF_TASK_RESOURCE_ACCESS role (registered in the FND_MENUS table) or JTF_TASK_RESOURCE_ACCESS role (registered in the FND_MENU_ENTRIES table)

  **Note:** This security role (menu) JTF_TASK_RESOURCE_ACCESS is replaced by CAC_TASK_RESOURCE_ACCESS for the resource list of values security access used for Tasks in Forms and Oracle Applications Framework.

## Registering LOV Object Data

Task resource LOV security references the following business objects seeded into JTF Objects:

***Seeded Object Data***

| JTF Object Code | FND Object Name |
|---|---|
| RS_EMPLOYEE | JTF_RS_RESOURCE_EXTNS |
| RS_GROUP | JTF_RS_GROUPS |
| RS_TEAM | JTF_RS_TEAMS |
| RS_INDIVIDUAL | JTF_RS_RESOURCE_EXTNS |
| RS_OTHER | JTF_RS_RESOURCE_EXTNS |
| RS_PARTNER | JTF_RS_RESOURCE_EXTNS |
| RS_PARTY | JTF_RS_RESOURCE_EXTNS |
| RS_SUPPLIER_CONTACT | JTF_RS_RESOURCE_EXTNS |
| RS_TBH | JTF_RS_RESOURCE_EXTNS |

## Creating Global Grants

In order to provide backward compatibility, the following global grants are shipped:

- Any user can see any resource:

```
FND_GRANTS
GRANTEE_TYPE = "GLOBAL"
GRANTEE_KEY= "GLOBAL"
MENU_NAME = "JTF_TASK_RESOURCE_ACCESS"
OBJECT_NAME = "JTF_RS_RESOURCE_EXTNS"
INSTANCE_TYPE = "GLOBAL"
```

- Any user can see any resource group:

```
FND_GRANTS
GRANTEE_TYPE = "GLOBAL"
GRANTEE_KEY= "GLOBAL"
MENU_NAME = "JTF_TASK_RESOURCE_ACCESS"
OBJECT_NAME = "JTF_RS_GROUPS"
INSTANCE_TYPE = "GLOBAL"
```

- Any user can see any resource team:

```
FND_GRANTS
GRANTEE_TYPE = "GLOBAL"
GRANTEE_KEY= "GLOBAL"
MENU_NAME = "JTF_TASK_RESOURCE_ACCESS"
OBJECT_NAME = "JTF_RS_TEAMS"
INSTANCE_TYPE = "GLOBAL"
```

If a system administrator decides to set the LOV security, then she or he should first disable corresponding global grant for the LOV data object by setting an end date to the specific global grant.

### Customizing Resource LOV

The resource LOV can be further customized if necessary before it is granted to resources or resource groups. Therefore, it is necessary to understand when the customization needs to be done, page 23-15 and how it can be done, page 23-16. In addition, how to grant the LOV to a user, page 23-17 is also addressed here.

## When to Customize the Resource LOV

The system administrator can grant an individual resource, all resources, or a specific set of resources to another resource, group of resources, or all resources.

## Grant An Individual Resource

For example, in the lowest security level and the most gradual one, a system administrator can grant a single employee resource (resource number 1234) access to the following grantee(s):

- A user "John Doe"
- All members of a resource group (group number 9876)
- All users

## Grant All Resources

As opposite to the previous one, in the most global security level, the administrator may grant all resources (global access) to another resource, all members of a resource group, or all users.

## Grant A Specific Set of Resources

When there is a need to grant a specific set of resources to a user, all members of a resource group, or all users, the administrator can customize the resource LOV by using object instance sets.

## Defining Object Instance Sets

For example, a company wants to grant access of a specific set of resource to a user, all members of a resource group, or all users.

This specific set of resources can be created by first registering a new parameterized object instance set using the following data:

```
FND_OBJECT_INSTANCE_SETS
INSTANCE_SET_NAME = "X_JTF_RS_GROUP_MEMBERS"
DISPLAY_NAME = "Members of Resource Group"
DESCRIPTION = "Members of Resource Group"
OBJECT_NAME = "JTF_RS_RESOURCE_EXTNS"
PREDICATE =
"&TABLE_ALIAS.resource_id IN (SELECT resource_id FROM jtf_rs_group
_members WHERE TO_CHAR(group_id) = &GRANT_ALIAS.PARAMETER1)"
```

- Please note that &TABLE_ALIAS is added as column alias in order to avoid problems with conflicting column names during runtime execution.

  **Note:** Any new instance set must be designed very carefully. It must be error free and should perform well. Because any error introduced by the new set(s) can cause data corruption or erroneous behavior in Task Manager.

Use the following steps to define object instance sets:

## Prerequisites

An object must be in place.

## Responsibility

FND Security Administration (Self Service Application)

## Navigation

Objects

## Steps

**Tips**: First locate the object that you want a new instance set created for, then enter necessary information for the set.

1. Enter necessary search information in the Find Objects window to locate the JTF_TASKS object. Search results should be listed after executing the search.

2. Click the object name hyperlink for which you want the new instance set to be created from the search result to open the Find Object Instance Set window.
3. Existing instance sets for the selected object are also listed here. Click **Create New Instance**.
4. Enter instance set detail information including instance set name, display name, description and predicate.
5. Save your work.

Detailed information on how to define object instance sets, see *Oracle Applications System Administrator's Guide*.

## Guidelines

Once the instance set is registered, it can be granted to another resource, group of resources, or all resources. The system administrator needs to set resource group_id in the grant PARAMETER1.

## Granting the LOV to a User

Before adding new grants, it is necessary to first disable the existing grants or necessary seeded global grants so that they will not interfere with the new grants.

## Disabling Existing Grants

To temporarily disable the existing grants, the system administrator can set the end date for the existing grants, instead of deleting them completely.

## Prerequisites

None

## Responsibility

FND Security Administration (Self Service Application)

## Navigation

Grants

## Steps

1. Search the existing grants that you want to disable by entering search criteria in the Search Grants window.
2. Click **Go** to retrieve the grants that match your search criteria.
3. Select the grant that you want to disable from the search result.
4. Set an end date in the Context window and click **Finish** to disable the grant.

More information on how to disable existing grants, see *Oracle Applications System Administrator's Guide.*

## Adding New Grants

Once the customized resource LOV (object instance set) is created and registered, it can be granted to another resource, group of resources, or all resources.

Please note that the administrator can grant users or user groups (grantee) with different levels of data access privileges. The access can be granted to function (menu) level (such as "Administrator" role) or further down to the data level (such as the LOV data level) depends on users or business needs.

Since the LOV access privilege controls the row level of data access, whenever there is a need to create a new grant for LOV security access, use the data grant functionality to add this grant.

For example, if group number 10000123 contains all resources defined for the LOV in the object instance set, then the administrator can use data grant functionality to grant the LOV access to user21. As a result, the user can see all members of resource group 10000123 while creating a task. The data grant information should be like:

```
FND_GRANTS
GRANTEE_TYPE = "USER"
GRANTEE_KEY= "USER21"
MENU_NAME = "JTF_TASK_RESOURCE_ACCESS"
OBJECT_NAME = "JTF_RS_RESOURCE_EXTNS"
INSTANCE_TYPE = "SET"
INSTANCE_SET_NAME = X_JTF_RS_GROUP_MEMBERS"
PARAMETER1 = "10000123"
```

Use the following steps to add a new grant:

## Prerequisites

None

## Responsibility

FND Security Administration (Self Service Application)

## Navigation

Grants

## Steps

1. Select **Create Data Grant** to add new grants to sales managers or sales representatives.
2. In the Object window, select JTF_TASKS as the object name.
3. In the Grantee window, select an appropriate radio button.
4. In the Function Set window, specify a menu name, such as JTF_TASK_RESOURCE_ACCESS.
5. In the Data Set window, select the A parameterized set of rows (Data Set) radio button. Furthermore, specify the appropriate object instance set that you want to grant to the grantee.

6. In the Data Set Details window, enter appropriate primary key values.
7. In the Context window, enter appropriate organization, responsibility and start date information. Leave the End Data field blank.
8. Enter JTF_TASKS in the Program Name field.
9. Enter appropriate information in the Program Tag field.
10. Click **Finish**. Once it is done successfully, the confirmation page opens with the message saying that the grant has been created.

More information on how to create data grants, see *Oracle Applications System Administrator's Guide.*

## See Also

- Setting the Security Profile Option, page 23-10
- Granting Manager-Directs Security Access, page 23-24
- Task Security Overview, page 23- 1
- Troubleshooting Task Data Security, page 23-30

## Customizing the Resource List of Values Security for Tasks in Oracle Applications Framework and Forms

The new enhancement of Task's the resource list of values (LOV) security based on VPD policy allows managing a row level security for a database object which makes it possible for Tasks to further support product specific security rules. This VPD security model for the resource LOV security access in Tasks Forms and the Oracle Applications Framework based Tasks continues to:

- Use AOL Data Security model as the repository for data security definition and the main tool for customization.
- Use existing JTF Objects for different applications to integrate with various common application components. There are no changes to JTF Objects for VPD model.

> **Note:** The resource list of value security access discussed here is restricted to the assignee list of values with resource types of employee, group, and team only.

### Task Resource LOV Security Seeding Strategy

Instead of having multiple views per an object, Task Manager registers necessary data into JTF Objects along with other seeded components.

## JTF Objects

Task resource LOV security references the following business objects seeded into JTF Objects:

*Seeded Object Data*

| JTF Object Code | FND Object Name | Referenced Object (Table/ View) |
|---|---|---|
| RS_EMPLOYEE | JTF_RS_RESOURCE_EXTNS | JTF_RS_EMP_DTLS_VL |
| RS_GROUP | JTF_RS_GROUPS | JTF_RS_GROUPS_VL |
| RS_INDIVIDUAL | JTF_RS_RESOURCE_EXTNS | JTF_RS_DTLS_VL |
| RS_OTHER | JTF_RS_RESOURCE_EXTNS | JTF_RS_RESOURCE_EXTNS A, JTF_RS_SALESREPS B |
| RS_PARTNER | JTF_RS_RESOURCE_EXTNS | JTF_RS_PARTNER_DTLS_VL |
| RS_PARTY | JTF_RS_RESOURCE_EXTNS | JTF_RS_PARTY_DTLS_VL |
| RS_SUPPLIER_CONTACT | JTF_RS_RESOURCE_EXTNS | JTF_RS_SUPPLIER_DTLS_VL |
| RS_TBH | JTF_RS_RESOURCE_EXTNS | JTF_RS_RESOURCE_EXTNS A, JTF_RS_SALESREPS B |
| RS_TEAM | JTF_RS_TEAMS | JTF_RS_TEAMS_VL |

## Other Seeding Data

Task Manager resource LOV security uses the following seeded data to allow one function or view per an object:

- **Security Privileges (Functions)**. These form functions are defined on existing resource objects.
  - CAC_TASK_RS_EXTNS_SEC for the object JTF_RS_RESOURCE_EXTNS
  - CAC_TASK_RS_GROUPS_SEC for the object JTF_RS_GROUPS
  - CAC_TASK_RS_TEAMS_SEC for the object JTF_RS_TEAMS

  These new privileges are seeded in the FND_FORM_FUNCTIONS table.
- **Security Role (Menu)**. These three new functions are added as menu entries to the followings:
  - Existing menu, JTF_TASK_RESOURCE_ACCESS, for backward compatibility. This menu is deprecated for Tasks in Oracle Applications Framework and Forms and is replaced by the new menu.

    The existing privilege JTF_TASK_RESOURCE_ACCESS is used only in HTML Tasks to support backward compatibility.
  - New menu, CAC_TASK_RESORCE_ACCESS

    This new menu is seeded in the FND_MENUS table or FND_MENU_ENTRIES table.
- **Security Views**. Database views defined on top of existing resource tables:
  - CAC_TASK_RS_EXTNS_SEC on top of table JTF_RS_RESOURCE_EXTNS

- CAC_TASK_RS_GROUPS_SEC on top of table JTF_RS_GROUPS
- CAC_TASK_RS_TEAMS_SEC on top of table JTF_RS_TEAMS

- **VPD Policies**. Common policy is attached to all secured views:
  - CAC_TASK_RS_EXTNS_POL attached to the CAC_TASK_RS_EXTNS_SEC view
  - CAC_TASK_RS_GROUPS_POL attached to the CAC_TASK_RS_GROUPS_SEC view
  - CAC_TASK_RS_TEAMS_POL attached to the CAC_TASK_RS_TEAMS_SEC view

### Impact on Existing HTML Tasks

Since Task Manager creates three new privileges (functions) and one new role (menu), CAC_TASK_RESORCE_ACCESS, to replace existing role, JTF_TASK_RESOURCE_ACCESS, for backward compatibility, future customization in HTML Task security specifically for the resource list of values security, implementors or system administrators need to use the following new resource privileges. The existing task privilege JTF_TASK_RESOURCE_ACCESS will be depreciated.

- CAC_TASK_RS_EXTNS_SEC (for all individual resources)
- CAC_TASK_RS_GROUPS_SEC (for resource groups)
- CAC_TASK_RS_TEAMS_SEC (for resource teams)

All these new privileges are also added to the existing JTF_TASK_RESOURCE_ACCESS role (menu), so that all existing grants will be automatically uptaken.

For integrated applications that have added task privileges to customized roles, the administrator only need to add new privileges to these roles so that the security rules can be automatically applied.

### Uptake Instructions

Applications that want to uptake this resource LOV security should use the following instructions based on the uptake methods:

## Uptake with Standard Task Resource Security

The standard resource LOV security is applied automatically in Task Manager, so that there is no any specific instruction for applications that will uptake tasks along with the standard resource security.

Example of Building a Secured Resource Query

The task applications code will simply query data by using the secured view instead of the base table. Predicate will be applied automatically by VPD policy.

```
String query = “SELECT b.group_id, l.group_name, l.group_desc “ +
 "FROM cac_task_rs_groups_sec b, jtf_rs_groups_tl l “ +
 “WHERE b.group_id = l.group_id  AND l.language = userenv(‘LANG’);
”;
```

## Uptake with Product Specific (Non-Standard) Resource Security

To incorporate enhanced the resource LOV security into your product, follow these instructions:

1. Define a privilege, AOL Data Security function, name on each resource object you want to secure for your product.
2. Define a view or synonym with the exactly same name, just a plain definition: "SELECT * FROM <resource fnd object>". This is done through XML Definition File (XDF) technology.

   **Note:** The XML Definition File (XDF), the next generation version of the current Object Definition File (ODF) utility, is used to provide support for capturing and altering the definitions for all schema Object types used by Oracle Applications and to eventually replace the ODF Utility.

3. Attach common AOL policy to the view. This is done through XDF technology.
4. Seed initial grants if any, such as global grants to support backward compatibility.
5. Pass product specific parameters to Task Manager for each privilege you want to replace in Forms or pass a class implementation in Oracle Applications Framework.

**For Product Specific Resource LOV Security in the Oracle Applications Framework based Tasks**

To support dynamic predicate binding into data security objects if passed by product specific security context, Task Manager adds one additional parameter to the **TaskAssigneeSecurity** interface to allow dynamic bindings of system context before the secured object is queried:

```
cacTaskAssigneeSecurityImpl = "oracle.apps.myproduct.MyTaskAssign
eeSecurityImpl";
```

However, if provided class does not exist or cannot be instantiated or executed by the Tasks module, then a run-time exception will be generated.

Example of Query Secured Resources for Tasks in Oracle Applications Framework

1. Translate the class name into a class object

   ```
   Class c = Class.forName(<value of parameter cacTaskAssigneeSecuri
   tyImpl>);
   ```

2. Reflective instantiation with interface access

   ```
   TaskAssigneeSecurity mySecurity = (TaskAssigneeSecurity) c.newIns
   tance();
   ```

3. Set context if it is not null

   ```
   mySecurity.setGroupContext();
   ```

4. Build an LOV query before executing it

```
String query = “SELECT b.group_id, l.group_name, l.group_desc ” +
 “FROM “ + mySecurity.getGroupFuncName() + “ b, jtf_rs_groups_tl l
 ” +
 “WHERE b.group_id = l.group_id   AND l.language = userenv(‘LANG’)
;”;
```

**For Resource LOV Security Access in Forms-Based Tasks**

Applications that want to uptake this security should set the necessary context in the parent form, such as Service Request Form, to implement the resource LOV security. If the context is set, then the parent form will pass parameters (function names) to the Task Manager form.

If a parameter value is not null, then the secured views are used to query resources. Otherwise, the JTF Objects metadata will be used.

> **Note:** When defining JTF Objects metadata in the metadata setup window, implementors can select the "From Task" check box for a specific source if tasks can be created, updated, and deleted using the standalone Task Manager. If it is unchecked, then tasks can be queried in read-only format from the Task Manager Forms. Any updates to the tasks should be made from the parent applications.

Additionally, the following three parameters should be passed to Task Manager form:

- Employee Resource: TASK_ASG_LOV_EMP_SEC
- Group Resource: TASK_ASG_LOV_GROUP_SEC
- Team Resource: TASK_ASG_LOV_TEAM_SEC

Example of Query Resources Using Metadata in Forms

```
If (l_source_object_type_code = ’RS_GROUP’) then
    l_task_asg_lov_group_sec := name_in(’parameter.task_asg_lov_gr
oup_sec’);
    If (l_task_asg_lov_group_sec != null) then
   l_sql_query := ’SELECT b.group_id, l.group_name, l.group_desc’|
|
         ’ FROM ’ ||  l_task_lov_group_sec || ’ b, jtf_rs_groups_t
l l ’ ||
         ’ WHERE b.group_id = l.group_id   AND l.language = useren
v("LANG")’;
   else
   (Use JTF Objects metadata to query group resources;)
    end if;
end if;
else  if  (l_source_object_type_code = ’RS_TEAM’) then
  (Use JTF Objects metadata to query team resources;)
else if  (l_source_object_type_code = ’RS_EMPLOYEE’) then
  (Use JTF Objects metadata to query employee resources;)
end if;
```

## Uptake Considerations

Task Manager recommends using of the standard resource privileges, not product specific privileges, if you can when uptaking this security feature. Because standard resource privileges, providing standard "one-place” data security setting in your

applications to secure tasks access, are seeded with Task Manager which requires no further implementation step.

Applications can use product specific privileges to uptake this resource LOV security only if there are product specific security requirements in place.

> **Note:** Be aware that the product specific privileges belong to the product owner and should be developed, and maintained by the product team, not by Task Manager.

## Granting Manager-Directs Security Access

In order to support reporting hierarchy used in Sales or Support organizations, HTML Tasks and Tasks in Oracle Applications Framework allow group managers who have effective manager's role to have appropriate privileges to access their direct's tasks if necessary permissions are granted to them. Sales managers, for example, can view their direct's tasks and be able to track possible sales related activities performed for a particular week.

Before granting any security access privileges to managers, we should first understand:

- The Functionality of Manager-Directs Security Access, page 23-24
- Definition of Reporting Hierarchy (how the group is defined), page 23-27
- Seeding Strategy, page 23-27
- Other Limitations, page 23-27
- Customize the Manager-Directs Security Access, page 23-28

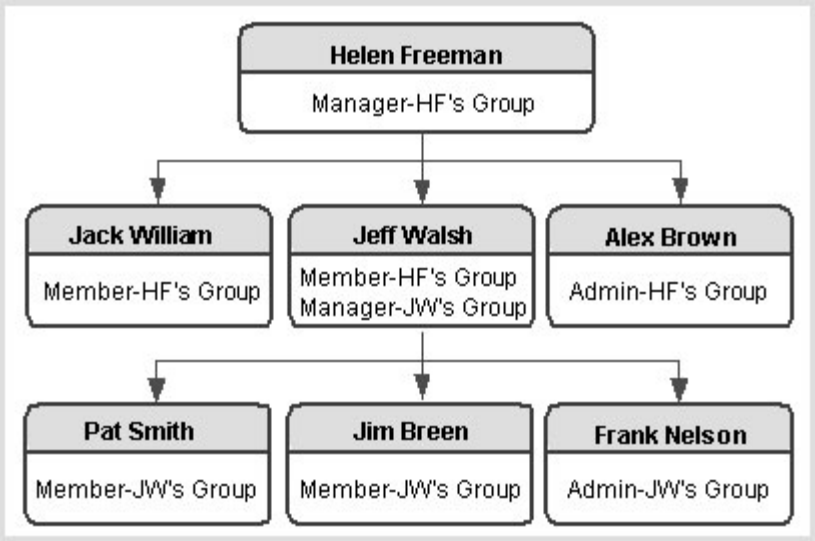
### The Functionality of Manager-Directs Security Access

Task Manager uses the manager-direct security access functionality to grant group managers an appropriate access privilege (read only or full access) to view or update their resource group member's non-private tasks.

Use the following example to understand how this functionality works in a resource group hierarchy.

- For example, a resource group is lead by Helen Freeman who has three directs reporting to her. These three directs are Jack William, Jeff Walsh, and Alex Brown who plays the administrator in Helen's group. Jeff Walsh who reports to Helen has three group members directly reporting to him. They are Pat Smith, Jim Breen, and Frank Nelson who plays the administrator role.

*The Helen Freeman's Group Hierarchy*




After this resource group is organized, the hierarchical data will be denormalized and populated in the table JTF_RS_REP_MANAGERS as follows:

***Group Denorm Data in the JTF_RS_REP_MANAGERS TABLE***

| Member Name | Associated Group | Hierarchy Type | Parent Resource Name | Denormal-ization Levels |
|---|---|---|---|---|
| Alex Brown | HF's group | ADMIN_TO_ ADMIN | Alex Brown | 0 |
| Jeff Walsh | HF's group | MGR_TO_MGR | Helen Freeman | 1 |
| Jeff Walsh | JW's group | MGR_TO_MGR | Helen Freeman | 1 |
| Jim Breen | JW's group | MGR_TO_REP | Helen Freeman | 1 |
| Frank Nelson | JW's group | MGR_TO_ADM | Helen Freeman | 1 |
| Pat Smith | JW's group | MGR_TO_REP | Helen Freeman | 1 |
| Alex Brown | HF's group | MGR_TO_ADM IN | Helen Freeman | 0 |
| Helen Freeman | HF's group | MGR_TO_MGR | Helen Freeman | 0 |
| Jack William | HF's group | MGR_TO_REP | Helen Freeman | 0 |
| Jeff Walsh | HF's group | MGR_TO_REP | Helen Freeman | 0 |
| Pat Smith | JW's group | REP_TO_REP | Pat Smith | 0 |
| Jim Breen | JW's group | REP_TO_REP | Jim Breen | 0 |
| Jack William | HF's group | REP_TO_REP | Jack William | 0 |
| Frank Nelson | JW's group | ADM_TO_ADM | Frank Nelson | 0 |
| Pat Smith | JW's group | MGR_TO_REP | Jeff Walsh | 0 |
| Frank Nelson | JW's group | MGR_TO_ADM | Jeff Walsh | 0 |
| Jim Breen | JW's group | MGR_TO_REP | Jeff Walsh | 0 |
| Jeff Walsh | JW's group | MGR_TO_MGR | Jeff Walsh | 0 |
| Jeff Walsh | HF's group | REP_TO_REP | Jeff Walsh | 0 |

**Note:** In addition to the columns in the JTF_RS_REP_MANAGERS table, the following columns must be considered:

- START_DATE_ACTIVE
- END_DATE_ACTIVE

After understanding the functionality of the manager-directs access and how it works, the definition of a reporting hierarchy should be further identified.

### Definition of Reporting Hierarchy

The definition of manager-subordinate hierarchy used for granting security access is based on the resource Group Hierarchy defined in Resource Manager. It is not based on the Human Resource (HR) reporting structure defined in the HR system.

## Group Hierarchy in Resource Manager

While defining resource group hierarchy in Resource Manager, each resource will perform certain roles in a resource group. For example, a sales group can be organized by a few sales representatives and a sales manager. The sales representative and sales manager are the roles that are associated with each resource in that group.

In order to determine the reporting hierarchy in a group, each role is also associated to a specific role attribute. When a role is assigned to a resource, a role attribute is also given to that resource simultaneously. A sales representative role is associated with a member role attribute, and a sales manager role is linked to a manager role attribute. Therefore, group members with sales representative roles could report to the group member with sales manager role in the sales resource group mentioned earlier.

Each resource group can be formed for a specific period of time, so as to the group member's roles. Therefore, when an end date (END_DATE_ACTIVE) is specified for a resource group or for any resource role of the group members, that group or a specific role can be terminated.

For more information, see Resource Manager chapter in the *Oracle Common Application Components Implementation Guide*.

## Highlights of Group Hierarchy For the Manager-Directs Security Access

Since the manager-directs security grant functionality is based on the group hierarchy defined in Resource Manager, not HR hierarchy, it is possible to have multiple managers in one resource group, and these managers will all be granted with security access to view or update their direct's tasks for HTML Tasks and the Oracle Applications Framework based Tasks.

In addition, as resource groups and roles can be terminated, only the managers who have effective manager's roles can be granted with security access to their direct subordinate's tasks. This grant only works if the managers belong to an effective resource group. If one of the manager's subordinates left the group, or the role has been terminated, then the manager will not be able to see the subordinate's tasks even if the manager has full access privilege.

> **Note:** Although full access is granted to a group manager, that manager still cannot see his or her direct's private tasks.

### Seeding Strategy

A new object instance set JTF_TASK_MANAGER_SECURITY is seeded in Tasks to support the manager-directs security grant functionality.

### Other Limitations

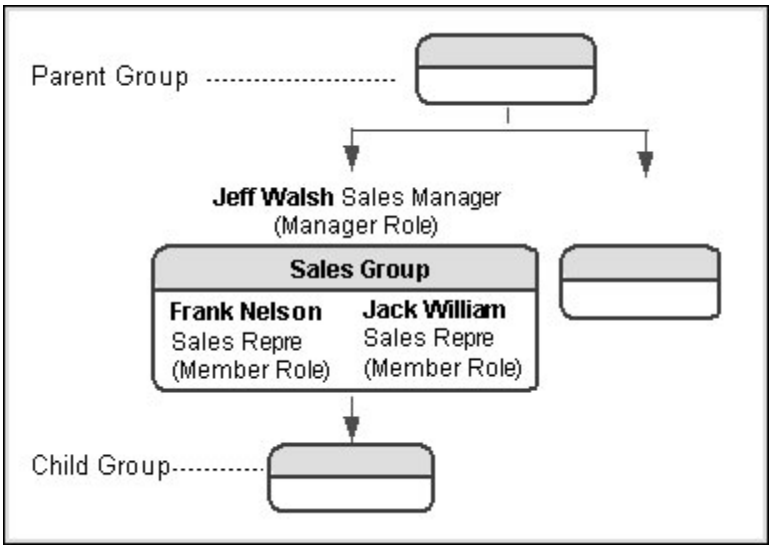
Task Manager supports the manager-directs security grants, however, there are some restrictions for performance reasons and avoiding complexity.

## Only Support "Manager" and "Member" Role Attributes

Resource Manager uses four role attributes (manager, admin, lead, and member) to associate a resource role while defining a resource role. However, this functionality only supports the Manager and Member role attributes.

## Only Support One Level of Group Hierarchy

***Resource Group Hierarchy***




A group might have parent groups and child groups. However, Task Manager only supports one level of group hierarchy for the manager-directs security access. This means that a manager can only be granted with access of his subordinate's tasks of one level below him. It does not include any multiple levels beneath. In other words, this grant only limits to one group. It does not extend to its parent or child groups.

## Only Implemented in HTML Tasks and Oracle Applications Framework based Tasks

This functionality only applies to HTML Tasks and the Oracle Applications Framework based Tasks. It is not implemented in the Forms-based Tasks.

### Customizing Manager-Directs Security Access

Use the following steps to grant security access to group managers:

- Defining Resource Group Hierarchy, page 23-28
- Granting Security Access to Relevant Resources, page 23-29

### Defining Resource Group Hierarchy

Use Oracle Resource Manager to define resource group hierarchy.

**Note:** After defining appropriate groups, the group hierarchical data is denormalized and populated in the table JTF_RS_REP_MANAGERS.

Detailed information on how to define employee resources, group resources, and assigning appropriate group member roles to each group member, see Resource Manager chapter,*Oracle Common Application Components Implementation Guide*.

### Granting Security Access to Relevant Resources

Once the appropriate group hierarchy is identified, system administrator can grant the seeded object instance set JTF_TASK_MANAGER_SECURITY with read only or full access to appropriate group managers.

Use the following steps to add a new grant to resource group managers:

## Prerequisites

None

## Responsibility

FND Security Administration (Self Service Application)

## Navigation

Grants

## Steps

1. Select **Create Data Grant** to add new grants to sales managers or sales representatives.
2. In the Object window, select JTF_TASKS as the object name.
3. In the Grantee window, select an appropriate radio button.
4. In the Function Set window, specify a menu name (JTF_TASK_READ_ONLY or JTF_TASK_FULL_ACCESS) for either read only or full access.
5. In the Data Set window, select the A parameterized set of rows (Data Set) radio button. Furthermore, specify the seeded object instance set JTF_TASK_MANAGER_SECURITY.
6. In the Context window, enter appropriate organization, responsibility and start date information. Leave the End Data field blank.
7. Enter JTF_TASKS in the Program Name field.
8. Enter appropriate information in the Program Tag field.
9. Click **Finish**. Once it is done successfully, the confirmation page opens with the message saying that the grant has been created.

More information on how to create data grants, see *Oracle Applications System Administrator's Guide.*

## See Also

- Setting the Security Profile Option, page 23-10
- Customizing List of Values Security Access, page 23-12
- HTML Task Security Overview, page 23- 1
- Troubleshooting HTML Task Data Security, page 23-30

## Troubleshooting Task Data Security

System administrator must perform the following steps in order for task owners to have full access to the tasks that they just created. Otherwise, they will have read only access to these tasks.

1. Use Adadmin to compile menus
2. Bounce the middle tier after compiling menus

## See Also

- Task Security Overview, page 23- 1
- Customizing Tasks Data Security, page 23-10

# 24

# Troubleshooting Task Manager

This chapter covers the following topics:

- Common Implementation Errors
- Answers to Frequently Asked Questions (FAQs)

## Common Implementation Errors

### Task Search On Name Does Not Return Results

If the Quick Find or the personalized search on task names does not return results, then rebuild the Intermedia index.

This can be done one of three ways.

- Manually rebuilding the Intermedia index using the alter index command.
- Starting the ctxsrv server daemon for background DML processing. For more information, consult the *Oracle8i interMedia Text Reference.*
- Run the Task Manager concurrent program, Rebuilding Intermedia Index for Task Names.

### UOM is Invalid or Disabled

If you experience this problem, perform the following:

1. The Time Unit of Measure class must be defined in the Inventory module. For this Time Unit of Measure class, define the Unit of Measure codes (such as Hours, Minutes, etc.)

   For details on defining the Unit of Measure class, refer to the*Inventory Users Guide*.

2. The profile "Time Unit Of Measure Class" must be set to Time Unit of Measure class defined in the inventory module.

## Answers to Frequently Asked Questions (FAQs)

The following are frequently asked questions. Answers to these questions may help you in troubleshooting problems with Task Manager.

## How Do You Map Task Types, Priorities, and References?

You can map task types, task priorities, and references to any source using the Object Mapping window. In both the HTML and the Forms-based Task Manager, priorities and date types that are mapped to a source and those that are not mapped to any source appear in the corresponding LOV, in the Forms-based version, or in the drop-down list in the HTML version. For references, only mapped types, priorities, and date types appear in the HTML user interface (UI). For information on how to map task types, priorities, and references, see the following sections:

- Defining Task Priorities, page 21-13
- Defining Task Types, page 21- 1
- Defining Task Date Types, page 21-15
- Defining Task and Notes Reference Mapping, page 21-16

## What is the Difference Between Task Types and Task Categories?

Task types are fixed for a given user. However, you can define and maintain personal categories for use in the HTML Task Manager during task creation.

## Can You Close a Parent Service Request When the Task is Still Open?

The Restrict Closure flag on the task tab determines whether or not to allow the closure of a parent service request, when the task is open. If this check box is selected and the task status is open, meaning the status does not have the Closed flag checked, then the parent service request (SR) cannot be closed. Any task status without the Closed flag turned on is considered Open.

# 25

# Calendar Implementation Overview

This chapter covers the following topics:

- Overview
- HTML Calendar Overview
- Forms-based Calendar Overview

## Overview

The Calendar module contains two distinct functionalities. It can be used with other applications to help organizations in scheduling resources, or it can be used to help individual or group resources in managing daily activities and appointments. With these two different functionalities, implementing Calendar involves two separate setup procedures.

When Calendar is used for organizations in scheduling resources and assigning work shifts, the implementor or system administrator must define an appropriate calendar used for scheduling, define resource availability as work shifts, define resource unavailability as exceptions, assigning shifts and exceptions to a calendar, and then assigning resources to that calendar.

If Calendar is used to help individual or group resources in managing daily activities for personal or group calendars, then the implementor or system administrator must first integrate the Calendar module by adding the Calendar tab to an appropriate responsibility, create a calendar administrator who is responsible for new group calendar request approvals, create calendar general users, change calendar administrator if necessary, implement calendar events so that calendar events, such as marketing campaigns, can be displayed in the personal calendar in addition to appointments and tasks, set necessary profile options, and start workflow processes.

Therefore, before implementing Calendar, it is necessary to understand which functionality of Calendar in particular will be used in your organization. It can be distinguished by the Forms-based Calendar and HTML Calendar.

### Forms-based and HTML Versions of Calendar

Calendar was initially a Forms-based application and used mainly for resource scheduling and work shift assignment. This includes defining and viewing available and unavailable times for an employee resource, as well as creating personal to-dos using Calendar Datebook functionality.

With the expansion of Calendar functionality, the Calendar module includes an HTML version. But the functionality of the HTML version is different from the Forms-based Calendar. The HTML Calendar is used as a personal productivity tool to help individual or group resources in managing their daily activities and appointments. This includes creating appointments or tasks for an individual resource, a group or public calendar, inviting attendees for the appointments, and viewing scheduled appointments through calendar daily, weekly, monthly, combination, and yearly views.

> **Note:** With recent expansion, Calendar developed for Oracle Common Application Calendar adopts Oracle Applications Self–Service Framework, the standard HTML development and deployment platform for Oracle Self–Service Applications, to provide another HTML version of essential calendar screens for integrated applications to uptake these features while re-building their functions. Calendar in Oracle Applications Framework is not fully compatible with HTML Calendar user interface. For basic implementation tasks, see Implementing the Oracle Applications Framework Based Calendar chapter. For detailed information implementation and use features of the integrated applications, please consult product specific documentation.

As each version of the Calendar module contains different functionalities, the setup steps for each version require separate implementation procedures.

This chapter provides an overview of both the HTML and Forms-based Calendar implementation processes.

# HTML Calendar Overview

Think of using the HTML Calendar as a personal productivity tool. Individual resources can use it to define and view personal daily activities and appointments. Users can create appointments, tasks or other calendar events, invite attendees for the appointment, and view scheduled activities through different calendar views.

In addition, the HTML Calendar provides an effective mechanism for users to manage group activities by using group or public calendars. Calendar users can request new group or public calendars and get request approvals from the Calendar Administrator. Once the request has been approved, the requestor of the new group calendar becomes the group calendar owner or Group Calendar Administrator of that group calendar and is responsible for any future approvals of that group calendar subscription requests.

To implement HTML Calendar, implementors can embed the Calendar tab into an existing Oracle E-Business Suite module if necessary. The implementor or system administrator must then create a Calendar Administrator. The Calendar Administrator, typically a workflow administrator or system administrator, creates individual calendar users later and is responsible for approving or rejecting new group and public calendar requests as well as starting and stopping required workflow processes.

## Setup Dependencies

To be able to use the full functionality of HTML Calendar, the following components must be set up properly:

- **HTML Task Manager**. Use HTML Task Manager to schedule appointments and tasks, and to create repeating appointments for meetings.
- **HTML Resource Manager**. Use HTML Resource Manager to retrieve individual resources for an appointment.
- **Oracle Workflow**. Use Oracle Workflow to send workflow notifications for processing new group calendar requests and subscription requests to existing group calendars.
- **HTML Tech Stack**. Use HTML Tech Stack to display the HTML functionality.

HTML Calendar also uses Accounts Receivable profile options to set the default client and server time zones for a user.

### HTML Calendar Implementation Steps

This section provides an overview of the following required steps for implementing HTML Calendar. Detailed instructions for these steps are contained in the subsequent chapters.


- Adding a Calendar Tab to a Responsibility, page 25- 3
- Creating a Calendar Administrator, page 25- 3
- Creating a Calendar User, page 25- 4
- Changing a Calendar Administrator, page 25- 4
- Implementing Calendar Events, page 25- 4
- Integrating with Web Mail, page 25- 4
- Setting Profile Options, page 25- 4
- Starting Workflow Processes, page 25- 5
- Running Concurrent Programs, page 25- 5
- Publishing Business Events for Appointments, page 25- 5


## Adding a Calendar Tab to a Responsibility

If the application that you want to integrate with HTML Calendar already has a profile menu, then the implementor or system administrator can add calendar profile node "JTF HTML Calendar Profile Preferences" to their profile main menu, JTF HTML Calendar Main Menu. As a result, the Calendar tab will appear in the application user interface.

## Creating a Calendar Administrator

After integrating HTML Calendar into your applications, the implementor or system administrator must identify one employee resource to become the Calendar Administrator. The Calendar Administrator has the privilege to grant approval or rejection to all new group and public calendar requests through workflow notifications.

Creating a Calendar Administrator involves several steps. This includes assigning appropriate responsibilities to the user who becomes the Calendar Administrator, associating the user with the "JTF HTML Calendar: Administrator" profile option, and assigning additional profile options to the user if the standalone HTML Calendar is used.

## Creating a Calendar User

Every employee resource with appropriate responsibilities can use the HTML Calendar functionality to create appointments, view personal calendars, request new group or public calendars, and subscribe to an existing group calendar. Therefore, make sure that all employees exist in the Resource Manager and the resources are linked to the application login user names (FND_User). Otherwise, they need to be imported from Oracle Human Resource Management System (HRMS) into Resource Manager.

To create a Calendar user, the implementor, system administrator, or Calendar Administrator needs to grant appropriate responsibilities to the employee resource. In addition, if the standalone HTML Calendar is used, then the general user also needs to be associated with two profile options.

The Calendar Administrator also has the same responsibilities as a general user does, but with an additional System Administrator responsibility assigned to him. In addition, the Administrator needs to be tied to the JTF HTML Calendar: Administrator profile option in order to have the privilege to grant approval for new group or public calendar requests.

## Changing a Calendar Administrator

Since the HTML Calendar allows only one Calendar Administrator in the system to be responsible for any new group or public calendar requests, in the case of the absence of the Calendar Administrator or other considerations, the Calendar Administrator or whoever has the JTF_CALENDAR_ADMIN role can perform the update by changing the name.

After the update, the JTF_CALENDAR_ADMIN role is automatically assigned to the new Calendar Administrator, and is revoked from the old Calendar Administrator. Therefore, the new Calendar Administrator will receive all the new group calendar requests through workflow notifications.

## Implementing Calendar Events

If an integrated application wants to display calendar events, such as marketing campaigns, in the personal calendars in addition to scheduled appointments and tasks, then the implementor or system administrator must perform required setup steps to implement this functionality. Calendar users who belong to resource groups to which the event is published must also set up their calendar personal preferences to be able to see the calendar events in their personal calendars.

## Integrating with Web Mail

To invoke web mail compose window through an integrated Web Mail, such as Oracle Collaboration Suite, from the calendar Availability view, system administrators must set up profile options to enable web mail, specify correct server URL, and perform additional implementation steps to launch webmails successfully.

## Setting Profile Option

The implementor or system administrator must set required profile options for HTML Calendar, such as set the default time zone for end users, grant the calendar administrator

group calendar request approval privilege, enable web mail, and specify web mail server URL. Some profile options enable HTML Calendar used as a standalone module.

## Starting Workflow Processes

The implementor or system administrator must start the following two workflow processes in order to have the HTML Calendar work properly:

- JTF Calendar Workflows. Use JTF Calendar Workflow to track and route requests to the Calendar Administrator for new group and public calendar approvals and to Group Calendar Administrators (the owners of the group calendars) for subscription approvals.
- JTF Task Reminder. Use JTF Task Reminder to pick up appointment reminders for scheduled appointments.

## Running the Concurrent Program

In order to retrieve new and updated appointments from quick find search, the system administrator must run the Rebuilding Intermedia Index for Task Names concurrent program periodically.

## Publishing Business Events for Appointments

The Calendar module publishes business events for appointments such as creating, updating, and deleting an appointment, adding and removing an invitee, and responding to an invitation when the following conditions occur from APIs, application user interfaces (UIs) in HTML or the Oracle Applications Framework based modules:

- An appointment is created, updated, and deleted
- An invitee is added to or removed from an appointment
- An invitee accepted or rejected an appointment

Applications that contain data directly affected by these events can subscribe to them and synchronize or modify their data accordingly.

## Forms-based Calendar Overview

Use the Forms-based Calendar to enter shifts and exceptions in order to define resource availability and unavailability, as well as to create personal To-Do List and view scheduled activities using Calendar Datebook functionality.

The resource work shift information defined here will be displayed as yellow background in the Gantt chart while using Assignment Manager for resource selection. Telesales applications use the Calendar Datebook functionality to view a resource's availability and assigned tasks.

To implement the Forms-based Calendar, implementors need to define a corporate calendar specifically used for resource scheduling, define resource availability as work shifts, define resource unavailability as exceptions, assigning shifts and exceptions to a calendar, and then assigning resources to that calendar.

### Setup Dependencies

To be able to use the full functionality of the Forms-based Calendar, the following components must be set up properly:

- **Task Manager (Forms)**. Use Forms-based Task Manager to create personal Todo List (tasks) and to have tasks displayed in different calendar views. The functionalities of Todo List and calendar views reside in the Calendar Datebook and can be accessed through the Telesales application.
- **Resource Manager**. Use Resource Manager to retrieve a specific resource for different calendar views.

### Forms-based Calendar Implementation Steps

This section provides an overview of the following required steps for implementing the Forms-based Calendar. Detailed instructions for these steps are contained in the subsequent chapters.


- Defining a Calendar, page 25- 6
- Defining Availability (Shifts), page 25- 6
- Defining Unavailability (Exceptions), page 25- 6
- Assigning a Shift to a Calendar, page 25- 7
- Assigning an Exception to a Calendar, page 25- 7
- Assigning a Resource to a Calendar, page 25- 7


## Defining a Calendar

To be able to show resource work shift information, the implementor or system administrator must first define a calendar with start and end date information. Once the shifts and exceptions are specified, they can be associated with the calendar used specifically for resource scheduling.

## Defining Availability (Shifts)

After defining a calendar, the implementor or system administrator needs to define work shift information indicating the beginning and ending time for a specific day within a week. Examples of a shift can be that a service engineer works from 7:00 a.m. to 4:00 p.m. on Monday, or from 8:00 a.m. to 3:00 p.m. from Tuesday through Friday.

Multiple shifts can be combined into a shift pattern for a longer period of time, such as from January 01, 2003 to May 31, 2003. After identifying shift information, implementors can then associate it with a specific calendar.

## Defining Unavailability (Exceptions)

In addition to the available work hours, the Forms-based Calendar also allows implementors to schedule unavailable days as exceptions to regular working shifts. This exception information will then be associated with a specific calendar.

## Assigning a Shift to a Calendar

After defining work shifts, the implementor or system administrator must assign them to a calendar. To assign them to a calendar, query up the calendar specifically used for scheduling resource, and then enter shift information.

## Assigning an Exception to a Calendar

Use the same calendar that has work shift information to assign previously defined exceptions. As a result, this calendar will have both available and unavailable work information for a period of time.

## Assigning Resources to a Calendar

After associating work shift and exception information to a calendar, the implementor can assign resources to it. In order to show the resource work shift information as yellow background in the Gantt chart while using the Assignment Manager for resource selection, implementor or system administrator must indicate this calendar is the resource's Primary Calendar.

Resources of any categories defined in Resource Manager can be assigned to a calendar.

# 26

# Implementing the HTML Calendar

This chapter covers the following topics:

- Adding a Calendar tab to a Responsibility
- Creating a Calendar Administrator
- Creating a Calendar User
- Changing a Calendar Administrator
- Implementing Calendar Events
- Integrating with Web Mail
- Setting Profile Options
- Starting Workflow Processes
- Running Concurrent Program
- Publishing Business Events for Appointments

## Adding a Calendar tab to a Responsibility

HTML Calendar can be integrated with an existing application within Oracle E-Business Suite. After integration, a Calendar tab appears in the application user interfaces (UI).

If the application already has a profile menu, then the implementor or system administrator can add calendar profile node "JTF HTML Calendar Profile Preferences" to the application's profile main menu, JTF HTML Calendar Main Menu.

Perform the following steps in Forms to embed Calendar into an existing Oracle application.

## Prerequisites

None

## Responsibility

System Administrator

## Navigation

Query up your root menu structure.

## Steps

1. Attach menu JTF HTML Calendar Main Menu to your Main node along with profiles node.
2. Add JTF HTML Calendar Profile Preferences for the preferences structure.
3. Bounce the server to view your changes.

   The Calendar module is embedded and the tab is added to your user interface in the location you specified.

## See Also

- Setting Profile Options, page 26- 9
- Starting Workflow Processes, page 26-12
- Creating a Calendar Administrator, page 26- 2
- Creating a Calendar User, page 26- 4
- Changing a Calendar Administrator, page 26- 5
- Running the Concurrent Program, page 26-13

## Creating a Calendar Administrator

The Calendar Administrator, typically the system administrator or workflow administrator, has the privilege to grant approval or rejection to new group and public calendar requests. When new group or public calendar requests generated, the Calendar Administrator will receive workflow notifications for approval. Therefore, the user who will become the Calendar Administrator must exist in Oracle Human Resource Management System (HRMS) as an employee resource.

Use the following procedures to create a Calendar Administrator:

1. **Assigning Appropriate Responsibilities:**

After identifying an employee resource to become a Calendar Administrator, implementors or system administrators must assign appropriate responsibilities to the employee. In order to receive notifications and create calendar general users, the Calendar Administrator must have the following responsibilities:

- System Administrator. Use this responsibility to grant the HTML Calendar access responsibilities to calendar general users.
- CRM Application Foundation User. Use this responsibility to access the HTML Calendar and HTML Resource Manager modules.

  Optionally, use the JTF HTML Calendar User responsibility if you are only to access the HTML Calendar module.
- Workflow User Web Applications. Use this responsibility to verify workflow processes, and to view workflow notifications. If it is configured correctly, you can view these notifications from your personal homepage.
- Preferences (Oracle Self-Service Web Applications). Use this responsibility to define user preferences, for example, send or do not send e-mail notifications. To receive workflow notifications, select General Preferences and change the value in the “Send me electronic mail notifications” field to “Do not send me mail”. This

tells the system not to send you e-mail notifications, but instead to send them to your notifications page.

- **Associating the Calendar Administrator with Appropriate Profile Options**

After creating the Calendar Administrator, implementors must set "JTF HTML Calendar: Administrator" profile option to the person who will be the Calendar Administrator. This grants the profile option to the Calendar Administrator, so that she or he can grant approval for new group and public calendar requests.

Additionally, if the standalone HTML Calendar module is used as default application and responsibility after signing on, then the following profile options also need to be assigned to the Calendar Administrator:

- JTF_PROFILE_DEFAULT_RESPONSIBILITY (22946)
- JTF_PROFILE_DEFAULT_APPLICATION (690)

Perform the following steps in Forms to create a Calendar Administrator.

## Prerequisites

The user must exist in Oracle HRMS as an employee resource.

## Responsibility

System Administrator

## Navigation

Navigate to **Security > User > Define**.

## Steps

1. In the Users window, enter a user name for the Administrator.
2. Select the name for the Administrator in the person field.
3. Enter a password, then re-enter it again for confirmation.
4. Add appropriate responsibilities to the user and save your work.
5. Associate the Calendar Administrator with the "JTF HTML Calendar: Administrator" profile option:
    1. Navigate to **Profile > System** to open the Find System Profiles Values window.
    2. Associate the profile option "JTF HTML Calendar: Administrator" to the user who will be the Calendar Administrator. Save your work.
6. (Optional) If using HTML Calendar as a standalone module, then you must associate the Calendar Administrator with following additional profile options:
    1. JTF_PROFILE_DEFAULT_RESPONSIBILITY: Enter 22946 to set the default responsibility when using calendar as a standalone application.
    2. JTF_PROFILE_DEFAULT_APPLICATION: Enter 690 to set the default application when using calendar as a standalone application.
    3. Save your work.

## See Also

- Setting Profile Options, page 26- 9
- Starting Workflow Processes, page 26-12
- Adding a Calendar Tab to a Responsibility, page 26- 1
- Creating a Calendar User, page 26- 4
- Changing a Calendar Administrator, page 26- 5
- Running the Concurrent Program, page 26-13

## Creating a Calendar User

Every employee resource with appropriate responsibilities can use the HTML Calendar functionality to create appointments, view personal calendars, request new group or public calendars, and subscribe to an existing group calendar. Make sure that all employees exist in the Resource Manager and the resources are linked to the application login user names (FND_User). Otherwise, they need to be imported from Oracle Human Resource Management System (HRMS) into Resource Manager.

To create a Calendar user, the implementor, system administrator, or Calendar Administrator needs to grant the following responsibilities to the employee resource:

- CRM Application Foundation User. Use this responsibility to access the HTML Calendar and HTML Resource Manager modules.

  Optionally, use the JTF HTML Calendar User responsibility if it is to access the HTML Calendar only.

- Workflow User Web Applications. Use this responsibility to verify workflow processes, and to view workflow notifications regarding new group or public calendar requests, as well as existing group calendar subscription requests.

- Preferences (Oracle Self-Service Web Applications). Use this responsibility to define user preferences, for example, send or do not send e-mail notifications. To receive workflow notifications, select General Preferences and change the value in the "Send me electronic mail notifications" field to "Do not send me mail". This tells the system not to send you e-mail notifications, but instead to send them to your notifications page.

  > **Note:** The Calendar Administrator also has the same responsibilities as a general user does, but with an additional System Administrator responsibility assigned to him. In addition, the Administrator needs to be tied to the JTF HTML Calendar: Administrator profile option in order to have the privilege to grant approval for new group or public calendar requests.

In addition, if the standalone HTML Calendar is used as default application and responsibility after signing on, then the following profile options also need to be assigned to the user:

- JTF_PROFILE_DEFAULT_RESPONSIBILITY (22946)
- JTF_PROFILE_DEFAULT_APPLICATION (690)

Perform the following steps in Forms to create a calendar user.

## Prerequisites

The user must exist in Oracle HRMS as an employee resource.

## Responsibility

System Administrator

## Navigation

Navigate to **Security > User > Define**.

## Steps

1. In the Users window, enter a user name.
2. Select the name in the Person field.
3. Enter a password, then re-enter it again for confirmation.
4. Add appropriate responsibilities to the employee resource.
5. Choose **File > Save** to save your changes. Close the window.
6. (Optional) If using Calendar as a standalone module, then you must associate the Calendar User with following profile options:
    1. Navigate to **Profile > System** to open the Find System Profiles Values window.
    2. JTF_PROFILE_DEFAULT_RESPONSIBILITY: Enter 22946 to set the default responsibility when using calendar as a stand-alone application.
    3. JTF_PROFILE_DEFAULT_APPLICATION: Enter 690 to set the default application when using calendar as a standalone application.
    4. Click **File > Save**.

## See Also

- Setting Profile Options, page 26- 9
- Starting Workflow Processes, page 26-12
- Adding a Calendar Tab to a Responsibility, page 26- 1
- Creating a Calendar Administrator, page 26- 2
- Changing a Calendar Administrator, page 26- 5
- Running the Concurrent Program, page 26-13

# Changing a Calendar Administrator

HTML Calendar allows only one Calendar Administrator in the system to be responsible for any new group or public calendar requests; therefore, in the case of the absence of the Calendar Administrator, the Calendar Administrator or whoever has the JTF_CALENDAR_ADMIN role can perform the update by changing the name in the Calendar Administration window.

The JTF_CALENDAR_ADMIN role can be assigned through the System Administrator Console by system administrator. A user without this role attempting to access the Calendar Administration window will see an error message saying that "You don't have sufficient privileges to view this page."

Once you update the Calendar Administrator, the JTF_CALENDAR_ADMIN role is automatically assigned to the new Calendar Administrator, and is revoked from the old Calendar Administrator. Therefore, the new Calendar Administrator can get access to the Calendar Administration window while the old Calendar Administrator cannot. All the new group calendar requests should be sent to the new Calendar Administrator through workflow notifications.

**Assign JTF_CALENDAR_ADMIN Role to a User**

To grant the JTF_CALENDAR_ADMIN role to a user, log in to the System Administrator Console as a system administrator. Select Users tab > Registration subtab > User Maintenance. Query up the user name and then click the Roles button to access the User-Role Mapping window. Select the JTF_CALENDAR_ADMIN role from the Available Roles block to move the role to the Assigned Roles block. Click the Update button to complete the change. The user will have access to the Calendar Administration window.

Perform the following steps to change the Calendar Administrator.

> **Note:** For more information regarding the Preferences and Personal Profile links accessed through the profile icon, please see the *Oracle CRM System Administrator Console Concepts and Procedures Guide*.

## Prerequisites

You must have the JTF_CALENDAR_ADMIN role to access the Calendar Administration window. This role is assigned to the user through the System Administrator Console. See the *Oracle Applications CRM System Administrator's Guide* for more information on defining user roles.

## Responsibility

CRM Application Foundation User

System Administrator

## Navigation

Navigate to the Calendar Administration window by clicking the **Profile** icon.

## Steps

1. Click **Administrator** in the side navigation bar.

   The Calendar Administration window opens with the current Calendar Administrator information.

2. Clear the name field and enter a new name for the new Calendar Administrator. The resource's job title and e-mail information populates automatically.

3. Click **Update** to save your changes.

The value of "JTF HTML Calendar: Administrator" profile option is updated to the new resource name.

## See Also

- Setting Profile Options, page 26- 9
- Starting Workflow Processes, page 26-12
- Adding a Calendar Tab to a Responsibility, page 26- 1
- Creating a Calendar Administrator, page 26- 2
- Creating a Calendar User, page 26- 4
- Running the Concurrent Program, page 26-13

## Implementing Calendar Events

In addition to scheduled appointments and tasks, HTML Calendar provides the ability to allow users to view calendar events, such as campaigns, on their calendar views.

In order to use this functionality, the integrated applications have to perform the following tasks:

1. Identify resource groups to which they would like to publish events and add CALENDAR_ITEMS usage to the groups.
2. Make sure that business objects (known as events in calendar) that are published are valid JTF_OBJECTS with all the following metadata defined:
   - SELECT_NAME
   - SELECT_ID
   - FROM_TABLE
   - OBJECT_CODE
   - WHERE_CLAUSE
   - WEB_FUNCTION_NAME
   - WEB_FUNCTION_PARAMETERS
   - WEB_HTML_CALL
3. Populate the JTF_CAL_ITEMS_B table using the JTF_CAL_ITEMS_PUB API.

In order to view the calendar events in the personal calendars, calendar users must also meet the following conditions:

- Users must belong to resource groups to which the event is published.
- Users must have the "Display Events" set to yes in the calendar personal preference page from the Profile navigation link.
- Users must further personalize how these calendar items will be displayed in their personal calendars by selecting the desired color and prefix text.

This feature will work only when integrated applications implement the functionality and follow the required steps.

Oracle Marketing Online (OMO) is one of the applications that is currently implementing this functionality. Please refer to *Oracle Marketing Online Implementation Guide* for more details.

## Integrating with Web Mail

To invoke web mail compose window through an integrated Web Mail, such as Oracle Collaboration Suite, from the calendar Availability view and the task Assignment window while creating or updating tasks, implementors or system administrators need to set up profile options to enable this feature and specify correct server URL. However, if Oracle Collaboration suite is not installed, then this feature will not work and link will open default e-mail client.

### Setting Profile Options

Calendar uses the following profile options for Web Mail setup:

- ATGCA: Enable Web Mail. This profile uses the following values to indicate whether or not to use web mail:
  - Yes. It indicates that Web Mail is enabled and you can launch webmails through the Availability window and the task Assignment window.
  - No (default). It indicates that Web Mail is not enabled and HTML "mailto:" attribute will be used instead. Using "mailto:" attribute will invoke default browser e-mail client, such as Netscape Messenger.
- ATGCA: Web Mail Server URL. This profile specifies the URL address for the integrated webmail server. It starts with either "http://" or "https://".

  **Valid Server URL Address**

  Use the following URL for the invocation of the Oracle Collaboration Suite Web Mail message compose window from a web page:

  "*http://<machinename>:<port>/um/traffic_cop"*

  Note that machine name is required. Port number is usually not part of the URL, but it can be added if necessary depending on how the Oracle Collaboration Suite is installed.

  For example, you can set the URL address as follows:

  - "https://collabsuite.oracle.com/um/traffic_cop" OR
  - "https://collabsuite.oracle.com:8080/um/traffic_cop"

If profile "ATGCA: Enable Web Mail" is set to Yes, system administrators must identify valid server URL for "ATGCA: Web Mail Server URL" profile. Otherwise, the following conditions will be used:

- If "ATGCA: Web Mail Server URL" profile value is missing, it has the same effect as "ATGCA: Enable Web Mail" being No. The default "mailto:" attribute would be used.
- If "ATGCA: Web Mail Server URL" profile value is invalid but does start with "http", the default browser error "The page cannot be displayed." will be shown.
- If "ATGCA: Web Mail Server URL" profile value is invalid and does not start with "http", an unrecoverable HTML error will occur after clicking the e-mail hyperlink from the availability view.

## Setting Profile Options

The following table describes the profile options that are specific to the HTML Calendar.

***Calendar Profile Options***

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| JTF HTML Calendar: Administrator | No default value | Site | The JTF HTML Calendar: Administrator profile option sets the Calendar Administrator who grants approval and subscription requests for group and public calendars. | Set the value to the username of the calendar user who grants group and public calendar requests. |
| Client Timezone | America/Los_ Angeles | Site | The Client Time zone profile option is used by Calendar to set the default time zone for the client in the Create Appointment window. | Set the value to the location where your appointments take place.<br>Setting the time zone from the profile link in the Calendar UI is another way to set and update this profile value. |
| JTF HTML Calendar Task Span Days | No | Site | The JTF HTML Calendar Task Span Days profile option sets tasks that spans over more than one day to appear continuously across days on your personal calendar. | Set the profile option to **Yes** to have your tasks that span over more than one day to appear continuously across days on your personal calendar.<br>If the value is set to **No**, the task shows as a memo for each day affected. |
| JTF_PROFILE_ DEFAULT_RES PONSIBILITY | 22946 | User | The JTF_PROF ILE_DEFAULT_ RESPONSIBIL ITY profile option sets the default responsibility when using calendar as a standalone application. | Set the value to correspond to the calendar user. The user value is 22946 |
| JTF_PROFILE_ DEFAULT_AP PLICATION | 690 | User | The JTF_PROF ILE_DEFAULT_ APPLICATION profile option sets the default application when using calendar as a standalone application. | Set the value to correspond to the calendar user. The user value is 690. |

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| ATGCA: Enable Web Mail | No | User | The "ATGCA: Enable Web Mail" profile option is used to enable or disable web mails sent from an integrated webmail, such as Oracle Collaboration Suite, through the Calendar Availability window. | If it is set to **Yes,** then you can launch webmails through the Availability window. If it is set to **No**, then you cannot send webmails, but HTML "mailto:" attribute will be used instead. |

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| ATGCA: Web Mail Server URL | N/A | User | The "ATGCA: Web Mail Server URL" profile option is used to specify the URL address for the integrated webmail server. | Set valid server URL for the web mail server in order to send web mails through an integrated web mail, such as Oracle Collaboration Suite, from Availability view. |
| Applications SSO Login Types | Both (Site level)<br>Local (user level) | Site and User levels | The "Application SSO Login Types" profile option is used to allow the Palm and Outlook synchronization to work properly if it is set to "Both" when using the Single Sign-On (SSO) feature.<br>It is important to note that if integrated applications decide to implement this Single Sign-on feature and once this profile option is set, it may have an impact on the login at the application level. As a result, the sync feature can also be affected. | Since any changes to the password stored at the local application level (such as Oracle E-Business Suite) can be passed to Oracle Internet Directory (Single Sign-On server), but not vice versa which means that a user's single sign-on password will not necessarily be synchronized with his local application's password. Therefore, if it is set to **Both**, then the sync required username and password are stored both at the local application level and the external Oracle Internet Directory. If it is set to **SSO**, then the sync required login information is stored externally at the SSO Server only and not maintained at the application level. Therefore, the sync feature will not work. If it is set to **Local**, then the sync required login information is stored at the local application level which means that the login is only allowed through the Oracle E-Business Suite local login. |

**Note:** See Appendix A, Profiles Options, page A- 4 , for details on how these profile options can be set.

## See Also

- Starting Workflow Processes, page 26-12
- Adding a Calendar Tab to a Responsibility, page 26- 1
- Creating a Calendar Administrator, page 26- 2
- Creating a Calendar User, page 26- 4

- Changing a Calendar Administrator, page 26- 2
- Running the Concurrent Program, page 26-13

## Starting Workflow Processes

HTML Calendar uses the following workflow processes in order for it to work properly:

- JTF Calendar Workflows. Use JTF Calendar Workflow to track and route calendar requests to Calendar Administrator for new group and public calendar approvals and to Group Calendar Administrators, the owners of the group calendars, for existing group calendar subscription approvals. It also sends invitations for appointment invitees and attendees.
- JTF Task Reminder. Use JTF Task Reminder to pick up appointment reminders for scheduled appointments. For example, if "15 minutes Before" is selected from the Remind Me drop-down list while creating an appointment, then a user receives a workflow notification 15 minutes prior to the scheduled meeting starts.
    - Refer to the *Oracle Workflow Administrator's Guide* to configure and monitor workflow.
    - If the concurrent manager is not up and running, workflow does not work correctly.

## Prerequisites

None

## Responsibility

System Administrator

## Navigation

Navigate to **Concurrent > Request**.

## Steps

1. In the Find Request window, click **Submit a New Request**. The Submit a New Request window opens.
2. Select the Single Request option button and click **OK**. The Submit Request window opens.
3. Enter "Workflow Background Process" as the workflow process.

   The parameters window opens.

   1. Enter one of the following for the item type:
      - Enter "JTF Task Reminders" to start the workflow for task reminders.
      - Enter "JTF Calendar Workflows" to start the workflow process for group calendar approvals.

The item type restricts this engine to activities associated with the item type you select.

2. Enter the Minimum and Maximum thresholds, in a hundredth of a second, which specifies the minimum and maximum costs that an activity must have for this background engine to execute.
3. Enter Yes for the Process Deferred, which specifies whether or not this background engine checks for deferred activities.
4. Enter Yes for the Process Timeout and click **OK**.

4. Click **Schedule** in the At these Times region.
5. Select the job to run periodically, in the Run the Job region.
6. Enter the start date and leave the end date blank to run the workflow indefinitely.
7. Define the interval which triggers the workflow to check for requests every specified minute, hour, day, week, or month and click **OK**.
8. Click **Yes** in the confirmation window if you selected for the workflow to run indefinitely.
9. Click **Submit** to confirm.
10. Click **No** to exit.
11. To stop the workflow process, query any workflows that are running and cancel the request.

## See Also

- Adding a Calendar Tab to a Responsibility, page 26- 1
- Creating a Calendar Administrator, page 26- 2
- Creating a Calendar User, page 26- 4
- Changing a Calendar Administrator, page 26- 2
- Setting Profile Options, page 26- 9
- Running the Concurrent Program, page 26-13

## Running Concurrent Program

The Rebuilding Intermedia Index for Task Names concurrent program rebuilds the intermedia index so that a user can use the Quick Find to search for new and updated appointments and tasks. Therefore, the concurrent program has to be compiled periodically in order for appointment search to work properly. For more information on running this concurrent program, see the Running the Task Manager Concurrent Program, page 21-26 documentation in the Task Manager section.

## Guidelines

The following table describes the Rebuilding Intermedia Index for Task Names concurrent program.

*Task Manager Seeded Concurrent Programs*

| Name | Description | Frequency |
|---|---|---|
| Rebuilding Intermedia Index for Task Names | This program is used to rebuild the intermedia index so a user can use the quick find to search for new and updated tasks as well as to search by task name. | As needed |

## See Also

- Adding a Calendar Tab to a Responsibility, page 26- 1
- Creating a Calendar Administrator, page 26- 2
- Creating a Calendar User, page 26- 4
- Changing a Calendar Administrator, page 26- 2
- Setting Profile Options, page 26- 9
- Starting Workflow Processes, page 26-12

## Publishing Business Events for Appointments

The Calendar module, leveraging the Oracle Workflow Business Event System, publishes business events for appointments such as creating, updating, and deleting an appointment, adding and removing an invitee, as well as responding to an invitation when the following conditions occur from APIs, application user interfaces (UIs) in HTML or the Oracle Applications Framework based modules:

- An appointment is created, updated, and deleted
- An invitee is added to or removed from an appointment
- An invitee accepted or rejected an appointment

Applications that contain data directly affected by these events can subscribe to them and synchronize or modify their data accordingly.

For example, if an appointment is created with invitees, this action is published or "raised" as a business event. This event can be, for example, captured to send relevant workflow notifications. If an appointment is created, updated, or deleted, this action is raised as a business event. This event can trigger synchronization between Oracle Applications and the offline device, such as a Palm or Outlook.

Detailed appointment business events are contained in the following sections:

- The Oracle Workflow Business Event System, page 26-15
- Appointment Business Events, page 26-15
- Event Attributes for Appointment and Invitee Events, page 26-16
- Appointment Events Subscription Guidelines, page 26-16

## The Oracle Workflow Business Event System

The Oracle Workflow Business Event System is an application service that leverages the Oracle Advanced Queuing (AQ) infrastructure to communicate business events between systems. The Business Event System consists of the Event Manager, which allows you to register subscriptions to significant events, and workflow process event activities, which allow you to model business events within workflow processes.

The Event Manager contains a registry of business events, systems, named communication agents within those systems, and subscriptions indicating that an event is significant to a particular system. Events can be raised locally or received from an external system or the local system through AQ. When a local event occurs, the subscribing code is executed in the same transaction as the code that raised the event, unless the subscriptions are deferred.

See *Oracle Workflow Developer's Guide* for detailed information about Oracle workflow business event system, and subscriptions.

## Appointment Business Events

When an appointment is created, updated or deleted, an invitee is added or removed, as well as an invitation is responded from APIs, or application user interfaces (UIs), the Calendar module will publish the following events:

***Appointment Business Events***

| Event Name | Display Name | Description |
|---|---|---|
| oracle.apps.jtf.cac.calendar.createAppointment | Appointment created. | This event is published when an appointment is created. |
| oracle.apps.jtf.cac.calendar.updateAppointment | Appointment updated. | This event is published when an appointment is updated. |
| oracle.apps.jtf.cac.calendar.deleteAppointment | Appointment deleted. | This event is published when an appointment is deleted. |
| oracle.apps.jtf.cac.calendar.addInvitee | Invitee added. | This event is published when an invitee is added. |
| oracle.apps.jtf.cac.calendar.respondInvitation | Invitee responded. | This event is published when an invitee is responded. |
| oracle.apps.jtf.cac.calendar.removeInvitee | Invitee removed. | This event is published when an invitee is removed. |

For each appointment business event, the owner name is "Calendar", the owner tag is "JTF" and the default status is "Enabled".

Event name represents the name of a business event that is an occurrence in an application or program that might be significant to other objects in a system or to external agents. Event name must be unique and is case-sensitive; therefore, subscribers must use Event Name for subscription purposes.

# Attributes for Appointment Events

The following table contains published attributes for the parameters used to create, update, and delete appointments.

***Event Attributes for Appointment Events***

| Parameter Name | Source Table Name | Create Appointment | Create Appointment | Create Appointment |
|---|---|---|---|---|
| TASK_ID | JTF_TASKS_B | Yes | Yes | Yes |

# Attributes for Invitee Events

The following table contains published attributes for the parameters used to add, and remove invitees, as well as respond invitation events. "Yes" indicates that an attribute is published and "No" indicates that it is not.

***Event Attributes for Invitee Events***

| Parameter Name | Source Table Name | Add Invitees | Respond Invitation | Remove Invitees |
|---|---|---|---|---|
| TASK_ID | JTF_TASKS_B | Yes | Yes | Yes |
| ASSIGNMENT_STATUS_ID | JTF_TASK_ASSIGNMENTS | No | Yes | No |
| RESOURCE_ID | JTF_TASK_ASSIGNMENTS | Yes | Yes | Yes |
| RESOURCE_TYPE | JTF_TASK_ASSIGNMENTS | Yes | Yes | Yes |

## Appointment Events Subscription Guidelines

All event subscriptions must follow the guidelines mentioned in the workflow development standards. For example, any subscription cannot commit inside the rule function. This can cause unexpected behavior in the workflow or appointment APIs.

In addition, the following subscription guidelines are also used in publishing appointment business events:

- Asynchronous Subscriptions

  All subscriptions to the events should be asynchronous. The UIs call the APIs, which in turn publish events. Therefore, if the subscriptions are synchronous, the transaction time for the UI will increase.

- Returning with success or warning

The rule function of the subscriptions should return success or a warning. It should not return an error. Returning an error disrupts the processing of other subscriptions; therefore, an error should not be returned.

# 27

# Implementing the Forms-based Calendar

This chapter covers the following topics:

- Defining a Calendar
- Defining Availability
- Defining Unavailability (Exceptions)
- Using the Assign Shift and Exceptions Window
- Assigning a Calendar to a Shift
- Assigning an Exception to a Calendar
- Assigning a Resource to a Calendar

## Defining a Calendar

To be able to show resource work shift information, the implementor or system administrator must define a calendar with start and end date information. For example, you can create a corporate calendar which runs from January 01, 2003 to December 31, 2003. Once the shifts and exceptions are specified, they can be associated with the calendar used specifically for resource scheduling.

Perform the following steps in Forms to define a calendar.

## Prerequisites

None

## Responsibility

CRM Administrator

## Navigation

Navigate to **Calendar > Calendar Setup > Define Calendar**.

## Steps

1. Enter a name for the calendar.

2. Select the type of calendar you want to create from the list of values (LOV). Options include, Corporate, Division, Group, Personal, and Team.
3. Enter a description for the calendar type.
4. Select the start and end dates from the LOV for your calendar.

   This defines how long your calendar is active
5. Click **Save**.

## See Also

- Defining Availability, page 27- 2
- Defining Unavailability (Exceptions), page 27- 3
- Assigning a Calendar to a Shift, page 27- 4
- Assigning an Exception to a Calendar, page 27- 5
- Assigning a Resource to a Calendar, page 27- 6

## Defining Availability

Use the define shift window to define available work hours. A shift is defined at the time a resource is available, and a shift pattern is the shift that extends for a longer period of time. Shift patterns cannot overlap with each other.

Examples of a shift can be that a service engineer works from 7:00 a.m. to 4:00 p.m. on Monday, or from 8:00 a.m. to 3:00 p.m. from Tuesday through Friday. A shift pattern for the service engineer is that she works from 7:00 a.m. to 4:00 p.m. on Monday and from 8:00 a.m. to 3:00 p.m. for Tuesday through Friday. This shift pattern can be defined from January 01, 2003 to May 31, 2003.

In addition, implementors can further specify if the shift is a regular or standby shift in the Availability Type field. After identifying shift information, implementors can then associate it with a specific calendar.

The shift information can be seen as yellow background displayed in the Gantt chart while using Assignment Manager for resource selection.

Perform the following steps in Forms to define shifts and shift patterns.

## Prerequisites

None

## Responsibility

CRM Administrator

## Navigation

Navigate to **Calendar > Calendar Setup > Define Shifts**.

## Steps

1. In the Define Shift window, enter a shift name.
2. Enter a description of the shift.
3. Enter the start and end dates for the duration of the shift.
4. Select the day of the week from the list of values (LOV) in the Shift Pattern region.
5. Enter the time the shift begins in the following format: 00:00.
6. Enter the duration of the shift in the Hours and Minute fields, such as 10 hours and 30 minutes. The shift end time is calculated automatically once the duration is entered.
7. Select the availability type from the LOV.
8. Save your work.

   Your shift pattern is saved to the database.

## See Also

- Defining Unavailability (Exceptions), page 27- 3
- Defining a Calendar, page 27- 1
- Assigning a Calendar to a Shift, page 27- 4
- Assigning an Exception to a Calendar, page 27- 5
- Assigning a Resource to a Calendar, page 27- 6

# Defining Unavailability (Exceptions)

You must define not only your working hours, but also the times when you are not available for work, such as federal holidays, vacation, or sick days. These days are exceptions to your regular working shift.

Perform the following steps in Forms to define non-availability.

## Prerequisites

None

## Responsibility

CRM Administrator

## Navigation

Navigate to **Calendar > Calendar Setup > Define Exceptions**.

## Steps

1. In the Exceptions window, enter a name for your non-available work time.
2. Select a category from the LOV. A category is a predefined type of exception.

3. Enter a description of your exception.
4. Define a start and end date for your exception.
5. Click **Save**.

   Your exception information is saved to the database.

## See Also

- Defining Availability, page 27- 2
- Defining a Calendar, page 27- 1
- Assigning a Calendar to a Shift, page 27- 4
- Assigning an Exception to a Calendar, page 27- 5
- Assigning a Resource to a Calendar, page 27- 6

## Using the Assign Shift and Exceptions Window

You can use the Assign Shift and Exceptions window to perform the following actions:

- Assigning a Calendar to a Shift, page 27- 4
- Assigning a Calendar to an Exception, page 27- 5

## Assigning a Calendar to a Shift

After defining work shifts, the implementor or system administrator must assign them to a calendar. To assign them to a calendar, query up the calendar specifically used for scheduling resource, and then enter shift information in the Shifts tab.

Perform the following steps in Forms to assign previously defined shift patterns to a specific calendar.

## Prerequisites

You must first define your shifts and shift patterns.

## Responsibility

CRM Administrator

## Navigation

Navigate to **Calendar > Calendar Setup > Assign Shift/Exceptions**.

## Steps

1. In the Assign Shift/Exceptions window, select the Shifts tab.
2. Enter a calendar name.
3. Enter the calendar type.

4. Enter the calendar description.
5. Enter the effective dates.
6. In the Shifts field, select your already defined shift from the list of values (LOV) and click **Save**.

## See Also

- Defining Availability, page 27- 2
- Defining Unavailability (Exceptions), page 27- 3
- Defining a Calendar, page 27- 1
- Assigning an Exception to a Calendar, page 27- 5
- Assigning a Resource to a Calendar, page 27- 6

## Assigning an Exception to a Calendar

Use the same calendar that has work shift information to assign previously defined exceptions. As a result, this calendar will have both available and unavailable work information for a period of time.

Perform the following steps in Forms to assign previously defined exceptions to a specific calendar.

## Prerequisites

You must first define your non-available work hours (exceptions).

## Responsibility

CRM Administrator

## Navigation

Navigate to **Calendar > Calendar Setup > Assign Shift/Exceptions**.

## Steps

1. In the Assign Shift/Exceptions window, select the Exceptions tab.
2. Select a calendar name from the list of values (LOV).
3. Select the Exception Tab.
4. Select the name of the calendar from the LOV.
5. Select the reason for the exception.
6. Enter the effective dates and click **Save**.

## See Also

- Defining Availability, page 27- 2

- Defining Unavailability (Exceptions), page 27- 3
- Defining a Calendar, page 27- 1
- Assigning a Calendar to a Shift, page 27- 4
- Assigning a Resource to a Calendar, page 27- 6

## Assigning a Resource to a Calendar

After associating work shift and exception information to a calendar, the implementor can assign resources to it.

In order to show the resource work shift information as yellow background in the Gantt chart while using the Assignment Manager for resource selection, implementor or system administrator must select YES in the Primary Calendar field. This is because only primary calendar will be considered for availability purposes.

> **Note:** A resource can be assigned to many calendars, but can have only one primary calendar for a period of time.

Resources of any categories defined in Resource Manager can be assigned to a calendar.

Perform the following steps in Forms to assign a resource to a calendar.

## Prerequisites

None

## Responsibility

CRM Administrator

## Navigation

Navigate to **Calendar > Calendar Setup > Assign Resources**.

## Steps

1. Select the calendar name from the list of values (LOV).
2. Enter the calendar type.
3. Enter a description for the calendar.
4. Select the resource type from the drop-down list.
5. Enter the name of the resource.
6. If this is your primary calendar, set the primary calendar flag to **Yes**.
7. Enter the Effective Dates for the calendar and click **Save**.

## See Also

- Defining Availability, page 27- 2

- Defining Unavailability (Exceptions), page 27- 3
- Defining a Calendar, page 27- 1
- Assigning a Calendar to a Shift, page 27- 4
- Assigning an Exception to a Calendar, page 27- 5

# 28

# Escalation Manager Implementation Overview

This chapter covers the following topics:

- Overview
- Steps

## Overview

An escalation is a process used to highlight or flag certain issues within an organization, so that the appropriate personnel can react to these situations and monitor the resolutions. A reactive escalation is in response to a customer complaint. Necessary action must be taken in response to the situation. This includes manually assigning escalation resources through Escalation Manager.

## Steps

This section describes the order and process of implementing Escalation Manager in Forms.

### Setting Profile Options

The Implementor identifies and sets specific profile options as required.

### Starting the Background Workflow Process

The implementor starts the background workflow process to generate notifications for the designated contact when the escalation is created and the owner, escalation level, target date, or status is changed.

### Defining a New Escalation Status

The implementor optionally defines a new escalation status. Escalation statuses are used to define the state of the escalation document.

### Defining New Escalation Reference Types

The implementor optionally defines new reference types. These determine if a document is going to be escalated. Examples are open, closed or working.

## Define New Escalation Reason Codes

The implementor optionally defines new escalation reason codes. Escalation reasons are used to specify why a source document is escalated.

## Defining the New Escalation Contact Types

The implementor optionally defines escalation contact types. Escalation contact types are used to classify the category for contacts. For example, contacts can be employees or customers.

## Defining the Escalation Level

The implementor optionally defines escalation levels that specify the levels of escalation severity.

# 29

# Implementation Tasks for Escalation Manager

This chapter covers the following topics:

- Setting Profile Options
- Starting the Background Workflow Process
- Setting Escalation Lookup Codes
- Setting Up Escalation Status
- Defining Escalation Reference Codes
- Defining Escalation Reason Codes
- Publishing Business Events

## Setting Profile Options

The first step in implementing Escalation Manager is to set the following profile options:

***Escalation Manager Profile Options***

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| Escalation: Close Only When De-escalated | Yes | Site | The escalation document cannot be closed (you cannot set up the escalation status to 'Close') without first changing the Escalation Level to 'De-escalated'. | If set to **Yes**, then it can regulate the escalation status change sequence from De-escalated to Close.<br>If set to **No**, then it will not. |
| Escalation: Default Contact Type | Employee | Site | This profile option sets the default contact type to Employee in the Contacts tab. | You can also set it to **Customer**, and then it will default the contact type to Customer. |

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| Escalation: Default Escalation Owner | Name | Site | This profile option sets the default escalation owner to a specific resource name, such as John Smith. | See description. |
| Escalation: Default Customer Contact Point | Phone | Site | This profile option sets the default customer contact point to Phone in the Contacts tab. | You can also set it to other values such as Cell, Email, Pager, or Web. |
| Escalation: Default Document Type | Task Manager | Site | This profile option sets the default document type to Task in the Document field on the Reference Document tab. | You can also set it to other values such as Service Request or Defects. |
| Escalation: Default Employee Contact Point | Work | Site | This profile option sets the default employee contact point to Work in the Contacts tab. | You can also set it to other values such as Home, Mobile, or Pager. |
| Escalation: Default Escalation Level | Level 1 | Site | This profile option sets the default escalation level to Level 1. | You can also set it to other values such as Never Escalated, Level 2, or De-Escalated. |
| Escalation: Default Status | Open | Site | This profile option sets the default escalation Status field to Open. | You can also set it to other values such as Closed or Working. |
| Escalation: Default New Note Type | General Note | Site | This profile option sets the default note type to General Note if additional notes are attached to an escalation document. | You can also set it to other values such as Event or Approved. |

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| Escalation: Default Notify (Y/N) | Yes | Site | This profile option sets the default Notify check box to "checked" in the Contacts tab. | You can also set it to No, which will leave the check box "unchecked" in the Contacts tab. |
| Escalation: Default Reason Code | Slow Progress | Site | This profile option sets the default escalation Reason field to Slow Progress. | You can also set it to other values such as Unacceptable Solution, or Unresponsive Owner. |
| Escalation: Default Reference Type | Escalation | Site | This profile option sets the default escalation reference type to Escalation in the Reference Document tab. | You can also set it to other values such as For Your Information. |

**Note:** See Appendix A, Profiles Options, page A- 4 , for details on how these profile options can be set.

## See Also

To change profile options and see detailed information, use the standard procedure outlined in Appendix A, Profile Options.

The following table describes Escalation Manager Profile Settings.

***Escalation Manager Profile Settings***

| Profile Option | Default Value |
|---|---|
| Escalation: Close Only When De-escalated | Yes |
| Escalation: Default Contact Type | Employee |
| Escalation: Default Escalation Owner | No default value |
| Escalation: Default Customer Contact Point | Phone |
| Escalation: Default Document Type | Task Manager |
| Escalation: Default Employee Contact Point | Work |
| Escalation: Default Escalation Level | Level 1 |
| Escalation: Default Status | Open |
| Escalation: Default New Note Type | General Note |
| Escalation: Default Notify (Y/N) | Yes |
| Escalation: Default Reason Code | Slow Progress |
| Escalation: Default Reference Type | Escalation |

## Starting the Background Workflow Process

The next implementation step is to start the background workflow process listed in the following table to ensure proper operation of Escalation Manager.

***Escalation Manager Workflow***

| Workflow Name | Description | User |
|---|---|---|
| JTFEC | Reactive Escalation Notification | Escalation Manager |

Use the following procedure to start the required background workflow process.

## Prerequisites

None

## Responsibility

System Administrator

## Navigation

Navigate to the Navigator - System Administrator window.

## Steps

1. Select **Requests > Run.**

   The Submit a New Request window opens.

2. Select Single Request and click **OK**.

3. In the Submit Requests window, type **W** in the Name field and select **Enter** on your keyboard.

   The Reports window opens and displays report names that begin with "w".

4. Select Workflow Background Process and click **OK**.

   The Parameters window opens.

5. Type "**re**" in the Item Type field and select **Enter** on the keyboard.

   The Item Type window opens and displays items that begin with the letters "re."

6. Select Reactive Escalation Notification and click **OK**.

   Leave the Minimum Threshold and Maximum Threshold fields empty.

7. Select **Yes** for both the Process Deferred and the Process Timeout fields and click **OK**.

8. Click **Schedule** on the Submit Request window.

9. Select **Run the Job...Periodically**.

   More options appear for defining the time period.

10. Define the Start Time and the End Time.

    **Warning:** Be sure to define an end time. If the end time field is blank, then the process runs indefinitely and cannot be shut off.

1. In the Rerun Every fields, enter the number of minutes that defines the interval between job runs.

2. Select the From the Completion of the prior run box and click **OK**.

## Guidelines

You must set up Notifications in Oracle Workflow to ensure that notifications are sent.

## Setting Escalation Lookup Codes

Another required task in implementing Escalation Manager is to set lookup codes. The codes define the level, reason, contact type, and reference of an escalation. Escalation reasons are used to specify why a source document is escalated.

First set up the escalation reason code and enable it in the Application Object Library: Escalation Reasons Lookups window. Then, as a task or document is escalated, select this reason code from the list of values for the Reason field in the Escalations window.

- JTF_TASK_ESC_LEVEL, page 29- 6
- JTF_TASK_REASON_CODE, page 29- 6
- JTF_TASK_CONTACT_TYPE, page 29- 6
- JTF_TASK_REFERENCE_CODES, page 29- 7


## Lookup Code JTF_TASK_ESC_LEVEL

The following table describes lookup code JTF_TASK_ESC_LEVEL, which describes escalation levels.

***Lookup Code JTF_TASK_ESC_LEVEL***

| Code | Description |
|---|---|
| DE | De-escalated |
| L1 | Level 1 |
| L2 | Level 2 |
| NE | Never escalated |

## Lookup Code JTF_TASK_REASON_CODE

The following table describes lookup code JTF_TASK_REASON_CODE, which describes escalation reasons.

***Lookup Code JTF_TASK_REASON***

| Code | Description |
|---|---|
| Slow-ProG | Slow Progress |
| Unacceptable_Solution | Unacceptable Solution |
| UNRES_OWN | Unresponsive Owner |
| IMP_FAILING | Implementation Failing |

## Lookup Code JTF_TASK_CONTACT_TYPE

The following table describes lookup code JTF_TASK_CONTACT_TYPE, which describes contact types.

***Lookup Code JTF_TASK_CONTACT_TYPE***

| Code | Description |
|---|---|
| CUST | Customer |
| EMP | Employee |

## Lookup Code JTF_TASK_REFERENCE_CODES

The following table describes lookup code JTF_TASK_REFERENCE_CODES, which describes reference codes for the task.

***Lookup Code JTF_TASK_REFERENCE_CODES***

| Code | Description |
|---|---|
| ESC | Escalation |
| FYI | For Your Information |

## Prerequisites

None

## Responsibility

CRM Administrator

## Navigation

Navigate to the Navigator - CRM Administrator window.

## Steps

1. Select **Task and Escalation Manager > Setup.**
2. Select the appropriate lookup code.

   **For example, select Define Escalation Reason to set the reason lookup codes.**
3. Enter today's date in the From field.
4. Leave the "To" field blank.
5. Select the Enabled check box to make it available.
6. Save your work.

## Setting Up Escalation Status

There are three pre-defined Escalation Statuses:

- Open

- Working
- Closed

You may add your own user-defined statuses to these available statuses. Perform the following steps to add user-defined statuses.

## Prerequisites

None

## Responsibility

CRM Administrator

## Navigation

Navigate to the Navigator - CRM Administrator window.

## Steps

1. Select **Task and Escalation Manager > Setup > Define Escalation Status.**
2. Enter a user-defined status in a blank field in the Status column.
3. Enter a brief description of the status type in the Description field.
4. Enter the effective dates in the From and To fields.
5. Select escalation status flags.
6. Click the Save icon to finish defining the Escalation status.

## References

The following table describes flags and definitions.

***Escalation Status Flag Definitions***

| Flag | Description |
|---|---|
| Assigned | Assigned to an individual |
| Working | In progress |
| Schedulable | Scheduled or re-schedulable |
| Accepted | Accepted by owner |
| Rejected | Rejected by owner |
| On Hold | Temporarily not active |
| Approved | Approved by management |
| Completed | Completed by owner |
| Cancelled | Cancelled by owner, creator, or management |
| Delete Allowed | Delete acceptable without cancellation |
| Closed | Completed and closed |
| Seeded | Pre-defined task status |

## Defining Escalation Reference Codes

A document or task can be combined with several other documents or tasks, such as when fulfilling a service request requires a series of tasks to be performed and related documents to be completed. In such a scenario, if one particular document or task needs to be escalated, the escalation might not apply to the other related items.

When you associate an Escalation Reference to the escalated item, you point to the other related items and indicate their relation. There are two pre-defined Escalation Reference types: FYI and Escalation.

- Use **FYI** (for your information) to indicate the task or document is related to the escalated item, but is not escalated.
- Use **Escalation** to indicate the task or document is related to the escalated item and also is escalated.

You can add other Escalation Reference types to your escalation references. Use the following procedure to define customized reference types.

## Prerequisites

None

## Responsibility

CRM Administrator

## Navigation

Navigate to the Navigator - CRM Administrator window.

## Steps

1. Select **Task and Escalation Manager > Setup > Define Reference Type.**

   The Application Object Library: Reference Codes for the Task Lookups window opens.
2. Enter the name of the new reference type in the first available row in the Code column.
3. Continue entering information in the remaining cells of the row to describe the escalation reference type and the effectivity dates.
4. Select the **Enabled** Check Box to make the escalation reference type available.
5. Save the new Escalation Reference and close the form.

## Defining Escalation Reason Codes

You can add other escalation Reason Codes to customize your escalation reasons. Use the following procedure to define customized reason types.

## Prerequisites

None

## Responsibility

CRM Administrator

## Navigation

Navigate to the Navigator - CRM Administrator window.

## Steps

1. Select **Task and Escalation Manager > Setup > Define Escalation Reason.**

   The Application Object Library: Escalation Reasons Lookup window opens.
2. Select the first blank line.
3. Enter a code, meaning, and description.
4. Enter the effective dates in the From and To fields.
5. Select the Enabled flag.
6. Click the Save icon to finish defining the Escalation reason.

# Publishing Business Events

Escalation Manager publishes events such as creating, updating, and de-escalating an escalation using the Oracle Workflow Business Event System. Applications that contain data directly affected by these events can subscribe to them and synchronize or modify their data accordingly. For example, if a support team uses Escalation Manager to escalate urgent or high profile support calls and one of these has been de-escalated, this action is published or "raised" as a business event. The support team, can consequently subscribe to this event and reassign support staff to escalated problems.

## The Oracle Workflow Business Event System

The Oracle Workflow Business Event System is an application service that leverages the Oracle Advanced Queuing (AQ) infrastructure to communicate business events between systems. The Business Event System consists of the Event Manager and workflow process event activities.

The Event Manager contains a registry of business events, systems, named communication agents within those systems, and subscriptions indicating that an event is significant to a particular system. Events can be raised locally or received from an external system or the local system through AQ. When a local event occurs, the subscribing code is executed in the same transaction as the code that raised the event, unless the subscriptions are deferred.

## Escalation Manager Events

When an escalation or its corresponding reference is created, updated or deleted, the Escalation Manager APIs call wrapper APIs that raise the following events:

***Escalation Manager Events***

| Functional Name | Event name | Description |
|---|---|---|
| Create_Escalation | oracle.apps.jtf.esc.<br>createEscalation | Raises an event once for a newly created escalation. |
| Update_Escalation | oracle.apps.jtf.esc.<br>updateEscalation | Raises an event once when any attribute for an escalation is changed. |
| Delete_Escalation | oracle.apps.jtf.esc.<br>deleteEscalation | Raises an event once when an escalation is deleted, and raises a Delete Escalation Reference Event once for each row in the references table. |
| Create_Reference | oracle.apps.jtf.esc.<br>createEscReference | Raises an event once for a newly created escalation reference. |
| Update_ Reference | oracle.apps.jtf.esc.<br>updateEscReference | Raises an event once when any attribute for an escalation reference is changed. |
| Delete_ Reference | oracle.apps.jtf.esc.<br>deleteEscReference | Raises an event once when an escalation reference is deleted |

For each Escalation Manager event, the owner name is "Escalation Manager", the owner tag is "JTF" and the default status is "Enabled". Subscribers must use the event name for subscription purposes. The event key is generated by the concatenation of the following:

- <<EVENT_NAME>>
- Value of the sequence JTF_ESC_WF_EVENTS_S

## Event Attributes

The following table contains published attributes for the parameters used to create, update, and delete escalations. "Yes" indicates that an attribute is published and "No" indicates that it is not.

***Escalation Event Attributes.***

| Parameter Name | Create_Esc | Update_Esc | Delete_Esc |
|---|---|---|---|
| TASK_ID | Yes | Yes | Yes |
| TASK_AUDIT_ID | No | Yes | No |

> **Note:** The value for the TASK_AUDIT_ID parameter is included in the preceding table , for subscribers to determine the remaining fields that are not published from the audits table.

The following table contains published attributes for the parameters used to create, update, and delete escalation references. "Yes" indicates that an attribute is published and "No" indicates that it is not.

***Escalation Reference Event Attributes***

| Attribute | Create_ EscReference | Update_ EscReference | Delete_ EscReference |
|---|---|---|---|
| TASK_REFERENCE_ ID | Yes | Yes | Yes |
| REFERENCE_CODE | Yes | Yes | Yes |
| OBJCT_TYPE_CODE | Yes | Yes | Yes |
| OBJECT_ID | Yes | Yes | Yes |
| OLD_REFERENCE_ CODE | No | Yes | No |
| OLD_OBJCT_TYPE_ CODE | No | Yes | No |
| OLD_OBJECT_ID | No | Yes | No |

When an escalation is created, the parameter is not set on the list, if the null value is inserted into the column. As a result, the API WF_EVENT.GetValueForParameter returns a NULL value.

When an escalation is updated, the parameter is not set on the list, if the value of the parameter is not changed. As a result, the API WF_EVENT.GetValueForParameter returns a NULL value.

### Steps

This section provides instructions for publishing Escalation Manager business events.

## Create Escalation

Perform the following to raise a buisness event using the jtf_task_wf_events_pvt. publish_create_esc wrapper API:

1. Add the following parameters into the parameter list using wf_event.AddParameterToList only if they are NOT NULL:
   - ESCALATION_ID
2. Event_key will be 'oracle.apps.jtf.esc.createEscalation-'||jtf_esc_wf_events_s. nextval.
3. Raise the Event, oracle.apps.jtf.esc.createEscalation using the workflow API, Wf_event.Raise.

## Update Escalation

Perform the following to raise a business event using the jtf_task_wf_events_pvt. publish_update_esc wrapper API:

1. Add the following parameters' old and new values into the parameter list using, wf_event.AddParameterToList only if they are changed.
   - ESCALATION_ID
   - ESCALATION_LEVEL
   - TASK_AUDIT_ID
2. Event_key will be 'oracle.apps.jtf.esc.updateEscalation-'||jtf_esc_wf_events_ s. nextval.
3. Raise the Event, oracle.apps.jtf.esc.updateEscalation using the workflow API, Wf_event.Raise.

## Delete Escalation

Perform the following to raise a business event using the jtf_task_wf_events_pvt. publish_delete_esc wrapper API:

1. Add the following parameters into the parameter list using, wf_event.Add ParameterToList
   - ESCALATION_ID

2. Event_key will be 'oracle.apps.jtf.esc.deleteEscalation-' || jtf_esc_wf_events_ s. nextval.
3. Raise the Event, oracle.apps.jtf.esc.deleteEscalation using the workflow API, Wf_event.Raise.

## Create Escalation Reference

Perform the following to raise a business event using the jtf_task_wf_events_pvt. publish_create_escref wrapper API:

1. Add the following parameters into the parameter list using, wf_event.Add ParameterToList only if they are NOT NULL
   - ESC_REFERENCE_ID
   - OBJECT_TYPE_CODE
   - REFERENCE_CODE
   - OBJECT_NAME
   - OBJECT_DETAILS
2. Event_key will be 'oracle.apps.jtf.esc.createEscReference-'||jtf_esc_wf_events_s. nextval.
3. Raise the Event, oracle.apps.jtf.esc.createEscReference using the workflow API, Wf_event.Raise.

## Update Escalation Reference

Perform the following to raise a business event using the jtf_task_wf_events_pvt. publish_update_escRef wrapper API:

1. Add the following parameters' old and new values into the parameter list using, wf_event.AddParameterToList only if they are changed.
   - TASK_REFERENCE_ID
   - OBJECT_TYPE_CODE
   - REFERENCE_CODE
   - OBJECT_NAME
   - OBJECT_DETAILS
   - OLD_OBJECT_TYPE_CODE
   - OLD_REFERENCE_CODE
   - OLD_OBJECT_NAME
   - OLD_OBJECT_DETAILS
2. Event_key will be 'oracle.apps.jtf.esc.updateEscReference-'||jtf_esc_wf_events_ s. nextval.
3. Raise the Event, oracle.apps.jtf.esc.updateEscReference using the workflow API, Wf_event.Raise.

## Delete Escalation Reference

Perform the following to raise a business event using the jtf_task_wf_events_pvt. publish_delete_escRef wrapper API:

1. Add the following parameters into the parameter list using, wf_event.Add ParameterToList:
   - TASK_REFERENCE_ID
2. Event_key will be 'oracle.apps.jtf.esc.deleteEscReference-' || jtf_esc_wf_events_ s. nextval.
3. Raise the Event, oracle.apps.jtf.esc.deleteEscReference using the workflow API, Wf_event.Raise.

# 30

# Troubleshooting Escalation Manager

This chapter covers the following topics:

- Troubleshooting Tips
- Error Messages

## Troubleshooting Tips

If you are having difficulties using Escalation Manager after implementing it, verify the following:

- Workflow is installed and working correctly.
- Territories have been defined and contain valid resources.
- System Profile Options starting with "Escalation..." are set to valid values.

If Assisted Assignment through the Assignment Manager does not return any resources, then check whether or not the Escalated object itself has a resource.

## Error Messages

This section contains information on some of the error messages associated with implementing Escalation Manager.

### APP-JTF-210807

**APP-JTF-210807 No Resources Found.**

**Cause**: This message is often reported as a problem with Escalation Manager. This error can occur when assigning an escalation territory. You can define the territory, with the appropriate resources, then associate an escalation territory with that territory, and still the No Resources Found message appears. This happens most often because the object that is being escalated does not contain a territory itself.

**Action**: If no territory is available in the escalated object, then there is no way to locate the appropriate escalation territory, so that the resources cannot be found.

Refer to bug #1617608 for further details on debugging steps.

# 31

# BRM Implementation Overview

This chapter covers the following topics:

- Overview
- Steps

## Overview

An escalation is a process used to highlight or flag certain issues within an organization, so that the appropriate personnel can react to these situations and monitor the resolutions. Escalation management is comprised of two modules: Escalation Manager and the Business Rule Monitor. The Business Rule Monitor is the proactive process.

In a proactive escalation, you take the necessary action to monitor customers issues before the customer complains. The Business Rule Monitor (BRM) is used to raise awareness. It provides a centralized place to define and also monitor business rules on a regular basis. Proactive escalation is used not just in response to problems but can be set up as a follow-up action.

## Steps

The Business Rule Monitor is used to check active business rules by setting up an Oracle Workflow process which continuously loops and checks at a specified interval for all active business rules. This section provides a summary of the steps for implementing the Business Rule Monitor. Each step is performed in the Forms-based interface by the Implementor or the System Administrator.

### Define the Business Rule Monitor Workflow Administrator

The Business Rule Monitor workflow administrator can receive workflow notifications when the business rule monitoring process starts and stops, as well as when errors are detected.

### Set the Business Rule Monitor Workflow Administrator profile option

Before starting the business rule monitoring process, the Business Rule Monitor Workflow Administrator system profile option must be set and be linked to the E-Business suite Workflow Administrator.

## Start the Background Processes

Before starting the business rule monitoring process, the background process for the Business Rule Monitor Main Process must be run. The following background processes are optional depending on which objects have active rules defined. Also, a background process should be started for any user-defined workflows that are being used.

- Business Rule Monitor Task Process
- Business Rule Monitor Service Request Process
- Business Rule Monitor Defect Process

## Create a New Business Rule

The implementor or system administrator can optionally create a new rule by defining a rule's general information, specifying workflow and workflow attributes, and defining a rule's condition which reflect your business logic.

## Enable the New Business Rule

Before monitoring your business rules, the implementor or system administrator must enable them by entering the effective dates in the Business Rule Workbench window.

## Verify that an Escalation Territory has been created and contains at least one resource

Ensure that you have a resource assigned to an escalation territory. The escalation territory can be a catch all for all escalations. The resource needs to be a primary contact.

## Start the Business Rule Monitor

The Business Rule Monitor is the control panel used to determine when the workflow process will run and stop.

# 32

# Phase I: Configuring the Business Rule Monitor

This chapter covers the following topics:

- Setting Up the Business Rule Monitor
- Defining the Business Rule Monitor Workflow Administrator
- Setting Profile Options
- Starting the Background Workflow Processes

## Setting Up the Business Rule Monitor

The Business Rule Monitor is one of the modules in Escalation Management. It is considered "proactive escalation" in that you can create rules based on your business logic and set them in a workflow process which will periodically check them. When the business rule is violated, the BRM workflow puts the violated rule in a queue, where it is picked up by Oracle Workflow. If a rule is violated, then a notification will be generated. How is this done? The Business Rule Monitor is integrated with other applications and modules, such as Oracle Workflow. The user that owns this workflow process receives notifications when the process starts and stops, and also when errors are detected.

There are many dependencies which need to be set up prior to setting up the business rule monitor. Refer to the chapter "Before You Begin" for a list of dependencies.

## Defining the Business Rule Monitor Workflow Administrator

A workflow process controls the Business Rule Monitor, which in turn periodically checks all the active business rules. The BRM workflow administrator, typically the system administrator or workflow administrator who owns the workflow process, receives notifications when the monitoring process starts and stops, and also when errors are detected. This is to ensure that an owner of the workflow process exists and that the notifications can be sent successfully.

You must first setup the BRM workflow administrator user and add the following responsibilities to the workflow administrator, so that the administrator can start the Business Rule Monitor and receive workflow notifications:

- **CRM Administrator responsibility**: The workflow administrator can access the Business Rule Monitor module through this responsibility. He can start the Business Rule Monitor and monitor the workflow process.

- **Workflow (Oracle Self-Service Web Applications)**: The workflow administrator can check the workflow processes, and can view workflow notifications from the customize link Worklist region if it is set up correctly in your personal homepage.
- **Preferences (Oracle Self-Service Web Applications)**: Use it to set up user preferences, for example, send or do not send e-mail notifications.

  **Note:** You can assign Workflow and Preferences responsibilities to many users, so that they can view workflow notifications if a business rule is violated and they are responsible for taking care of this automated escalation. However, there is only one BRM workflow administrator who will receive the notifications about when the monitoring process starts and stops, and also when errors are detected.

There are two types of notifications that can be sent through the Business Rule Monitor Main Process, to indicate the start and stop of the Business Rule Monitor, and any error conditions:

1. **Workflow Notification**: This type of notification can be viewed from the Worklist region if it is set up correctly in your personal homepage.

   To receive workflow notifications, select the Preferences responsibility. Then select General Preferences and change the value in the "Send me electronic mail notifications" field to "Do not send me mail". This tells the system not to send you e-mail notifications, but instead to send them to your notifications page.
2. **E-mail Notification**: This notification requires correct workflow and email server setup and is usually done by the system or workflow administrator. To receive email notifications, select the Preferences responsibility. Then select General Preferences and finally select the appropriate value in the "Send me electronic mail notifications" field.

## Prerequisites

The designated workflow owner must already exist in order to start the workflow process. If no workflow owner exists, then the account must first be created.

## Responsibility

System Administrator

## Navigation

Navigate to the Navigator - System Administrator window.

## Steps

1. Navigate to **Security > User > Define**.
2. Enter an existing username in the Name field.
3. Enter a password in the Password field.

   Do not press Enter to move to the next field, you must move your cursor.
4. Enter the password again.

5. Select the Workflow Administrator responsibility from the List of Values (LOV) in the Responsibility field. This grants the responsibilities to the user.
6. Select the CRM Administrator responsibility from the LOV in the next Responsibility field.
7. Select the Preferences responsibility from the LOV in the next Responsibility field.
8. Select **File > Save**.

## Setting Profile Options

The following table describes the profile options that are specific to the Business Rule Monitor.

***Business Rule Monitor Profile Options***

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| Business Rule Monitor Workflow Administrator | No Default Value | Site | This profile option must be set first in order to grant this profile option to the BRM Workflow Administrator. | The Administrator can receive workflow notifications when the monitoring process starts and stops, and also when errors are detected. |

**Note:** See Appendix A, Profiles Options, page A- 4 , for details on how these profile options can be set.

## Starting the Background Workflow Processes

The Business Rule Monitor, like other Oracle Workflow process, needs to have its background processes started in order for it to run. This is done using the standard applications concurrent manager.

There are four predefined workflow item types. The Business Rule Monitor Main Process is the only one that is internal to the Business Rule Monitor. This process services the Business Rule Monitor looping workflow which itself checks all the active rules defined in the workbench and identify if any rule is violated.

The Business Rule Monitor Task Process is used when the violated business rule which is identified by the Business Rule Monitor Main Process is related to Task (object). This BRM Task process services the consequent activities based on the workflow information identified for the rule. For example, if the Escalate a Task (notification only) workflow is selected in the workbench for the rule, then a workflow notification will be sent automatically to the person identified in the workflow attributes window.

This is the same usage for the Business Rule Monitor Service Request Process and Business Rule Monitor Defect Process. The Business Rule Monitor Service Request Process is used when a violated rule is related to Service Request (object), and the

Business Rule Monitor Defect Process is used for a violated rule which is related to Defect (object).

These attributes are maintained within the Business Rule Workbench, and can be viewed by clicking the button next to the workflow field. The following table describes the seeded workflow processes.

***Seeded Workflow Processes***

| Item Types | Description |
|---|---|
| JTFBRM | Business Rule Monitor Main Process |
| JTFBRMDF | (Optional) Business Rule Monitor Defect Process |
| JTFBRMPR | (Optional) Business Rule Monitor Task Process |
| JTFBRMSR | (Optional) Business Rule Monitor Service Request Process |

Proper operation of the Business Rule Monitor requires that the Business Rule Monitor Main Process be started before starting the Business Rule Monitor. Perform the following procedure to start these background processes. Additionally, the optional background workflow processes may be started if necessary.

## Prerequisites

None

## Responsibility

System Administrator

## Navigation

Navigate to the Navigator - System Administrator window.

## Steps

1. Select **Requests > Run**.

   The Submit a New Request window opens.

2. Select Single Request and click **OK**.

3. In the Submit Requests window, type **W** in the Name field and select **Enter** on the keyboard.

   The Reports window opens and displays report names that begin with "W".

4. Select **Workflow Background Process** and click **OK**.

5. Type "**bu**" in the Item Type field and select **Enter** on the keyboard.

The Item Type window opens and displays the four Workflow background processes required by the Business Rule Monitor.

6. Select one of the four Business Rule Monitor processes and click **OK**.

   Leave the Minimum Threshold and Maximum Threshold fields empty.

7. Enter **Yes** in the Process Deferred field, in the Process Timeout field, and the Process Stuck field and click **OK**.

   The Submit Request window appears in front.

8. Click **Schedule** on the Submit Request window.

   The Schedule window appears in front.

9. Select **Run the Job...Periodically**.

   More options appear for defining the time period.

10. Define the Start time and the End time. An end time of two hours after the start time is recommended.

    **Warning:** Be sure to define an end time. If the end time field is blank, then the process runs indefinitely and cannot be shut off.

    1. In the Rerun Every field, enter the number of minutes that defines the interval between job runs. A rerun time of two minutes is recommended.
    2. Select the From the Completion of the prior run box and click **OK**.
    3. Repeat this entire procedure for any of the optional background workflow processes that you require, or for your own customized processes.

## Guidelines

- If the four seeded background processes are not used, you still need to run the Business Rule Monitor Main Process, plus any of your own workflow processes that are used. Initially select some parameters and allow the background processes to run. Monitor their performance and tune the parameters as necessary to meet the needs of your enterprise.
- Remember to run your workflow processes periodically, for example, every 15 minutes throughout the expected duration of the Business Rule Monitor.

# 33

# Phase II: Implementing Business Rules Using the Business Rule Monitor

This chapter covers the following topics:

- Creating a New Business Rule
- Enabling a Business Rule
- Verifying an Escalation Territory
- Starting the Business Rule Monitor

## Creating a New Business Rule

In addition to the seeded business rules provided with the Business Rule Monitor, you can define your own business rules. Use the following procedure to define a business rule.

## Prerequisites

None

## Responsibility

CRM Administrator

## Navigation

Navigate to the Navigator - CRM Administrator window.

## Steps

1. Select **Business Rule Monitor > Business Rule Workbench**.
2. Enter values for the following:
   - **Name**: The name of the new business rule.
   - **Object**: The object for which the rule will operate.
   - **Check Rule Every**: The time interval that you want.
   - **Effective**: Use the LOV to select the date to start the rule.

Only put an end date to stop the rule.

- **Owner**: Mandatory field.
- **Workflow**: Chose a workflow from the drop down menu.

  Attributes can be defined for the Workflow and an Owner for the business rule. See the Guidelines section for a description of Business Rule Monitor workflows and their attributes.

3. Use the fields in the Simple tab to define conditions when the business rule is triggered.
4. Click **Validate** to check the syntax of the PL/SQL statement defined in the Simple tab. The syntax check verifies whether or not the syntax is correct.

   A dialog box confirms that the syntax validation was successful.
5. Click **OK.**
6. Click **Generate**.

   A dialog box confirms that your business rule has been generated.
7. Select **File > Save**.

## Guidelines

- You can leave the Effective Dates field empty until the time you want to start the business rule. Once you enter the effective dates for your rule, you enable and start the rule.
- After defining a rule, specify its condition for your rule in SQL format. This can be done in either of the following tabs:
  - **Simple**: Use the Simple tab to make guided SQL statements by specifying the appropriate values for the necessary fields. For example, if your rule is defined for a task with Open status, then you need to select Status (Task) from the LOV in the Left Value field, "=" in the Operator field, and "Open" from the Right Value field.
  - **Complex**: Use the Complex tab if you are knowledgeable in SQL and want to directly write SQL statements.
- **Workflows**. Choose the appropriate workflows, attributes, and document owners when defining a business rule.

***Business Rule Monitor Workflows***

| Workflow | Description |
|---|---|
| Notification Only | An Oracle Workflow notification will be sent. The person who receives this notification can be selected from the Value field in the Workflow Attributes window. Click the "..." button, to display this attributes window. |
| Create a Task Only | An automated escalation task will be created. This is generated through the seeded Automated Escalation Template Group for Task Manager (Service Request or Defect Management.) The owner and assignee of this task can be selected from the Value field in the Workflow Attributes window. |
| Notification and Create Task | Besides the workflow notifications that will be sent, an automated escalation task will also be created. The owner and assignee of this task can be specified in the Value field. If the unassigned option is selected in the Automated Escalation Notification Task Assignee Role field in the Workflow Attributes window, then the task that is created has no assignee. |
| Escalated Object | An escalated document will be created. The owner of this escalated document can be specified in the Value field. |

> **Note:** The selection in the Value field can be document owner, document owner's HR manager, escalation territory primary contact, and business (rule) owner. If this value is not specified, it defaults to the business owner.

Since the automated escalation can happen to the document owner in addition to employee resource type, the person who will receive the notifications is determined as follows:

| Document Owner | Description |
| --- | --- |
| Document Owner | The Document Owner is selected as the value in the workflow attributes:<br>• If the document owner type is Employee Resource, this document owner will receive notifications.<br>• If the document owner resource is of any other type, then the primary contact with the employee resource type in the escalation territory is used. If there is no resource that satisfies this criteria, then the primary contact with the employee resource type in the catch-all territory is used. Again, if there is no resource that satisfies this criteria, then the Business Rule Owner is used because the business rule owner is guaranteed to be a resource of type Employee Resource. |

| Document Owner | Description |
|---|---|
| Document Owner's HR Manager | The Document Owner's HR Manager is selected as the value:<br>• If the document owner type is Employee Resource, then the notification is sent to the HR manager of that resource. If there is no resource that satisfies this criteria, then the primary contact with the employee resource type in the escalation territory is used. Otherwise, the primary contact with the employee resource type in the catch-all territory is used, and then the Business Rule Owner.<br>• If the document owner resource is of type Group Resource, then the notification is sent to the first resource of type Employee Resource within the resource group who has a manager. If there is no resource that satisfies this criteria, then the primary contact with the employee resource type in the escalation territory is used. Otherwise, the notification is sent to the primary contact with the employee resource type in the catch-all territory, and then the Business Rule Owner.<br>• If the document owner resource is of any other type other than employee or group resources, then the same rule is used— the primary contact with the employee resource type in the escalation territory, then the primary contact with the employee resource type in the catch-all territory, and then the Business Rule Owner. |
| Escalation Territory Primary Contact | The notification is sent to the primary contact with employee resource in the escalation territory. If there is no resource that satisfies this criteria, then the notification is sent to the the primary contact with employee resource in the catch-all territory. Otherwise, the Business Rule Owner. |

## See Also

Enabling a New Business Rule, page 33- 5

## Enabling a Business Rule

Before monitoring your business rules, you need to enable them first by entering the effective dates in the Business Rule Workbench window. Use the following procedure to first search for a rule, and then second, enable it.

## Prerequisites

None

## Responsibility

CRM Administrator

## Navigation

Navigate to the Navigator - CRM Administrator window.

## Steps

1. Select **Business Rule Monitor > Business Rule Workbench**.

   The Business Rule Workbench window opens.

2. Select **View > Find.**
3. Enter a name, an object, or other search criteria, and click **Find** to return to the Business Rule Workbench. Use the up or down arrow keys to select the rule that you want to use if there is more than one rule that matches your search criteria.
4. Enter the effective date in the Business Rule Workbench window.
5. Save your work.

## Guidelines

If this rule has been generated and the Business Rule Monitor has been started, this rule will then be monitored from the effective date. If this rule has not been generated, you can click Generate to generate your business rules. If a business rule is generated without problems, a note message displays "Your Business Rule has been generated."

> **Note:** The Generate button dynamically creates a view in the database. This view queries the objects that fit the conditions you have defined in the business rule and is used by the main BRM process when it checks the rule, to detect the objects that it needs to take action about.

## Verifying an Escalation Territory

The automatic assignment and notification of escalations depends heavily on the Territory Manager module. So what happens if escalation territories are not there?

If the identity of a person who receives notifications defined in the Workflow Attributes window cannot be determined, then a notification is sent to the primary contact for the escalation territory associated with the source document owner's territory if the territory ID exists. If the territory ID does not exist, it is sent to the primary contact in the catch-all territory, or the Business Rule Owner.

Therefore, the system administrator needs to ensure that the correct structure of escalation territories or a catch-all territory is defined at installation time. Use the following procedure to verify an escalation territory.

## Prerequisites

None

## Responsibility

CRM Administrator

## Navigation

Navigate to the Navigator - CRM Administrator window.

## Steps

1. Select **Territory Manager > Territory Administration**.
2. Select **Administration > Search.**

   The Territory Search window opens.
3. Select **your usage from the list of values in the Usage field.**
4. Select **Escalations** from the Search Category field.
5. Click **Search**.

## Guidelines

Refer to Using Territory Manager for details.

## Starting the Business Rule Monitor

Use the Business Rule Monitor to monitor the workflow processes. Specify the time interval in the Control Panel region. This sets up an Oracle Workflow process which continuously loops and checks at a specified interval for all active business rules.

For example, suppose the Open Task business rule is defined to be checked every hour. Now, if the interval is set to five minutes and the Start button is selected, then the BRM starts the monitoring process. The main background process (Business Rule Monitor Main Process) services the Business Rule Monitor looping workflow which itself checks all the active rules, not just your Open Task rule, every five minutes to see which of the active rules are due to be checked. If it is less than one hour since the Open Task rule was checked last time, then this rule won't be checked until it is due. For those that are due, the BRM looping workflow then goes on to see if there are any objects that violate the rule. If a high priority task has stayed open for more than four hours, then this task will be identified. The appropriate background workflow process (such as Business Rule Monitor Task Process) is then performed to service the escalation activity workflow for that business rule. If the Escalate a Task (notification only) workflow is selected in the workbench, then the task owner will receive a workflow notification automatically. Perform the following procedure to start the Business Rule Monitor.

## Prerequisites

Any workflow process that is used in the Business Rule Monitor must be started. If you have designed customized workflow background processes, then the background processes for these workflows must also be started. In addition, the *Business Rule Monitor Administrator* profile option must be set.

## Responsibility

CRM Administrator

## Navigation

Navigate to **the Navigator - CRM Administrator window.**

## Steps

1. Select **Business Rule Monitor > Business Rule Monitor**.

   The Business Rule Monitor opens.

2. Enter the time period in the Interval field. Enter a time unit (minutes or hours) in the UOM field.
3. Click **Save.**
4. Click **Start** to activate the Business Rule Monitor.

   A dialog box confirms that the Business Rule Monitor started successfully.

5. Click Workflow Monitor to view details of this process.

## Guidelines

After the monitor is started, the Stop button appears. Click **Stop** to stop the monitor.

Click **Refresh Status** to get an immediate status on the BRM main process.

# 34

# Troubleshooting the Business Rule Monitor

This chapter covers the following topics:

- Troubleshooting Tips
- General Tips for Defining Rules
- Stopping the Business Rule Monitor
- Answers to Frequently Asked Questions (FAQs)

## Troubleshooting Tips

If you are having difficulties using the Business Rule Monitor after implementing it, verify the following:

- The Concurrent Manager is running.
- Workflow background processes for all Escalation Workflows are running periodically.
- Oracle Workflow is installed and correctly running.
- Profile Option "Business Rule Monitor Workflow Administrator" is set to the Apps user ID of a valid user with the Workflow responsibility.
- Profile Option "Escalation: Default Level" is set to a value which exists in the Define Escalation Level form.

## General Tips for Defining Rules

The following suggestions are helpful when defining rules in the BRM:

- **The condition should not reflect an absolute state**. Otherwise, the monitor will keep detecting the same objects and acting upon them; you may have repeated notifications sent.
- **Use reasonable check intervals**. The check interval also determines the notification interval. So, if you check a rule every two minutes, notifications are sent every two minutes.
- **Take loop time into consideration**. If the main scan cycle is set to run every ten minutes, then there is no point in setting the check frequency to two minutes.
- **Even in a simple rule, SQL syntax applies.** You can use SQL functions, but you also have to use quotes around your character values. Also use IS NULL and IS NOT NULL instead of =NULL and <>NULL.

- **Verify that the view does what you intended for it to do.** The simplest way to do this is to cut and paste the view definition from the Complex tab into a SQL+ session.
- **Check the performance of the view**. Do a Select from your view. If it takes a long time to return the values, then ask a SQL expert for assistance.

## Stopping the Business Rule Monitor

Some patches for CRM Foundation require the Business Rule Monitor to be stopped before the patch can continue. You can tell if the Business Rule Monitor is running by entering the CRM Administrator responsibility and navigating to Business Rule Monitor > Business Rule Monitor - this invokes the Control Panel. The Status field will show 'Active' or 'Stopping' if the Business Rule Monitor is in a running state.

To stop the Business Rule Monitor press the 'Stop' button on the Business Rule Monitor Control Panel. Note that the workflow background process for the 'Business Rule Monitor Main Process' workflow should be running in order for the 'Stop' command to be processed.

If the Business Rule Monitor Control Panel shows a status of 'Stopping' for an unusually long period of time, this is normally caused by the workflow background process not being running at the time the 'Stop' button is pressed. To start the workflow background process perform the following steps:

## Steps

1. Select System Administrator responsibility from the Requests menu option.
2. Select Run.
3. Run a Single Request.
    1. The name is Workflow Background Process.
    2. The item type is Business Rule Monitor Main Process
    3. Leave min and max threshold blank.
    4. Process deferred to Yes.
    5. Process timeout to Yes.
4. Click ***OK***.
5. Select the Schedule button.
6. Select Periodically.
7. Enter an end date and time of 15 minutes later.
8. Re-run every three minutes.
9. From Completion of the prior run, click **OK**.
10. Select Submit.
11. Note that if your Business Rule Monitor main process is running every 30 minutes, for example, then you will need to extend the end time of the background process so that it is still running the next time the BRM process checks for instructions.

12. You then need to wait for the BRM to do its next run so that it will process the 'STOP' command, then the status should show 'Complete' and you can continue with the patch.
13. You should not comment out this script and continue with the patch as this will leave your system in an undefined state.
14. If for some reason the main BRM workflow will not process the 'STOP' command then you will need to abort the process from within the Workflow Monitor. To do this:
    1. Find the error notification for itemkey JTFBRM and the process ID that is shown on the BRM control screen: these notifications are usually sent to the SYSADMIN user.
    2. View the notification for this process.
    3. At the bottom of the screen there is a poplist from where you choose what you want to happen next, select **Abort**.
    4. After a short while the process should stop.

## Answers to Frequently Asked Questions (FAQs)

The following are frequently asked questions. Answers to these questions may help you in troubleshooting problems with the Business Rule Monitor.

### What is the relationship between the following "Time Related Features"?

**Answer:** In Business Rule Monitor (BRM), you have the option to select how often (in <<Interval>> Field) you want the BRM to check the rules noted in Business Rule Workbench (BRW).

In BRW, you have option to select how often (in <<Check Rule Every>>, <<Tolerate Condition For>> Fields) you want the BRM to check the rule noted here.

In Workflow background process (WBP), you have option to select how often you want to run the workflow background process.

### How Are The Parameters Discussed In Step 1 Related?

**For example, you can set five minutes as the Interval in BRM, set one minute in Check Rule Every in BRW for one of the rules AND only run the Workflow background process every DAY, then what will happen?**

**What is the point of reference for time in the BRM? If it is run at 12:00 PM, and started at 12:05 PM, will the BRM continue to check every five minutes until a specified time?**

**Answer:** Be realistic when setting the time intervals as there is no cross-referencing between them, so all times are independent of each other.

In the example of having the BRM run every five minutes, the BR check every minute and the WBP run once a day, then the BRM will run once when the WBP 24-hour anniversary occurs each day. The checking of the actual BR will depend on when its WBP is next run after the BRM has run. The Workflow processes cannot do anything unless the WBP associated with that process is executed, so the timing of the BRM is dependant on when the WBP runs.

The point of reference for the BRM is when the 'Start' button was pressed in the Control screen. So if it is started at 12.00 pm to run every five minutes, then it will check at

12.00 pm, then at 12.05 pm, until the 'Stop' button is pressed OR until the WBP stops repeating. However, this is dependent on when the WBP is run for the BRM Main Process. If the WBP is run from 12.00 pm every one minute then the above will hold true. However, if it is run every two minutes then it will only check at 12.02 pm, 12:04 pm, 12:06 pm, and so forth, so the 12:05 pm run of the BRM will be delayed by a minute.

For each BR the timing is taken from when the last iteration of that BR occurred. This is affected also by the timing of the WBP for that individual BR Process, in the same way as the main BRM as explained above, plus the timing of the main BRM run and how it coincides with the timing of each BR check.

## Can You Stop the Notifications From Repeating?

**Once the conditions set in a Business Rule are met, then the notifications are sent continuously. Is this the intended functionality? Do you have the option to have a flag to indicate that only one notification should be sent?**

**Answer:** If you choose to send a notification or create a Task, then that will happen each time the BR is checked if the condition is still true. This is as designed, you should set the BR interval to how often you want the notification to be sent. If you want to send the notification only once then you can either customize the Escalation Activity code to do that, or raise it as an Enhancement Request which will be considered for a future release.

## Can You Expand the Fields Available From The 3D View?

**In the BRW, you are limited to fields in the CS_BRM_3D_SERVICE_REQUEST_V view. For example, there is no problem code field in CS_BRM_3D_SERVICE_ REQUEST_V. Is there an option to use fields from other tables or views?**

**Answer:** The seeded 3D view makes available the fields that you see on the Service Request UI that are audited. You only use the fields that are audited because this is how you are able to detect how the values have changed over time. If you need additional fields then you can use the 'Complex' style of rule definition to specify these in standard SQL format.

## How Do You Control Who Receives the Workflow Notifications?

When defining business rules, you have the ability to associate a Workflow process with each business rule. It is the Workflow process that generates the notifications.

The client can view the definition of these seeded workflow processes in the Workflow builder, however, it is not clear as to how the process determines whom the notifications should be sent to. For example, in the Workflow Builder, viewing the process definition of "Escalate a Service Request (notification only)", it has a notification activity called "Object Conformed to a Rule" which sends a notification to a role defined in the "Notification Person" item attribute.

What is the default behavior of this workflow process? What is the hierarchy of criteria that the system uses to determine who to notify?

**Answer:** Select the button labelled "..." which is next to the Workflow LOV. This brings up the Workflow Attributes window, and from there you can select a value for each of the attributes for that specific Workflow process. For example, for the notification workflow you can choose the Notification Role, which is the role of the (in relation to the object, i.e. Service Request) who you want the notification to go to. The options are:

- Business Owner

- Document Owner
- Document Owner's HR Manager
- Escalation Territory Primary Contact

The default setting is Business Owner, which is the owner of the Business Rule. If an individual resource cannot be identified programmatically for any reason, then the notification will always default to Business Owner.

## Where Can I View the Workflow Process Launched by the BRM?

**I want to see if anything is happening for the rule I created which has six records in the database that have matched criteria. I completed all the necessary preliminary set ups to get the BRM running.**

**Answer:** Perform the following steps.

1. First check that the rule will actually return the records that you think it should. Do this by going to the Complex tab in the rule definition and copy the text into SQL*Plus. If it returns rows, then the rule is fine, if not then re-examine your rule. Start simply, such as 'Task Number' = '12345'.
2. If rows are returned, then next look at the Workflow processes using the Workflow Monitor. Ensure that the SYSADMIN user has 'Workflow' responsibility attached, then connect to Applications as SYSADMIN through the PHP login for the instance that you are using.
3. Under the heading 'Self Service', click **Workflow**.
4. At the next page click **View Progress**.
5. In 'Item Type' choose the name of the Workflow process that you believe should be invoked for your rule. For example, any of the Task seeded Workflow processes would use 'Business Rule Monitor Task Process'.
6. Click **Find**. All of the Workflow processes that have been started in that instance will be displayed. Drill down into the details of each process.
7. If there are none, there can be a problem with the main BRM Workflow. You can look at its progress using the same method, but select **Business Rule Monitor Main Process**.

It could be that there is a problem with the Workflow you are using, so again it is suggested that you try the simplest case first so that you can see it working. Try using the 'Escalate a Task - send a Notification' seeded Workflow and have the notification sent to the 'Business Rule Owner' or the 'Document Owner'.

# 35

# User Management Implementation Overview

This chapter covers the following topics:

- Overview
- User Types
- Enrollments
- Templates
- Approval Processes
- Access Control
- Self-Service Registration
- Terms and Definitions

## Overview

Oracle User Management is a highly extensible framework that automates many of the user registration and administration processes for an organization based on its business requirements. Because these processes are self-service enabled, users can complete many of their own registration tasks and different levels of administration can be handled by predefined resources or partners of an organization who are granted the appropriate roles and permissions. This reduces an organization's operating cost and its reliance on customer service agents who manually perform these tasks. Oracle User Management functionality is based on key concepts that include user types, enrollments, templates, approval processes, access control, and self-service registration. Once an organization has implemented Oracle User Management, it can automate the process for registering, approving, and maintaining different types of users, and for providing them with access to the appropriate applications. This chapter provides a conceptual explanation of Oracle User Management in the following topics:

## User Types

User types are categories of users based on an organization's unique registration requirements. They provide a flexible, and extensible method of defining, categorizing, and implementing specific forms of user behavior. In addition, user types facilitate user self-service registration by enabling merchants to associate default roles, responsibilities, accounts, and registration templates with categories of users and to determine the appropriate approval process. All users that belong to a specific user type possess the same registration requirements and, if

desired, are provided the same default application access with one responsibility and a range of security roles from none to several complex ones. They can sign up for and configure a set of enrollments and are required to participate in the same approval process. Oracle User Management contains three default user types: primary user, business user, and individual user. Information about each user that registers for one of these types is stored in the TCA, FND, and JTF schemas.

### Primary User

The primary user is a business user and is also the primary contact for an organization. An individual belonging to this user type functions as customer administrator and is responsible for managing all users of the same user's organization. It is generally the first user to register an organization and does not require approval.

### Business User

The business user is a typical B2B user associated with an organization. The business user is generally approved by one or more primary users of an organization or someone in the merchant organization. Business users can be granted Primary User privileges with the new Primary User enrollment.

### Individual User

The individual user is a typical business-to-consumer (B2C) user that has no relationship to an organization. Approval is generally not required for individual users.

## Enrollments

Enrollments are a set of add-on services that incrementally capture user data and grant users additional access privileges. Users can obtain enrollments during registration or after the approval process is completed. Enrollments typically grant a user access to an application, but can also enable the user to accept licensing terms, to provide surveys, and to sign up for parking permits or any other service. Enrollments can be tied to one or many user types, can be automatic, self-service, delegation only, or delegation and self-service, and may require an approval process. They correspond to a 0-1 responsibility and 0-many security roles and are optionally displayed in a user interface such as a JSP page.

### Self-service Enrollments

Self-service enrollments are enrollments that a user manually assigns to itself as part of the registration process.

### Automatic Enrollments

Automatic enrollments are automatically and transparently assigned to a user when the user registers for a specific user type. For example, an organization may wish to automatically assign primary users with access to specific accounts that are not available to other user types.

### Delegation Only

Delegation only enrollments are assigned to users by an individual with the appropriate access privileges and never requires any approvers. This process only takes place at the delegating individual's discretion and users cannot sign up for these enrollments. An individual with the appropriate access privileges can also grant delegation privileges to other users. Users cannot use self-service registration to sign up for enrollments that are delegation only enrollments.

## Required Roles

The delegation only enrollment is only available if:

- The administrator has granted the user all access roles associate with the enrollment.
- The delegation role is defined for the enrollment and the administrator has the delegation role.

### Delegation and Self-service

Delegation and self-service enrollments can be assigned to a user by either of two methods. Users can sign up for these enrollments or an individual with the appropriate access privileges can assign them to users. If a user signs up for a self-service enrollment or is delegated an enrollment by an individual with insufficient access privileges, then the user must complete the approval process. If the enrollment is a delegation and self-service enrollment the it is always available in the UI as a choice for the administrator.

## Required Roles

If the administrator has all of the required roles for an enrollment, then the administrator can grant users the enrollment without launching an approval process. If the administrator does not have all of the required roles for an enrollment, then the administrator can grant users the enrollment, however an approval process is launched and must be completed before it is granted to the user.

## Templates

Templates are JSP pages that enable Oracle User Management to capture and retain information during the registration process. Each JSP page is associate with a Java class called a template handler, which captures the required information and writes it to the database. Each template is associated with one or more user types and enrollments.

## Approval Processes

An approval process is a predefined series of steps required to approve user registration or service enrollment requests. They are associated with one-to-many user types and can be associated with one-to-many enrollments. Approval processes use Oracle Workflow for routing requests to the correct approvers and use email to send workflow notifications to the approvers. In addition, approval processes support time-outs and reminders. A request times out if it is left in an approvers queue for a specified amount of time. Users are sent email notifications once their requests have been approved or rejected. They will not be granted security roles or responsibilities until they have been approved.

### Approval

An approval is an optional feature that enables approvers to reject or approve new user accounts. The System Administrator Console Users tab enables users to view, create, modify, delete, enable, and disable approvals, including those for specific organizations.

### Approval Definition

An approval definition is the association of a user type or an enrollment with a workflow process, a default list of approvers, and optionally with an organization that overrides the list of approvers. It uses workflow to track and route an approval request to the approvers and to deliver an email notice to the approvers when required. If the approval definition has multiple approvers, then the email notification is sent to each successively to approve the request. The user is only granted the required access or enrollment after each approver has approved the request. Rejection is required from only one approver to deny the user the requested access or enrollment. If the order of the approvers changes, all pending requests are transferred back to the top of the new approver list. If the user type or enrollment is changed to use another approval definition, all pending request workflow processes terminate and a new workflow process is created and launched. If a user type or enrollment is modified and no longer requires an approval, then all pending requests are automatically approved.

### Approval Flow

The approval flow is a predefined flow of steps required to approve user registration or service enrollment requests.

### Approver Lists

An approver list is a group of one or more approvers associated with an approval definition. Each approval definition has a default approver list and can have separate approver lists defined for each organization that takes priority over the default list.

### Approvers

Approvers are designated individuals who can modify user information and who can create and assign user accounts. Approvers with the CRM Primary User responsibility or access to the CRM System Administration Console can approve or reject user type and enrollment requests. Primary users can approve any request for their organization if approval group capability has been implemented in the system. Oracle User Management recognizes the following levels of approvers:

- System Administrators
- Primary Users
- Request Owners

## System Administrators

System administrators, also referred to as merchant administrators, can accept or reject any requests in the system and can define a global or default list of approvers for each user type and enrollment. They can also supersede any decision made by other

approvers in an organization. To approve requests, system administrators must be assigned the JTF_REG_APPROVAL permission.

## Primary Users

Primary users can approve requests that are explicitly assigned to them, and can approve any requests for their organization if approval group capability has been implemented in the system. Primary users must be assigned the JTF_PRIMARY_USER_SUMMARY permission to approve pending requests and must be assigned the JTF_PRIMARY_USER responsibility to access the approval page.

## Request Owner

Request owners, also known as approvers are generated by the approver list and the most current state of workflow defined for given approval. Request owners have the JTF_APPROVER permission and can only approve requests assigned to them.

### Approval Groups

User Management enables a designated group of users to approve account requests. All members of this group can view and process the request and only one member of the group must approve the request. Once this occurs, the request, if applicable, is assigned to the next approver in the approval hierarchy.

## Access Control

Oracle User Management provides a flexible and granular level of access control through its system of permissions, roles, and responsibilities.

### Responsibilities

Responsibilities are groupings of application menus that determine the user interface accessible to a particular user. During the registration process, users are granted access to one or more responsibilities depending on the services in which they enroll and the merchant policy. Typically, individual users are given access to only one responsibility. Oracle User Management contains the following responsibilities:

## CRM HTML Administration

The CRM HTML Administration responsibility provides access to the HTML System Administration console. Oracle User Management functionality, can be accessed by clicking the Users tab.

## CRM User Management

The CRM User Management responsibility provides access to the Registration and Setup navigation links in the System Administration Console.

## CRM Primary User

The CRM Primary User page provides access to the Home tab and Users tab in standalone mode. This responsibility does not provide access to any other tabs in the System Administrator Console.

### Permissions

Permissions are specific types of access privileges that can be assigned to a user. A user can perform specific tasks if the user is assigned the required permissions. Oracle User Management contains the following permissions:

## JTA_UM_SETUP

The JTA_UM_SETUP permission provides access to all Oracle User Management setup screens and should only be granted to administrators in the organization who are responsible for implementing the system.

## JTA_UM_DELEGATION_ACCESS

The JTA_UM_DELEGATION_ACCESS permission displays the Delegation column with checkboxes in the Enrollment selection page. This permission is automatically assigned when a user is granted delegation privileges for the first time for an enrollment.

## JTF_APPROVER

The JTF_APPROVER permission enables users to view and to approve requests that are assigned to them and to be approvers in the Approval Definition screen.

## JTF_PRIMARY_USER_SUMMARY

The JTF_PRIMARY_USER_SUMMARY permission provides users with access to the User Maintenance and Pending Approvals page s, and enables them to query all users in their organization. Users who are assigned this permission can perform the following in the User Maintenance page:

- Disable user accounts thereby preventing users from logging in.
- Reset passwords.
- Change Account Assignments.
- View Enrollments.
- Revoke enrollments.
- Assign new enrollments.

Users who are assigned this permission can perform the following in the Pending Approvals page:

- View and approve all requests assigned to them.
- View and approve all requests for their organization if the approval group function has been implemented in the system.

## JTF_REG_APPROVAL

The JTF_REG_APPROVAL permission provides system administrator capability for specific functions that include the ability to view and respond to all requests in the system independently of the person to whom they are assigned.

## JTF_SECURITY_ASSIGN_ROLE

The JTF_SECURITY_ASSIGN_ROLE permission provides system administrator capability for specific functions that include the ability to query any users and to change their details, to assign accounts, to manage enrollments, and pending approvals from the Pending Approvals link in the main navigation bar, to reset passwords, and to disable user access.

### Roles

Roles are groupings of permissions, which are page level or function level granular privileges used to maintain application security. A single user can be granted several roles, each of which separately determines access rights to the user interface details, the ability to perform certain transactions and the ability to access certain data sets. During the registration process, users are granted the appropriate set of roles that map to their job function. Although Oracle User Management contains the following predefined roles, users with the appropriate access privileges can also create and customize their own roles.

## JTA_UM_DELEGATION_ACCESS

The JTA_UM_DELEGATION_ACCESS role is assigned the JTA_UM_DELEGATION_ACCESS permission and provides users with all of the access privileges associated with this permission.

## JTA_UM_SETUP_ADMIN

The JTA_UM_SETUP_ADMIN role is assigned the JTA_UM_SETUP permission and provides users with all of the access privileges associated with this permission.

## JTF_APPROVER

The JTF_APPROVER role is assigned the JTF_APPROVER permission and provides users with all access privileges associated with this permission.

## JTF_PRIMARY_USER

The JTF_PRIMARY_USER role is assigned the JTF_PRIMARY_USER_SUMMARY permission and provides users with all access privileges associated with this permission.

## JTF_SYSTEM_ADMIN_ROLE

The JTF_SYSTEM_ADMIN role is the global system administration role and contains all permissions required to access and operate the System Administration Console including JTF_SECURITY_ASSIGN_ROLE and JTA_UM_SETUP.

## Self-Service Registration

Self-service registration is a user interface and set of background processes that enable users to perform their own registration tasks instead of doing so through an administrator. This feature reduces an organization's operating costs and removes registration restrictions that are based on the availability of an administrator.

### Registration

Registration is the process that provides users with access to some or all of an application's functionality.

### Registration Self-service Administration UI

The Registration Self-service Administration UI is a user interface that enables system administrators, and designated primary users, to maintain users, parties, and accounts for an external organization or an internal group.

### Registration Self-service User UI

The Registration Self-service user UI is a user interface that enables self-registration for primary, individual, or business users.

## Terms and Definitions

This section contains additional terms and definitions that are essential to understanding Oracle User Management.

### Customers

Customers are individuals who are external to the implementing organization and who use but do not implement the Oracle e-Business Suite.

### Java Server Pages (JSPs)

JSPs are an extension to the Java servlet technology that was developed by Sun as an alternative to Microsoft's ASPs (Active Server Pages). JSPs have dynamic scripting capability that works in tandem with HTML code, separating the page logic from the static elements — the actual design and display of the page. Many of the Oracle User Management configuration and management tasks are performed using a HTML interface composed of JSPs.

### Merchants

Merchants implement the Oracle e-Business Suite and should not be confused with "customers" who use the Oracle e-Business Suite.

### Users

Users are individuals who require partial or complete access to one or more applications in the Oracle e-Business suite.

## Workflow

Oracle Workflow automates and continuously improves business processes, routing information of any type according to business rules you can change. The rules, which we call a workflow process definition, include the activities that occur in the process and the relationship between those activities. An activity in a process definition can be an automated function defined by:

- a PL/SQL stored procedure or an external function
- a notification to a user or role that may request a response
- a business event
- a subflow that itself is made up of many activities.

# 36

# Implementation Tasks for User Management

This chapter covers the following topics:

- Introduction
- Creating the User Management Administrative User
- Setting Profile Options
- Setting Up Workflow
- Starting the Workflow Process
- Stopping the Workflow Process
- Setting Up Approvals
- Creating a New Approval
- Removing an Approval
- Searching for an approval
- Editing Approval Details
- Enabling and Disabling Approval Definitions
- Updating Approval Preferences for an Organization
- Setting Up Templates
- Creating a Template
- Removing a Template
- Enabling and Disabling Template Definitions
- Editing a Template's Details
- Searching for a Template
- Setting Up Enrollments
- Creating an Enrollment
- Removing an Enrollment
- Enabling and Disabling Enrollment Definitions
- Editing an Enrollment's Details
- Setting Up User Types
- Creating a User Type

- Removing a User Type
- Activating and Deactivating User Types
- Searching for a User Type
- Editing a User Type's Details
- Creating Primary User Approval Groups
- Backward Compatibility
- Related Documentation and Resources

## Introduction

The Users tab in the System Administration Console provides functionality for setting up the User Management framework and for registering users. The Setup menu in the main navigation bar enables administrators to implement User Management by creating and managing approvals, enrollments, user types, and templates. This chapter provides instructions for implementing User Management including the steps performed in the Setup Menu of the Users tab. The Registration menu in the main navigation bar enables administrators to manage approvals, and to setup, modify, or delete users. Instructions for performing these tasks are contained in the User Management chapter of the Oracle Common Application Components User's Guide.

## Creating the User Management Administrative User

To access the System Administrator Console and perform certain User Management administrative functions, a user must be a system administrator or an administrative user with the appropriate responsibilities and roles. This section provides instructions for creating a User Management administrative user and assigning it the appropriate responsibilities and roles. The steps for creating the User Management administrative user are performed in the HTML and Forms-based interfaces.

> **Note:** Because the Forms-based interface does not generate party information you should first perform the required steps for creating the User Management Administrative User in the HTML interface and then complete the process using the Forms-based interface.

## Prerequisites

None

## Responsibility

System Administrator

## Navigation

Log in to the Forms and HTML interfaces as required.

## Steps in HTML

1. Log on to the System Administrator Console as a System Administrator.
2. Click the Users tab and then click User Maintenance on the side navigation bar.
3. Enter the user name in the search field and Select **Go**.
4. Select the user name and then select **Roles**
5. Assign the required roles to the administrative user, select **Update**, and exit the System Administrator Console:
    1. JTA_UM_SETUP_ADMIN (for access to the setup screens)
    2. JTF_APPROVER (for access to the approval screens)

## Steps in Forms

1. Log in to the Forms interface with System Administrator responsibility and choose **Security>User>Define**.
2. Enter a user name and password in the Users window.
3. Add either of the following responsibilities, save your work, and exit the Forms interface:
    - CRM HTML Administration
    - CRM User Management

    **Note:** Responsibilities determine which pages a user can access and roles determine which functions the user can perform in those pages. If you do not assign appropriate roles to the user, then it will not be able to perform the required function even with the appropriate access to the page.

## Setting Profile Options

The first step in implementing User Management is to set the appropriate values for the User Management profile options. Profile options determine a wide range of User Management functionality. Appendix A: Profile Options, page A- 4 contains detailed instructions for setting profile options. The following table lists the User Management profile options:

***User Management Profile Options***

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| JTF_PRIMARY_USER | sysadmin | Site | Predetermines the username that corresponds with the "Universal Approver". | The supplied username corresponds to the Universal Approver. |

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| JTF_INDIV IDUALUSER_ ACCOUNT | Yes | Site | Enables automatic account creation for newly registered users. | When set to **Yes**, automatically creates a new account in the HZ_ CUST_ACCOUNTS table for a newly registered user and associates the user with the account. Users must have an account to buy products in the iStore. |
| JTA_UM_APPLICAT ION_URL | None | Site | Specifies the application logon URL sent to users in email messages that are automatically generated once a user request has been approved. | The supplied URL is sent to users in email messages that are automatically generated once a user request has been approved. |
| JTA_UM_ WORKFLOW_ OWNER | sysadmin | Site | When a workflow is launched it always identifies the user who launched it. The system administrator is the default User Management workflow owner. User Management uses workflow for registration and for resetting passwords. Users can query workflows using the name of the workflow owner. | Specifies the name of the workflow owner. |
| JTA_UM_SENDER | None | Site | Provides a sender clause for automatically generated email messages such as approval and password expiration notifications. | Provides a sender clause for automatically generated email messages such as approval and password expiration notifications. |
| JTF_UM_AP PROVAL_OWNER | sysadmin | Site | .Defines the individual who serves as an escalation point of contact and who receives and approval request when the last approver fails to approve the request. | This profile option is used in the approval process. If the last approver in a predefined approval definition fails to approve a request, the person defined in this profile option will be the escalation point of contact and will receive the request. The user specified as the value for this profile option must have the JTF_ SECURITY_ASSIGN_ROLE permission |

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| JTF_UM_APPROVAL_TIMEOUT_MINS | 1440 Minutes (one day) | Site | Defines (in minutes) how long a workflow notification remains in a queue before it is timed out. | When the notification times-out, the request goes to the next approver on the list. If no approver is specified, the approval owner receives and answers the request. If you enter 0 as the default, no time out occurs. If no value is set, the profile option is defaulted to 0. The Process Time-out field in the parameters window when starting the "JTF Approval" workflow must be set to Yes for this profile option value to take affect. |
| JTF_UM_APPROVAL_URL | None | Site | Defines the user application logon URL. | The URL is included in the workflow notification sent to each approver when they are assigned a request. The approver is sent an email message stating that the approver must approve a request. |
| JTF_UM_MERCHANT_NAME | None | Site | Defines the name of your organization. | Workflow inserts this name into request approval and rejection notifications when they are sent to the user. |
| JTF_REGISTRATION_CACHE | Yes | Site | Determines whether the registration pages will cache the data entered by the user during the registration flow. | If set to **Yes** and if the user presses the browser "Back" button, then the data entered on the previous page is available. If set to **No**, then the data (page) expires as soon as the user leaves the page. |
| ICX: Language | American English | Site | The ICX: Language profile can be set at the user level and determines the language displayed for the user when logging in. | The language for the registration page accessed from the "Register Here" link of the login page is determined by the ICX Language profile set for the "Guest User" defined in the System Administration console. To change the language for this page access the ICX: Language profile option, click the User field, and choose a language from the LOV. |

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| JTA_UM_REG_ ORG_FAX_REQD | Yes | Site | Provides Yes/No values in the registration page that determine whether or not an organization's fax information is required. | The Organization Information page changes its required options depending on the values set for this profile option, however the fax field remains optional in the user detail page regardless of how this profile option is set. |
| JTA_UM_REG_ ORG_PHONE_ REQD | Yes | Site | Provides Yes/No values in the registration page that determine whether or not an organization's phone information is required. | The Organization Information page changes its required options depending on the values set for this profile option, however the phone field remains optional in the user detail page regardless of how this profile option is set. |
| JTA_UM_HIDE_QU ICKFIND | No | Site | Optionally hides the Quickfind menu. | When set to **Yes**, this profile option hides the Quickfind menu from users. When set to No, the Quickfind menu appears. The profile option is set to **No**, to ensure compatibility with previous versions of User Management that did not contain this feature. |
| SIGNON_ PASSWORD_ LENGTH | 5 | Site | Specifies the number of characters required to constitute a valid password. | Specifies the number of characters required to constitute a valid password. |
| JTA_UM_ PASSWORD_GEN_ WKF | JTAUM PSW | All | Specifies the name of the workflow used for sending passwords to users. | Specifies the name of the workflow used for sending passwords to users. |
| JTA_UM_SUPPORT_ CONTACT | Null | Responsibility | Specifies the name or email address of the support person to contact in case of logging errors. | Specifies the name or email address of the support person to contact in case of logging errors. |

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| JTF_UM_EMAIL_AS_USERNAME | No | Site | Optionally disables the User ID field in the registration screen and enables the user's email address to also function as the user ID. | When set to **Yes**, this profile option disables the User ID field in the registration screen and enables the user's email address to also function as the user ID. During the registration process, User Management populates the USER_ID column in the FND_USER table with the user's email address.<br>When set to **No**, this profile option retains both User ID field in the registration screen and consequently does not populates the USER_ID column in the FND_USER table with the user's email address. |
| JTA_UM_DEFAULT_ADDRESS_STYLE | US | Site | Determines the default country whose specific style of address fields must be displayed in the company registration page and user details page.<br>When a user registers for the first time, the user must choose a country before entering address information. The country specified by this profile option appears by default.<br>If User Management does not contain seeded data for the required country, then you must setup the address style using the Accounts Receivable flex fields. For instructions on configuring flexible address fields, see the Chapter 3 of the *Oracle Receivables User Guide*. | When the profile option is set for a specific country then the address fields required by that country's address style appear in the company registration page, and user details page. If the profile option is not set for a specific country of if there is an error displaying that country's address style then the registration and user details pages default to the U.S. address style.<br>The registration process cannot be completed unless information is entered in mandatory address fields. The mandatory definition can be turned on or off for a given field from the flexfield segment definition, as a single address field maps to a segment of the address flexfield. |

**Note:** If you are calling the TCA API to create a party, then the HZ_GENERATE_PARTY_NUMBER profile option must be set to yes. This is not a User Management profile option.

## Setting Up Workflow

User Management uses workflow to track and route approval requests and to send notifications to approvers. The default workflow JTF APPROVER retrieves the first approver from the hierarchy list and notifies the approver. When the approver approves

the request, Workflow searches for the next required approver and continues this process until all approvers approve the request, or the request is rejected. Workflow items are sent to an approvers worklist and email address. For user types, the approver receives a URL in their notification that provides access to the Pending Approvals window.

> **Note:** Email notification will only be sent if the Workflow mailer is setup and configured properly. The PHP / Self Service Workflow notifications page can also be used to view notifications. Please refer to the Workflow documentation for more information on how to start and configure the workflow mailer. If the concurrent manager is not up and running, workflow does not work correctly.

For information instructions on setting up Workflow, see the following:


- Starting the Workflow Process, page 36- 8
- Stopping the Workflow Process, page 36- 9


## Starting the Workflow Process

> **Note:** Refer to the Oracle Workflow Administrator's Guide for instructions on setting up and monitoring workflow.

Perform the following steps to start the Workflow process.

## Prerequisites

See the *Oracle Workflow Administrator's Guide* for more information.

## Responsibility

System Administrator

## Navigation

Log in to the navigator of the Forms-based application, select **Concurrent>Request**.

## Steps

1. Click **Submit a New Request** and in the resulting window, select the Single Request option button and click **OK**.
2. Enter the name of the workflow process as "Workflow Background Process." Workflows must be defined in the approval setup. Oracle is shipping one seeded workflow out-of-the-box, JTFAPPROVAL workflow
3. Perform the following in the Parameters window:
    1. Enter JTF_APPROVAL or the workflow you want to start as the Item Type. This must be defined as an approval type in the approval definition set in the System Administrator User tab.

2. Enter the Minimum and Maximum thresholds which specifies the minimum and maximum costs that an activity must have for this background engine to execute it, in a hundredth of a second.
3. Enter No for the Process Deferred, which specifies whether this background engine checks for deferred activities.
4. Enter Yes for Process Timeout and click **OK**.

   If this is set to No, the workflow process ignores the JTF_UM_APPROVAL_TIMEOUT profile option

4. Click **Schedule** next to the At these times option, region.
5. Select the job to run the job periodically, in the Run the Job region.
6. Enter the start date and leave the end date blank to run the workflow indefinitely.
7. Define the interval which triggers the workflow to check for requests every specified minute, hour, day, week, or month and click **OK**.
8. Click **Yes** in the confirmation window if you selected for the workflow to run indefinitely, then click **Submit** to confirm, and click **No** to exit.

## Stopping the Workflow Process

Perform the following steps to stop the workflow process.

## Prerequisites

- A workflow must be running.
- See the *Oracle Workflow Administrator's Guide* for more information.

## Responsibility

System Administrator

## Navigation

Log in to the navigator of the Forms-based application, select **Concurrent>Request**.

## Steps

Query any workflows that are running and cancel the request.

## Setting Up Approvals

An approval is an optional feature that enables approvers to reject or approve new user accounts. The System Administrator Console Users tab enables users to view, create, modify, delete, enable, and disable approvals, including those for specific organizations. For instructions on setting up approvals, see the following:


- Creating a New Approval, page 36-10
- Removing an Approval, page 36-11

- Searching for an Approval, page 36-11
- Editing an Approval's Details, page 36-12
- Enabling and Disabling Approval, page 36-12
- Updating Approval Preferences for an Organization, page 36-13


## Creating a New Approval

Perform the following steps to create a new approval. In some cases an approval may generate an exception. When this occurs, an error window is generated that displays a default workflow error message and the workflow description.

## Prerequisites

None

> **Warning:** The **Use Pending Request Page** check box should only be unchecked if your organization does not plan to use User Management's pending approval window and intends to respond to all approvals through emails and the workflow notification window.

## Responsibility

CRM HTML Administration or CRM User Management

## Role

JTA_UM_SETUP_ADMIN

## Navigation

In the System Administrator Console, navigate to Users>Setup>Approval Setup and click the **Create New Approval** button.

## Steps

1. Enter the following approval information and click **Next**:
   - Approval key
   - Approval name
   - Description
   - Select a Workflow Item Type from the drop-down list.
   - Select an Application from the drop-down list.
   - (Optional) Select the **Use Pending Request Page** check box if you want the approval to display during the registration process from the "Register Here" link.
2. Enter the following Approver Selection information, click **Add User** and then click **Save**:
   - Enter a number to define the order that each approver gets the request.

- Enter the name of the first approver into the Approver1 field or click **Go** to search for an approvers name.

## Removing an Approval

Perform the following steps to remove an approval.

## Prerequisites

None

## Responsibility

CRM HTML Administration or CRM User Management

## Role

JTA_UM_SETUP_ADMIN

## Navigation

In the System Administrator Console, navigate to Users>Setup>Approval Setup

## Steps

1. Select the check box in the Remove column that corresponds to the Approval that you plan to delete.
2. Click **Update** to delete the Approval or click **Restore** to reset the original values in the window.
3. In the resulting window, click **Confirm and Update Now** to delete the Approval or click **Cancel** to cancel the deletion.

## Searching for an approval

Perform the following steps to search for an approval.

## Prerequisites

None

## Responsibility

CRM HTML Administration or CRM User Management

## Role

JTA_UM_SETUP_ADMIN

## Navigation

In the System Administrator Console, navigate to Users>Setup>Approval Setup

## Steps

1. Select the Approval Name or Approval Key options from the Search Approval menu.
2. Enter your search criteria in the adjacent field and click **Go**.

## Editing Approval Details

Perform the following steps to edit an approval's details.

## Prerequisites

None

## Responsibility

CRM HTML Administration or CRM User Management

## Role

JTA_UM_SETUP_ADMIN

## Navigation

In the System Administrator Console, navigate to Users>Setup>Approval Setup

## Steps

1. Click the name of the approval in the Approval Name column.
2. Edit the fields as desired and click **Next**.
3. Edit the information in the Update Approval window and click **Next**.
4. Edit the information in the approver selection order window and click **Submit**.

## Enabling and Disabling Approval Definitions

Perform the following steps to enable or disable an approval definitions.

## Prerequisites

None

## Responsibility

CRM HTML Administration or CRM User Management

## Role

JTA_UM_SETUP_ADMIN

## Navigation

In the System Administrator Console, navigate to Users>Setup>Approval Setup

## Steps

1. If you want to enable an approval, select **Enabled** from the drop-down list in the corresponding Status column.
2. If you want to disable an approval, select **Disabled** from the drop-down list in the corresponding Status column.
3. Click **Update** to modify the status of the approval or click **Restore** to reset the original values in the window.

   A confirmation window opens.
4. Click **Confirm and Update All** to modify the status.

# Updating Approval Preferences for an Organization

Perform the following steps to update approval preferences for an organization.

## Prerequisites

None

## Responsibility

CRM HTML Administration or CRM User Management

## Role

JTA_UM_SETUP_ADMIN

## Navigation

In the System Administrator Console, navigate to Users>Setup>Approval Setup>Organization

## Steps

1. Select Organization Name or Company Number from the Enter Search Criterion drop-down list.
2. Enter a minimum of three characters into to the search field.

   The "%" and "_" (underscore) symbols are wildcards.
3. Click **Go**.

A list of search results appears in the window.

4. Click the column heading to sort the row.
5. Click the Organization Name.

   The Approval Preferences window opens with a list of approval definitions for the specified organization.
6. Click the approval list that you want to update.
7. Enter the Approver Selection information:
   1. Enter a number to define the order that each approver gets the request.
   2. Enter the name of the first approver into the Approver1 field or click **Go** to search for an approvers name.
   3. Enter your search criteria and click **Go**.
   4. Select the option button for the user that you want to be the approver and click **Add User**.
   5. (Optional) Enter the name of additional approvers into the other Approver fields (repeat steps a-e).
   6. (Optional) Click **Cancel** to clear the fields.
   7. (Optional) Click **add 5 more rows** to add five empty approver fields.
8. Click **Submit** to save.

## Setting Up Templates

Templates are JSP pages that enable User Management to capture and retain information during the registration process. Each JSP page is associate with a Java class called a template handler, which captures the required information and writes it to the database. Each template is associated with one or more user types and enrollments. For instructions on setting up templates, see the following:

- Creating a Template, page 36-14
- Removing a Template, page 36-15
- Enabling and Disabling Template Definitions, page 36-16
- Editing a Template's Details, page 36-17
- Searching for a Template, page 36-17

## Creating a Template

Perform the following steps to create a template.

## Prerequisites

None

## Responsibility

CRM HTML Administration or CRM User Management

## Role

JTA_UM_SETUP_ADMIN

## Navigation

In the System Administrator Console, navigate to Users>Setup>Templates and click **Create New Template**.

## Steps

1. Enter the following required information.
    1. Enter the template key.
    2. Enter a name for the template.
    3. (Optional) Enter a description for the template.
    4. Select a template type from the drop-down list. Options include user type template or enrollment template.
    5. Enter the name of the template handler. The template handler is a java class implemented by the application to handle the registration data at runtime.
    6. Enter the name of JSP page that is the first window of the template flow into the Page Name field. The extension of the window must be ".jsp".
    7. Select an application from the drop-down list.
2. (Optional) Click **Reset** to clear the fields.
3. Click **Create** to save your information.

## Removing a Template

Perform the following steps to delete a template.

## Prerequisites

None

A template is an application-specific set of JSPs that you can use to customize the user registration process. There are two template categories, user types and enrollments. Perform the following steps to create a template.

## Prerequisites

None

## Responsibility

CRM HTML Administration or CRM User Management

## Role

JTA_UM_SETUP_ADMIN

## Navigation

In the System Administrator Console, navigate to Users>Setup>Templates.

## Steps

1. Select the check box in the Remove column that corresponds to the template that you want to delete.
2. Click **Update** to delete the template or click **Restore** to reset the original values in the window.

   A confirmation window opens.
3. Click **Confirm Update** to delete the template or click **Cancel** to return to the Available Templates window.

# Enabling and Disabling Template Definitions

Perform the following steps to enable or disable a template.

## Prerequisites

None

## Responsibility

CRM HTML Administration or CRM User Management

## Role

JTA_UM_SETUP_ADMIN

## Navigation

In the System Administrator Console, navigate to Users>Setup>Templates

## Steps

1. If you want to enable a template, select **Enabled** from the drop-down list in the corresponding Status column.
2. If you want to disable a template, select **Disabled** from the drop-down list in the corresponding Status column.
3. Click **Update** to modify the template's status or click **Restore** to reset the original values in the window.

   A confirmation window opens.

4. Click **Confirm Update** to modify the template's status or click **Cancel** to return to the Available Templates window.

## Editing a Template's Details

Perform the following steps to edit a template's details.

## Prerequisites

None

## Responsibility

CRM HTML Administration or CRM User Management

## Role

JTA_UM_SETUP_ADMIN

## Navigation

In the System Administrator Console, navigate to Users>Setup>Templates.

## Steps

1. Click the name of the template in the Template Name column.

   The User Management: Update Template window opens.
2. Edit the fields as desired.
3. (Optional) Click **Clear** to reset the fields to their original settings.
4. Click **Update** to save your changes.

## Searching for a Template

A template is an application-specific set of JSPs that you can use to customize the user registration process. Perform the following steps to search for a template.

## Prerequisites

None

## Responsibility

CRM HTML Administration or CRM User Management

## Role

JTA_UM_SETUP_ADMIN

## Navigation

In the System Administrator Console, navigate to Users>Setup>Templates

## Steps

1. Select how you want to search for the template. Options include Template Name or Template Key from the drop-down list.
2. Enter your search criteria into the text field and click **Go**.

## Setting Up Enrollments

Enrollments are a set of add-on services that can incrementally capture user data and grant users additional access privileges. Users can obtain enrollments during registration or after the approval process is completed. Enrollments typically grant a user access to an application, but can also enable the user to accept licensing terms, to provide surveys, and to sign up for parking permits or any other service. Enrollments can be tied to one or many user types, can be automatic, self-service, delegation only, or delegation and self-service, and may require an approval process. They correspond to a 0-1 responsibility and 0-many security roles and are optionally displayed in a user interface such as a JSP page. For instructions on setting up enrollments, see the following:

- Creating an Enrollment, page 36-18
- Removing an Enrollment, page 36-19
- Enabling and Disabling Enrollment Definitions, page 36-20
- Editing an Enrollment's Details, page 36-20

## Creating an Enrollment

Perform the following steps to create an enrollment.

## Prerequisites

None

## Responsibility

CRM HTML Administration or CRM User Management

## Role

JTA_UM_SETUP_ADMIN

## Navigation

In the System Administrator Console, navigate to Users>Setup>Enrollments and click the **Create New Enrollment** button.

## Steps

1. Define the following information:
    1. Enter an Enrollment Key.
    2. Enter a name for the new enrollment.
    3. (Optional) Enter a description for the new enrollment. This description can include HTML tags for style. There is a 2000 character limit in the field that includes all HTML tags.
2. Select roles and responsibilities.
    1. Select a responsibility from the Responsibility drop-down list. If no responsibility is required, choose **No Responsibility is Required**.
    2. Select the name of a role in the Available list and click **>** to move it to the Assigned list. You can hold down the [CTRL] key and use your mouse to select multiple roles.
    3. Repeat the previous step to add more roles to the list.
    4. To move all Available Roles to the Assigned Roles list, then click **>>** or to move all Assigned Roles to the Available Roles list, then click **<<**.
    5. Select an application from the drop-down list.
    6. Select an approval from the drop-down list. If no approvals are required for the user to subscribe to the service, choose **No Approval Required**.
    7. Select an enrollment template from the drop-down list.
3. (Optional) Click **Reset** to clear the fields and click **Create** to save your changes.

## Removing an Enrollment

Perform the following steps to delete an enrollment.

## Prerequisites

None

## Responsibility

CRM HTML Administration or CRM User Management

## Role

JTA_UM_SETUP_ADMIN

## Navigation

In the System Administrator Console, navigate to Users>Setup>Enrollments.

## Steps

1. Select the check box in the Remove column that corresponds to the enrollment that you plan to delete.
2. Click **Update** to remove the enrollment or click **Restore** to reset the original values in the window.

   A confirmation window opens.
3. If you are sure you want to delete the enrollment, click **Confirm and Update Now**.

# Enabling and Disabling Enrollment Definitions

An enrollment is an optional step in the user registration process. Perform the following steps to enable or disable an enrollment.

## Prerequisites

None

## Responsibility

CRM HTML Administration or CRM User Management

## Role

JTA_UM_SETUP_ADMIN

## Navigation

In the System Administrator Console, navigate to Users>Setup>Enrollments.

## Steps

1. If you want to enable an enrollment, select **Enabled** from the drop-down list in the corresponding Status column.
2. If you want to disable an enrollment, select **Disabled** from the drop-down list in the corresponding Status column.
3. Click **Update** to modify the information or click **Restore** to reset the original values in the window.

   A confirmation window opens.
4. Click **Confirmed and Update Now**.

   The enrollment status is modified.

# Editing an Enrollment's Details

An enrollment is an optional step in the user registration process. Perform the following steps to edit an enrollment's details.

## Prerequisites

None

## Responsibility

CRM HTML Administration or CRM User Management

## Role

JTA_UM_SETUP_ADMIN

## Navigation

In the System Administrator Console, navigate to Users>Setup>Enrollments.

## Steps

1. Click the name of the enrollment.

   The Update Enrollment window opens.
2. Edit the fields as desired and click **Next**.
3. Select the **Assign the changed role to existing users of this Enrollment** check box if you want previously registered users to be granted the specified role.
4. Assign new roles as needed.
5. Select the **Assign the changed responsibility to existing users of this Enrollment** check box if you want previously registered users to be granted the specified responsibility.
6. (Optional) Click **Reset** to reset the fields to their original settings or click **Update** to save your changes.

   A confirmation window opens.

## Setting Up User Types

User types are categories of users based on an organization's unique registration requirements. They provide a flexible, and extensible method of defining, categorizing, and implementing specific forms of user behavior. In addition, user types facilitate user self-service registration by enabling merchants to associate default roles, responsibilities, accounts, and registration templates with categories of users and to determine the appropriate approval process. All users that belong to a specific user type possess the same registration requirements and, if desired, are provided the same default application access with one responsibility and a range of security roles from none to several complex ones. They can sign up for and configure a set of enrollments and are required to participate in the same approval process. Oracle User Management contains three default user types: primary user, business user, and individual user. Information about each user that registers for one of these types is stored in the TCA, FND, and JTF schemas. For instructions on setting up user types, see the following:

- Creating a User Type, page 36-22

- Removing a User Type, page 36-24
- Activating and Deactivating User Types, page 36-24
- Searching for a User Type, page 36-25
- Editing a User Type's Details, page 36-26

## Creating a User Type

A user type is a category of users based on common responsibilities and roles. User Management ships the following predefined user types out-of-the-box:

- primary user
- business user
- individual user

Each user type is assigned predefined enrollments that include different roles, responsibilities and availability. Legacy users that uptake the new user management framework, no longer have access to the default roles and responsibilities windows. The user type definition replaces these windows. Roles and responsibilities defined at the user level are the default.

Creating a new user type is a multi-step process. The following table lists the three pages needed to create a user type.

***Necessary User Type Information***

| Page | Information | Description |
|---|---|---|
| Details | • Description | • Optional description of user type |
| | • Enable Self-Service Registration | • Checkbox |
| | • Registration Template | • N/A |
| | • Application | • N/A |
| | • Approval by | • N/A<br>You also can change the User Type name here. |
| Credentials | • Default Responsibility | • N/A |
| | • Default Roles | • N/A |
| | • Role delegation | • Checkbox |
| Enrollments | • Enrollment name | • N/A |
| | • Activate (Yes or No) | • N/A |
| | • Availability | • N/A |
| | • Order the active enrollments | • N/A |

Perform the following steps to create a new user type.

**Note:** If you deselect the Enable Self-service Registration check box when you create a new user type, the user type does not appear in the self-service registration window when you click the "Register Here" link unless the user has the JTF_SECURITY_ASSIGN_ROLE permission.

**Note:** At runtime, the system validates that the user has this permission, if not, it confirms if the check box is selected and only shows the user types that are available for self-service.

## Prerequisites

None

## Responsibility

CRM HTML Administration or CRM User Management

## Role

JTA_UM_SETUP_ADMIN

## Navigation

Log in to the CRM System Administrator Console as a system administrator, navigate to Users>Setup>User Types, and click the **Create New User Type** button.

## Steps

1. Enter the details for the user type:
    1. Enter a user type name.
    2. Enter a user type key.
    3. (Optional) Enter a description into the Description field. This description can include HTML tags for style. There is a 2000 character limit in the field that includes all HTML tags.
    4. (Optional) Select **Enable Self-service Registration** to display the new user type during the registration process from the "Register Here" link.
    5. Enter the order in which you want the user type to be displayed.
    6. Select the default registration template and default application from the drop-down lists.
    7. Select the approval by information from the drop-down list and click **Next**.
2. Enter the credentials for the user type:
    1. Select a default responsibility from the drop-down menu. This determines the default login page for the user.
    2. Assign a default role to the user. This determines the default level of functional ability for the user.

3. Enter the enrollments for the user and click **Next**:
    1. Choose Yes or No from the Activate drop-down list next to the enrollment name.
    2. Determine the enrollment's availability by choosing either Automatic, Delegation & Self Service, Delegation Only, or Self Service from the drop-down menu. These values are explained in the Enrollments section of this document.
    3. Enter the order in which you with the enrollment to appear in the Order field.

## Removing a User Type

A user type is a category of users based on common responsibilities and roles. A user type can be removed as long as it is not enabled (in use). Perform the following steps to remove a user type.

## Prerequisites

None

## Responsibility

CRM HTML Administration or CRM User Management

## Role

JTA_UM_SETUP_ADMIN

## Navigation

Log in to the CRM System Administrator Console as a system administrator, navigate to Users>Setup>User Types.

## Steps

1. Select the check box in the Remove column that corresponds to the user type that you want to delete.
2. Click **Update** to delete the User Type or click **Restore** to reset the original values in the window.

    A confirmation window opens.
3. Click **Confirm** to delete the User Type or click **Cancel** to cancel the deletion.

## Activating and Deactivating User Types

A user type is a category of users based on common responsibilities and roles. Perform the following steps to activate or deactivate a user type.

## Prerequisites

None

## Responsibility

CRM HTML Administration or CRM User Management

## Role

JTA_UM_SETUP_ADMIN

## Navigation

Log in to the CRM System Administrator Console as a system administrator, navigate to Users>Setup>User Types.

## Steps

1. If you want to activate an enrollment, select **Active** from the drop-down list in the corresponding Status column.
2. If you want to deactivate an enrollment, select **Inactive** from the drop-down list in the corresponding Status column.
3. Click **Update** to modify the status of the user type or click **Restore** to reset the original values in the window.

## Searching for a User Type

A user type is a category of users based on common responsibilities and roles. Perform the following steps to search for a user type.

## Prerequisites

None

## Responsibility

CRM HTML Administration or CRM User Management

## Role

JTA_UM_SETUP_ADMIN

## Navigation

Log in to the CRM System Administrator Console as a system administrator, navigate to Users>Setup>User Types.

## Steps

1. If you want to search by the User Type Name, then:
    1. Enter your search phrase into the text input field.

2. Click **Go**.

   The results appear in the window.

2. If you want to search by the User Type Key, then:
   1. Enter your search phrase into the text input field.
   2. Click **Go**.

      The results appear in the window.

## Editing a User Type's Details

A user type is a category of users based on common responsibilities and roles. Perform the following steps to edit a user type's details.

## Prerequisites

None

## Responsibility

CRM HTML Administration or CRM User Management

## Role

JTA_UM_SETUP_ADMIN

## Navigation

Log in to the CRM System Administrator Console as a system administrator, navigate to Users>Setup>User Types.

## Steps

1. Click the name of the user type in the User Type Name column.

   The User Type Details window opens.
2. Edit the fields as desired.
3. (Optional) Click **Clear** to reset the fields to their original settings.
4. Click **Next** to save and go on to the next page.

   The Roles and Responsibilities window opens.
5. Edit the information as needed.
   1. Use the drop-down list to select a user type responsibility.
   2. (Optional) Select the **Assign the changed responsibility to existing users of this user type** check box if you want users registered under this user type to be granted the responsibility specified.
   3. To assign roles, select the name of a role in one list and then click **>** or **<** to move it to the other list. Repeat this step for as many roles you want to assign.

4. If you want to move all Available Roles to the Assigned Roles list, then click **>>**.
5. If you want to move all Assigned Roles to the Available Roles list, then click **<<**.
6. (Optional) Select the **Assign the changed role to existing users of this user type** check box if you want users registered under this user type to be granted the role specified.

6. Click **Next** to save and go on to the next page or click **Restore** to revert back to the original values in the window.

   The Enrollments window opens.

7. Edit the information as needed.
   1. If you want to enroll the user type in an enrollment, select **Yes** from the drop-down list in the Enroll column.
   2. If you do not want to enroll the user type in an enrollment, select **No** from the drop-down list in the Enroll column.
   3. Select **Automatic** or **Self-service** from the drop-down lists to define the type.
   4. Enter a number into the fields in the Order column to set enrollment order.
   5. If you want to edit an enrollment's details, then click the name of the enrollment.
8. Click **Next** to save and go on to the next form or click **Restore** to revert back to the original values in the window.

   The User Types window opens with the newly updated user type information.

## Creating Primary User Approval Groups

User Management provides support for assigning requests to the group of primary users within an external organization. Merchants can set up an approval hierarchy for this group and then define a single "virtual" or "logical" approver within the approval hierarchy called the Universal Approver. Requests that are assigned to the Universal Approver can be seen and processed by any/all primary users of the external organization to which the request belongs and are removed from the queue when the first approver approves or rejects them. Security is maintained since primary users can only see requests that pertain to users of their organization. Universal Approvers receive email notifications each time a new approval is required. Consequently they do not have to log into the system and query new approval requests to determine whether or not any new approvals are required.

## Prerequisites

You must be the merchant administrator, system administrator to create a universal approver.

## Responsibility

System Administrator or CRM HTML Administration

## Navigation

Log in to the CRM System Administrator Console as a system administrator, navigate to Users>Registration>User Maintenance>Create.

## Steps

1. Choose the individual user registration profile and click **Next**.
2. Enter personal information for the user.
3. Assign the JTF_APPROVER permission to the user:
    1. Click the Settings tab and then navigate to Security>Access Controls>Permissions.
    2. Search for and access the JTF_APPROVER permission.
    3. Make a note of the role to which JTF_APPROVER permission is assigned. If this permission is not assigned to a role, navigate to Security>Access Controls>Roles and assign the permission to a new or existing role.
    4. Click the Users Tab and navigate to Registration>User Maintenance.
    5. Search for and access the user you created in steps 1 and 2.
    6. Click **Roles** and assign this user the role containing the JTF_APPROVER permission.
4. Navigate to Setup>Approval Setup and either select an approval from the list or create a new approval.
5. Add the newly created user to the Approver list, enter the desired number in the Order field, and then click **Submit**.
6. In the Forms-based interface, navigate to Profile>Sytem, enter "JTF PRIMARY USER" in the Profile field and click **Find**.
7. In the Site column, select the newly created user from the list of values and click **OK**. Save your work and exit the Forms-based interface.

    **Note:** You can test these steps by registering a new user for your organization and checking the workflow notifications in your personal home page. The work list on this page will contain workflow notifications for every user new user you subsequently register.

## Backward Compatibility

User and account requests that are filed through iStore or before the latest version of User management was applied must be approved using the old "Pending Requests" screen. Perform the following steps to approve or reject these user requests.

**Note:** The "End User" user type in the old registration module has been renamed to “Individual User"

## Prerequisites

None

## Responsibility

CRM HTML Administrator

**Role**

JTF_APPROVER

## Navigation

In the System Administrator Console, navigate to Users>Registration>Pending Approvals

## Steps

1. Review the following text at the bottom of the screen:

   "Requests filed through the old registration module will have to be approved from the old request page. This link will be removed, once all these requests have been processed. Click here"

2. Click the **Click Here** link and approve or reject the users as you see necessary. Any user account requests filed after this patch has been applied will be visible in the main Pending Approval screen.

## Related Documentation and Resources

You can consult the following documentation:

- *Oracle Applications, Product Update Notes, Release 11i*
- *Installing Oracle Applications, Release 11i*
- *Implementing CRM Applications*
- *Oracle CRM Foundation Components Concepts and Procedures*
- *Oracle CRM Foundation Technical Reference Manual*
- *Oracle Workflow Administrator's Guide*
- *Oracle Receivables User Guide*

These documents range from the general to the specific, in the order listed in the following table.

***Related Documentation***

| Document | Purpose |
|---|---|
| Oracle Applications, Product Update Notes, Release 11*i* | This document contains information about new product features and functions for the various Oracle applications. |
| Installing Oracle Applications, Release 11*i* | This documents the Rapid Install installation process. |
| Implementing CRM Applications, A85301-01 | This document contains post-installation information on CRM modules. |
| Oracle CRM Foundation Components, Concepts and Procedures | This document contains a printed compilation of the Oracle Foundation online help system. |
| Oracle CRM Foundation, Technical Reference Manual | This document contains table and view descriptions for all the Foundation components. |

# 37

# Verify the Implementation

This chapter covers the following topics:

- Oracle Common Application Components Implementation Verification Tasks

## Oracle Common Application Components Implementation Verification Tasks

This section covers the following topics:


- Running Diagnostic Tests, page 37- 1
- Verification Task List per Module, page 37- 2


### Running Diagnostic Tests

Before proceeding with the implementation of the Common Application Components, run the applicable diagnostic tests available through the HTML System Administrator Console. You can troubleshoot any setup and installation problems of the technology foundation and certain participating applications such as Foundation. Note that a product module must be registered with the diagnostic tool before diagnostic tests for it become available.

Additionally, you can register and employ new diagnostic tests, run test groups and individual tests, and manage tests and test groups. An implementor would most likely either verify using the Basic tab or the Advanced tab. The type of tests that are available depend on which application you test.

Each test generates a report if a problem is encountered. The report identifies the problem and provides a suggested resolution to the problem.

## Accessing the HTML Diagnostic Test Set

The HMTL Diagnostic Test Set can be accessed in one of two ways:

- Selecting the Diagnostics tab in the System Administrator Console
- Using a variation of the following URL:

  *tap://<hostname>:<portnumber>/OA_HTML/jtfqalgn.htm*

## Selecting the Diagnostic Level that is Appropriate

The Diagnostic Tool contains three functional areas:

- **Basic**: Use the links on this tab to automatically run all the listed diagnostic tests or to run specific tests. Define test input parameter values using the Configuration tab.
- **Advanced**: Use the links on this tab to test specific CRM modules or groups. Enter input parameter values for the specific test directly in this window.
- **Configuration**: Use this window for test and group administration and to configure any necessary test input parameters.

  **Note:** Consult the Diagnostic Tool user interface for a description of each test.

## Viewing the Diagnostic Reports

After a test is run, a summary appears on the Results window. To access the report, double-click the report icon.

## Log-in Issues

A commonly reported problem is the inability of a user to log in to the console. Frequently, this has nothing to do with the setup of the HTML Tech Stack or the System Administrator Console. The problem is that user data, especially numeric data, is entered incorrectly during user definition. This can effectively make it impossible to log in to the Console and correct the problem. The independent URL for the Diagnostic Tool then becomes the portal for pinpointing and correcting the error.

**Note:** Refer to the Understanding Diagnostics section in the *Oracle Applications CRM System Administrator's Guide* for additional information.

### Verification Task List per Module

After you complete the configuration and setup of all the Oracle Common Application Components modules, verify that you can perform the tasks outlined in the following table to ensure that you have setup the module correctly.

***Common Application Components Verification List***

| Foundation Module | Task | Reference |
|---|---|---|
| HTML Tech Stack | Login to HTML Applications as System Administrator | *Oracle Applications CRM System Administrator's Guide.* |
| User Management | Register and approve a new user | *Oracle Common Application Components User's Guide* |
| Resource Manager | • Import a resource (Forms)<br>• Create a salesperson (Forms or HTML)<br>• Create a group resource (Forms or HTML) | *Oracle Common Application Components Implementation Guide* |
| Notes | Create a note for a task | *Oracle Common Application Components User's Guide* |
| Assignment Manager | • Assign a resource to a task | *Oracle Common Application Components User's Guide* |
| Task Manager | Create a task | *Oracle Common Application Components User's Guide* |
| Calendar (Forms) | Assign a resource to a shift | *Oracle Common Application Components Implementation Guide* |
| Calendar (HTML) | • Create an appointment<br>• Invite attendees | *Oracle Common Application Components User's Guide* |
| Escalations | Escalate a task | *Oracle Common Application Components User's Guide* |
| Business Rule Monitor | Ensure that a rule is violated and appropriately escalated | *Oracle Common Application Components Implementation Guide* |

You must be able to complete each task successfully, or your Oracle Common Application Components modules will not work properly. If you are unable to complete a task successfully, then correct the problem before continuing.

# A

# Profile Options

This appendix covers the following topics:

- Before You Begin
- About Profile Options
- Setting Profile Options
- Common Application Components Profile Options

## Before You Begin

This appendix chapter describes profile option settings that are required for successful implementation. These profile options are only for Common Application Components. For additional functionality, you may need to set additional profile options from the appropriate calling applications. Consult the calling application's documentation for additional information.

Before making Oracle Forms settings, ensure that all Oracle Applications server processes are up and running. In particular, if you stopped concurrent managers before applying Oracle Applications patchsets, restart them now by changing to

```
$COMMON_TOP/admin/scripts
```

and executing

```
adcmctl.sh <APPS username/APPS password> start.
```

## About Profile Options

You set profile options whenever you want the application to react in different ways for different users, depending on specific user attributes. Profile options affect the way the applications run. Oracle Application Object Library establishes a value for each option in a user's profile when the user logs on or changes responsibility. Oracle Application Object Library provides many options that you can set to alter the user interface of the applications to satisfy individual preferences.

Profile options are defined and can be set at four levels:

- Site
- Application

- Responsibility
- User

You define a profile option to determine which subset of the organization's data your end user views. From the point of view of a System Administrator or end user, profile options that are defined are indistinguishable from those provided by Oracle Application Object Library.

### Site Level

Site is the lowest user profile level. Site-level option values affect the way all applications run at a given installation.

### Application Level

Application is the user profile level immediately above Site. Application-level option values affect the way a particular application runs.

### Responsibility Level

Responsibility is the user profile level immediately above Application. Responsibility-level option values affect the way applications run for all users of a responsibility.

### User Level

User is the highest user profile level and is immediately above Responsibility. User-level option values affect the way applications run for an application user.

#### Example

Oracle Application Object Library provides a site-level Printer option, an application-level Printer option, and so on. Oracle Application Object Library enforces the level hierarchy to ensure that higher-level option values override lower-level values. As a result, if your Site-level Printer value is "New York", but your User-level Printer value is "Boston" your reports print on the Boston printer.

## Setting Profile Option Values

A System Administrator can set values for profile options at each profile level. You can set default values for your new profile options by using the System Administrator responsibility. Typically, a System Administrator sets site-level option values after installing Oracle Application Object Library-based applications at a site. These site-level option values then work as the defaults until the System Administrator or end user sets them at higher levels. Oracle Application Object Library derives run-time values for each user's profile options based on values the System Administrator sets at each level. An option's run-time value is the highest-level setting for that option.

#### Example

For a given end user, the Printer option is set only at the Site and Responsibility levels. When the end user logs on, the Printer option sets the value at the Responsibility level, since it is the highest-level setting for the option. If the default value of a user profile option at any level is inappropriate, the System Administrator can change it at any time. This change takes effect as soon as end users log on again or change responsibilities.

### See Also

The appendix in the Oracle Applications System Administrator's Guide.

# Setting Profile Options

A user profile is a set of changeable options that affect the way your application looks and behaves. As System Administrator, you control how Oracle Applications operate by setting user profile options to the values you want. You can set user profile options at four different levels: site, application, responsibility, and user. Perform the following steps to set profile options.

### Prerequisites

None

### Responsibility

System Administrator

### Navigation

Navigate to **Profile > System**.

### Steps

1. In the Find System Profile Values window, select an appropriate check box for the profile option that you want to set before clicking **Find**.

   The System Profile Values window opens with the profile option you searched for.

2. Set an appropriate value for your profile option if the check box is selected:

   1. Set the Site value.

      This field displays the current value, if set, for all users at the installation site.

   2. Set the Application value.

      This field displays the current value, if set, for all users working under responsibilities owned by the application identified in the Find Profile Values block.

   3. Set the Responsibility value.

      This field displays the current value, if set, for all users working under the responsibility identified in the Find Profile Values block.

   4. Set the User value.

      This field displays the current value, if set, for the application user identified in the Find Profile Values block.

      You should set site-level default values for any required options after installation of an application. If you do not assign a particular profile option at any of the four levels, that option does not have a default value and may cause errors when you use forms, run reports, or run concurrent requests.

3. Save your work.

   **Note:** For Business Rule Monitor profile options, enter the name of the workflow administrator in the Site field. This user is the one that you previously named in Defining the Owner of the Workflow Process.

# Common Application Components Profile Options

This section summarizes the Oracle Common Application Components profile options per module that you need to set.


- Resource Manager, page A- 4
- Notes, page A- 7
- Spreadtable, page A- 8
- Gantt, page A-11
- Assignment Manager, page A-12
- Task Manager, page A-16
- Calendar, page A-24
- Escalation Manager, page A-27
- Business Rule Monitor, page A-29
- User Management, page A-30


See: About Profile Options, page A- 1 and Setting Profile Options, page A- 3 .

## Resource Manager Profile Options

The following table describes the profile options that are specific to the Resource Manager. Each profile option is specific for HTML-based functionality.

***Resource Manager Profile Options***

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| Employee Resource Update Access | Self | Site | This profile option sets the security around updating employee information in the Resource Manager. | If set to **Self**, only the employee can update their own information.<br>If set to **Any**, others, including a System Administrator, can update the employee information, including overriding any previous values in the profile option: Resource Lookup Audience. |

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| Group Update Access | None | Site | This profile option sets the security around updating groups, including hierarchies. | If set to **None**, then only the Administrator or manager can update their group and any other group following their group in the hierarchy.<br>If set to **All**, then the user can update any group hierarchy in the site. |
| Resource Lookup Audience | General | Site | This profile option controls what the user views in the Resource Details window and in the Advanced Search. | If set to **Admin**, then the user can query in the Advanced Search using the additional fields of Resource number and Salesperson number.<br>If set to **General**, then the user is sees and searches on limited fields. |
| Role Update Access | None | Site | This profile is used to control the access to the Role HTML windows.<br>The Resource Self Service Administrator responsibility level is set to the **All** value. | If set to **None**, then it is Read-Only access to the Role windows. You can search and view all the roles.<br>If set to **All**, then the user can create, update non-seeded roles, delete non-seeded roles, search, and view roles. |
| Resource active days after termination of source | 30 days | Site | This profile is used when end dating a resource of type Partner or employee. It allows a set period of days for the resource to stay active after termination. Set at Site level. | When set to **x days** the resource has that many days to stay active in the system. |

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| JTFRS: Hide Sensitive HR Data | Yes | Site | This profile option is used to optionally hide sensitive and sometimes confidential employee resource data such as the home address information. This information appears in the Miscellaneous tab of the Define Resource Form and when clicking the View button in that form. | When set to **Yes**, sensitive employee resource information does not appear in the Miscellaneous tab of the Define Resource Form and when clicking the View button in that form. When set to **No**, sensitive employee resource information is exposed to those portions of the Resource Manager UI. |

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| Mode of Salesperson Number Creation | Employee Number' | Site | This profile option specifies the mode used to generate a salesperson number during the automatic creation of a sales person. | When **Employee Number** is selected the salesperson number is identical to the employee number.<br>When **Sequence Generated** is selected, the salesperson number is auto-generated by a newly created Sequence.<br>When **Manually** is selected, the implementor must manually enter the salesperson number. If no creation number is specified for the selected resources, then the import process fails. |
| Update Primary Groups for Salespersons | Unassigned Group (Group ID 1) | Site | Populates the primary sales group for all the salesreps defined in JTF_RS_SALESREPS table. Primary groups can be selected from within the date range 01-JAN-1900 to 31-DEC-4712. If no primary group is found, the 'Unassigned' Group (group id = -1) is allocated as primary group. | Eliminates the return of multiple groups for a salesperson when that salesperson is queried in the table JTF_RS_SRP_GROUPS. Instead, the query resturns a single primary sales group for the salesperson. |

## Notes Profile Options

The following table describes the profile options that are specific to Notes.

***Notes Profile Options***

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| Notes: Default Note Status | Public | Site | This profile option sets the default note status. Profile option values include private, public, or publish. | If you select **Publish**, then that is the default value shown in the Status drop-down list when creating a new note.<br>If no profile option is set, default is **Public**. |
| Notes: Default Note Type | N/A | Site | This profile option sets the default note type only to the Notes in Oracle Applications Framework. It does not apply to the HTML and Forms-based Notes. | Set the desired value to the note type. If this profile option is not set or the note type default value is not mapped to a source, then there will not have a default value in the Note Type field during note creation. Otherwise, the default note type will appear in the field. |

## Spreadtable Profile Options

**Note:** The browser must be restarted for changes to the profile option settings to take effect.

The following table describes the profile options that are specific to Spreadtable.

***Spreadtable Profile Options***

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| JTA Display images in the grid | Null | User | This profile options sets whether or not images are visible in the spreadtable.<br>Possible values are Null, Yes, or No. | If **Null** (left blank), the value is treated as **Yes**.<br>If set to **Yes**, all images are visible. This is a global setting for all spreadtable images.<br>If set to **No** all images are turned off. |
| JTA Display images in grid column headers | Null | User | This profile options sets whether or not column header images are visible in the spreadtable.<br>Possible values are Null, Yes, or No. | If **Null** (left blank), it has the same value as JTF_GRID_DISPLAY_IMAGES.<br>If set to **Yes**, all column header images are visible.<br>If set to **No** all column header images are turned off. |
| JTA Display header popup images | Null | User | This profile options sets whether or not header popup images are visible in the spreadtable.<br>Possible values are Null, Yes, or No. | If **Null** (left blank), it has the same value as JTF_GRID_DISPLAY_IMAGES.<br>If set to **Yes**, all header popup images are visible.<br>If set to **No**, all header popup images are turned off. |
| JTA Display row header images in the grid | Null | User | This profile options sets whether or not row header images are visible in the spreadtable.<br>Possible values are Null, Yes, or No. | If **Null** (left blank), it has the same value as JTF_GRID_DISPLAY_IMAGES.<br>If set to **Yes**, all row header images are visible.<br>If set to **No**, all row header images are turned off. |

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| JTA Display grid popup images | Null | User | This profile options sets whether or not grid popup images are visible in the spreadtable.<br>Possible values are Null, Yes, or No. | If **Null** (left blank), it has the same value as JTF_GRID_DISPLAY_IMAGES.<br>If set to **Yes**, all header popup images are visible.<br>If set to **No**, all header popup images are turned off. |
| JTA Display checkbox images | Null | User | This profile options sets whether or not images in cells defined as check boxes are visible in the spreadtable.<br>Possible values are Null, Yes, or No. | If **Null** (left blank), it has the same value as JTF_GRID_DISPLAY_IMAGES.<br>If set to **Yes**, all check box images are visible.<br>If set to **No**, an asterick (*) is used for True and Null (blank) for False |
| JTA Display custom images | Null | User | This profile options sets whether or not images in cells defined as 'Image' are visible in the spreadtable.<br>Possible values are Null, Yes, or No. | If **Null** (left blank), it has the same value as JTF_GRID_DISPLAY_IMAGES.<br>If set to **Yes**, all cell images are visible.<br>If set to **No**, the image description is used in place of the image. |
| JTA Display long wait images | Null | User | This profile options sets whether or not long wait images are visible in the spreadtable.<br>Possible values are Null, Yes, or No. | If **Null** (left blank), it has the same value as JTF_GRID_DISPLAY_IMAGES.<br>If set to **Yes**, all long wait images are visible.<br>If set to **No**, no long wait images are visible. |

## Gantt Profile Options

The following table describes the profile options that are specific to Gantt

***Gantt Profile Options***

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| JTF_GANTT_ SNAP_VALUE_ DAYS_MODE | 60 minutes | User | Enables the start or end of a taskbar to automatically readjust (snap) during drag and drop operations in the "Day" view. | Snaps to the default value if the user does not specify a snap value. |
| JTF_GANTT_ SNAP_VALUE_ SIX_HOURS_ MODE | 60 minutes | User | Enables the start or end of a taskbar to automatically readjust (snap) during drag and drop operations in the "6 Hour" view. | Snaps to the default value if the user does not specify a snap value. |
| JTF_GANTT_ SNAP_VALUE_ THREE_ HOURS_MODE | 30 minutes | User | Enables the start or end of a taskbar to automatically readjust (snap) during drag and drop operations in the "3 Hour" view. | Snaps to the default value if the user does not specify a snap value. |
| JTF_GANTT_ SNAP_VALUE_ HOURS_MODE | 15 minutes | User | Enables the start or end of a taskbar to automatically readjust (snap) during drag and drop operations in the "Hour" view. | Snaps to the default value if the user does not specify a snap value. |
| JTF_GANTT_ SNAP_VALUE_ 30MIN_MODE | 10 minutes | User | Enables the start or end of a taskbar to automatically readjust (snap) during drag and drop operations in the "30 Minute" view. | Snaps to the default value if the user does not specify a snap value. |

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| JTF_GANTT_ SNAP_VALUE_ 15MIN_MODE | 5 minutes | User | Enables the start or end of a taskbar to automatically readjust (snap) during drag and drop operations in the "15 Minute" view. | Snaps to the default value if the user does not specify a snap value. |
| JTF_GANTT_ DEF_TIMEL INE_MODE | Day Mode | Site Application ResponsibilityUser | Enables specification of one of the following modes upon startup:<br>• 15 Minutes Mode<br>• 30MIN<br>• Hours Mode<br>• 3 Hours Mode<br>• 6 Hours Mode<br>• Days Mode | Specifies one of six available modes on startup. |

## Assignment Manager Profile Options

The following table describes the profile options that are specific to Assignment Manager.

***Assignment Manager Profile Options***

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| Activate Auto Selection of Resources | Yes | Application | This profile option is set to activate the auto-selection of resources by the Assignment Manager engine. The engine uses this profile option setting to determine where the user needs to make a selection from the provided list of resources, or if this task is performed automatically by the Assignment Manager engine itself. | If you set this profile option to **No**, the Assignment Manager engine will automatically make a selection from the provided list of resources. |
| Activate Contracts Preferred Resources | No | Application | This profile option is set to retrieve the preferred resource information from the Contracts module. The engine uses this profile option setting to determine whether the Contracts Preferred Engineers are picked up automatically by the Assignment Manager engine or not. | If you set this profile option to **No**, it will uncheck the Contracts in the Assignment Manager. |

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| Activate Installed Based Preferred Resources | No | Application | This profile option is set to retrieve the preferred resource information from the Installed Base module. The engine uses the profile option setting to determine whether the Installed Base Preferred Engineers are picked automatically by the engine. | If you set this profile option to **No**, it will uncheck Territories in the Assignment Manager. |
| Activate Workflow Name | No default value | Application | This profile option is set to a user-defined workflow procedure name. This workflow procedure is user-programmed code for further filtering the resources. The engine retrieves the procedure name from this profile option, and uses it to process the user's request. | This profile option is an additional filter based on the user's criteria. |
| JTFAM: Resource Type for Unassisted Mode | Employee Resource | Site | This profile option sets the default value for resource type in the unassisted mode. | This profile option is a convenience to the user who wants the resource type to be the defaulted value in the unassisted mode. |

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| JTFAM: Resource Search Order | Contracts Preferred Resource | Site | This profile option sets the default order for resource selection between Contracts and Installed Base if both check boxes are selected in the Assignment Manager for a service request assignment. | If Contracts Preferred Resource is selected, then Assignment Manager engine checks Contracts preferred resources first. If a Contracts preferred resource is found, then stop the process. If not, then check the Installed Base preferred resources. If a Installed Base preferred resource is found, and stop the process. If not, then continue check the territories.<br><br>If Installed Base Preferred Resource is selected, then Installed Base preferred resources are checked first, if a resource is found, then stop the process. If not, then continue check the Contracts.<br><br>If "Both Contracts and Installed Base" is selected, then Assignment Manager checks both preferred resources simultaneously before retrieving qualified resources from winning territories. |

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| JTFAM: Usage for Groups and Teams | All | Site | This profile option sets the default value for the group and team resource selection used in a service request assignment. | If it is set to **All**, then all group or team resources, regardless of its usage, are all displayed in the Gantt chart. If it is set to **Support**, then only the group or team with Support usage can then be retrieved for a service request assignment. |
| JTFAM:Hour UOM code used by AM for Tasks | HR | Site | Tasks contains a profile that defines the Time Class used to define a task duration. The UOM (Unit of Measure) that defines Hour in that time class must be set for this profile. | By default if the value is not set for this profile "HR" is considered to be the UOM that denotes Hour. |
| JTFAM:Use Current Date, Time for Assignments | Yes | Site | This functionality enables the sysdate/time to be used for determining a task start date. | When set to **Yes**, the sysdate/ time is used to determine a task start date. When set to **No**, a date and time that precede the sysdate and time can be used to determine the task start date. |
| JTFAM:Filter resources based on group membership | Yes | Site | This functionality filters resources based on group membership. | When set to **Yes**, the profile option filters resource by group membership. When set to **No**, filtering does not occur. |

## Task Manager Profile Options

The following table describes the profile options that are specific to Task Manager.

***Task Manager Profile Options***

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| Task Manager: Default Task Type | Meeting | Site | Use the Default Task Type profile option to set the default task type. Possible values include appointment and lead. | Set the value to the task type that you want to appear in the task type drop-down list when you are creating a task. |
| Task Manager: Default Task Status | Open | Site | Use the Default Task Status profile option to set the default task status. Possible values include open and completed. | Set the value to the task status that you want to appear in the task status drop-down list when you are creating a task. |
| Task Manager: Default Priority | Medium | Site | Use the Default Priority profile option to set the default task priority. Possible values include critical and medium. | Set the value to the task priority that you want to appear in the task priority drop-down list when you are creating a task. |
| Task Manager: Default Task Owner | No default value | Site | Use the Default Task Owner profile option to set the default task owner. | Set the value to the name of the default task owner. |
| Task Manager: Owner Type for Task | No default value | Site | Use the Owner Type for Task profile option to set the default owner type. Possible values include employee resource and party. | Set the value to the owner type for the task. |
| Task Manager: Default Assignee Status | Accepted | Site | Use the Default Assignee Status profile option to set the default assignee status. | Set the value to the assignee status that you want to appear in the Assign To Status drop-down list when you are creating a task. |

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| Task Manager: JTF Tasks Default Date Selected | Scheduled | Site | Use the JTF Tasks Default Date Selected profile option to set the default date selected. Possible values include Planned, Scheduled, or Actual. | Set the value to the default date that you want to default in the Create Task window. |
| Task Manager: Task APIs to Determine if Security is Implemented | No default value | Site | The Task APIs to Determine if Security is Implemented profile option is reserved for future use. | The value of this profile option should always be set to No. |
| Time Unit of Measure Class | Time | Site | Use the Time Unit of Measure Class profile option to define the time unit of measure class in the inventory module.<br>Depending on the time unit of measure class, you will see the list of UOM codes in the Tasks module. | Depending upon the value of this profile, the Time UOM codes are shown in the list of values. If the value of this profile changes, then there will be a discrepancy between the existing data and the new LOV shown for the new Time UOM class.<br>Oracle strongly recommends the value of this profile should NOT be changed after the system in the production |
| Task Manager: View All Task Privileges | Yes | Site | The View All Task Privileges profile option is reserved for future use. | Do not change the value of this profile option. |
| Task Manager: View All Task Privileges | Yes | Site | The View All Task Privileges profile option is reserved for future use. | Do not change the value of this profile option. |

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| Task Manager: Delete Any Task Privileges | No | Site | The Delete Any Task Privileges profile option is reserved for future use. | Do not change the value of this profile option. |
| Task Manager: Use the Indicator of Data Truncation | "..." | Site | Use the Indicator of Data Truncation profile option to store a three-character code which is appended to the source object name of a Task when it has been truncated. The default value of this profile option is '...'.<br><br>For example, if the source of a Task is a Party, the name may be too large to store in the source_object_ name column. If the name: "This is a very long name to test the truncation indicator functionality" (71 chars) is passed to the Task API as the source object name, it is written to the Task record as: "This is a very long name to test the truncation indicator..." (60 chars). The default value of this profile option is '...'. | Set the value that is appended to the source object name of a Task when it has been truncated. |

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| Task Manager: Create Quick Task | No default value | Site | Use the Create Quick Task profile option to display the "Create Quick Task" button on the Tasks Summary window. | Set the value to **Yes** if you want the "Create Quick Task" button to appear in the Task Summary.<br>Set the Value to **No** if you do not want the button to appear in the window. |
| Client Timezone | N/A | Site or User level | The Client Time zone profile option is used by Calendar to set the default time zone for the client in the Create Appointment window. | Set the value to the location where your appointments take place.<br>Setting the time zone from the profile link in the Calendar UI is another way to set and update this profile value. |
| Task Manager: Send Notifications to Group or Team Members | No | Site | The Task Manager: Send Notifications to Group and Team Members profile option provides the ability to notify either the Owner or the Assignee of a Group or Team resource, when a task is modified.<br>This profile option is for workflow only. | If the value is set to **No**, then no notification will be sent to group or team members.<br>If the profile option is set to **Yes**, then the system looks at any resources of type Group or Team and expand them to include any of their members whose resource type is RS_EMPLOYEE, RS_PARTY or PARTY_ PERSON.<br>When adding a resource to the notify list, the system checks to see if the resource is already on the list before adding it. |

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| Task Manager: Automatically Launch Workflow | No | Site | The Task Manager: Automatically Launch Workflow profile option is used to determine whether to send the automatic notifications or not. | Set the value to **No**, for the task workflows not to be initiated by the API.<br>If the value is set to **Yes**, then task workflows are initiated by the API. The default value is No. |
| Task Manager: Abort Previous Task Workflow if it is still active | No | Site | The Task Manager: Abort Previous Task Workflow if it is still active profile option is used to determine whether to abort the previous workflow processes before starting the next one. | If the value is set to **No**, then the previous Task Workflows that are still active are not aborted.<br>If the value is set to **Yes**, then the previous Task Workflows that are still active are aborted. |
| JTF_TASK_ SUMMARY_ SOURCE | Source | User | The JTF_TASK_ SUMMARY_ SOURCE profile option sets the view drop-down list value in the Task Summary context sensitive window. Possible values are Source and All. | Set the value to **Source** to have all tasks created with a particular source in the contextual window.<br>Set the value to **All** to have all tasks created with a source as well as those which refer to that source in the context sensitive Task Summary. |

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| Task Manager: Mass Task Reassign Access | No | Site | Use the Task Manager: Mass Task Reassign Access profile option to display the Task Reassignment window. | If the profile option is set to **Yes**, the Task Reassignment window is accessible and the administrator is able to reassign tasks. If the value is set to **No**, then the Task Reassignment window is not accessible and a relevant message is shown. |
| JTF Sync: Category Value | Oracle Business | System | This profile option is used in the Palm and Outlook synchronization process.<br>It is to set the default value for the category while trying to download business contacts to the offline device. | All business contacts downloaded to the offline device will be created with this category. If the category does not exist in the offline device, then it will be created upon synchronization. |
| Task Manager: Copy Task Start Date to End Date | Yes | Site | This profile option is used to control the task start and end date for the Palm and Outlook synchronization. | If it is set to **Yes**, the task start date is defaulted from the system date and the task end date is defaulted to the task start date.<br>For example, if it is set to Yes, then any changes the user made to the task start date while the user is in the task creation screen will automatically be populated to the task end date field. |

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| Task Manager: Set Context Data Security | Full Access | Site | Use the Task Manager: Set Context Data Security profile option to set task data security for the context sensitive task instances. | If Full Access is selected, then all the tasks related to the context can be viewed, updated, and deleted. If Security Access is selected, then whether the task for that context can be updateable is based on the privileges granted to the user. |
| Task Manager: automatically launch workflow | Yes | Site | Use the Task Manager: automatically launch workflow profile option to disable the task subscription workflow events. | If it is set to **Yes**, then workflow notification will be sent when subscribed events are raised. If it is set to **No** which disables the workflow event, then no workflow notifications will be sent when subscribed events are raised. |

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| Task Manager: Default Duration | No Duration | Site | Use the Task Manager: Default Duration profile to set the default value of the duration field. | If this profile is set, then the task end date can be automatically calculated based on start date and time plus the duration.<br>This profile option overrides the profile "Task Manager: Copy Start Date to End Date" if both profiles are set. |
| Task Manager: Restricted Task Update | Yes | Site | Use the Task Manager: Restricted Task Update profile option to allow task updates in the standalone Forms-based Tasks. | If it is set to the default value "Yes", then tasks created from other sources cannot be updated in the standalone Forms-based Tasks to avoid breaking product specific business rules enforced on the task. If it is set to "No", then users can update contextual tasks. |

## Calendar Profile Options

The following table describes the profile options that are specific to the HTML Calendar.

***Calendar Profile Options***

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| JTF HTML Calendar Administrator | No default value | User | The JTF HTML Calendar Administrator profile option sets the Calendar System Administrator who grants approval and subscription requests for group and public calendars. | Set the value to the username of the calendar user who grants group and public calendar requests. |

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| Client Timezone | N/A | Site or User level | The Client Time zone profile option is used by Calendar to set the default time zone for the client in the Create Appointment window. | Set the value to the location where your appointments take place.<br>Setting the time zone from the profile link in the Calendar UI is another way to set and update this profile value. |
| JTF HTML Calendar Task Span Days | No | Site | The JTF HTML Calendar Task Span Days profile option sets tasks that spans over more than one day to appear continuously across days on your personal calendar. | Set the profile option to **Yes** to have your tasks that span over more than one day to appear continuously across days on your personal calendar.<br>If the value is set to **No**, the task shows as a memo for each day affected. |
| JTF_PROFILE_ DEFAULT_RES PONSIBILITY | 22946 | User | The JTF_PROF ILE_DEFAULT_ RESPONSIBILITY profile option sets the default responsibility when using calendar as a stand-alone application. | Set the value to correspond to the calendar user. The user value is 22946. |
| JTF_PROFILE_ DEFAULT_APPL ICATION | 690 | User | The JTF_PROFILE_ DEFAULT_APPL ICATION profile option sets the default application when using calendar as a stand-alone application. | Set the value to correspond to the calendar user. The user value is 690. |
| ATGCA: Enable Web Mail | No | User | The "ATGCA: Enable Web Mail" profile option is used to enable or disable web mails sent from an integrated webmail, such as Oracle Collaboration Suite, through the Calendar Availability window. | If it is set to **Yes,** then you can launch webmails through the Availability window. If it is set to **No**, then you cannot send webmails, but HTML "mailto:" attribute will be used instead. |

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| ATGCA: Web Mail Server URL | N/A | User | The "ATGCA: Web Mail Server URL" profile option is used to specify the URL address for the integrated webmail server. | Set valid server URL for the web mail server in order to send web mails through an integrated web mail, such as Oracle Collaboration Suite, from Availability view. |

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| Self Service Accessibility Features | No | User | The "Self Service Accessibility Features" profile option is used to access the Accessibility Daily View page in the Oracle Applications Framework based Calendar. | If it is set to "Screen Reader" or "Yes", then users can access the Accessibility Daily View page. If it is set to "No", then users cannot access this accessibility page. |
| Applications SSO Login Types | Both (Site level)<br>Local (user level) | Site and User levels | The "Application SSO Login Types" profile option is used to allow the Palm and Outlook synchronization to work properly if it is set to "Both" when using the Single Sign-On (SSO) feature.<br>It is important to note that if integrated applications decide to implement this Single Sign-on feature and once this profile option is set, it may have an impact on the login at the application level. As a result, the sync feature can also be affected. | Since any changes to the password stored at the local application level (such as Oracle E-Business Suite) can be passed to Oracle Internet Directory (Single Sign-On server), but not vice versa which means that a user's single sign-on password will not necessarily be synchronized with his local application's password. Therefore, if it is set to **Both**, then the sync required username and password are stored both at the local application level and the external Oracle Internet Directory. If it is set to **SSO**, then the sync required login information is stored externally at the SSO Server only and not maintained at the application level. As a result, the sync feature will not work. If it is set to **Local**, then the sync required login information is stored at the local application level which means that the login is only allowed through the Oracle E-Business Suite local login if there is any update. |

## Escalation Manager Profile Options

The following table describes the profile options that are specific to Escalation Management.

***Escalation Manager Profile Options***

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| Escalation: Close Only When De-escalated | Yes | Site | The escalation document cannot be closed (you cannot set up the escalation status to 'Close') without first changing the Escalation Level to 'De-escalated'. | If set to **Yes**, then it can regulate the escalation status change sequence from De-escalated to Close.<br>If set to **No**, then it will not. |
| Escalation: Default Contact Type | Employee | Site | This profile option sets the default contact type to Employee in the Contacts tab. | You can also set it to **Customer**, and then it will default the contact type to Customer. |
| Escalation: Default Escalation Owner | Name | Site | This profile option sets the default escalation owner to a specific resource name, such as John Smith. | See description. |
| Escalation: Default Customer Contact Point | Phone | Site | This profile option sets the default customer contact point to Phone in the Contacts tab. | You can also set it to other values such as Cell, Email, Pager, or Web. |
| Escalation: Default Document Type | Task Manager | Site | This profile option sets the default document type to Task in the Document field on the Reference Document tab. | You can also set it to other values such as Service Request or Defects. |
| Escalation: Default Employee Contact Point | Work | Site | This profile option sets the default employee contact point to Work in the Contacts tab. | You can also set it to other values such as Home, Mobile, or Pager. |
| Escalation: Default Escalation Level | Level 1 | Site | This profile option sets the default escalation level to Level 1. | You can also set it to other values such as Never Escalated, Level 2, or De-Escalated. |

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| Escalation: Default Status | Open | Site | This profile option sets the default escalation Status field to Open. | You can also set it to other values such as Closed or Working. |
| Escalation: Default New Note Type | General Note | Site | This profile option sets the default note type to General Note if additional notes are attached to an escalation document. | You can also set it to other values such as Event or Approved. |
| Escalation: Default Notify (Y/N) | Yes | Site | This profile option sets the default Notify check box to "checked" in the Contacts tab. | You can also set it to No, which will leave the check box "unchecked" in the Contacts tab. |
| Escalation: Default Reason Code | Slow Progress | Site | This profile option sets the default escalation Reason field to Slow Progress. | You can also set it to other values such as Unacceptable Solution, or Unresponsive Owner. |
| Escalation: Default Reference Type | Escalation | Site | This profile option sets the default escalation reference type to Escalation in the Reference Document tab. | You can also set it to other values such as For Your Information. |

## Business Rule Manager Profile Options

The following table describes the profile options that are specific to the Business Rule Monitor.

***Business Rule Monitor Profile Options***

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| Business Rule Monitor Workflow Administrator | No Default Value | Site | This profile option must be set first in order to grant this profile option to the BRM Workflow Administrator. | The Administrator can receive workflow notifications when the monitoring process starts and stops, and also when errors are detected. |

## User Management Profile Options

The following table describes the profile options that are specific to User Management.

***User Management Profile Options***

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| JTF_PRIMARY_USER | sysadmin | Site | Predetermines the username that corresponds with the "Universal Primary User Approver". | The supplied username corresponds to the Universal Primary User Approver. |
| JTF_INDIV IDUALUSER_ ACCOUNT | Yes | Site | Enables automatic account creation for newly registered users. | When set to **Yes**, automatically creates a new account in the HZ_CUST_ ACCOUNTS table for a newly registered user and associates the user with the account. Users must have an account to buy products in the iStore. |
| JTA_UM_APPL ICATION_URL | None | Site | Specifies the application logon URL sent to users in email messages that are automatically generated once a user request has been approved. | The supplied URL is sent to users in email messages that are automatically generated once a user request has been approved. |

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| JTA_UM_ WORKFLOW_ OWNER | sysadmin | Site | When a workflow is launched it always identifies the user who launched it. The system administrator is the default User Management workflow owner. User Management uses workflow for registration and for resetting passwords. Users can query workflows using the name of the workflow owner. | Specifies the name of the workflow owner. |
| JTA_UM_ SENDER | None | Site | Provides a sender clause for automatically generated email messages such as approval and password expiration notifications. | The specified clause is sent with each automatically generated message such as approval and password expiration notifications. |
| JTF_UM_A PPROVAL_ OWNER | sysadmin | Site | .Defines the individual who serves as an escalation point of contact and who receives and approval request when the last approver fails to approve the request. | This profile option is used in the approval process. If the last approver in a predefined approval definition fails to approve a request, the person defined in this profile option will be the escalation point of contact and will receive the request. The user specified as the value for this profile option must have the JTF_SECURITY_ ASSIGN_ROLE permission |

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| JTF_UM_APPROVAL_TIMEOUT_MINS | 1440 Minutes (one day) | Site | Defines (in minutes) how long a workflow notification remains in a queue before it is timed out. | When the notification times-out, the request goes to the next approver on the list. If no approver is specified, the approval owner receives and answers the request. If you enter 0 as the default, no time out occurs. If no value is set, the profile option is defaulted to 0. The Process Time-out field in the parameters window when starting the "JTF Approval" workflow must be set to Yes for this profile option value to take affect. |
| JTF_UM_APPROVAL_URL | None | Site | Defines the user application logon URL. | The URL is included in the workflow notification sent to each approver when they are assigned a request. The approver is sent an email message stating that the approver must approve a request. |
| JTF_UM_MERCHANT_NAME | None | Site | Defines the name of your organization. | Workflow inserts this name into request approvals and rejections when they are sent to the user. |

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| JTF_REGISTRATION_CACHE | Yes | Site | Determines whether the registration pages will cache the data entered by the user during the registration flow. | If set to **Yes** and if the user presses the browser "Back" button, then the data entered on the previous page is available. If set to **No**, then the data (page) expires as soon as the user leaves the page. |
| ICX: Language | American English | Site | The ICX: Language profile can be set at the user level and determines the language displayed for the user when logging in. | The language for the registration page accessed from the "Register Here" link of the login page is determined by the ICX Language profile set for the "Guest User" defined in the System Administration console. To change the language for this page access the ICX: Language profile option, click the User field, and choose a language from the LOV. |
| JTA_UM_REG_ORG_FAX_REQD | Yes | Site | Provides Yes/No values in the registration page that determine whether or not an organization's fax information is required. | The Organization Information page changes its required options depending on the values set for this profile option, however the fax field remains optional in the user detail page regardless of how this profile option is set. |

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| JTA_UM_REG_ ORG_PHONE_ REQD | Yes | Site | Provides Yes/No values in the registration page that determine whether or not an organization's phone information is required. | The Organization Information page changes its required options depending on the values set for this profile option, however the phone field remains optional in the user detail page regardless of how this profile option is set. |
| SIGNON_ PASSWORD_ LENGTH | 5 | Site | Specifies the number of characters required to constitute a valid password. | When users define their password, the system will not accept passwords of fewer characters than the number specified in this profile option. |
| JTA_UM_HIDE_ QUICKFIND | No | Site | Optionally hides the Quickfind menu. | When set to **Yes**, this profile option hides the Quickfind menu from users. When set to No, the Quickfind menu appears. The profile option is set to **No**, to ensure compatibility with previous versions of User Management that did not contain this feature. |
| JTA_UM_ PASSWORD_ GEN_WKF | None | Site | Specifies the name of the workflow used for sending passwords to users. | The workflow specified in this profile option sends passwords to users. |

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| JTA_UM_ SUPPORT_ CONTACT | Null | Responsibility | Specifies the name or email address of the support person to contact in case of logging errors. | The name and email address specified in this profile option are used to contact support in case of logging errors. |
| JTF_UM_ EMAIL_AS_ USERNAME | No | Site | Optionally disables the User ID field in the registration screen and enables the user's email address to also function as the user ID. | When set to **Yes**, this profile option disables the User ID field in the registration screen and enables the user's email address to also function as the user ID. During the registration process, User Management populates the USER_ID column in the FND_USER table with the user's email address.<br><br>When set to **No**, this profile option retains both User ID field in the registration screen and consequently does not populates the USER_ID column in the FND_USER table with the user's email address. |

| Name | Default Value | Level | Description | Outcome |
|---|---|---|---|---|
| JTA_UM_ DEFAULT_ ADDRESS_ STYLE | US | Site | Determines the default country whose specific style of address fields must be displayed in the company registration page and user details page.<br>When a user registers for the first time, the user must choose a country before entering address information. The country specified by this profile option appears by default.<br>If User Management does not contain seeded data for the required country, then you must setup the address style using the Accounts Receivable flex fields. For instructions on configuring flexible address fields, see the Chapter 3 of the *Oracle Receivables User Guide*. | When the profile option is set for a specific country then the address fields required by that country's address style appear in the company registration page, and user details page. If the profile option is not set for a specific country of if there is an error displaying that country's address style then the registration and user details pages default to the U.S. address style.<br>The registration process cannot be completed unless information is entered in mandatory address fields. The mandatory definition can be turned on or off for a given field from the flexfield segment definition, as a single address field maps to a segment of the address flexfield. |
| JTA: User Management: Automatic Account Creation | Yes | Site | Enables organizations to specify whether account creation is handled automatically or manually. | When set to **Yes**, user accounts are created automatically from "register here" links. When set to **No**, user accounts must be created manually. |

# B

# Concurrent Programs

This appendix covers the following topics:

- About Concurrent Programs
- Running Concurrent Programs
- Common Application Components Concurrent Programs

## About Concurrent Programs

This appendix chapter contains information relating to concurrent programs. These concurrent programs belong to Core Application Components and for additional functionality, you may need to run additional concurrent programs from the appropriate calling applications. Consult the calling application's documentation for additional information.

Concurrent programs are tasks run by a concurrent manager. A concurrent process runs simultaneously with interactive functions and other concurrent processes. A concurrent manager coordinates the processes generated by user's requests to run various data-intensive programs. A Foundation module can have several concurrent programs.

System administrator run concurrent programs periodically to update and synchronize their information.

## Running Concurrent Programs

The following is a general procedure for running a concurrent program. Refer to the applicable chapter for specific information on running each specific concurrent program.

### Prerequisites

None

### Responsibility

CRM Administrator or

System Administrator

### Navigation

Navigate to the Navigator - CRM Administrator window, or

Navigate to the Navigator - System Administrator window

### Steps

1. Select **Request > Run.**

   The Submit a New Request window opens.
2. Select **Single Request**.
3. In the Name field in the Submit Request window, select your chosen concurrent program.
4. Enter additional information if necessary in the appropriate fields.
5. Click **Submit**.

## Common Application Components Concurrent Programs

The following modules use concurrent programs:

- Resource Manager, page B- 2
- Task and Calendar, page B- 7

### Resource Manager Concurrent Programs

The following table describes the types of seeded programs, their use, and the frequency in which you need to run them.

***Resource Manager Concurrent Programs***

| Name | Description | Frequency | Notes |
|---|---|---|---|
| Build Reporting Manager | This program is redundant, and, has been replaced with the "Synchronize Reporting Managers", and "Populate Reporting Manager" concurrent programs. | Run only when data is modified | None |

| Name | Description | Frequency | Notes |
|---|---|---|---|
| Synchronize Employees | This program is used to synchronize employee data in Human Resources. Note the difference in employee parameters:<br><br>**Get New Employees**. When this parameter is set to **Yes**, the concurrent program:<br><br>• Synchronizes all the employees that currently exist in Resource Manager.<br><br>• Imports all new active employees in Human Resources.<br><br>• Displays the Create Sales Person parameter.<br><br>When set to **No**, the program synchronizes only the employees that currently exist in the Resource Manager and does not display the Create Sales Person parameter.<br><br>**Create Sales Person**. When set to **Yes**, the concurrent program:<br><br>• Automatically creates a salesperson from the imported resource.<br><br>• Displays the Sales Credit Type parameter.<br><br>When set to **No** (default value), the concurrent program does not automatically create a salesperson.<br><br>**Sales Credit Type**. The concurrent program only displays this parameter if the Create Sales person parameter is set to yes. For the above condition, the User must always pass a value for the 'Sales Credit Type' parameter, from the LOV provided. Sales Credit Type information is required for creating Salesperson.<br><br>**Other**. A resource of type Other is not required to be a salesperson.<br><br>**Maps Job Roles**. When job role mapping between Oracle HRMS jobs and Resource Manager roles is established, the Synchronize Employees Concurrent Program imports the employee's job from HRMS and stores it as an associated role in Resource Manager.<br><br>**Effective Start Date**. The resource role start date is synchronized with the Oracle HRMS job assignment start date that is also the effective start date (ESD).<br><br>**Rehires**. If an employee is rehired to perform its previous job/role, then it is reassigned its original hire date. No new record of the employee start date is created.<br><br>**Preferred Name**. The preferred name in Resource Manager is synchronized with the alias name from Oracle HRMS. If no alias is specified in Oracle HRMS, then the preferred name is synchronized with the full name in Oracle HRMS. This only takes place if the user has not changed its full name in resource manager prior to the execution of the synchronization process. | Daily | For about 100,000 employees, this concurrent program should take about 10 minutes to run. It can be scheduled to run as a nightly process. |

| Name | Description | Frequency | Notes |
|---|---|---|---|
| Flatten Employee Hierarchy | This concurrent program is ONLY meant to populate data in resource manager internal tables in order to expedite the data display in "Organization" link for Employee hierarchy. | Daily | Run this program after running Synchronize Employees<br>For about 100,000 employees, this program takes about 2-3 minutes to run. So, it can be scheduled as a nightly process. |
| Flatten Group Hierarchy | This program is used to denormalize the Resource Group hierarchy structure into a flat structure for fast and easy data access. | Daily | Run this program after Synchronize Groups Denorm.<br>For about 4000 groups, and average of 10 level hierarchy structure, this program takes about 10-15 minutes. It can be scheduled as a nightly process. |
| Synchronize Parties and Partners | This program keeps the Party Resource Name in Resource Manager in sync with information in TCA. | Daily | For 1 million party records in HZ_PARTIES, this concurrent program should take about 20 minutes to run. If the business is using a lot of Party type of resource, then this program can be scheduled to run on a nightly basis. |
| Synchronize Supplier Contacts | This program is used to synchronize supplier contacts of type person in Purchasing. | Daily | For 100,000 supplier contact records in PO_VENDOR_CONTACTS, this program should take about 20 minutes to run.<br>If the business is using a lot of Supplier Contact type of resource, then the program can be scheduled to run every night. |
| Synchronize Application User Name | This program is used to synchronize the FND user name and resource table. | Daily | In a system comprising 50000 users, this concurrent program should take about 5 minutes to run. It can also be scheduled as a nightly process. |

| Name | Description | Frequency | Notes |
|---|---|---|---|
| Synchronize Groups Denorm | This program is used to denormalize the Resource Group hierarchy structure into a flat structure for fast and easy data access. | The application runs this automatically | For about 4000 groups, and average of 10 level hierarchy structure, this program takes about 10-15 minutes. It can be scheduled as a nightly process. This program achieves the same results as "Flatten Group Hierarchy". The only difference between the two is that this program is kicked off automatically from the UIs where as the latter is used for cases where the data may have been created using Resource Manager APIs. |
| Group Audit Report | This program is used to obtain audit information for a particular resource group. You can optionally include descriptive flexfield information with this report. | As needed | For a group, it should take no more than 1-2 minutes assuming normal system load and resource availability. |
| Group Structure Report | This program is used to obtain group structure information for a particular resource group. Given a group, it displays all the child groups, as well as all the immediate level members of the group. This information can also be obtained online through Resource Manager HTML windows. You can optionally include descriptive flexfield information with this report. | As needed. | For a group, it should take no more than 1-2 minutes assuming normal system load and resource availability. |
| Resource Manager Diagnostics | This concurrent program is a diagnostic tool to be used for troubleshooting in case of some undesirable behavior. It generates an output containing various critical file versions that comprise the resource manager functionality. | As needed | None |
| Populate Reporting Manager | This program is used to populate data into an internal resource manager table which is accessed by Oracle Incentive Compensation team. This program should be used when Resource Group Membership data has not been entered through Resource Manager UIs, but, APIs instead. | As needed | In a system with 150,000 resources, and about 4000 groups, this program takes about 10-15 minutes. It can be scheduled as a nightly process if a lot of changes around Resource Group Membership is made daily. |
| Synchronize Reporting Managers | This program is used to populate data into an internal resource manager table which is accessed by the Oracle Incentive Compensation team. It is launched automatically from Resource Manager UIs. | As needed | In a system with 150,000 resources, and about 4000 groups, this program takes about 10-15 minutes. It can be scheduled as a nightly process if a lot of changes around Resource Group Membership is made daily. |

| Name | Description | Frequency | Notes |
|---|---|---|---|
| Synchronize Workflow Roles | This program synchronizes all attributes and records in the workflow wf_local_* tables with the mismatching records in Resource manager. | As needed | This program should be run as follows:<br>• The first time group notification functionality is implemented in Resource Manager.<br>• When groups or resources that were not active at the time of their creation have become activated.<br>• If online transactions encounter a Workflow error.<br>• When the Synchronize Employees concurrent program is run.<br>• When the Synchronize Parties and Partners concurrent program is run.<br>• When the Synchronize Supplier Contact concurrent program is run. |

| Name | Description | Frequency | Notes |
|---|---|---|---|
| Resource Skills Report | This program generates skill reports for resources reporting to a manager and for group members. | As needed | This program contains the following parameters:<br>• Manager. When this parameter is entered, the program displays a hierarchical skills rating report for all resources that report to the manager including direct and indirect reports.<br>• Group. When this parameter is entered, the program displays skill ratings for all group members. It does not display skill ratings for any child groups. |
| Synchronize Active Group Membership | Populates the table JTF_RS_ACTIVE_GRP_MBRS with active group members . | Daily | The table JTF_RS_ACTIVE_GRP_MBRS eliminates performance problems created by searching though an increasing volume of historical records that include active and inactive group members. This table only stores active group members including new or existing members and excluding deleted ones. Running the concurrent program on a daily basis ensures that the table contains the most up-to-date records and optimizes performance by eliminating unnecessary historical records such as deleted group members. |

**Note:** It is strongly recommended that an employee, party, partner, or supplier contact not have more than one entry in FND_USERS. If an employee linked to two or more FND_USERS is imported into Resource Manager, then the USER_ID column in JTF_RS_RESOURCE_EXTNS table randomly picks a value from FND_USERS for that resource.

## Task and Calendar Concurrent Program

The following table describes the type of seeded program, its use, and the frequency in which you need to run it.

***Task Manager Concurrent Programs***

| Name | Description | Frequency |
|---|---|---|
| Rebuilding Intermedia Index for Task Names | This program is used to rebuild the intermedia index so a user can use the quick find to search for new and updated tasks as well as to search by task name. | As needed |

# Glossary

### approval

An optional feature in User Management, whereby approvers can reject or approve new user accounts. In the User tab, the System Administrator Console provides windows so you can view, create, modify, delete, enable, and disable approvals, including those for specific organizations.

### approval flow

The approval flow is a predefined flow of steps required to approve user registration or service enrollment requests in User Management.

### assignee

An assignee is the designated person who is assigned to fulfill a specific task or assignment. If an assigned task cannot be completed by the assignee, then the owner of this task can reassign a new resource (assignee) to this task.

The assignee, can also be the owner of the task.

### Assignment Manager

The Assignment Manager is a tool that helps you assign resources to a task or a document.

### assisted assignment option

The assisted assignment option is used to assign a resource to a task or a document based on predefined criteria in the Assignment Manager.

### attachment

An attachment is any document associated with one or more application modules. You can view attachments as you review and maintain a module. For example: operating instructions, purchase order, notes, item drawings, presentations, or an employee photo can be an attachment.

### audit

An audit displays a history of changes that have been made to information in Oracle e-Business Suite.

### automatic assignment

Automatic assignment refers to the matching of territories to resources resulting in a "Winning Territory" in Territory Management.

### bins

Bins are small reports, which display high-level summary information in a tabular format on your homepage.

**business rule**

A business rule is a user-defined condition. When a rule is violated, a relevant workflow process can be triggered.

**Business Rule Monitor (BRM)**

The Business Rule Monitor is the engine that monitors documents over time against user-defined business rules.

**business rule owner**

A business rule owner is an employee resource who enforces the business rules.

**business rule workbench**

The Business Rule workbench is used to define a business rule in BRM.

**business user**

A business user is a typical Business to Business (B2B) user, associated with an organization. Generally, the Primary user(s) of the same organization approves these users.

**Calendar (HTML)**

The HTML Calendar is a tool to effectively manage your daily activities, appointments, and tasks.

**Calendar (Forms)**

The Forms-based Calendar is a scheduling tool used to define and view available and non-available time for a resource or group of resources.

**calendar datebook**

The calendar datebook displays time availability for yourself, a resource, or a group of resources in the Forms-based Calendar.

**concurrent manager**

The concurrent manager is a process manager that coordinates the processes generated by users' requests to run various data-intensive programs. An Oracle applications product group can have several concurrent managers.

**contact**

A contact contains information about a person and how to locate them such as their phone number and e-mail address.

**control tower**

The Control Tower is a window in Field Service where you can view resource availability or assign resources to a task.

**customer**

Customers are typically primary users, Business to Business (B2B) users, business to Customer (B2C), and (individual) users.

**customer relationship escalation**

A customer relationship escalation is an escalation document that escalates multiple support requests, defects, or tasks.

### customization

Customizations are enhancements to an Oracle Applications system made to fit the needs of a specific user community.

### defect

A defect is a document that tracks product problems and resolutions in Escalation Management. A defect can be escalated without an associated service request. It is escalated through Oracle Quality Online (OQO), formerly known as the Defect Management System.

### dependency

A dependency is where one task must complete before another. This functionality is only available in the Forms-based Task Manager.

### dynamic group

A dynamic group is a group which is created based on your criteria by using SQL statements in the Resource Manager.

### effective dates

Effective dates are the dates used by Oracle E-Business Suite to specify when something is going to begin.

### employee

An employee is a resource type that represents a person who is hired to work for a company. Employee resources can be imported as resources from the Oracle Human Resources Management System (HRMS).

### enrollment

Enrollment is a set of add-on services that you can receive during or after registration in User Management. One enrollment corresponds to zero or one responsibility, zero or one template, zero or one approval and zero or more roles. Enrollments are application specific and can be tied to user types.

### escalation

An escalation is a modification of a process, a status, or both, to reflect an increased level of importance and a more immediate degree of response.

### escalation management

Escalation Management is the process of managing proactive and reactive escalations. Proactive escalations are managed using the Business Rule Monitor and reactive escalations are managed using Escalation Manager.

### Escalation Manager

Escalation Manager is a tool used to reprioritize, reassign, and monitor a situation, such as a service request or task, to a satisfactory completion.

### escalation owner

An escalation owner is a person who oversees the escalation task, or document in Escalation Management. Once a task or document is escalated, the responsibility of the original owner of the escalated task is transferred to the escalation owner. For example, a defect is escalated to Rhonda Abbott and Rhonda becomes the escalation

owner of this defect. John Smith, the original owner of the escalated defect, is no longer responsible for the defect.

### escalation plan

An escalation plan is a series of follow up tasks that are attached to the escalation document.

### exception

An exception is defined the time that a resource is not available in the Forms-based Calendar. Examples of exceptions include holidays, vacations, sick days, or weekends.

### explicit enrollment

Explicit enrollments are enrollments that you manually register for during the registration process from the "Register Here" link in User Management.

### forms

Forms are a logical collection of fields, regions, and graphical components that appears on a single screen. Oracle applications forms resemble paper forms used to run a business. You enter data by typing information into the form.

### forms server

A Forms server is a type of application server that hosts the Forms server engine. It mediates between the desktop client and the database, providing input screens for the Forms-based products on the desktop client and creating or changing database records based on user actions.

### framework

A framework is a collection of collaborating classes. The interaction framework dictates the architecture. It defines the overall structure, its partitioning into classes and objects, the key responsibilities, how the classes and objects collaborate, and the thread of control.

### full access

Full access provides you with the ability to read and edit, and delete a record. This access type does not include the capability of granting access to others.

### functions (privileges)

A function is an action that can be performed on an object or object instance. It can be granted to a user or user group that means gives them permission to perform that function. Therefore, a function can also be referred as a permission or privilege from a user's point of view.

### Gantt Chart

The Gantt chart provides a graphical overview of the scheduled tasks for resources.

### grant (authorization)

A grant is an authorization for the grantee (users, or user groups) to perform the specified object role on the specified object instance or object instance set.

### group calendar

A group calendar is a calendar used only by its subscribers in the HTML Calendar. For example, a group calendar called Key Account can be used by any subscriber after the subscription is approved.

### GUI

An interface used with personal computers and workstations that allows the user to access fields and regions of the screen with a pointing device, typically a mouse. The acronym is pronounced "goo-ee."

### HTML (hypertext markup language)

HTML is a simple language used to format documents, predominantly for viewing with a web browser. Portions of text or images, called hypertext, can be associated with other documents.

### HTTP (Hypertext transfer protocol)

The TCP/IP-based network protocol used to transmit requests and documents between an HTTP server and a web browser.

### HTTP listener

An HTTP listener is a program on an HTTP server that accepts and processes incoming HTTP requests from web browsers.

### implicit enrollment

These are enrollments for which a user is automatically registered for during the registration process using the "Register Here" link In User Management. The user is not asked to register for these enrollments. Instead, they are automatically attached to the user upon registration.

### individual user

An individual user is an individual with no relationship to an organization in User Management. Generally, no approval is required for this type of user.

### intelligent assignment option

The intelligent assignment option is used only in the Field Service Dispatch Center to assign the resource with the lowest cost.

### JAR (java archive) file

JAR files are a collection of Java classes compressed into files for faster download to a desktop client.

### java class

Java classes are components of a Java program that define objects and operations performed on objects. A Java class also identifies an operating system file that contains a program or part of a program written in Java.

### JInitiator

Oracle JInitiator enables end users to run Oracle Developer Server applications directly within Netscape Navigator or Microsoft Internet Explorer on the Windows 95, 98, or 2000 and Windows NT4.0 platforms. Implemented as a plug-in (Netscape Navigator) or ActiveX component (Microsoft Internet Explorer), Oracle JInitiator allows you to specify

the use of Oracle's Java Virtual Machine (JVM) on web clients instead of having to use the browser's default JVM.

### JSP

Java server pages are an extension to the Java servlet technology that was developed by Sun as an alternative to Microsoft's ASPs (Active Server Pages). JSPs have dynamic scripting capability that works in tandem with HTML code, separating the page logic from the static elements — the actual design and display of the page.

### list of values (LOV)

A list of value is a predefined list of choices that the user has to chose from.

### menus (roles)

A menu is a grouping of functions. It is required to group functions into related sets of menus necessary to perform a particular job role on an object instance. A good example is an "Administrator" menu, which might include many functions required for a user with an administrator role to perform his job. Therefore, menus can also be referred as roles.

### merchant administrator (system administrator)

The Merchant or System Administrator is the main administrator of a company who approves requests for primary, business, and individual users in the User Management process. This System Administrator, who has the JTREG_APPROVAL permission, sees all the pending requests to be approved and is able to approve them.

### merchants

Merchants refer to implementors of the Oracle E-Business Suite. This term is used to clear up any confusion with the term "customers", which refers to customers of a business using Oracle products as opposed to those implementing the product.

### Notes

Notes is a tool that provides additional text locations where you can specify more detail, if needed. A note can be added to a task.

### note source

A note source is the originating module of the note. For example, if the notes are entered from a service request application, then the source of the note is Service Request.

### note status

Note status determines note accessibility. For example, you can define a private note with status of Personal so that only you can see the note. There are three statuses available for notes that you can set:

- Private: Only the creator can view it.
- Public: The creator and others can read or write to it.
- Publish: Publishable over the Internet. Everyone can view it. This status is currently not used.

### note text

A large type note, such as a customer's letter or directions.

### note type

Note types provide a further categorization to the notes based on a user's individual needs. Also, a note type can be tied to a source type and such note types are visible only to that mapped source. Therefore, you must choose between the entire note types that have been defined for your source and those which do not have any source type attached to them.

### Objects

An object is a type of thing on which security can be managed. For example, Tasks and Notes can be examples of an object.

In a technical definition, each object must be registered in the FND_OBJECTS tables. Every object definition will contain related database object (table or view) and primary key information for the object.

### Object Instances

An object instance is a subset of an object. This generally corresponds to a row (or related set of rows) in the database. For example, if Notes is considered an object, then the Note with number 1541 is an object instance.

In a technical explanation, object instances are derived from the primary key values. The primary key values should be set for the registered object in the FND_GRANTS table.

### Object Instance Sets

An object instance set is a group of multiple object instances. For example, all notes with a number smaller than 5 could be considered as an object instance set.

In a technical definition, object instance set definition is stored in the FND_OBJECT_INSTANCE_SET table. The definition contains a SQL where clause, the predicate, that combined with the object definition will return all the object instances that are part of the object instance set.

### OMO

OMO is an acronym for Oracle Marketing Online.

### OSO

OSO is an acronym for Oracle Sales Online.

### other/TBH

Other/TBH is the only resource that is created and not imported in the Forms-based version of Resource Manager. Use this resource to create a salesperson that is going to be hired (TBH) but is not yet an employee.

### owner

An owner is a resource person who oversees a task or a document. Use the Task Manager: Default Task Owner profile option to set the default to a specific owner. For example, tasks can be owned by a specific employee such as Ms. Marsha Able. This way she can oversee the work completed per task.

### partner

A partner is one of two or more persons who contribute capital to establish or maintain a commercial venture and who usually share in the risks and profits.

### party

A party is a person, group, or organization and is owned by TCA. Party relates to an employee, customer, or organization that can be related to a task.

### permissions

A permission is the HTML equivalent to a responsibility.

### platform

Within a resource category, there could be numerous platforms in skills management. A resource can be rated individually for each of those platforms. Platforms can be rated with the following: foundation, intermediate, skilled, advanced, expert, or N/A.

### PL/SQL

PL/SQL is a procedural extension of SQL that provides programming constructs such as blocks, conditionals, and functions.

### port

In TCP/IP and UDP networks, a port is an endpoint to a logical connection. The port number identifies what type of port it is. For example, port 80 is used for HTTP traffic.

### primary user

A primary user is a designated person of an external organization, like a business partner, who is responsible for some administrative functions on behalf of the external organization in User Management. In the case of registration the primary user is responsible for managing the registration and maintenance of users, accounts, and enrollments. Primary users of different parties may have access to different responsibilities and they may be granted different access rights.

### privileges

Privileges define how a user can operate a system resource on a network or a file server. Privileges also define a right to execute a particular type of SQL statement or to access another user's object. For example, the right to create a table or session.

### problem code

Within a category in skills management, there could be numerous problem codes. A resource can be rated individually for each of those problem codes. Problem codes can be rated with the following: foundation, intermediate, skilled, advanced, expert, or N/A.

### product

Within a category in skills management, it is possible to have numerous products. A resource can be rated individually for each of those products. A product can be sub-divided into components. Products can be rated with the following: foundation, intermediate, skilled, advanced, expert, or N/A.

### profile option

A profile option is a set of changeable attributes that affect the way Oracle applications appear and how they function.You set profile options whenever you want the application to react in different ways for different users, depending on specific user attributes. They can be set at the user, application, site, or responsibility level.

### proxy server

A server that sits between a client application, such as a Web browser, and a real server. It intercepts all requests to the real server to see if it can fulfill the requests itself. If not, it forwards the request to the real server.

### public calendar

A public calendar can be used by everyone. Examples of public calendars can be corporate holiday calendar and local holiday calendars for branch offices.

### read-only

Read-only access provides you with read-only capability. You **cannot** edit or delete any information.

### recurrence

Recurrence is where a task is repeatedly assigned to a user in a pre-specified time increment such as daily, weekly, monthly, or yearly.

### reference document

A reference document is a document that is linked to an escalation document. For example, a service request (number 9229) is escalated to John Smith in an escalation document (number 11749), then this service request (number 9229) is a reference document.

### reference

Reference is where one task relates to another document. For example, a task can be related to a service request.

### reference type

A reference type specifies whether or not a reference document is escalated or used to provide additional information in Escalation Management.

### registration

Registration is the process by which any user gains some access to the application's functionality.

### registration self-service administration UI

The registration self-service administration UI is used by System Administrators, and at times primary users, to maintain external organization or internal group, users, parties, and accounts in User Management.

### registration self-service user UI

The registration self-service user UI is used by the primary, individual, or business users to register themselves in User Management.

### registration templates

Applications require varying pieces of information to register different types of users in User Management. Registration templates refer to JSP files that are used to capture the registration information that is special to a particular user type or enrollment.

### repeating task

A repeating task is repeated in specified time increment such as daily, weekly, monthly, or yearly.

### request owner

The request owner is the current approver based on the approver list and current state of workflow defined for a given approval in User Management. The request owner is only able to approve the requests which they currently own. This user should have "JTAPPROVER" permission. The request owner is tied to the JTUM_APPROVAL_OWNER profile option.

### resource

A resource is the basic element of the Resource Manager and is defined as people, places and things.

### resource category

There are five types of resources defined in Resource Manager: party, employee, partner, supplier contact, other/to be hired (TBH).

### resource component

Within a product in skills management, there are numerous components. A resource can be rated individually for each of those components. Components can be rated with the following: foundation, intermediate, skilled, advanced, expert, or N/A.

### Resource Manager

The Resource Manager is a tool used to define, access, and maintain all resources in Oracle E-Business Suite.

### resource skill category

A resource skill category is the highest level that a resource can be rated in relation to skills management. If a resource is rated at the category level, and not rated at any one of the product, platform, or product code levels, it does not imply the resource is also rated at those levels. Categories can be rated with the following: foundation, intermediate, skilled, advanced, expert, or N/A.

### responsibilities

Responsibilities are groupings of application menus that determine the user interface accessible to a particular user.

### role

Roles are groupings of permissions, which are page level and function level granular privileges used to maintain application security.

### role attribute

A role attribute is associated with a role. It defines the responsibility for each role in a group or team in the Resource Manager. For example, a Telesales Agent role represents the Member role attribute in a group, and a Sales Manager role represents the Manager role attribute in a group.

### role type

A **role type** is a collection of roles associated with a particular module in Oracle E-Business Suite.

### salesperson

A salesperson is a generic term used for any person involved in the sale or support of products and services.

### self-service registration

Rather than asking an Administrator to register users manually, users can register themselves through a self-service UI in User Management. Self-service registration includes the UI and the background processes used to complete the registration process. This involves assigning users the correct data and UI access privileges.

### service request

A service request is a document that tracks information about a customer's product and service problems.

### servlet

A servlet is a Java program executed on an HTTP server, rather than downloaded to a desktop client.

### shift

Shifts define a resource's availability to work in the Forms-based Calendar.

### shift pattern

Shift pattern is a set of shifts, such as First Shift Monday through Friday 08:00 a.m - 05:00 p.m. in the Forms-based Calendar.

### skills management

Skills management provides the ability to add a new skill rating to a resource in the Resource Manager. The resource can update and maintain their skill rating, attach a numeric value to each skill level, and change the actual name of each skill level.

### source

A source is the originator of the note. For example, if the notes are entered from a service request application, then the source of the note is Service Request. Sources are pre-defined.

### source object

The source object is the originator of the task, note, or appointment; for example, Sales, Service, or Contract.

### Spreadtable

A spreadtable is the user interface component that contains row, columns, and column headers set in a grid that can be embedded into an Oracle form.

### SQL (structured query language)

SQL is an internationally standard language used to access data in a relational database. The acronym is pronounced "sequel."

### SQL*Plus

SQL*Plus is an Oracle tool used to submit SQL statements to an Oracle database server for execution. It has its own command language.

### SQL script

A SQL script is a file containing SQL statements that you run with a tool such as SQL*Plus to query or update Oracle data.

### supplier contact

A supplier contact is the contact information for a person or agency that sells raw material or goods in the Resource Manager. Supplier resources can be imported as resources from the purchasing (PO) application.

### system administrator

The System Administrator is the person who manages administrative tasks in Oracle Applications, such as registering new users and defining system printers, using the System Administrator responsibility.

### task

A task is a discrete unit of work that is assigned to one or more individuals. Tasks are managed by the Task Manager. Tasks are often scheduled events and have defined expirations.

### task assignee

An assignee is the person that is assigned to a task, which can include the owner. An assignee can accept, refuse, or reassign the task.

### task category

A task category as a way of organizing tasks. For example, the task can be a phone call and the category could be call back customer.

### task creator

The creator is the originator of the task and defaults to the owner. However, the owner can be modified.

### task template

A task template is a skeleton or surrogate task.

### task group template

A task group template is a grouping of different task templates defined during setup.

### Task Manager

Task Manager is a tool used to manage tasks throughout other applications. Task Manager provides a mechanism for tasks to be created, assigned, managed, sorted, and prioritized to provide timely response to customer issues.

### task owner

An owner is the person (resource) that creates and is responsible for the task.

### task type

A task type defines the nature of the task such as a callback or a meeting.

### TCP/IP (transmission control protocol / internet protocol)

A widely-used industry-standard networking protocol used for communication among computers.

### team

A team is a collection of cross-functional resources. It is organized for the purpose of accomplishing a project in the Resource Manager. Team members are chosen for their availability, qualifications, and location. This functionality can be defined in the Forms version of Resource Manager only.

### template handler

Template handlers refers to how the data flow built by other applications occur among registration and how they are associated with enrollments and user types in User Management.

### Thin Client Framework (TCF)

The Thin Client Framework server is a middle tier process that enables certain Java components of the Oracle Applications user interface to communicate with the middle tier and database tier.

### tier

A set of machines that perform similar tasks. Client/server is a two-tier architecture, with machines on the client tier connecting to machines on the server tier. Internet Computing Architecture consists of three tiers. In Release 11i, machines on the desktop client tier communicate with machines on the application tier, which in turn, communicate with each other and with machines on the database tier.

### to do list

A to do list is a personal listing of things to do.

### unassisted assignment option

The unassisted assignment option is used to manually assign a resource to a document or task of your choice without taking predefined criteria into account in the Assignment Manager.

### universal primary user approver

Create a universal primary user approver if you want to have multiple primary users in User Management.

### user

A user is a single person with an account on the system (represented by a row entry in FND_USER). Users can be referred as Grantee if they are the subjects of a data security grant. These users must be exposed in the WUSER table.

Users can be grouped into groups.

### user group

A user group is any grouping of FND_USERS who are exposed through the WROLES view. User groups can be referred as Grantee if they are the subjects of a data security grant. These user groups must be exposed in the WROLES table.

### user ID

The User ID is a combination of a username and its password.

### User Management

User Management is a tool used to registering a user and thereafter maintaining the user in the system by granting or revoking privileges, accounts, customer profile information, and party relationships based on a set of business requirements set-forth by the organization where the process is deployed.

### username

A name that grants access to a secure environment or program, such as an Oracle database or Oracle applications. A username is customarily associated with a collection of privileges and data available to a particular user (responsibilities in Oracle Applications). Every username is associated with a password.

### user profile

User profiles, which are associated with responsibilities, are a set of user interfaces that give users access to their personal data and preferences.

### user type

A user type is a category of users that caters to the specific needs of an application's business requirements in User Management. User types allow flexible and extensible ways for defining, categorizing and implementing behavior of users. A user type is associated to only one template, one responsibility, zero or one approval and zero or more roles.

### web availability

Web availability is defined as a resource who has the immediate ability to attend to a service request that is assigned online in the Resource Manager.

### window to promise assignment option

The Window to Promise assignment option is used only in the Field Service Dispatch Center to assign a resource to a specific time slot.

### work

Work is broadly defined as a collection of items presented to an agent through the Oracle E-Business application to be processed. Work items can be either a media item or a task.

### workflow

Oracle Workflow automates and continuously improves business processes, routing information of any type according to business rules you can change. Oracle Workflow manages business processes according to rules that you define. The rules, which we call a workflow process definition, include the activities that occur in the process and the relationship between those activities. An activity in a process definition can be an automated function defined by:

- a PL/SQL stored procedure or an external function
- a notification to a user or role that they may request a response
- a business event
- a subflow that itself is made up of many activities.

**workflow attributes**

Workflow attributes control the behavior of the workflow.

**workflow monitor**

The workflow monitor is a Java based tool used for administering and viewing workflow process.