

Oracle® Field Service

Implementation Guide

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Send Us Your Comments

Oracle Field Service Implementation Guide, Release 11i

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Preface

Intended Audience

Welcome to Release 11i of the *Oracle Field Service Implementation Guide*.

This guide is designed for implementors, administrators and users of the Oracle Field Service application. It assumes that you have a working knowledge of the principles and customary practices of your business area, along with specific application knowledge of the Oracle Field Service suite of products.

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

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Structure

- 1 Introduction**
- 2 Technology, Requirements, and Performance**
- 3 Dependencies, Verification and Task Sequence**
- 4 E-Business Suite Application Implementation Tasks**
- 5 Field Service Implementation Tasks**
- 6 Preventive Maintenance Setup Steps**
- A Profile Options**

Related Documents

Oracle Field Service User Guide

This manual contains detailed information about using the Oracle Field Service application, including the Dispatch Center, Debrief, and the Technician's Portal.

Oracle Self-Service Web Applications Implementation Guide.

This manual contains detailed information about the overview and architecture and setup of Oracle Self-Service Web Applications. It also contains an overview of and procedures for using the Web Applications Dictionary.

Oracle Common Application Components User Guide

Oracle Field Service uses many modules from among the Common Application Components, including Resource and Task Manager, among others. Refer to this guide for details on the usage of each module.

Oracle Advanced Scheduler Concepts and Procedures

When Advanced Scheduler is installed, the usage is tightly integrated with the Field Service application. This guide explains the Advanced Scheduler processes and how it is integrated with Field Service.

Oracle Field Service/Laptop Concepts and Procedures

This guide will help you to navigate the mobile client, the laptop device, and explains how to use the Mobile Field Service/Laptop application. Field Service information is sent to the laptop device to be handled by the field service representative.

Oracle Field Service/Palm™ Devices Concepts and Procedures

This guide will help you to navigate the mobile client, the palm device, and explains how to use the Mobile Field Service/Palm™ Devices application. Field Service information is sent to the palm device to be handled by the field service representative.

Oracle Wireless Option for Service Concepts and Procedures

This guide will help you to navigate the mobile client, the wireless device, and explains how to use the Oracle Wireless Option for Service application. Field Service information is sent to the wireless device to be handled by the field service representative.

Oracle Knowledge Management User Guide

This guide will help you understand and use the Oracle Knowledge Management application, which integrates with the Oracle Field Service Technician's Portal module.

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.

Introduction

This chapter covers the following topics:

- Summary
- Oracle Field Service Suite Overview
- Oracle Field Service Overview

Summary

In this chapter you will find an overview of the products in the Field Service suite as well as an overview of the Field Service application itself.

Please address the following topics for details:

- Oracle Field Service Suite Overview, page 1- 1
- Oracle Field Service Overview, page 1- 3

Oracle Field Service Suite Overview

The Oracle Field Service suite supports an automated process used by service organizations to manage their field service operations. It assists in the entire service process from taking the customer call to fixing and reporting on the problem at a customer site.

The Oracle Field Service suite offers a range of products to meet your organization's business needs. The following table lists all the products in the suite.

Suite Product	Description
Customer Care	Not really a product of the Field Service suite but the Service Request form is delivered along with the Field Service application to take the customers call for service and create a service request.
Oracle Common Application Components	The products in Oracle Common Application Components are essential to use Field Service. They are used to create tasks, territories, define resources, and help in the assignment of tasks to resources. Oracle Common Application Components comes with Field Service.

Suite Product	Description
Field Service	The Field Service application assists in assigning tasks to service representatives, creating and dispatching daily schedules, monitoring progress, and reporting on material, expense, and labor transactions.
Advanced Scheduler	Advanced Scheduler enables optimization of scheduling capabilities of tasks to qualified resources. It takes into account driving time, distance, part availability and creates part reservations.
Spares Management	Spares Management is a module of Field Service and is used to provide additional logistics and planning features to manage a service parts inventory in a multi-location environment.
CRM Gateway for Mobile Devices	The CRM Gateway for Mobile Devices consists of a mobile client and a central application. It provides data transport between the Oracle CRM enterprise database and the Oracle mobile client database.
Field Service/Laptop	This is a remote application typically installed at a service representative's laptop to receive his daily schedule and report on progress, material, expense, and labor.
Field Service/Palm Devices	This is a remote application for a handheld device so a service representative can receive his daily schedule and report on progress, material, expense, and labor.
Wireless Option for Service	This is a remote application for a WAP enabled device so a service representative can receive his daily schedule and report on progress, expense, and labor.
Preventive Maintenance	This module enables a Field Service operation to address service needs in a proactive manner, as well as reactively. The Preventive Maintenance solution provides the capability to log service requests and allocate tasks to the appropriate resources with the right parts and schedule them in anticipation of the service need.

Suite Product	Description
Complex Maintenance, Repair and Overhaul (CMRO)	CMRO functionality is used to support the Preventive Maintenance module. It enables you to create PM programs and activities to be used in a preventive maintenance operation. For the purposes of Preventive Maintenance, a profile option setting in CMRO enables it to run in a Preventive Maintenance mode, whereby PM-specific functionality is available to the user.
Field Service Technician's Portal	The HTML-based field service portal module enables your technicians to manage and report on their task-based customer calls from any computer with an internet connection.

Oracle Contracts Family Suite for Preventive Maintenance

In order to enable the Preventive Maintenance module in Oracle Field Service, you must also install the Oracle Contracts Family Suite. The following product is used for Preventive Maintenance:

Field Service Suite of Products

Suite Product	Description
Service Contracts	Service Contracts is used to author service contracts with coverages associated to a PM program, which can be sold against serviceable products. In Service Contracts, you can define coverage templates for PM programs and author and maintain service contracts with PM coverage.

Oracle Field Service Overview

Oracle Field Service is an essential part of the Field Service application suite. At the core of Field Service is the Dispatch Center, which allows the field service dispatcher to plan, dispatch, and monitor all field service activities, ultimately ensuring that the right person is in the right place at the right time with the right parts. Field Service Debrief functionality enables you to report all activities performed out in the field.

Review the following to learn more about the Field Service application:

- Field Service Dispatch Center Features, page 1- 4
- Field Service Debrief Features, page 1- 4
- Spares Management Features, page 1- 5
- Preventive Maintenance Features, page 1- 6
- Field Service Technician's Portal Features, page 1- 6

Field Service Dispatch Center Features

- Shows information for a selected task such as related service request, escalations, parts transactions, Install Base related information, resources assigned for a task, and customer address information.
- Scheduling or task assignment, either automatically or manually, to one or more service representatives. The automatic process of scheduling tasks can be run as a background process.

Task assignment is assisted by the use of the Assignment Manager.

When Oracle Scheduler is installed, you can optimize your scheduling capabilities. Driving time and distance for the service representative is provided, and parts reservations are made.

- Managing parts information. Locating, ordering, and monitoring parts for specific tasks.

When Oracle Scheduler is installed locating parts and creating reservations is done automatically.

- Commitment of tasks and daily schedules to service representatives, either automatically or manually. When parts reservation are created an order for the parts is initiated by this process.

The tasks or daily schedules are send to the service representative's mobile application with information about the task, related service request, problem and resolution, customer address information, Install Base information when applicable, and counters.

- Monitoring schedules, activities, and progress, of service representatives.

Use different grids to visualize the planning such as a daily view, view over a period of time (user definable), or a geographical representation.

Escalation notifications give you the ability to react to non-conforming tasks (tasks that for some reason become non-conforming, for example parts aren't available anymore, contract response times can't be met).

- Making a selection of tasks based on characteristics such as ready to be planned, planned for today, or escalated.
- View service history for a customer or a product.
- Manages resource availability for single or multiple technicians. Through the Trips Management UI, a dispatcher can easily block the trips of a single field technician or multiple technicians, temporarily freezing the schedule in the process. You can also unplan or reschedule the engineer's tasks.
- Uses robust skills management and assignment functionality to effectively assign tasks to appropriate technicians, based upon skill requirements and skill levels.
- Uses advanced color coding functionally, which makes the various tasks within the Plan Board and Gantt easily identifiable, depending upon a number of factors, including the task's priority, status type, or plan option.

Field Service Debrief Features

- Reporting on parts, expenses, and labor for a task. Ultimately resulting in updates to Inventory, Install Base, and Charges.

- Reporting on counters. From Field Service Debrief you can easily access the Capture Counter Reading functionality from Oracle Service to capture counter readings.
- Direct access to specific Spares Management functionality such as View Move Order, Create Move Order, and View Onhand Quantity.
- Access Notes, Calendar, or Interaction History directly. A technician can also view notes that were created with service requests or tasks.

Spares Management Features

- Integrates with Oracle Advanced Scheduler to assign and schedule technicians based on the availability of technicians and the availability of parts.
- Integrates with the Dispatch Center and provides the following functionality:
 - Point-and-click parts search tool
 - Create parts orders for the technician
 - View parts order status for the task
 - View parts required for the task
- Tracks both usable and defective parts through the complete logistics cycle. Defective inventories are created when the technician recovers repairable parts from the customer site.
- Uses order creation functionality specifically designed to handle the technician's parts orders. The UI can be used to either create an internal order or a parts requirement for a specific task. This functionality allows the dispatcher to link an internal order to a service request or task; automatically enters parts linked to the task; displays a technician's inventory for parts being ordered; integrates with Available-to-Promise to determine source; and offers a view of substitute parts.
- Uses robust excess return functionality to use business rules to focus on high impact parts excess. Excess parts are identified based on max levels and excess orders can be automatically created based on planner review.
- Uses an Authorized Stock List (ASL) to define which parts should be stocked, where they should be stocked, and in what quantities. The ASL recommendation is based on usage history, planning parameters and planning method. The parameters can be uniquely applied to each technician or warehouse, or defaults can be applied which would help to avoid excessive data entry where many field technicians are involved. Advanced planning methods can be used to address the more complex scenarios typical in a field service environment.
- Spares Management is tightly integrated with Oracle Depot Repair, which is an additional automated warehouse replenishment process, whereby parts are repaired at an internal depot and then circulated back into the supply chain for further use. In this scenario, defective parts are removed by a technician from a customer site and consolidated with other defective parts at an internal warehouse. From there, a planner creates an internal order, which ships the parts to an internal depot that is supported by the Oracle Depot Repair application while, at the same time, creating the repair order and the internal order that ships the repaired parts back to the central warehouse.

Preventive Maintenance Features

- Maintains and administers Preventive Maintenance programs, which includes authoring service contracts with Preventive Maintenance programs attached, by leveraging robust Oracle Complex Maintenance, Repair, and Overhaul (CMRO) and Oracle Service Contracts functionality.
- Logs service requests and allocates tasks to the appropriate resources with the right parts and schedules them in anticipation of the service need. The Preventive Maintenance demand can be based on the usage of the relevant item (estimated or actual usage). Also, the demand can be based on the date interval calculated from historical information (such as the service fulfillment date) or on the calendar such as defined in the contract.
- A concurrent program generates the Preventive Maintenance requests automatically (service requests and tasks). The tasks are created as a result of task templates, which are associated with the activities such as defined when recording the Preventive Maintenance demand.

Field Service Technician's Portal Features

Field Service Technician's Portal is a web-based module designed to enable field technician's to receive service request and task information for tasks assigned to them. It allows technicians to manage tasks and spare parts, to add notes, and to initiate new service requests.

These are the features of the Field Service Portal:

- Provides a personalized dashboard view to serve as the entry point for a field technician.
- Allows for customizable multiple views for the dashboard, depending upon the technician's preferences.
- Enables search capabilities on service request, task number, and customer information.
- Provides integration to Oracle Install Base for item instances.
- Supports Knowledge Base integration.
- Provides the ability to view and create service requests, tasks, and notes.
- Provides access to spare parts information and enables a technician to order parts.
- Provides for the ability to return and receive parts.

Technology, Requirements, and Performance

This chapter covers the following topics:

- Technology and Requirements Summary
- Architectural Overview
- Minimum Software and Hardware Requirements

Technology and Requirements Summary

This chapter describes the technology stack used and gives an architectural overview of the Field Service application. Listed are the software and hardware requirements.

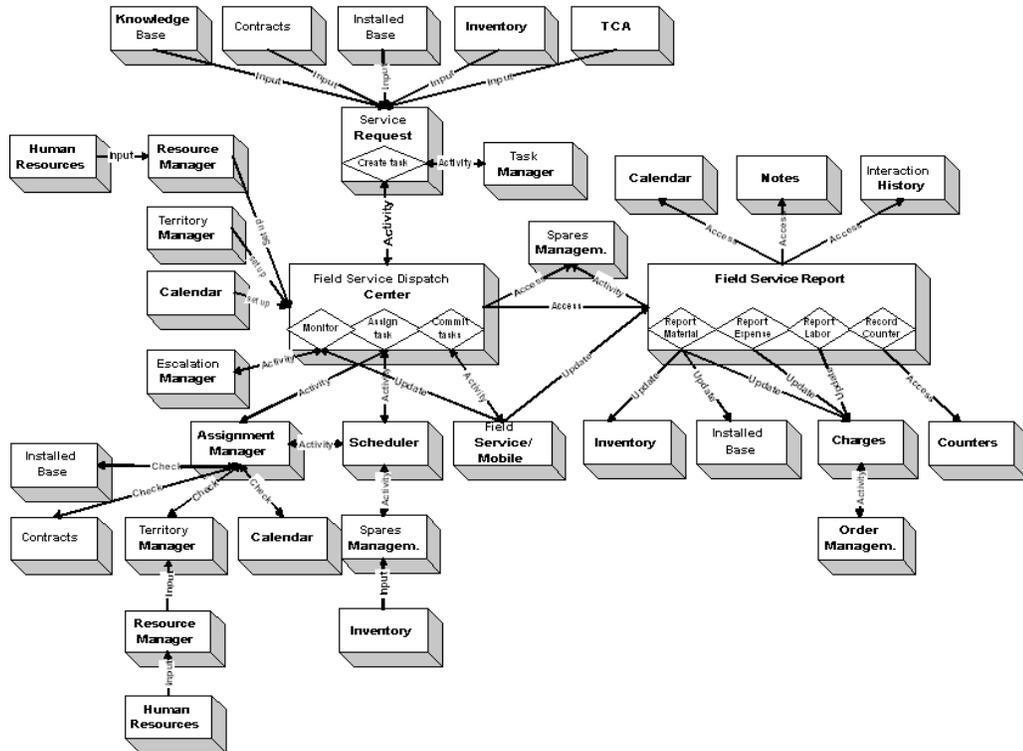
This chapter includes the following sections:

- Architectural Overview, page 2- 1
- Minimum Software and Hardware Requirements, page 2- 5

Architectural Overview

Field Service is compliant with the latest technology-stack and conforms to all the standard components required on client, middle, and database tiers. For more information please refer to the *Installing Oracle Applications* guide.

Field Service is integrated with many other Oracle Applications in the E-Business Suite. The following figure visualizes this integration. The applications involved and their relation are explained in more detail in the sections following the figure.



Service Request

A Service Request is created. The following applications have a relation with Service Request:

- Knowledge Base provides input for resolution of the problem.
 - Contracts this could be either Contracts Core or Service Contracts. Input for the service request is the response time, considered for task assignment.
 - TCA provides information on parties and contacts and their information.
 - Install Base provides input on the install base information send to the Mobile applications. Used by the service representative when servicing the product.
 - Inventory provides input to determine what products are serviceable.
 - Task Manager functionality is used to create tasks to perform the field visit.

Resource Manager

All service representatives and field service dispatchers need to be defined as such in the resource manager individually. Field service dispatchers are also part of a dispatcher group created in Resource Manager to be able to access the Field Service Dispatch Center.

Territory Manager

Territory Manager is used for two purposes.

- It is used to create territories with service representatives assigned to it. These territories are then related to a dispatcher group. The service representatives assigned to the territory show up in the Field Service Dispatch Center for the dispatcher.

- It is also used to create territory qualifiers for task assignment. These territory qualifiers are used by the Assignment Manager and Advanced Scheduler to retrieve a qualified service representative for a task.

Calendar

For each service representative working hours, shifts, and non-available working hours like public holidays need to be defined. This information is used for scheduling. A service representative can also access his calendar and view his task assignments. For more information see *Oracle Common Application Components User's Guide*.

Assignment Manager

The Assignment Manager assists in the task assignment from the Field Service Dispatch Center by finding a qualified service representative to resolve the task. Indirectly the following applications have a relationship with:

- Install Base, a preferred service representative to perform the field visit can be recommended from the Install Base.
- Contracts, a preferred service representative to perform the field visit can be recommended from Contracts, or Contracts Service.
- Territory Manager, territories with qualifiers are created to filter qualified service representatives.
- Calendar, the availability of the service representative is checked in his or her calendar.

Advanced Scheduler

Advanced Scheduler assists in task scheduling from the Field Service Dispatch Center by finding a qualified service representative to resolve the task with the right part. Advanced Scheduler uses the input from the Assignment Manager and applies it's own functionality. It takes into account driving time and distance, part availability and creates part reservations. Advanced Scheduler is tightly integrated with Spares Management.

Spares Management

In most situations, you need parts to resolve a problem at the customer's site. You can access the Spares Management component to order parts for a task. When Advanced Scheduler is installed a reservation for the part is created automatically at task assignment. When the task is committed, an order for the part is created. You can update Spares Management indirectly from Field Service Debrief with parts usage for a task. The update is done to maintain stock levels at different locations, and for the subinventories.

Escalation Management

Escalations occur for a wide variety of reasons. An escalation management system allows an organization to identify, track, monitor, and manage situations that require increased awareness and swift action.

Field Service Mobile

After task assignment the schedule is committed and send to one of the following mobile applications:

- Field Service/Laptop
 - Field Service/Palm™ Devices
 - Wireless Option for Service

It is received by the service representative and he can update the schedule and create a service report. The data is received back by Field Service to monitor progress and captured on the Field Service Debrief.

Inventory

Inventory provides input for Service Request to determine what product needs service. You can update Inventory (Spares Management) from Field Service Debrief with parts usage for a task. Updating Inventory is done to maintain stock levels at different locations, and subinventories. A subinventory could be a warehouse or a service representative's vehicle. Updating inventory results in activities to supply these warehouses or a service representative with new materials or to retrieve materials from them. For more information, see *Oracle Spares Management Concepts and Procedures*.

You cannot modify reported information in Field Service Debrief once it has been transmitted successfully to Inventory.

Install Base

Install Base provides input for the service request to indicate if it is an install base item. It also provides input to the Assignment Manager regarding preferred service representatives to perform the field visit.

You can update a customer's Install Base from Field Service Debrief. Updating Install Base results in an update of the items of the customer's Install Base.

You cannot modify reported information in Field Service Debrief once it has been transmitted successfully to Install Base.

Interaction History

Oracle Interaction History tracks all customer-agent interactions and serves as a repository for the interaction data. You can view the interaction data as well as the Oracle CRM application data associated to the interaction. Access Interactions from the Field Service Debrief.

Notes

Notes provide a text area where you can enter information about a customer, product, service, or anything related to your service report that may be helpful for other service representatives or customers. Once you create a note, it can be attached to a task, sent to the customer, or submitted to the knowledge base for reuse. You can access Notes from the Field Service Debrief.

Charges

You can update Charges with parts usage, counter information, labor time, and expenses for a task. All information recorded is transmitted to the Charges database on Update. Make sure you update each tab on the Field Service Debrief separately in order to update Charges. In Charges this information is checked against any contracts and a final invoice is generated.

You cannot modify reported information in Field Service Debrief once it has been transmitted successfully to Charges.

Minimum Software and Hardware Requirements

Please refer to the Release 11*i* System Requirements section of the *Installing Oracle Applications* for software and hardware requirements.

Dependencies, Verification and Task Sequence

This chapter covers the following topics:

- Summary of Dependencies
- Mandatory Dependencies
- Conditional Dependencies
- Installation and Dependency Verification
- Implementation Task Sequence

Summary of Dependencies

This chapter gives an overview of the mandatory and conditional application dependencies: ERP, CRM, and 3rd-party applications that must be implemented prior to implementing Field Service.

Please address the following topics for details:

- Mandatory Dependencies, page 3- 1
- Conditional Dependencies, page 3- 2
- Installation and Dependency Verification, page 3- 2
- Implementation Task Sequence, page 3- 3

Mandatory Dependencies

Before setting up Oracle Field Service, you must install and fully implement these Oracle applications or components:

- Oracle Human Resources
- Oracle Inventory
- Oracle Order Management
- Oracle Service
 - Charges
 - Install Base
 - Counters

- Oracle Common Application Components
 - Assignment Manager
 - Resource Manager
 - Territory Manager
 - Task Manager
 - Escalation Manager
 - Calendar
 - Gantt
 - Notes
 - Interaction History

For information regarding the installation and implementation of these applications and components, see the appropriate documentation for each product.

The tasks that are necessary to use the additional functionality included with Oracle Field Service are described in the following chapters.

Conditional Dependencies

To work effectively with Oracle Field Service it is recommended that you install and fully implement these Oracle applications or components:

- Oracle Spares Management
- Oracle Contracts Core
- Oracle Service Contracts
- Oracle Depot Repair
- Navigation Technologies (Navtech) spatial data
- Oracle Advanced Scheduler
- Oracle CRM Gateway for Mobile Devices
- Oracle Field Service/Laptop
- Oracle Field Service/Palm™ Devices
- Oracle Field Service/Wireless
- Oracle Complex Maintenance, Repair and Overhaul

For information regarding the installation and implementation of these applications and components, see the appropriate documentation for each product.

The tasks that are necessary to use the additional functionality included with Oracle Field Service are described in the following chapters.

Installation and Dependency Verification

For some of the mandatory and conditional dependencies make sure the following version has been installed.

Installation Dependencies

Dependency	Installation Requirement
Oracle Service	Version 11.5.10
Oracle Common Application Components	Version 11.5.10
Oracle Spares Management	Version 11.5.10
Oracle Advanced Scheduler	Version 11.5.10

The tasks that are necessary to use the additional functionality included with Oracle Field Service are described in the following chapters.

Implementation Task Sequence

While you can implement Oracle Field Service in many different ways, the following checklist shows the recommended order to implement the relevant applications in the Oracle E-Business Suite as they relate to Oracle Field Service. Complete the following implementation steps in sequential order:

Implementation Task Sequence

Step	Required	Step Title
1	Yes	Setting Up the System Administrator, page 4- 3
2	Yes	Defining Key Flexfields, page 4- 5
3	Yes	Defining Calendars, Currencies, and Set of Books, page 4- 6
4	Yes	Confirming Setup of Employees, page 4- 8
5	Yes	Confirming Set Up of Resources, page 4- 8
6	Yes	Confirming Setup of Inventory, page 4- 9
7	Yes	Confirming Setup of Order Management, page 4-17
8	Yes	Oracle Work In Process Setup, page 4-19
9	Yes	Oracle Bills of Material Setup, page 4-19

Step	Required	Step Title
10	Yes	Oracle Purchasing Setup, page 4-19
11	Yes	Confirming Setup of Service Request, page 4-20
12	Yes	Confirming Setup of Customer Model 11i (TCA), <i>ERROR: linkend not in current document and TARGET_BOOK_TITLE missing</i>
13	Yes	Confirming Setup of Territory Manager, page 4-21
14	Yes	Confirming Setup of Tasks, page 4-22
15	Yes	Confirming Setup of Escalation Management, page 4-25
16	Yes	Confirming Setup of Charges, page 4-26
17	Yes	Confirming Setup of Knowledge Management, <i>ERROR: linkend not in current document and TARGET_BOOK_TITLE missing</i>
18	Yes	Confirming Setup of Counters, <i>ERROR: linkend not in current document and TARGET_BOOK_TITLE missing</i>
19	Optional	Confirming Setup of Notes, page 4-27
20	Optional	Confirming Setup of Interaction History, page 4-27
21	Yes	Confirming Setup of Install Base, page 4-27
22	Optional	Confirming Setup of Contracts Core, page 4-29
23	Optional	Confirming Setup of Service Contracts, page 4-30

Step	Required	Step Title
24	Yes	Confirming Setup of Assignment Manager, page 4-30
25	Yes	Confirming Setup of Calendar, page 4-31

Field Service Suite Implementation Task Sequence

The following checklist shows the recommended order to implement the various steps of the Oracle Field Service Suite of products. This includes Field Service, Spares Management, Advanced Scheduler, CRM Gateway for Mobile Devices, Field Service Palm Devices, Field Service/Laptop and Field Service/Wireless. Complete the following implementation steps in sequential order:

Field Service Implementation Task Sequence

Step	Required	Step Title
1	Yes	Setting up Resource Relations, page 5-3
2	Yes	Assigning Territories to Planner Groups, <i>ERROR: linkend not in current document and TARGET_BOOK_TITLE missing</i>
3	Yes	Generating Shift Tasks, page 5-11
4	Yes	Assigning Resources to Subinventories, <i>ERROR: linkend not in current document and TARGET_BOOK_TITLE missing</i>
5	Yes	Activating Automatic Commitment of Schedules, page 5-14
6	Yes	Defining Material Justification Codes, page 5-16
7	Yes	Defining Labor Justification Codes, page 5-18
8	Yes	Defining Expense Justification Codes, page 5-20
9	Yes	Set Up Billing Types and Service Activity Codes, page 5-22

Step	Required	Step Title
10	Yes	Set up Skills Management, page 5-28
11	Yes	Set Up Tasks Custom Color Coding, page 5-30
12	No	Setting Up Spares Management, page 5-32
13	No	Setting up the Map, page 5-44
14	No	Setting Up Spatial Data, page 5-47
15	No	Setting Up Oracle Advanced Scheduler, page 5-51
16	No	Setting Up CRM Gateway for Mobile Devices, page 5-51
17	No	Setting Up Field Service/Palm Devices, page 5-51
18	No	Setting Up Field Service/Laptop, page 5-52
19	No	Setting up Field Service/Wireless, page 5-52

Preventive Maintenance

For the task sequence for a successful implementation of the Preventive Maintenance module, see Implementation Task Sequence for Preventive Maintenance, page 6-10.

E-Business Suite Application Implementation Tasks

This chapter covers the following topics:

- Summary of Implementation Tasks
- Setting Up the System Administrator
- Defining Key Flexfields
- Defining Calendars, Currencies, and Set of Books
- Define a Calendar
- Define Currencies
- Define a Set of Books
- Open and Close Accounting periods
- Confirming Setup of Employees
- Confirming Setup of Resources
- Confirming Setup of Inventory
- Define Unit of Measurement
- Check Profile Option for Operating Unit Setting
- Defining Subinventories
- Additional Setup Required for Intransit Subinventory
- Set Up Account Aliases
- Define Items
- Set Up On Hand Quantity for Items
- Define Planners
- Define Shipment Methods
- Define Freight Carriers
- Confirming Setup of Order Management
- Setup of Price Lists
- Oracle Work In Process Setup
- Oracle Bills of Material Setup

- Oracle Purchasing Setup
- Confirming Setup of Service Request
- Confirming Setup of Customer Model 11i (TCA)
- Confirming Setup of Territory Manager
- Set Territory Manager Profile Option
- Confirming Setup of Tasks
- Set up Task Status and Transition Rule
- Set up Task Type
- Set up Task Priority
- Set up Task Manager Profile Options
- Confirming Setup of Escalation Management
- Confirming Setup of Charges
- Confirming Setup of Knowledge Management
- Confirming Setup of Counters
- Confirming Setup of Notes
- Confirming Setup of Interaction History
- Confirming Setup of Install Base
- Setting up Business Processes
- Setting up Transaction Billing Types
- Confirming Setup of Contracts Core
- Confirming Setup of Service Contracts
- Confirming Setup of Assignment Manager
- Confirming Setup of Calendar
- Defining a Calendar
- Defining Calendar Exceptions
- Defining Shifts
- Assigning Shifts/Exceptions to Calendar
- Assigning Resources to Calendar

Summary of Implementation Tasks

This chapter describes the implementation tasks for those Oracle E-Business Suite applications relevant to Oracle Field Service in detail and in the recommended order. These setups are standard for the application unless Field Service-related steps are noted in the details.

Please refer to the following implementation tasks:

Implementation Tasks for E-Business Suite Applications

- Setting Up the System Administrator, page 4- 3
 - Defining Key Flexfields, page 4- 5
 - Defining Calendars, Currencies, and Set of Books, page 4- 6
 - Confirming Setup of Employees, page 4- 8
 - Confirming Setup of Resources, page 4- 8
 - Confirming Setup of Inventory, page 4- 9
 - Confirming Setup of Order Management, page 4-17
 - Oracle Work In Process Setup", page 4-19
 - Oracle Bills of Material Setup, page 4-19
 - Oracle Purchasing Setup, page 4-19
 - Confirming Setup of Service Request, page 4-20
 - Confirming Setup of Customer Model 11i (TCA), *ERROR: linkend not in current document and TARGET_BOOK_TITLE missing*
 - Confirming Setup of Territory Manager, page 4-21
 - Confirming Setup of Tasks, page 4-22
 - Confirming Setup of Escalation Management, page 4-25
 - Confirming Setup of Charges, page 4-26
 - Confirming Setup of Knowledge Management, page 4-26
 - Confirming Setup of Counters, page 4-26
 - Confirming Setup of Notes, page 4-27
 - Confirming Setup of Interaction History, page 4-27
 - Confirming Setup of Install Base, page 4-27
 - Confirming Setup of Contracts Core, page 4-29
 - Confirming Setup of Service Contracts, page 4-30
 - Confirming Setup of Assignment Manager, page 4-30
 - Confirming Setup of Calendar, page 4-31
-

Setting Up the System Administrator

To fully implement Oracle Field Service, and set up the system across all applications, you need the *System Administrator* responsibility. Please see *Oracle Applications System Administrator's Guide* for more information.

The Oracle Field Service application comes with the following seeded responsibilities:

Field Service Seeded Responsibilities

Responsibility	Description
Field Service Administrator	Allowed to perform all administrative tasks within CRM Service, such as Setup.
Field Service Manager	Access to all applications and windows within CRM Service. Limited setup possibilities, such as creating task types.
Field Service Dispatcher	Access to all applications within CRM Service.
Field Service Representative	Access to a limited set of windows from the applications within Oracle Field Service.
Preventive Maintenance	Access to the Complex Maintenance, Report and Overhaul (CMRO) application for setting up Preventive Maintenance.
Preventive Maintenance Reports	Provides access to PM-related concurrent programs, which are used during the execution phase of the program.
Field Service Technician Portal	Provides access to the Field Service web-based module.

You will need to create an Oracle Applications user with the appropriate responsibilities for performing implementation procedures. The user name you assign to the user can be used to log on to the Oracle Field Service suite of products.

You must use the System Administrator responsibility to create the user. The user you create must be specified as a Person by selecting the appropriate name in the Person field in the User window. The name of the person will be available in the list of values only if the person has already been defined as an employee.

Assign all of the following responsibilities to the user you are creating:

- Spares Management
- Field Service Manager
- Order Management Super User
- System Administrator
- Inventory

Optionally, if you are using the Preventive Maintenance module, you must assign the following two responsibilities to the user:

- Preventive Maintenance
- Preventive Maintenance Reports

Use the Users window to define the Oracle Field Service user. This user will need to be uniquely identified by an application user name.

- To define additional responsibilities, please see *Oracle Applications System Administrator's Guide*.
- Set up printers (optional). For more information, see: *Setting Up Your Printers, Oracle Applications System Administrator's Guide*.

Defining Key Flexfields

The setup of key flexfields is required.

Be sure to coordinate with other applications such as Oracle Human Resource Management or Oracle General Ledger, those products' flexfield setup before defining the key flexfields here, as it is not recommended to change flexfields frequently. For more information, see: *Oracle Applications Flexfields Guide*.

For each key flexfield, you perform the following tasks, some of which are optional for some flexfields:

- Define the flexfield structure.
- Define value sets.
- Define flexfield segments.
- Define flexfield segment values.
- Define security rules.
- Assign security rules.
- Define roll-up groups.
- Define cross-validation rules.

Prerequisites

None

Responsibility

System Administrator

Navigation

Application > Flexfield > Key

Steps

1. Set up the Accounting flexfield.

You may not need to perform this step if you have already installed and set up Oracle General Ledger or performed a common application setup. For more information, see *Oracle General Ledger User's Guide*.

2. Set up the following Human Resources key flexfields.

You may not need to set up these key flexfields if you have already installed and set up Oracle Human Resource Management Systems or performed a common applications setup:

- Grade flexfield

- Job flexfield
- Position flexfield
- People Group flexfield

For more information, see: *Oracle Human Resources User's Guide*.

Defining Calendars, Currencies, and Set of Books

The setup of Calendars, Currencies, and Set of Books is required.

If you have defined your calendars, currencies, and set of books while setting up a different Oracle Applications product, proceed with the next step. However, if you are performing a Multi-Org implementation, see the note below.

Note: If you are performing a Multi-Org implementation, you may optionally create more than one calendar, currency, or set of books. For more information, see: *Multiple Organizations in Oracle Applications*.

To setup Calendars, currencies, and a set of books perform the following steps:

- Define a Calendar, page 4- 6
- Define Currencies, page 4- 7
- Define a Set of Books, page 4- 7
- Open and Close Accounting periods, page 4- 8

Define a Calendar

Carefully consider the type of Calendar that you need for your organization, it can be difficult to change your calendar (for example, from a fiscal year to a calendar year) after you have used it to enter accounting data.

You must set up the following calendars:

- Define period types. For more information, see: *Defining Period Types, Oracle General Ledger User's Guide*.
- Define accounting calendar. For more information, see: *Defining Calendars, Oracle General Ledger User's Guide*.
- Define transaction calendar. For more information, see: *Defining Transaction Calendars, Oracle General Ledger User's Guide*. (Optional)
- Define workday calendar. For more information, see: *Overview of Workday Calendar, Oracle Bills of Material User's Guide*. (Optional)
- Define exception templates. For more information, see: *Creating a Workday Exception Template, Oracle Bills of Material User's Guide*. (Optional)

Prerequisites

None

Responsibility

GL (General Ledger) Super User

Navigation

Setup > Financials > Calenders

Define Currencies

Use the Currencies window to define non-ISO (International Standards Organization) currencies and to enable or disable currencies. Oracle Applications has predefined all currencies specified in ISO standard 4217. To use a currency other than U.S. dollars (USD), you must enable that currency. USD is the only currency that is enabled by default.

Do the following setups:

- Define currencies.
- Define conversion rate types.

For more information, see *Defining Currencies and Defining Conversion Rate types* in the *Oracle General Ledger User's Guide*.

Prerequisites

None

Responsibility

GL (General Ledger) Super User

Navigation

Setup > Currencies

Define a Set of Books

A set of books determines the functional currency, account structure, and accounting calendar for each company or group of companies. If you need to report on your account balances in multiple currencies, you should set up one set of books for each reporting currency.

Your primary set of books should use your functional currency. Each reporting set of books should use one of your reporting currencies.

Proceed with the following setups as you set up a Set of Books:

- Assign your set of books to a responsibility
- Set up accounting code combinations.

For more information, see the *Oracle General Ledger User's Guide*.

Prerequisites

None

Responsibility

GL (General Ledger) Super User

Navigation

Setup > Financials > Books

Open and Close Accounting periods

It is necessary to open and close accounting periods. For more information, see: *Opening and Closing Accounting Periods, Oracle General Ledger User's Guide.*

Confirming Setup of Employees

The setup of employees is required. You setup employees in Oracle Human Resources.

Please refer to the appropriate section in *Oracle Human Resource Management Systems* to enter and maintain employees.

The Setup of Employees is also addressed in more detail in *Setting up Resource Relations*, page 4-8 of the Field Service set up.

Prerequisites

None

Responsibility

HR (Human Resource) Super User

Navigation

People > Enter and Maintain

Confirming Setup of Resources

Make sure you implement Resource Manager as described in Resource Manager section in *Oracle Common Applications Components Implementation Guide.*

The Oracle Field Service specific setup of Resource Manager involves the following:

- Set up service representatives. In Resource Manager assign role "Field Service Representative" to a resource to make it visible in the Dispatch Center.
A field service representative does not have to be defined as an employee and does not have to be an Oracle Applications User.
- Set up planners. A planner does not need a specific role assigned. You can assign the role "Field Service Dispatcher" in Resource Management.
A planner needs to be defined as an employee and assigned an Oracle Applications User. Define the planner as an employee and import the employee into Resource Management to define it as a resource. It is then automatically assigned an Oracle Applications User.
- Create planner groups by creating resource groups with only planners assigned to it. The planner groups are used to assign groups of service representatives created in Territory Management to.
- Optionally, if you are using Preventive Maintenance, you must create a resource group of type 'Preventive Maintenance'. In this case set the following values for this resource group:

- Access Type set to Service Request
- From the Members tab, choose Employee in the Category field and associate each employee that ought to be included in the group by choosing the employee identifier in the Number field.
- From the Usage tab, choose Support in the Usage field.

The setup of Resources is also addressed in more detail in Setting up Resource Relations, page 5-3 of the Field Service set up.

Confirming Setup of Inventory

The implementation of Inventory is required for several purposes within the Field Service suite of products. These include:

- To define the units of measurement (UOM) required by Oracle Field Service.
- To report on items used, taken down on the Field Service Debrief. You update Inventory from the Field Service Debrief.

Field Service Debrief contains three tabbed pages: Material, Labor and Expense. The Item field in the Field Service Debrief for each tab displays the following items:

Material tab: All items defined in the Service tabbed page of Master Items having a billing type associated with a billing category of Material are displayed in the list of values for items in the Material tabbed page.

Labor tab: All items defined in the Service tabbed page of Master Items having the billing type with a billing category of Labor are displayed in the list of values for items in the Labor tabbed page.

Expenses tab: All items defined in the Service tabbed page of Master Items having the billing type with a billing category set to Expense are displayed in the list of values for items in the Expenses tabbed page.

- Spares Management functionality requires Inventory setups to enable the following core functionality:
 - Inventory organizations are used to define warehouses and groups of field technicians.
Spares Management uses inventory organizations as a structure for subinventories that contain spare parts. Inventory organizations represent warehouses and groups of field engineers.
 - Subinventories are used to define parts inventory locations for defective and usable parts.
 - The Inventory Item Master is used to define spare parts. The additional features of serial number, lot, locator and revision control can optionally be implemented in Spares Management.
 - Items, or spare parts, are assigned to subinventory locations.
 - Inventory balance tracking is viewable in Spares Management.
 - Inventory accounting is used when a short receiving line is closed for parts.
 - The Inventory Min/Max Planning concurrent program is used to automatically replenish spares parts inventories.

- Preventive Maintenance module uses items in Inventory to enable PM programs and the creation of coverage templates.

Refer to the following sections of the *Oracle Inventory User's Guide* for detailed instructions on how to set up and administer inventory organizations:

- Overview of Inventory Structure
- Creating an Organization
- Defining Organization Parameters

In the Organization Classification section of the Define Organizations window, each Spares Management organization must include *Inventory Organization* as a classification. Otherwise the setup is standard.

The following Field Service-specific setup steps are necessary.

- Define Unit of Measurement, page 4-10
- Check Profile Option for Operating Unit Setting, page 4-11
- Defining Subinventories, page 4-11
- Additional Setup Required for Intransit Subinventory, page 4-12
- Set Up Account Aliases, page 4-13
- Define Items, *ERROR: linkend not in current document and TARGET_BOOK_TITLE missing*
- Define Planners, page 4-15
- Define Shipment Methods, page 4-16
- Define Freight Carriers, page 4-16

Suggestions for setting up organizations in Oracle Inventory for Spares Management

You should set up an organization for each warehouse that stores parts. You should also set up organizations for groups of field engineers, based on your organizational structure. The Spares Management logistics process can move parts within a single inventory organization and across multiple inventory organizations.

Spares Management provides for the management of both usable and defective inventories. If costing for the defective inventory is different than costing for the same items in usable inventory, separate organizations should be created for the defective subinventories.

Set up Inventory as described in Overview of Setting Up in *Oracle Inventory User's Guide*. Ensure that all the following required steps have been reviewed and completed as necessary:

- Create items.
- Make sure that on Master Item level the Serviceable Product flag is checked for the organization.

Define Unit of Measurement

You need to define the UOM for Hour and Minute. Two profile options in Field Service make use of these UOMs. It is used to define a planned start and end time when creating a task.

Note: The Unit of Measure for Hours is pre-defined for use on the Oracle Field Service Report.

Make sure the unit of measure for Hour and Minute is defined. For setup details please refer to *Oracle Inventory User's Guide* for more information.

Prerequisite

None.

Responsibility

Inventory Super User

Navigation

Setup > Units of Measure

Check Profile Option for Operating Unit Setting

Make sure the profile option MO: Operating Unit is set to the operating unit that represents your enterprise.

Prerequisite

None.

Responsibility

System Administrator

Navigation

Profile > System

Steps

1. To narrow your search, enter MO% at the Profile field.
2. Click Find.
3. Check if the following profile option is set to the appropriate operating unit:
 - MO: Operating Unit

Defining Subinventories

Subinventories are unique physical or logical separations of material inventory. Spares Management uses subinventories for tracking usable and defective spare parts.

Standard setup is required in Oracle Inventory for subinventories. The setup of a subinventory in Oracle Inventory is a partial setup. The balance of the setup occurs in Spares Management where additional parameters for the subinventory are defined in either loops or hierarchies.

The minimum setup for subinventories to be used in Spares Management follows. For detailed information regarding subinventories, please refer to the *Oracle Inventory User's Guide*.

Prerequisite

None.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Spares Management > Inventory > Setup > Organization > Subinventories

Steps

1. Enter a name for the subinventory.
2. Enter a description for the subinventory.
3. Check the following check boxes so the subinventory can be used by Spares Management:
 - Qty Tracked
 - Asset Subinventory
 - Allow Reservation
4. Save your work.

Additional Setup Required for Intransit Subinventory

A special subinventory is required to track intransit between subinventories for each organization. This subinventory can be named, for example, INTRANSUB with a description of Intransit subinventory.

The following parameters should be checked:

- Qty Tracked
- Asset subinventory

The Locator Control field must be set to NONE. The Intransit subinventory does not use locators.

The Lead Times, Sourcing, and Items/subinventories fields should be left blank. These fields are either not used or are populated in the Authorized Stock List from the Spares Management forms.

Guidelines

Spares Management provides for the management of both usable and defective inventories. Subinventories for defective items should be set up along with the subinventories for usable items. The distinction between usable and defective subinventories will be made in the Spares Management setup form.

Set Up Account Aliases

An account alias is used to identify the financial account to be used for over- and under-receiving in Spares Management. To use it, you must set up an account alias in the relevant organization. This also enables the Close Line button on the Receive Shipments form.

You must set up the specific alias outlined in the following steps.

Prerequisites

None.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Spares Management > Inventory > Setup > Account Aliases

Steps

1. After choosing the Organization, in the Account Aliases window, enter the following name of the alias in the Alias field: CSP_RECEIPT.
2. Enter the following description:
Account for Spares Management over and under receipt.
3. Select the account to be used.
4. Enter the date on which this alias account is to be effective.
5. Save your work.

Define Items

Standard setup in Oracle Inventory is required for Items. Additionally, Field Service Debrief, Spares Management and Preventive Maintenance all use items and require some specific settings to enable items to be properly displayed in the application.

For Debrief, you can set up items that are both trackable -- those items associated with the billing category of Material -- and items that are non-trackable, which includes those items that are of a billing category of Labor or Expense.

In addition to the standard item setup, the specific requirements for both trackable and non-trackable items to be used by Field Service Debrief, Spares Management, and Preventive Maintenance are as follows:

Service Tab

- If the item is to be trackable, select the Serviceable Product check box. Additionally, the Install Base Tracking checkbox is automatically selected.
- For trackable items, select a Billing Type that is associated to the Material Category.
- For items that are set up as Labor, select the Billing Type of "Labor."

- For Spares Management, in the Recovered Part Disposition field you can optionally choose a value. The Recovered Part Disposition field defines items as spares parts that will be active in Spares Management.

The Recovered Part Disposition field has three choices:

- No Return. Indicates to the service representative that return of the recovered part is not required.
- Fast return. An RMA is created and the recovered part is returned to Depot Repair.
- Slow Return. The part is transacted into the service representative's designated defective subinventory.

Inventory Tab

- The Inventory Item checkbox must be selected for items of type Material. This requirement applies to all items to be used by Spares Management as well.
- For items of billing category of Material, select the Stockable checkbox. This automatically enables the Reservable and Transactable attributes.

Order Management Tab

- For items with a billing category of Material, select the Customer Ordered checkbox. This automatically enables the Customer Orders Enabled checkbox
- The following two attributes must be set to allow the item to be shipped on an internal order in Order Management:
 - Internal Ordered
 - Internal Orders enabled

For detailed information relating to setting up Items refer to the *Oracle Inventory User's Guide*.

Prerequisite

Billing types must be defined and associated to billing categories.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Spares Management > Inventory > Items > Master Item

Guidelines

Items with the associated billing category of Material must be associated with a price list. For details, see Setup of Price Lists, page 4-17.

Once you have set up an item in a master organization, you can assign it to all organizations by navigating to Tools > Organization Assignment and clicking Select All.

Set Up On Hand Quantity for Items

In order to set an on-hand quantity value for items of billing category Material for specific subinventories, you must set these up in Oracle Inventory.

Prerequisite

Items and subinventories must be set up.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Spares Management > Inventory > Items > Miscellaneous Transaction

Steps

1. In the Transaction Type field, select Miscellaneous Receipt from the list of values.
2. Click the Transaction Lines button.
The Miscellaneous Receipt form opens.
3. Choose the Item you want to set an on-hand quantity for from the list of values.
4. Choose the Subinventory you want to associate to this Miscellaneous Receipt line from the list of values.
5. Enter a numeric value in the Quantity field.
This represents the on-hand quantity value for this item and subinventory.
6. If the Account field is enabled, select an Account from the list of values.
7. Save your work.

Guidelines.

You must repeat the above steps for each subinventory that you want to set an on-hand quantity for a specific item.

You can verify these values by navigating to Inventory > On-Hand Availability > On-Hand Quantities and selecting the Item/Subinventory combination that you setup during this process. The Quantities will be displayed.

Define Planners

Use this procedure to define planners. In Spares Management, inventory planners are required to be associated with parts loops.

Prerequisite

The employee to be defined as a planner must have already been defined in Oracle Human Resources or Oracle Purchasing. Please refer to the *Oracle Inventory User's Guide* for additional information about planners.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Spares Management > Inventory > Setup > Planners

Steps

1. In the Planners setup form, enter the name of the planner in the Name field.
2. Enter the user role in the Description field.
3. Select the employee name from the Employee list of values.
4. Save your work.

Define Shipment Methods

The Spares Management module provides functionality to specify estimated delivery times for the shipment methods and freight carriers that are used to deliver spare parts. Shipment methods must be defined in Oracle Inventory before delivery times can be set up in Spares Management.

An overview of the steps for defining shipment methods follows. For additional information about defining shipment methods, refer to the Defining Shipping Methods section in the *Oracle Inventory User's Guide*.

Prerequisite

None.

Responsibility

Inventory

Navigation

Setup > Organization > Shipping Methods

Steps

1. From the Ship Method Lookups window, enter a unique alphanumeric code describing the shipping method.
2. Enter the Meaning of the shipping method code.
3. Enter a Description of the shipping method.
4. Optionally, enter from and to effective dates.
5. Indicate whether the shipping method is enabled.
6. Save your work.

Define Freight Carriers

Spares Management provides functionality to specify estimated delivery times for the shipment methods and freight carriers that are used to deliver spare parts. Freight

carries must be defined in Oracle Inventory before delivery times can be setup in Spares Management.

For additional information about defining freight carriers, refer to the Defining Freight Carriers section in the *Oracle Inventory User's Guide*.

Prerequisite

None.

Responsibility

Inventory

Navigation

Setup > Freight Carriers

Confirming Setup of Order Management

Implement Order Management as described in the Overview of Setting Up section of the *Oracle Order Management User's Guide*.

Field Service Report requires specifically that you setup Price Lists, Units of Measure (UOM), and two Inventory Item Attributes in Order Management. Price Lists contain the list price for an item. Items could be material, but also labor and expenses like units of driving distance. Once material, expense and labor transactions for a task have been taken down on the Field Service Debrief, this information is updated to Charges. In Charges the list price for the item is received from Order Management and is used to generate an invoice for a customer.

Oracle Field Service requires a unit of measure (UOM) for measuring the item, for example, Each or Dozen. The UOM is displayed on the Field Service Debrief in accordance with the item that is selected. After setup of Unit of Measurement for an item, it is displayed automatically in the Field Service Debrief when the item is selected.

The Spares Management module uses Order Management to process internal orders that move across inventory organizations, and pick, pack and shipping processes for internal orders. The two attributes are as follows:

- Internal Ordered Item - Allows an item to be ordered on an internal requisition.
- Internal Orders Enabled - Allows an item to be ordered internally.

Refer to the Item Attributes section of the *Oracle Order Management User's Guide* for additional information about setting these attributes.

Setup of Price Lists

Perform the following steps to create price lists listing prices for items.

Prerequisite

None

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Spares Management > Order Management > Pricing > Price Lists > Price List Setup

Steps

1. From the Price List setup page, in the Name field, enter a name for the Price list.
2. At Description enter a description of the Price List.
3. The functional currency for your business unit defaults into the Currency field.
4. At Round To enter the rounding factor to be applied in the Price list.
 - A positive number indicates the number of digits to the right of the decimal point.
 - A negative number indicates the number of digits to the left of the decimal point.
The default setting is -2.
5. At Effective Dates enter the start and end date for the Price List to be effective.
6. Select Payment Terms from the list of values.
Examples of options include Collect, Prepaid, Third Party Billing, etc.
7. Select the default Freight Terms and Freight Carriers from the list of values.
8. Click on the List Lines tab.
9. In the Product Context field, select Item.
10. Select Item Number in the Product Attribute field from the list of values.
11. In the Product Value field, select the item number of the item you want to associate with the price list from the list of values.
12. Keep the default values for UOM.
13. Choose an Application Method for the price list for this item.
Acceptable values are as follows:
 - Unit Price or Percent Price for service items.
 - For inventory items or item categories only, Unit Price is used.
14. In the Value field, enter the list price for the item.
15. For service items enter a value at Dynamic Formula and leave Static Formula open.
16. At Start Date and End Date enter the effective date for this item line.
The dates entered should be within the Effective Dates entered for the Price List.
17. At Line Type select Price List Line from the list of values.
18. At Modifier Level select Line from the list of values.
19. Enter a value at Precedence.
This is the product precedence. When the pricing engine is trying to locate a price, it uses Precedence to resolve conflicts when it selects more than one list line from a Price List.

20. Check Primary UOM if this is the primary pricing UOM for this list line item on the price list.
21. Repeat steps 8-20 for each item you want to associate with this price list.
22. Save the Price List.
23. Click the Pricing Attributes button to define pricing attributes.
24. Enter a pricing context in the Product Context column and an attribute in the Product Attribute column.
25. At Operator select = or BETWEEN.
26. At Value:
 - When Operator is BETWEEN, enter To.
 - Otherwise enter From.
27. Save Pricing Attributes.

Please refer to the *Oracle Order Management User's Guide* for additional details in this procedure.

Oracle Work In Process Setup

Set up Work in Process as described in Overview of Setting Up, *Oracle Work in Process User's Guide*. Make sure that all of the steps described have been reviewed and completed as necessary.

WIP functionality is used along with BOM in Spares Management to create and manage repair orders. The repair order is a key piece of the total Loop Quantity. Without WIP or equivalent functionality, the Spares Management planning process is not complete.

Oracle Bills of Material Setup

This is an optional step for Spares Management functionality, which is required only if you have Oracle Bills of Material installed.

Set up Oracle Bills of Material (BOM) as described in Overview of Setting Up, *Oracle Bills of Material User's Guide*. Make sure that all of the steps described have been reviewed and completed as necessary.

This step is required only if you have Oracle Work in Process installed.

Oracle Purchasing Setup

The Spares Management module is dependent on Oracle Purchasing for the following functionality:

- Internal requisitions for processing internal orders for parts that move across inventory organizations
- Receiving functionality for parts on internal orders

Set up Oracle Purchasing as described in Overview of Setting Up, *Oracle Purchasing User's Guide*.

Purchasing functionality in Spares Management is used to create and manage New-buy orders. The repair order is a key piece of the total Loop Quantity. Without Purchasing or equivalent functionality, the Spares Management planning process would not be complete.

Confirming Setup of Service Request

On the service request form all information for a field service visit is captured. Tasks are assigned to this service request and these tasks are assigned to field service representatives.

Make sure you set up the following:

- Service Request Statuses
- Request Severities
- Request Types
- Service Request Urgencies
- Problem Codes
- Resolution Codes
- Message Action Requests
- Call Types
- Call Follow-up Types

Note: If you are using the Preventive Maintenance module, you must create a Request Type of "Preventive Maintenance" and relate it to a Business Process of type "Field Service."

If you are using the Preventive Maintenance module, you must c

For setup details please refer to the *Oracle Support Implementation Guide*. Also make sure the profile options for Service Request are set.

No additional Field Service specific setup steps are necessary.

Prerequisite

None

Responsibility

Field Service Administrator

Navigation

Service Requests

Confirming Setup of Customer Model 11i (TCA)

Customer Model 11i is an architecture designed to support complex trading communities. The goal of the Customer Model is to provide the foundation for Oracle ERP, CRM, and E-Business applications. It strives to model all relationships within a given trading community. For example the trading community of an appliance

manufacturer might include suppliers, distributors, re sellers, retailers, and service providers.

To maintain consistency across all applications Oracle Field Service shares the new customer master information with other modules. Customers can be defined in Order Management, Oracle Receivables, and Customer Support.

Multiple addresses can be defined for one or more businesses, for example Ship-To address, Bill-To address, and installation address. To be able to assign tasks to field service representatives, the Installed-At address needs to be defined.

In both applications make sure the Installed At address is defined.

For setup details please refer to *Oracle Customer Care Concepts and Procedures* or *Oracle Order Management User's Guide*.

Prerequisite

None

Responsibility

Field Service Dispatcher or Order Management

Navigation

Customer Management > Contact Center

Confirming Setup of Territory Manager

In Oracle Field Service, territories are used for three purposes:

- You create territories for scheduling purposes based on qualifiers. These territories are used by the Assignment Manager and Oracle Scheduler (when installed) to assign a task to a service representative.
- You create territories with resources (field service representatives) assigned to them. You will use these territories to assign them to one or more planner groups (created in Resource Manager). Once they are assigned to the planner groups this is the default group of field service representatives that is shown to a planner in the Oracle Field Service Dispatch Center.

Set up Territory Manager as described in *Implementing Territory Management* as part of the Oracle Common Applications Components Implementation Guide. Create Territories as described in *Oracle CRM Foundation Concepts and Procedures*

The creation of territories is also addressed in more detail in *Setup Resource Relations* as part of *Setting up Resource Relations*, *ERROR: linkend not in current document and TARGET_BOOK_TITLE missing*

Perform the following Field Service specific steps:

- Set Territory Manager Profile Option, page 4-21

Set Territory Manager Profile Option

You need to set a profile option from Territory Manager that affects the way tasks are scheduled by the Assignment Manager or Oracle Advanced Scheduler.

Responsibility

Field Service Administrator

Navigation

Other > Profiles

Steps

1. Open the Find Personal Profile Values window.
2. At Profile Name enter TERR%.
3. Click Find.

Set the following profile option:

Territory Manager Profile Option Setup

Step	Profile Option	Description
1	TERR: Multiple Winning Territories	<p>There are two options from the list of values:</p> <ul style="list-style-type: none">• Single Winner: Only qualified resources found in one of the territories selected are considered.• Multiple Winners: All qualified resources found in each of the territories selected are considered.

Confirming Setup of Tasks

The setup of Tasks is required to be able to perform a field service visit. You create tasks for service requests that have been logged. In the Oracle Field Service Dispatch Center you schedule tasks.

Make sure you implement Task Manager as described in Implementing Task Manager as part of the Oracle Common Applications Components Implementation Guide.

Perform the following Field Service specific setup steps:

- Set up Task Status and Transition Rule , page 4-23
- Set up Task Type, page 4-23
- Set up Task Priority, page 4-24
- Set up Task Manager Profile Options, page 4-25

Set up Task Status and Transition Rule

Setup task statuses to define the task flow. Oracle Field Service comes with a pre-defined task status flow.

For the Preventive Maintenance module, you must define a Task Status of "Confirm."

Prerequisite

None

Responsibility

Field Service Administrator

Navigation

Field Service Dispatcher > Field Service Setup > CRM Foundation > Task and Escalation Manager > Setup > Define Task Status

Steps

1. At the Status field enter the name of the Task Status you want to define.
2. At Description enter a brief description of the Task Status you are defining.
3. At From and To enter the date for the Task Status to be effective.
4. Check the task status flags you want to assign to the Task Status.

For more information on the task status flags, see the Defining Task Statuses and Status Transition Rules section of the Oracle Common Applications Components Implementation Guide.

Note: Make sure to check the Schedulable flag in order to be able to schedule a task in Oracle Field Service.

5. Optionally, define the transition values to determine user privileges for each status type by clicking Define Transition.
When the Status Transition window opens, from within the Rule tab, query the Applications field for Field Service.
6. In the Current State field, select the task status that you want to set a transition for. (For example, Open).
7. In the Next State field, select the task status that you want the Current State that you selected to transition to. (For example, Closed).
8. Repeat this process for each status you want to set a transition status for, such as Cancelled, Reject, Complete, Assigned, and so on.
9. Save the Task Status.

Set up Task Type

Set up task types to make a task qualify as a Field Service task so it can be scheduled.

Prerequisite

None

Responsibility

Field Service Administrator

Navigation

Field Service Dispatcher > Field Service Setup > CRM Foundation > Task and Escalation Manager > Setup > Define Task Type

Steps

1. In the Task Types window, at the Type field enter the name of the Status Type you want to define.
2. At Rule select Dispatch from the list of values.
Note: For a task to qualify as a field service specific task the Rule has to be set to Dispatch.
3. At From and To enter the date for the Task Type to be effective.
4. Select an UOM (Unit of Measurement) to go with the Task Type.
5. Check the task type flags you want to assign to the Task Type.
For more information on the task types flags, see the Defining Task Types section of the Oracle Common Applications Components Implementation Guide.
6. Save the Task Type.

Set up Task Priority

Set up task priorities.

Prerequisite

None

Responsibility

Field Service Administrator

Navigation

Field Service Dispatcher > Field Service Setup > CRM Foundation > Task and Escalation Manager > Setup > Define Task Priority

Steps

1. In the Task Priority window, enter the name of the Status Priority you want to define in the Priority field.
2. At Importance enter a numerical value between 1 and 4.
In this field, 1 is highest priority and 4 is the lowest.
3. At Description enter a brief description of the Task Priority you are defining.

4. At From and To enter the date for the Task Priority to be effective.
5. Save the Task Priority.

Set up Task Manager Profile Options

The profile options need to be set before creating a task. It is not possible to save a task when the profile options aren't set.

Prerequisites

None

Responsibility

Field Service Administrator

Navigation

Other > Profiles

Steps

1. Open the Find Personal Profile Values window.
2. At Profile Name enter Task Manager%.
3. Click Find.
4. Enter User values for the following seven profile options returned from a list of 11:
 - Task Manager: Default Priority
 - Task Manager: Default Task Status
 - Task Manager: Default Task Type
 - Task Manager: Default task owner
 - Task Manager: Delete Any Task Privilege
 - Task Manager: Owner type for task
 - Task Manager: View All Tasks

Please refer to the Oracle Common Applications Components Implementation Guide for more information on the profile options.

Confirming Setup of Escalation Management

An escalation management system allows an organization to identify, track, monitor, and manage situations that require increased awareness and swift action. Escalation Management is offered as an integrated as part of the Field Service Dispatch Center.

Escalation Management features include:

- Escalation situation tracking information
- Service Request, Task, and Defect linking capability
- Ownership assignment based on escalation territory
- Resolution plan definition with associated tasks and notes

- Automatic notification of escalation progress to identified contacts
- De-escalation and closure

Please refer to the appropriate section from Oracle Common Applications Components Implementation Guide for Escalations Manager setup.

No additional Field Service specific setup steps are necessary.

Confirming Setup of Charges

Oracle Field Service requires the setup of Charges to be able to create Orders and RMA's for an Install Base product. Charges also consolidates the service billing information to generate the final invoice to the customer through Order Management. All this information is taken down on the Field Service Debrief. You update Charges from the Field Service Debrief.

Please refer to the appropriate section from *Implementing Oracle Service* for Charges setup. Make sure the following has been set up:

- Set Up Order Type
- Set Up Line Type
- Define Currency
- Define Currency Type
- Define Currency Conversion Type
- Define Coverage Template
- Define Contracts
- Profile Options for Order Capture and Order Management

No additional Field Service specific setup steps are necessary.

Confirming Setup of Knowledge Management

Knowledge Management is used from the Service Request form.

Please refer to the appropriate section from *Oracle Service Implementation Guide* for Knowledge Management setup.

No additional Field Service specific setup steps are necessary.

Confirming Setup of Counters

The setup of Counters is required to be able to report counter readings when performing a field service visit. You can access counters through the Field Service Debrief. Only items that are set up as trackable -- the Stockable and Trackable checkboxes are selected in the Inventory tab of the Master Item form -- and have a billing type of Material or Component can be associated with a counter.

You must set up Counter Groups and individual counters that you associate with items.

Please refer to the appropriate section from *Oracle Service Implementation Guide* for Counters setup.

No additional Field Service specific setup steps are necessary.

Confirming Setup of Notes

Notes provides a text area where you can enter information about a customer, product, service, or anything related to your service report that may be helpful for other service representatives or customers. Once you create a note, it can be attached to a task, sent to the customer, or submitted to the knowledge base for reuse. You can access Notes from Field Service Debrief.

Please refer to the appropriate section from Oracle Common Applications Components Implementation Guide for Notes setup and to define source types.

No additional Field Service specific setup steps are necessary.

Confirming Setup of Interaction History

Oracle Interaction History tracks all customer-agent interactions and serves as a repository for the interaction data. You can view the interaction data as well as the Oracle CRM application data associated to the interaction. You can access Interactions from Field Service Debrief.

Please refer to the appropriate section from Oracle Common Applications Components Implementation Guide for Interaction History setup.

No additional Field Service specific setup steps are necessary.

Confirming Setup of Install Base

The Install Base is a repository that contains vital information and details of a service provider's customers, products, and services. The service provider updates all data contained in the Install Base.

Install Base is a component of Oracle Service, it consolidates information for customer products in the Install Base. Each customer product includes the following:

- Customer name and number
- Bill-to location code, address, and contact
- Ship-to location code, address, and contact
- Installation location, address, and technical and administrative contact
- Service Provider
- Any other user-defined contacts

Use the Install Base to track your serviceable and customer products.

Make sure you set up Install Base as described in *Oracle Service Implementation Guide*:

- Confirm the ERP setup
- Confirm Customer Product Status setup
- Confirm Customer Product Types (optional)
- Confirm System Types setup
- Confirm Transaction Billing Types setup
- Confirm Split Product Reasons setup
- Confirm Business Processes setup

- Confirm Customer Product Configuration Types setup
- Confirm profile options setup:
 - Many service options
 - Options to access HTML windows
 - Options for the Install Base Interface concurrent program
- Confirm System Administration menu setup.
- Confirm inventory item setup.
- Test the Install Base Interface concurrent program.

Once the Install base has been set up you maintain it using the Field Service Debrief to report on install base transactions and update Install Base from it.

Make sure the following is setup correctly:

- Confirm Setup of Business Processes

Field Service Debrief displays the transaction types for only those business processes that have the Field Service flag turned on. Oracle provides the following business processes out-of-the-box. (These are not seeded values and therefore the customer can update them.)

 - Field Service
 - Depot Repair
- Confirm Setup of Transaction Billing Types

As mentioned above, transaction billing types with all business processes with the Field Service flag turned on are displayed in the list of values for transaction types on the Field Service Debrief form. This means you can have the same transaction types repeated in the list of values because they can belong to multiple business processes.
- Confirm Setup of Billing Types

Currently three Billing Types are supported by Field Service Report: M (Material), L (Labor) and E (Expense). These are seeded.

Complete the following Oracle Field Service specific setup steps:

- Setting up Business Processes, page 4-28
- Setting up Transaction Billing Types, page 4-29

Setting up Business Processes

Business Process setup is required in order to select the service activity codes in Field Service Debrief and to get the order type information for creating orders or returns against debrief lines.

Business processes are also used in the Preventive Maintenance module for Service Request generation. You must create a

Business Process groups the service activity codes to restrict the service activity code availability. For example, Oracle has provided an out-of-box Field Service business group that enables the relevant service activity codes. You can update this group because it is not a seeded value.

Steps

1. Switch to Field Service Administrator responsibility.
2. Navigate to Setup > Install Base > Business Processes.
3. Enabling the Service Request flag enables the user to pick this business process when charges are invoked from Service Request.
4. Enabling the Depot Repair flag enables the user to pick this business process when charges are invoked from Depot Repair.
5. Enabling the Field Services flag shows service activity codes for all business processes that have this flag enabled in Field Service Debrief.

Please refer to the appropriate section from *Oracle Service Implementation Guide* for detailed Charges setup.

6. Save your work.

Setting up Transaction Billing Types

Setup for transaction billing types is required in Field Service to update the Install Base and Charges. It is used to determine:

- How Service and Order Management transactions affect the Install Base.
- What kinds of charges transactions taken down on the Field Service Debrief can be created.

The Transactions Billing Type window is used to define transaction types and associate billing types (labor, material, and expenses) to them.

The Oracle Field Service application comes with the following predefined transaction billing types. They are seeded values provided out of the box, and they cannot be deleted.

- Autocreate System
- Expense Transaction
- Labor Transaction
- Material Transaction
- New
- Product Upgrade
- Replacement
- Revision Update

For step-by-step details, see the Set Up Billing Types and Service Activity Codes section in the following chapter.

Confirming Setup of Contracts Core

The set up of Contracts Core is optional, but when you have installed it, please refer to *Implementing Oracle Contracts Core* for Contracts setup.

No additional Field Service specific setup steps are necessary.

Confirming Setup of Service Contracts

Oracle Service Contracts is not required. You can create a service request without any service coverage.

When you are using Service Contracts a service contract is associated with a service request. The service contract is associated with the:

- Party
- Account
- System
- Customer Product
- Inventory Item

Select Service Contracts from the Product Coverage tabbed page on the service request form. You can drill down to contract details on the Product Coverage tabbed page.

Please refer to *Oracle Service Contracts Concepts and Procedures* for Service Contracts setup.

No additional Field Service specific setup steps are necessary.

Confirming Setup of Assignment Manager

The setup of Assignment Manager is required because it is used to assign a service representative to a task. It can be used from the service request form and the Oracle Field Service Dispatch Center.

Please refer to the appropriate section from Oracle Common Applications Components Implementation Guide for Assignment Manager setup.

Please ensure the following profile options are set before using Oracle Field Service. The profile options are set at the application level and are unique to Assignment Manager.

Responsibility

Field Service Administrator

Navigation

Other > Profiles

Steps

1. Open the Find Personal Profile Values window.
2. At Profile Name enter AC%.
3. Click Find.

You can set these options in any sequence.

Assignment Manager Profile Options

Step	Profile Option	Description
1	Activate Auto Selection of Resources	To activate auto selection of resources. Default set to: Y (yes).
2	Activate Workflow Name	To activate the workflow plug-in. Default set to: None.
3	Activate Install Base Preferred Resource	To retrieve preferred resource information from the install base application. Default set to: Y (yes).
4	Activate Contracts Preferred Resources	To retrieve preferred resource information from the contracts application. Default set to: Y (yes).
5	Activate Install Base Preferred Engineers	To retrieve preferred engineer information from the install base application. Default set to: Y (yes).

1. Save your work.

Confirming Setup of Calendar

The setup of Calendar is required to define the availability and non-availability of resources (field service representatives). This information is used when scheduling a task for a resource. Especially the setup of shifts is very important because it is used to generate departure and arrival tasks for each service representative. These departure and arrival tasks show up in the Oracle Field Service Dispatch Center and are used for scheduling purposes. Make sure to perform the following setup steps:

- Defining a Calendar, page 4-31
- Defining Calendar Exceptions, page 4-32
- Defining Shifts, page 4-32
- Assigning Shifts/Exceptions to Calendar, *ERROR: linkend not in current document and TARGET_BOOK_TITLE missing*
- Assigning Resources to Calendar, page 4-32

Defining a Calendar

Create a high level definition for a calendar for a particular group of resources.

Steps

1. Switch to the Field Service Administrator responsibility.
2. Navigate to CRM Foundation > Calendar > Calendar Setup > Define Calendar.

3. For details see, Oracle Common Applications Components Implementation Guide.

Defining Calendar Exceptions

Define the exceptions that could occur for a calendar, such as Christmas holidays.

Steps

1. Switch to the Field Service Administrator responsibility.
2. Navigate to CRM Foundation > Calendar > Calendar Setup > Define Exceptions.
3. For details see, Oracle Common Applications Components Implementation Guide.

Defining Shifts

Define the working hours for your resources.

Steps

1. Switch to the Field Service Administrator responsibility.
2. Navigate to CRM Foundation > Calendar > Calendar Setup > Define Shifts.
3. For details see, Oracle Common Applications Components Implementation Guide.

Assigning Shifts/Exceptions to Calendar

Define what shifts and exceptions you want to associate with a calendar.

Steps

1. Switch to the Field Service Administrator responsibility.
2. Navigate to CRM Foundation > Calendar > Calendar Setup > Assign Shifts/Exceptions.
3. For details see, Oracle Common Applications Components Implementation Guide.

Assigning Resources to Calendar

Define for each calendar for which resources it applies.

Steps

1. Switch to the Field Service Administrator responsibility.
2. Navigate to CRM Foundation > Calendar > Calendar Setup > Assign Resources.
3. For details see, Oracle Common Applications Components Implementation Guide.
4. Define a Calendar, page 4- 6

Field Service Implementation Tasks

This chapter covers the following topics:

- Field Service Implementation Task Summary
- Setting up Resource Relations
- Assigning Territories to Planner Groups
- Generating Shift Tasks
- Assigning Resources to Subinventories
- Activating Automatic Commitment of Schedules
- Defining Material Justification Codes
- Defining Labor Justification Codes
- Defining Expense Justification Codes
- Set Up Billing Types and Service Activity Codes
- Set up Skills Management
- Set Up Tasks Custom Color Coding
- Setting Up Spares Management
- Setting up the Map
- Setting Up Spatial Data
- Setting Up Oracle Advanced Scheduler
- Setting Up CRM Gateway for Mobile Devices
- Setting Up Field Service/Palm Devices
- Setting Up Field Service/Laptop
- Setting up Wireless Option for Service

Field Service Implementation Task Summary

This chapter describes the implementation tasks for Field Service-specific tasks, including setting up the Dispatch Center, Debrief and Spares Management. The general implementation of related Field Service suite products are also referenced in this chapter.

Please refer to the following implementation tasks relating to the Field Service suite of products:

Field Service Implementation Task Summary

Step	Description
1. Setting up Resource Relations, page 5-3	In order to launch the Field Service Dispatch Center you need to setup resources: field service dispatchers and field service representatives.
1. Assigning Territories to Planner Groups, page 5-10	Use this Field Service setup screen to relate territories of service representatives to field service dispatcher groups. Once setup this is the default group of service representatives shown to the field service dispatcher in the Field Service Dispatch Center.
1. Generating Shift Tasks, page 5-11	Use this Field Service concurrent program to create departure and arrival tasks for field service representatives based on their shifts. These tasks are used for scheduling.
1. Assigning Resources to Subinventories, page 5-13	Use this setup screen in Field Service to relate sub inventories to service representatives.
1. Activating Automatic Commitment of Schedules, page 5-14	Use this procedure to automatically commit schedules at predefined intervals to service representatives without interference of a dispatcher.
1. Defining Material Justification Codes, page 5-16	Define justification lookup codes when reporting on material for the Field Service Debrief.
1. Defining Labor Justification Codes, page 5-18	Define justification lookup codes when reporting on labor for the Field Service Debrief.
1. Defining Expense Justification Codes, page 5-20	Define justification lookup codes when reporting on expense for the Field Service Debrief.
1. Set Up Billing Types and Service Activity Codes, page 5-22	Billing Type functionality has been expanded to allow the user to set up multiple service activity codes, which are differentiated by the billing category they are associated with.
1. Set up Skills Management, page 5-28	In order to effectively manage a field service representative's skills, and assign tasks to technicians that have the right skills, you must define the skills, skill levels and the scales to use.
1. Set Up Tasks Custom Color Coding, page 5-30	Color coding tasks that can be viewed in the Field Service Dispatch Center allows a dispatcher to quickly identify a multitude of situations, such as high priority tasks, escalated tasks that need immediate rescheduling, tasks "in jeopardy," and tasks that have been committed to a customer and cannot be rescheduled.

Step	Description
1. Setting Up Spares Management, page 5-32	Define the setups that enables the Spares Management module.
1. Setting up the Map, page 5-44	A Map is available to the user as part of the Field Service Dispatch Center functionality. Map display is supported by the MapViewer which is part of Oracle 9iAS and the installation of spatial data.
1. Setting Up Spatial Data, page 5-47	Spatial data is a separate product and is used for Map Display (Dispatch Center), and Oracle Advanced Scheduler functionality such as Route Calculation (Time Distance Server) and Location finding (geocoding).
1. Setting Up Oracle Advanced Scheduler, page 5-51	Oracle Advanced Scheduler is used to optimize scheduling capabilities. It is bought separately.
1. Setting Up CRM Gateway for Mobile Devices, page 5-51	When you are going to use one of the following applications you need to setup the CRM Gateway for Mobile Devices: Oracle Field Service/Laptop Oracle Field Service/Palm™ Devices
1. Setting Up Field Service/Palm Devices, page 5-51	Make sure you set up Oracle Field Service/Palm™ Devices as described in the appropriate manuals.
1. Setting Up Field Service/Laptop, page 5-52	Set up as described in the appropriate manual.
1. Setting up Wireless Option for Service, page 5-52	Set up as described in the appropriate manual.

Setting up Resource Relations

In order to launch the Field Service Dispatch Center as a dispatcher showing the right Field Service representatives (resources), and to be able to assign tasks to these service representatives, you need to do the following:

- Create Application Users with the Field Service Dispatcher Role, page 5- 4
- Create Employees, page 5- 4
- Assign the Field Service Representative Role to Employees, page 5- 5
- Create Resources with the Field Service Representative Role, page 5- 6
- Assign a Human Resource to an Applications User (Field Service Dispatcher), page 5- 6
- Assign an Applications User to a Resource (Field Service Dispatcher), page 5- 7
- Create Field Service Dispatcher Groups, page 5- 8
- Create Territories (of Field Service Representatives), page 5- 8
- Create Territories (of Qualifiers), page 5- 9

- Generate Territory Packages, page 5-10
- Assigning Territories to Planner Groups, page 5-10

Create Application Users with the Field Service Dispatcher Role

In order for a Field Service dispatcher to access the Field Service Dispatch Center, you must create it in Applications.

For more information on setup of the refer to *Oracle Applications System Administrator's Guide*.

Prerequisites

None

Responsibility

System Administrator

Navigation

Security > User > Define

Steps

1. From the Define User window, enter the Applications User Name and Password.
The password must be at least 5 characters and you must enter it twice to verify.
2. Make sure that on the Responsibilities tab, Field Service Dispatcher is selected from the list of values at Responsibility.
3. Optionally, you can set password expiration parameters and enter other information, such as person name, email, fax, etc.
4. Save your work.

Create Employees

You need to define your Field Service dispatchers as employees (human resources). It is optional to define field service representatives as employees. However you must define service representatives as resources in order to assign tasks to them, but they do not necessarily have to be employees. This process is described in Create Resources with the Field Service Representative Role, page 5- 6 .

There are two options for creating employees.

- From Human Resources
- From Resource Manager

When Human Resources is installed you cannot create employees from the Resource Manager. However you will be able to maintain your employees from Resource Manager once they have been created in Human Resources.

Prerequisites

None

Responsibility

Field Service Administrator

Navigation

CRM Foundation > Resource Manager > Maintain Employee > Employee

Steps

1. When Human Resource application is installed, this navigation path will fail.
2. Switch to the HR Super User responsibility.
3. Navigate to People > Enter and Maintain.
4. For both applications you need to at least supply the following information:
 - Last Name: Last name of resource
 - Gender: Select from list of values
 - Type: select employee form list of values
 - Social Security: Social security number
 - Employee number
 - Birth Date

For set up details please refer to Oracle Common Application Components Implementation Guide or *Oracle Human Resource Management Systems* to enter and maintain employees.

5. Save your work.

Guidelines

To synchronize modifications made to the employee data in Human Resources, you need to run a concurrent program: Synchronize Employees. The changes made in either Human Resources or Resource Manager are synchronized when they originate from the Human Resources application.

Assign the Field Service Representative Role to Employees

When you have defined your Field Service representatives as employees, they need to be assigned the field service representative role to show up in the Field Service Dispatch Center. Use the following procedure to assign the field service representative role.

Prerequisites

None

Responsibility

Field Service Administrator

Navigation

CRM Foundation > Resource Manager > Maintain Resources > Import Resources

Steps

1. At Resource Category, select Employee.
2. Enter a search criteria in the Resource Category region.
3. Click Search.
The results are shown in the Search Results region.
4. Check the resource and click Create.
The Default Values window is opened.
5. At Role select Field Service Representative from the list of values.
6. Click OK.
7. Click Save Resource.
A transaction number is displayed upon saving.
For additional set up details please refer to Oracle Common Application Components Implementation Guide.

Create Resources with the Field Service Representative Role

When you are working with field service representatives that aren't employees of your company use this procedure. The field service representatives need to be defined as resources with the field service representative role assigned to show up in the Field Service Dispatch Center.

Prerequisites

None

Responsibility

Field Service Administrator

Navigation

CRM Foundation > Resource Manager > Maintain Resources > Resources

Steps

1. From the Resources window, click New.
2. Enter all the appropriate information.
For set up details, refer to the Oracle Common Application Components Implementation Guide.
3. On the Roles tab make sure the Field Service Representative Role Type and Role are selected.
4. Save your work.

Assign a Human Resource to an Applications User (Field Service Dispatcher)

The Field Service Dispatcher needs to be assigned his Application user account. Use either this procedure or the next to establish this.

Prerequisites

You should have already created a Field Service Dispatcher Application user and defined the Field Service Dispatcher as an employee in human resources.

Responsibility

System Administrator

Navigation

Security > User > Define

Steps

1. From the Define window, search for the relevant Applications User Name.
2. At the Person field, choose the human resource name from the list of values.
3. Save your work.

Assign an Applications User to a Resource (Field Service Dispatcher)

When you haven't used the previous procedure to assign the field service dispatcher his applications user name, use this procedure in Resource Management.

Prerequisites

You should have already created a Field Service Dispatcher Application user and, because we defined him as an employee, he is automatically defined as a resource.

Responsibility

Field Service Administrator

Navigation

CRM Foundation > Resource Manager > Maintain Resources > Resources

Steps

1. In the Resource region, select Employee from the Category list of values.
2. Optionally, choose the Field Service Dispatcher's Name.
3. Click Find.
The Resource Search results window is opened.
4. Select the Field Service Dispatcher and click Resource Details.
The Resource window is opened.
5. At User Name field, select the appropriate Applications user name from the list of values.
6. Optionally, you can assign the Field Service Dispatcher Role Type and Role on the Roles tab.
This is not mandatory for Field Service dispatchers.
7. Save your work.

Create Field Service Dispatcher Groups

Create field service dispatchers groups. These groups are used to assign territories of service representatives to.

Once a territory of service representatives is assigned to a dispatcher group it is shown to the field service dispatcher in the Field Service Dispatch Center. A dispatcher group can have one or more field service dispatchers.

Prerequisites

Field Service representative and territories must be defined.

Responsibility

Field Service Administrator

Navigation

CRM Foundation > Resource Manager > Maintain Resources > Groups

Steps

1. In the Groups window in the Name field, enter a name for the dispatcher group you are creating.
2. Enter a Description.
3. On the Members tab, select Employee from the Category list of values.
4. Enter the employee number for the field service dispatcher you want to add to this dispatcher group.

For setup details please refer to Oracle Common Application Components Implementation Guide
5. Save your work.

Create Territories (of Field Service Representatives)

You need to create territories with field service representatives assigned to them to be able to connect to the dispatcher groups. Use this procedure to create territories of field service representatives.

Prerequisites

You should have already created a Field Service Dispatcher Application user and defined the Field Service Dispatcher as an employee in human resources.

Responsibility

Field Service Administrator

Navigation

CRM Foundation > Territory Manager > Territory Administration

Steps

1. In the Navigator window, from the menu bar choose Administration > Define Territory.

The Territory Details window opens.

2. In the Overview tab in the Usage field, select Oracle Service from the list of values.
3. Enter a territory Name and Description.
4. At the Transaction Type field choose Service Request and Task from the list of values.
5. Select the Resources tab.
6. Enter all the Field Service representatives you want to add to this territory.

For more information on setup, refer to Oracle Common Application Components Implementation Guide.

7. Save your work.

Create Territories (of Qualifiers)

In order to create territories to be used by the Assignment Manager and Oracle Advanced Scheduler to assign a task to a Field Service representative in the most effective way, you must create territories with transaction and resource qualifiers attached.

Qualifiers allow the assignment manager and Advanced Scheduler to select the appropriate territory and resource from among all the available options. This allows for automated scheduling.

To create territories that can be used by Field Service for scheduling purposes you need to do the following procedure.

For more information on setting up territories with qualifiers, please refer to Oracle Common Application Components Implementation Guide.

Prerequisites

None

Responsibility

Field Service Administrator

Navigation

CRM Foundation > Territory Manager > Territory Administration

Steps

1. From the Navigator window, go to the menu bar and choose Administration > Define Territory.
2. In the Overview tab select Oracle Service from the list of values at Usage.
3. Enter a territory Name and Description.
4. At Transaction Type choose Service Request and Task from the list of values.
5. Navigate to the Transaction Qualifiers tab or, optionally, the Resource Qualifiers tab and enter the appropriate details.
6. Save your work.

Generate Territory Packages

After territory creation or updates, you must run the Generate Territory Package concurrent program to generate the correct, and updated territories before a calling module can properly assign resources that are defined in your territories.

Prerequisites

None

Responsibility

Field Service Administrator

Navigation

Other > View Requests

Steps

1. From the View Requests window, check the All My Requests radio button.
2. Click Submit a New Request.
The Submit a New Request window is opened.
3. Click Single Request.
The Submit Request window is opened.
4. At Name, select the Generate Territory Packages from the list of values.
5. At Parameters enter the following:
 - Usage: Oracle Service
 - Qualifier Type: Service Request and Task
 - Debug flag: Y
 - SQL Trace: Y
6. Click OK.
7. Click Submit.
8. To verify whether the Territory packages have been generated navigate to Other > View Requests.
9. Select All My Requests and click Find.
An overview is shown with the progress of the generating process. When the generation was successful it reads Completed.

Assigning Territories to Planner Groups

This setup screen is used to assign territories to planner groups. Planner groups are a group of resources (field service dispatchers) dedicated to planning and are setup in Resource Management. Territories consist of service representatives and are setup in Territory Management. Once this is setup this is the default group of territories that is shown to a planner group in the Dispatch Center.

Prerequisites

Create a resource group with field service dispatcher(s) assigned to it in Resource Management. Create a territory with service representatives assigned to it in Territory Management.

Responsibility

Field Service Administrator

Navigation

Setup > Assign Territories to Planner Groups

Steps

1. From the Select Planner Group window, select the resource group that represents the planner group you want to assign territories to from the list of values.
2. Click OK.
The Assign Territories to Planner Groups window is opened.
3. Select a territory from the list of values you want to add to the planner group. You can add multiple territories to a planner group.
4. Save your work.

Generating Shift Tasks

Generate Shift Tasks is a concurrent program used to create departure and arrival tasks for each service representative. The departure and arrival tasks are used by Advanced Scheduler to schedule tasks in between and calculate the travel time and distance in the complete trip. These departure and arrival tasks are created based on the shifts defined for each service representative in Calendar, and normally use the service representative's home address for departure and arrival location.

Run this program for a specific period or choose to run it every night. When running this program for a specific period the Advanced Scheduler profile option CSR: Planscope is used to determine the length of the period for which the tasks are created in days. When running this program every night the profile option determines how many days in advance the tasks are created.

Perform the following task:

- Generate Shift Tasks, page 5-11

If for some reason the concurrent program doesn't seem to execute, perform the following tasks:

- Define an executable, page 5-12
- Set Up Concurrent program, page 5-16

Generate Shift Tasks

Prerequisites

Setup of shifts in CRM Foundation Calendar.

Steps

1. Logon with the Field Service Administrator responsibility
2. Open Generate Shift Tasks. The Parameters window is opened.
3. Enter the Start date of time frame if you want to run the program for a specific period. Clear the Start date of time frame field if you want to run the program every night.
4. Click Ok.
The Generate Shift Tasks setup window is opened.
5. The Parameters field contains the entered start date of time frame or is empty when running the program every night.
6. Click Languages to change the language of the created tasks.
7. Click Schedule. The Schedule window is opened.
8. Click Apply a Saved Schedule to use the settings of a previous saved schedule.
9. Choose one of the options at Run the Job.
10. Click Help for assistance.
11. Click OK when finished.
12. Click the Options button. The Upon Completion window is opened.
13. Click Help for assistance.
14. Click Submit when you have finished.

Define an executable

Steps

1. Logon with the System Administrator responsibility.
2. Navigate to Concurrent > Program > Executable.
3. Enter the following values into the fields:

Executable Setup Parameters

Field	Value
Executable	Generate Shift Tasks
Short Name	CSFVGST
Description	Free, e.g. Generates departure and arrival tasks for field service representatives within a specific time frame.
Execution Method	PL/SQL Stored Procedure
Execution File Name	CSF_SHIFT_TASKS_PVT.Generate_Shift_Tasks

4. Click Save.

Set Up Concurrent program

Steps

1. Logon with the System Administrator responsibility.
2. Navigate to Concurrent > Program > Define.
3. Enter the following values into the fields:

Concurrent Program Setup Parameters

Field	Value
Program	Generate Shift Tasks
Short Name	CSFVGST
Application	Field Service
Description	Free, e.g. Generates departure and arrival tasks for field service representatives within a specific time frame.
Executable Name	CSFVGST
Executable Output format	Text

4. Click Save.

Assigning Resources to Subinventories

The Resources to Subinventories Assignment setup window is used to relate field service representatives to subinventories. For now resources will be service representatives, in future other type of resources might be available. When entering a material transaction in the Field Service Debrief, the subinventories for the service representative are shown.

Steps

1. Logon with the Field Service Administrator responsibility.
2. Navigate to Spares Management > Resources Subinventories Assignment.
3. Enter the following values into the fields, perform these steps in sequential order.

Note: When the setup screen is opened you will be prompted to select the code that applies for your organization. Make sure you choose the right organization code because you will not be able to change this once you have selected it.

Updating a record results in the creation of a new record, re-query to make the record visible. You cannot delete a record.

Resources and Subinventories Mapping

Step	Field	Value
1. 1	Organization: Code	This field is populated with the code that was selected at the prompt the setup screen was opened.
1. 2	Organization: Name	The name of the organization will automatically be populated once the code of the organization is selected.
1. 3	Resource Type	Select a resource type from the list of values.
1. 4	Resource	Select a service representative from the list of values.
1. 5	Subinventory	Select the subinventory you want to assign to the service representative.
1. 6	Default	Select IN for good subinventory, OUT for bad subinventory and nothing for all other subinventories.
1. 7	Start date	Select the start date for the assignment to be effective.
1. 8	End date	Select the end date for the assignment to be effective.

4. Click Save.

Activating Automatic Commitment of Schedules

To commit schedules or tasks to service representatives without interference of a dispatcher, you can run a concurrent program at predefined intervals.

Tasks that have parts associated with them are committed based on the lead time for the part (the number of days it takes to get the part to its destination).

Perform the following tasks:

- Set Profile Options, page 5-15
- Auto Commit Schedule, page 5-15

If for some reason the concurrent program doesn't seem to execute, perform the following tasks:

- Define an executable, page 5-12
- Set Up Concurrent program, page 5-16

Set Profile Options

The following profile options determine the transition of the task status when the automatic commitment of schedules program is executed:

- The From task status is determined by the CSF: Default "In planning" task status profile option.
- The To task status is determined by the CSF: Default Assigned task status profile option.

Auto Commit Schedule

Use this procedure to execute the Auto Commit Schedule concurrent program.

Prerequisites

None.

Steps

1. Logon with the Field Service Administrator responsibility.
2. Navigate to Auto Commit Schedule. The Parameters window is opened.
3. Enter the Start date of time frame to run the program for a specific period.
4. Click Ok. The Auto Commit Schedule setup window is opened.
5. The Parameters field contains the entered start date of time frame.
6. Click Schedule. The Schedule window is opened.
7. Define how often you want to commit the schedules for the time frame defined previously.
8. Click Apply a Saved Schedule to use the settings of a previous saved schedule.
9. Choose one of the options at Run the Job.
10. Click OK when finished.
11. Click Submit.

Define an executable

Steps

1. Log on with the System Administrator responsibility.
2. Navigate to Concurrent > Program > Executable.
3. Enter the following values into the fields:

Executable Parameters and Values

Field	Value
Executable	Auto Commit Schedule
Short Name	CSFVCMT
Description	Free, e.g. Commits schedules automatically from In Planning to Assigned status.
Execution Method	PL/SQL Stored Procedure
Execution File Name	CSF_AUTO_COMMIT_PVT.Update_Planned_Task_Status

4. Click **Save**.

Set Up Concurrent program

Steps

1. Logon with the System Administrator responsibility.
2. Navigate to Concurrent > Program > Define.
3. Enter the following values into the fields:

Concurrent Program Parameters and Values

Field	Value
Program	Auto Commit Schedule
Short Name	CSFVCMT
Application	Field Service
Description	Free, e.g. Committs schedules automatically from In Planning to Assigned status.
Executable Name	CSFVCMT
Executable Output format	Text

4. Click **Save**.

Defining Material Justification Codes

Material Justification codes are setup for Field Service Debrief. These justification codes are offered to the user from the Reason list of values when creating a material transaction line on the Field Service Debrief Materials tab.

Note: Be sure not to confuse this action with the Return Reason field on the Material tab from Field Service Debrief.

Prerequisites

None.

Responsibility

Field Service Administrator

Navigation

Debrief > Define Material Justification Codes.

Steps

1. This navigation path opens the Application Object Library: CSF _MATERIAL_REASON Lookups window.

The Type field is defaulted. The User Name is displayed. It is used by loader programs. The Application is defaulted. In the Description field a description is given. You can modify this description.

2. In the Access Level region it is defined what changes are possible to a lookup type.
 - User: You can change any lookup code.
 - Extensible: New lookup codes can be added. However, you cannot modify seeded lookup codes.
 - System: No changes to the lookup codes are allowed.
3. Create material justification lookup lines by entering the following information in the lower region on the window:

Material Justification Lookup Lines

Field	Value
Code	<p>Enter the code value for your Lookup. You can define a maximum of 250 Lookups for a single Lookup type. When you enter a valid Lookup meaning into a displayed window field, Lookups stores this code into a corresponding hidden field. For example, the Lookup "Y" displays the meaning "Yes" but stores the code value "Y" in a hidden field.</p> <p>You cannot change the values in this field after committing them. To remove an obsolete Lookup you can either disable the code, enter an end date, or change the meaning and description to match a replacement code.</p>
Meaning	<p>When you enter a valid Lookup meaning into a displayed window field, Lookups stores the corresponding code into a hidden field. Lookups automatically displays the meaning in your Lookups field whenever you query your window. For example, the Lookup "Y" displays the meaning "Yes" but stores the code value "Y" in a hidden field.</p>
Description	<p>You can display the description along with the meaning to give more information about your Lookup.</p>
Tag	<p>Optionally, enter in a tag to describe your lookup. The tag can be used to categorize lookup values.</p>
From and To	<p>Enter the dates between which this Lookup becomes active. If you do not enter a start date, your Lookup is valid immediately.</p> <p>Once a Lookup expires, users cannot insert additional records using the Lookup, but can query records that already use the Lookup. If you do not enter an end date, your Lookup is valid indefinitely.</p>

4. Check Enabled for each line you want to activate.
5. Click Save.

Defining Labor Justification Codes

Labor Justification codes are setup for Field Service Debrief. These justification codes are offered to the user from the Reason list of values when creating a labor transaction line on the Field Service Debrief Labor tab.

Prerequisites

None.

Responsibility

Field Service Administrator

Navigation

Debrief > Define Labor Justification Codes

Steps

1. This navigation path opens the Application Object Library: CSF _LABOR_REASON Lookups window.

The Type field is defaulted. The User Name is displayed. It is used by loader programs. The Application is defaulted. In the Description field a description is given. You can modify this description.

2. In the Access Level region it is defined what changes are possible to a lookup type.
 - User: You can change any lookup code.
 - Extensible: New lookup codes can be added. However, you cannot modify seeded lookup codes.
 - System: No changes to the lookup codes are allowed.
3. Create labor justification lookup lines by entering the following information in the lower region on the window:

Labor Justification Code Table

Field	Value
Code	<p>Enter the code value for your Lookup. You can define a maximum of 250 Lookups for a single Lookup type. When you enter a valid Lookup meaning into a displayed window field, Lookups stores this code into a corresponding hidden field. For example, the Lookup "Y" displays the meaning "Yes" but stores the code value "Y" in a hidden field.</p> <p>You cannot change the values in this field after committing them. To remove an obsolete Lookup you can either disable the code, enter an end date, or change the meaning and description to match a replacement code.</p>
Meaning	<p>When you enter a valid Lookup meaning into a displayed window field, Lookups stores the corresponding code into a hidden field. Lookups automatically displays the meaning in your Lookups field whenever you query your window. For example, the Lookup "Y" displays the meaning "Yes" but stores the code value "Y" in a hidden field.</p>
Description	<p>You can display the description along with the meaning to give more information about your Lookup.</p>
Tag	<p>Optionally, enter in a tag to describe your lookup. The tag can be used to categorize lookup values.</p>
From and To	<p>Enter the dates between which this Lookup becomes active. If you do not enter a start date, your Lookup is valid immediately.</p> <p>Once a Lookup expires, users cannot insert additional records using the Lookup, but can query records that already use the Lookup. If you do not enter an end date, your Lookup is valid indefinitely.</p>

4. Check Enabled for each line you want to activate.
5. Click Save.

Defining Expense Justification Codes

Expense Justification codes are setup for Field Service Debrief. These justification codes are offered to the user from the Justification list of values when creating an expense transaction line on the Field Service Debrief Expense tab.

Prerequisites

None.

Responsibility

Field Service Administrator

Navigation

Debrief > Define Expense Justification Code

Steps

1. From the Application Object Library: CSF _EXPENSE_REASON Lookups window, in the Description field a description is given. You can modify this description.

The Type field is defaulted. and the User Name is displayed. It is used by loader programs. The Application also is defaulted.

2. In the Access Level region it is defined what changes are possible to a lookup type.
 - User: You can change any lookup code.
 - Extensible: New lookup codes can be added. However, you cannot modify seeded lookup codes.
 - System: No changes to the lookup codes are allowed.
3. Create expense justification lookup lines by entering the following information in the lower region on the window:

Expense Justification Codes Table

Field	Value
Code	<p>Enter the code value for your Lookup. You can define a maximum of 250 Lookups for a single Lookup type. When you enter a valid Lookup meaning into a displayed window field, Lookups stores this code into a corresponding hidden field. For example, the Lookup "Y" displays the meaning "Yes" but stores the code value "Y" in a hidden field.</p> <p>You cannot change the values in this field after committing them. To remove an obsolete Lookup you can either disable the code, enter an end date, or change the meaning and description to match a replacement code.</p>
Meaning	<p>When you enter a valid Lookup meaning into a displayed window field, Lookups stores the corresponding code into a hidden field. Lookups automatically displays the meaning in your Lookups field whenever you query your window. For example, the Lookup "Y" displays the meaning "Yes" but stores the code value "Y" in a hidden field.</p>
Description	<p>You can display the description along with the meaning to give more information about your Lookup.</p>
Tag	<p>Optionally, enter in a tag to describe your lookup. The tag can be used to categorize lookup values.</p>
From and To	<p>Enter the dates between which this Lookup becomes active. If you do not enter a start date, your Lookup is valid immediately.</p> <p>Once a Lookup expires, users cannot insert additional records using the Lookup, but can query records that already use the Lookup. If you do not enter an end date, your Lookup is valid indefinitely.</p>

4. Check Enabled for each line you want to activate.
5. The double brackets ([]) identify a descriptive flexfield that you can use to add data fields to this window without programming.
6. Click Save.

Set Up Billing Types and Service Activity Codes

In previous releases of Field Service Debrief, billing types were limited to 'L' (labor), 'M' (material) and 'E' (expense), which prevented customers from creating different coverage based on the specific details of an item. For example, a customer might want to

have different coverage on an item that is consumable rather than a non-consumable item. These categories also determine which tab on the Debrief window the item should appear: Expense, Labor, or Material.

In this release, a new 'billing category' has been added in Service core that allows users to differentiate the billing types into categories of (Material) 'M', (Labor) 'L' and (Expense) 'E'. These billing categories, which are seeded, will be required along with billing type before the billing type is attached to a service activity code. As such, billing types are user extensible and can represent the various business needs that might arise in your enterprise.

The following steps are required to enable billing functionality to be used in Debrief and Spares Management:

- Define Billing Types , page 5-23
- Set Up Billing Type Attributes, page 5-24
- Set Up Service Activity Codes, page 5-25
- Set Up Material Service Activity Codes in Install Base, page 5-26
- Associate Service Activity Codes with a Business Process, page 5-27

Define Billing Types

You can define billing types to fit your business needs, which you can associate to billing categories and service activity codes. The three seeded billing types are Labor, Expense, and Material. Each of these billing types is associated with the related billing category of the same name.

When you create new billing types, they can be associated with either the Expense or the Material billing category. You cannot associate extensible user-defined billing types with the Labor category.

Billing types are associated with Service Activity Codes and they are also associated with items, which you set up in Oracle Inventory.

Prerequisites

None.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Service Request > Others > Service: Lookups

Steps

1. At the Oracle Service Lookups window, choose Find from the View menu and query the following lookup: MTL_Service_Billable_Flag.
The Meaning, Application and Description are defaulted in. The Access Level is set at Extensible.
2. To create a new lookup, insert a record (Ctrl + down arrow) and enter a code for the new billing type in the Code field.

3. Enter the name of the billing type in the Meaning Field.
4. Optionally, enter a Description.
5. Leave the Tag field blank. It is not used in this lookup for Field Service.
6. Enter an Effective From date. This is the date that the billing type becomes active.
7. Optionally, enter an Effective To date.
If you want to deactivate a Billing Type, enter an end date that corresponds with the day you want the billing type to become inactive.
8. Check the Enabled checkbox.
9. Repeat steps 2-8 for each new billing type you want to create.
10. Save your work.

Set Up Billing Type Attributes

When you create billing types, you must associate them with billing categories to ensure that the lookups appear in on the appropriate tab in the Debrief window. The new extensible billing types will either be categorized as Material, if you want them to appear in the Materials Tab, or Expense, if you want them to appear in the Expense tab.

Note: You cannot create extensible billing types for the Labor tab in debrief. You must only use the seeded billing type 'Labor' for Service Activity Codes associated with this billing type.

Those billing types of category Material also are used by Spares Management and can be tracked in Install Based.

When you set up your billing types and associated them with the appropriate category remember that these billing types will be associated with Service Activity Codes, which will appear as options in the Material or Expense tab of Debrief.

Prerequisites

Billing types must be set up.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Service Request > Setup > Charges > Billing Type Attributes

Steps

1. In the Billing Type window, create a new record and in the Billing Type field, choose a billing type from the list of values.
2. In the Category field, choose a category to associate your billing type with from the list of values.
The options are: Material or Expense.
3. Enter a Start Date.

4. Optionally, enter an End Date. To keep the lookup active indefinitely, leave this field blank.
5. If you want to associate this Billing Type with a specific item in Inventory, select the item in the Rollup Item field.
6. Repeat steps 1-5 for each billing type you want to associate with a category.
7. Save your work.

Set Up Service Activity Codes

You must create the Service Activity Codes that you want to appear in the lookups on the Material, Labor and Expense tabs of Field Service Debrief. All activities that a Field Service technician will be logging in Debrief must have a related Service Activity Code.

These are extensible. The Service Activity Codes are filtered by the billing type and associated category that you link to them. For example, a Service Activity Code with a billing type of Material will only appear in the lookup on the Material Tab of the Debrief window.

Service Activity Codes must be categorized to represent either "issued items," or those items that are going to a customer, or as "returned items," or those items that are being retrieved from the customer.

Prerequisites

Billing types and billing attributes must be set up.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Service Request > Setup > Charges > Service Activities and Billing Types

Steps

1. In the Service Activities block of the Service Activities and Billing Types window, create a new record (CTRL + down arrow).
2. In the Service Activity field, enter the name of the Service Activity Code you want to create.
3. Optionally, enter a description of the Service Activity Code.
4. In the Line Category field, choose whether the Service Activity Code is to be of type Order or type Return.
5. Enter a Start Date.
6. Optionally, you can enter an End Date. If you leave this field blank, the Service Activity Code will be open ended.
7. In the Billing Types block, choose the Billing Type that you want to associated with Service Activity Code that you just created from the list of values.

The description defaults from the billing type and the Start Date defaults to the current date.

8. Repeat step 7 for each billing type you want to associate with the Service Activity Code.
9. In the Order Management Header and Line Type block, choose the Operating Unit you want to associated with the Service Activity Code.
10. In the Order Type field, choose Mixed from the list of values.
11. In the Line Type field, choose Standard from the list of values.

Note: The Order Type and Line Type settings are not restricted to the values noted above. You can use any type as long as it is set up correctly in Order Management. For more information, see the *Oracle Order Management User Guide*.

12. Save your work.

Guidelines

It is important that you remember what billing category that you associated with each billing type that you created and attached to a Service Activity Code. Within the Debrief window, Service Activity Codes are filtered for each tab based upon the billing category.

Set Up Material Service Activity Codes in Install Base

All Service Activity Codes that are categorized with a billing type and category of Material must be set up in Install Base. The reason for this is these Service Activity Codes are related to items that are trackable in Install Base.

Service Activity Codes with both line types of Order and Return must be added to the Install Base.

Prerequisites

Service Activity Codes of type Material must be set up.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Service Request > Setup > Charges > Install Base Transaction Types

Steps

1. When the Transaction Sub Types window opens, select the Service Type flag.
This flag will enable you to access only Service Transaction Types among the LOVs in the Name field.
2. Query on the name of the Service Activity Codes that you created in the Service Request fields and select one that you created with a billing category of Material.
3. In the Source Info block, select the Reference Required check box if you want to include trackable items.
4. Select the Change Owner check box.

5. If the Service Activity Code has a line type of Order, then choose External in the Change Owner field. If the Service Activity Code has a line time of Return, then choose Internal in the Change Owner field.
6. Choose a Status for the source.
Be sure to not select a status that will reflect the source as inactive, such as Terminated or Expired.
7. In the Source Transaction Types block, you must set up lines for Field Service and Order Management application. Select each from the list of values in the Application Name field.
The Field Service line will default the values in the Transaction Name, Transaction Type, and Description fields.
8. For the Order Management line, select Order Management Ship/Fulfill in the Transaction Name field.
The Transaction Type and Description fields are defaulted.
9. For both lines, select the Update IB checkbox to include trackable items in your setup.
10. Save your work.

Associate Service Activity Codes with a Business Process

Within the Oracle E-Business Suite there may be several applications that use Service Activity Request functionality. You can map the same Service Activity Code to multiple business processes through this process.

You must create new business processes and associate them with the appropriate Service Activity Code. See *Setting up Business Processes*, page 4-28 for details on setting up business processes.

Prerequisites

A Business Process and Service Activity Codes must be set up.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Service Request > Setup > Charges > Service Business Process

Steps

1. From the Service Business Process form, switch to query mode and search for the business process you want to associated the service activity code with in the Name Field.
For example, Field Service.
2. Select the Field Service checkbox.
The Service Request checkbox is selected by default. If you want to enable Depot Repair you can select the checkbox as well.
3. Optionally, enter an Effective Date range. If you leave these fields blank, the mapping will remain open ended.

4. In the Service Activities block, select the Service Activity Code you want to map to the Field Service business process from the list of values in the Service Activity field.
5. Repeat step 4 for each Service Activity Code you want to map to the business process.
6. Save your work.

Set up Skills Management

In order to effectively manage a field service representative's skills, and assign tasks to technicians that have the right skills, you must define the skills, skill levels and the scales to use.

Skills fall into three major categories: product skills, other technical skills, and non-technical skills. The skill level indicates the expertise scale of the field service representative's skill. For example, expert, trainee, and experienced could be skill levels.

The following topics are covered in this section:

- Set Up Rating Scales and Skill Levels, page 5-28
- Define Skills Types and Skills, page 5-29

Once you have set up rating scales, skill levels, defined skills sets and skills, you can add skills to a resource and assign skills to a task. For more information on that process, see the *Oracle Field Service User Guide*.

Set Up Rating Scales and Skill Levels

You can define multiple skills scales, which you can use when you are creating skills sets and skills. There are two seeded scales in Field Service:

Rate Scales and Skill Levels

Scale Name	Seeded Skill Levels
Field Service Standard	Trainee, Standard, Expert
Field Service Extra Scale	Low, Moderate, High

You might want multiple rating scales available for your Field Service operation if you have a large technician force with a variety skill levels for the tasks you perform. Or, you may already have a rating system in place in your operation, which uses different values than those seeded here. In any case, Field Service allows you to set up as many rating scales as you need.

Note: You can add your own skill levels to those in the seeded scales. Note that once you add a skill level, you cannot delete it.

Once you have defined your rating scales and skill levels for each scale, you use the rating scales when you are creating the Skills Sets. For more information, see *Define Skills Types and Skills*, page 5-29.

Prerequisite

None

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Skills Management

Steps

Use this process to set up a new rating scale:

1. Open the Skill Levels tab and open a new form.
You can do this by navigating down through the seeded scales until you reach a blank form.
2. In the Rating Scale section, enter a Name for the Rating Scale.
3. Optionally, enter a Description.
4. The From Date defaults to the current date. You can change this, if needed.
If you want the Rating Scale to be available indefinitely, leave the To date blank.
5. To set the skill levels for the rating scale, in the first line of the spread table in the Levels section, enter a numerical value in the Order field.
This number determines what order the skill levels will appear in the list of values.
6. In the Name value, enter the word or words you want to represent the skill level in the list of values.
(For example: trainee, expert, top, gold level, etc.)
7. Optionally, enter a brief description of the skill level.
8. The From date defaults to the current date that you are setting up the rating scale. You can change this date, if necessary.
9. Repeat steps 5-8 for each skill level you want to associate with this rating scale.
10. Save your work.

Guidelines

If you want to inactivate a Rating Scale, enter a To date in the appropriate field in the Rating Scale section. If you want to inactivate a particular skill level within a Rating Scale, enter a To date in the field next to the skill level you want to inactivate.

Define Skills Types and Skills

Skills are the Field Service representative's competencies. Skills fall into three major categories: product skills, other technical skills, and non-technical skills. You can set up skill types and then populate them with specific skills, which will enable a dispatcher to make informed decisions when assigning technicians to tasks, or when assigning particular skill requirements to a task that has yet to be scheduled.

To illustrate this concept, consider the following scenario: Your Field Service operation services computer systems, hardware, software, networking, etc. A potentially useful skill type could be named "Operating Systems," which you would assign to those technicians who are competent in servicing operating systems. Furthermore, you may

service customers using a variety of operating systems. So you might want to add the following values to your skill type: Windows NT, Mac, Windows 2000, Solaris, etc.

You can set up as many skill types with related skills as needed for your Field Service operation.

Prerequisite

Rating Scales must be set up, if you are using anything other than the default

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Skills Management

Steps

Use this process to set up skills and still types:

1. Navigate to the Skills tab.
2. In the Skills Type section, enter a name of your skills type.
3. Optionally, enter a Description.
4. In the Use Scale field, choose the rating scale that you want to use when assigning skills to a resource.

The rating scale you choose will determine the list of values available for assigning skills to a resource or a task. For details on Rating Scales, see Define Skills Types and Skills, page 5-29.
5. The From Date defaults to the current date. You can change this date, if necessary.
6. Optionally, enter a To Date.

You can enter a To Date if you want to end the use of a particular skill type.
7. In the Skills section spreadsheet, enter a Skills Name on the first line.

This name should reflect a skill related to the Skill Type it is associated with.
8. Enter a Description of the Skill.
9. Optionally, enter an Alias for the skill.
10. The From Date defaults to the current date. You can change this date, if necessary.
11. Optionally, enter a To Date.

You can enter a To Date if you want to end the use of a particular skill.
12. Repeat steps 7-11 for each skill you want to associate with the Skill Type.
13. Save your work.

Set Up Tasks Custom Color Coding

Color coding tasks that can be viewed in the Field Service Dispatch Center allows a dispatcher to quickly identify a multitude of situations, such as high priority

tasks, escalated tasks that need immediate rescheduling, tasks "in jeopardy," and tasks that have been committed to a customer and cannot be rescheduled.

By default, only a limited number of colors are used in Field service. In the Plan Board, yellow is attached to a task with actual times, and red is used when a task is escalated. In the Gantt chart, yellow and red have the same use, and blue is used when a task has scheduled times. Furthermore, green is used in the Scheduling Advice window to identify a plan option.

You can enhance this color-coding functionality greatly through a custom setup. There are 36 colors, of which 35 are available for custom coding. (Green is a reserved color.) The following properties relating to tasks are available to use in determining your color-coding scheme:

- Task Type
- Task Priority
- Task Status

Plan option will automatically be assigned Green, the reserved color just as it is in the standard configuration. Using the custom color coding configuration will greatly enhance a dispatcher or planner's ability to effectively manage the day-to-day field service operations.

To set up your custom color coding, perform the following setups.

Prerequisites

The profile option "CSF: Use Custom Color Coding Scheme" must be set to Yes in order to set up custom color coding.

Task Types, Task Statuses, and Task Priorities must be set up.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Task's Custom Color Setup

Steps

1. At the Task's Custom Color Setup UI, enter a Color Determination Priority number.
In the case of a conflict between two color coding schemes, the color with the lowest priority number will prevail.
2. In the Type field, select the Task Type that you want to associate with this color configuration from the list of values.
3. In the Priority field, select the Task Priority to be associated with this color configuration.
4. In the Status field, select the Task Assignment Status that you want to associate with the color configuration from the list of values.

To distinguish between tasks by status, for example, you could choose Blue to represent all tasks of a certain type (say "Repair at Site") with the status of "Approved," and you could set up an orange color configuration for tasks of type

"Repair at Site" without distinguishing the status. To ensure that the Approved status takes precedence, you would have to set the Color Determination Priority number lower for the first color configuration. In this scenario, tasks of type Repair at Site with a status of Approved would appear in blue, and all other tasks of type Repair at Site would appear as orange.

5. Choose the Color for your color configuration.

The Custom Colors palette is displayed where you can choose from the available colors. The characteristics of the color you choose will be displayed in the Background Color Value section in the RGB Value and Decimal Value fields.

6. If you want the color to apply only to those situations where the task has been escalated, select the Escalated? checkbox.

You will need to enter the same configuration twice, once with the Escalated checkbox selected and once without to distinguish between the two situations.

7. If you want the custom color configuration to be usable in Field Service, select the Active checkbox.
8. Save your work.

Guidelines

You can set up any number of color configurations by simply changing any one of determining factors (Type, Priority, Status, Escalated).

Setting Up Spares Management

In order to setup the Spares Management module in Field Service, perform the steps listed in the following table:

Step	Description
1. Define Forecast Rules, page 5-33	1. Forecast rules are used to determine how the parts forecast is calculated.
1. Define Calculation Rules, page 5-35	1. Calculation rules are used to determine which availability elements are to be included when calculating the Actual Available quantity for the purpose of producing notifications for the planner.
1. Define Excess Rules, page 5-36	1. Excess Rules filter out excess parts that do not have a significant impact on excess value.
1. Define Excess Reject Reasons, page 5-37	1. Excess reject reasons enable better analysis of your excess recommendation process and are applied when an excess recommendation is rejected.
1. Define Manual Override Reasons, page 5-38	1. Manual override reasons provide a planner with reasons he may have for overriding the values of an existing stock list or creating a stocklist manually.
1. Define Task Parts, page 5-40	1. Define a list of parts that are typically required for a specific task.
1. Define Parts Priorities, page 5-41	1. Part priorities are used in Field Service Advanced Scheduler to determine which priorities are used in assigning and scheduling technicians.
1. Define Delivery Times, page 5-42	1. Specify the delivery times for shipment methods that are defined in Oracle Inventory

Define Forecast Rules

Forecast rules are used to determine how forecast information is calculated. A forecast rule is a dependency for defining parts loops. Forecast rules are also used in making Min/Max recommendations for Authorized Stock Lists.

Forecast Methods

Several forecast methods are provided in Spares Management:

- The Simple Average forecast method is based on the number of history periods selected.
- The Weighted Average forecast method is based on the number of history periods, and you can assign different weights to each history period.
- The Exponential Smoothing forecast method provides another version of weighted averages. The smoothing constant Alpha is used to define the weight given to the current history period.
- The Trend Enhanced forecast method produces a trended forecast. Beta is a smoothing factor for the trend and is used to define the weight given to current

trend. Alpha is a smoothing factor for the constant and is used to define weight given to current period history.

Forecast Rules Parameters

The list below details the parameters that are defined for forecast rules:

- The Rule Name is the name of the forecast rule.
- The Description field contains a description of the forecast rule.
- The Period Size is measured numerically in days. If you wanted to set up a weekly period, for example, you would enter 7.
- The Forecast Periods field indicates the number of periods in the future for which you want to see a forecast.
- The History Periods field indicates the number of periods in the past that you want to include in the forecast calculation.
- The Alpha field is used in the Exponential Smoothing and Trend Enhanced methods. In exponential smoothing, alpha is the factor that determines how much weight to apply to current period usage. In the trend enhanced method, the alpha factor determines the constant to be used in the formula.
- The Beta field is used in the Trend Enhanced method and is the factor used to determine the trend, which is used in the formula.
- The Weighted Average Period Index fields are used to specify weights for individual periods. For example, you can assign higher weights to more recent periods, if that is desired. The total of the period values must equal 1 and each value must be greater than zero and less than one.

Prerequisites

None

Responsibility

Field Service Dispatcher

Navigation

Dispatch Center > Spares Management > Setup > Forecast Rules

Steps

Use the following procedure to define forecast rules:

1. In the Forecast Rules window, enter a rule name in the Name field.
2. Optionally, enter a description in the Description field.
3. Select a forecast method from the Forecast Method list of values.
The choices are Simple Average, Weighted Average, Exponential Smoothing and Trend Enhanced.
4. In the Period Size field, select Weekly or Periodic. Periodic refers to accounting periods.

5. If you are using the exponential smoothing or trend enhanced method, enter the factor in the Alpha field.

This number is expressed as a fraction with a decimal point. Alpha would be greater than 0, and equal to or less than 1. (In most cases, the alpha factor should be set in the range of 0.15 - 0.25.)

6. If you are using the trend enhanced method, enter the factor in the Beta field.

This number is expressed as a fraction with a decimal point. Beta should be greater than 0, and equal to or less than 1. (In most cases, the beta factor would be set in the range of 0.15 - 0.25.)

7. Save your work.

Define Calculation Rules

Calculation rules are used to determine which availability elements are to be included when calculating the Actual Available quantity for the purpose of producing notifications for the planner. The most accurate definition of part availability for planning purposes can be achieved by using all availability elements.

The calculation rule includes a tolerance percentage to be used in loop planning to generate notifications. A notification is created whenever the parts quantity is over or under the loop quantity by the percentage specified.

The calculation rule also includes a value called Time Fence that represents the number of days in the future to be used when considering the availability elements.

A calculation rule is a dependency for setting up parts loops.

The availability elements used to calculate available quantity are listed below:

- Usable on-hand
- Defective on-hand
- Purchase orders (use this only if Oracle Purchasing is installed)
- Open WIP orders (use this only if Oracle Work in Process is installed)
- Open Requisitions (use this only if Oracle Purchasing is installed)
- Sales Orders (use this only if Oracle Order Management is installed)
- Move Orders
- Inter Org transfers
- In-transit Move Orders

Example of a Calculation Rule

Suppose you want your planner to be notified when the loop quantity exceeds 110% of the desired loop quantity. You also want to consider all orders due in the next twenty days when calculating the available quantity that is compared to the desired loop quantity. Below are suggested parameter settings of the calculation rule for this scenario.

- The Rule Name is Twenty Days.
- The Description is Include Availability Elements for 20 Days.
- All Availability Elements are checked.
- The Tolerance Percent is 10.

- The Time Fence is 20.

Prerequisites

None

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Spares Management > Setup > Calculation Rules

Steps

Use the following procedure to define calculation rules:

1. From the Calculation Rules window, enter a rule name in the Name field.
2. Optionally, enter a description in the Description field.
3. Select the appropriate availability elements.
The choices are: Usable on-hand, Defective on-hand, Purchase orders, WIP orders, Requisitions, Sales Orders, Move Orders, Inter Org transfers, and In-transit Move Orders.
4. Enter a tolerance percent.
This is used in loop planning to filter notifications that are within the tolerance percent. If a 10 is entered, for example, a notification will be sent whenever the quantity is plus or minus 10% of the desired quantity.
5. Enter the Time Fence in days.
This is used in loop planning to filter incoming and outgoing orders scheduled beyond a specified time period.

Define Excess Rules

You can define Excess Rules to filter out excess parts that do not have a significant impact on excess value. This allows the field technician and planner to focus on the few items that have a high impact.

If you do not use excess rules, all quantities that are greater than the maximum level in the ASL are considered to be excess and would then appear in the Excess List window for return.

Prerequisite

None

Responsibility

Field Service Dispatcher

Navigation

Field Service Dispatcher > Spares Management > Setup > Excess Rules

Steps

Use the following procedure to create excess rules:

1. From the Define Excess Rules window, enter a unique name for the excess rule.
2. Enter a Description for the excess rule.
3. Enter a value in the Total Max Excess field to represent a maximum allowable percentage of the total excess value.

For example, if you enter a 10 in this field, then excess parts are considered for return only if their total excess value is greater than 10% of the total max value. If this field is left blank, a zero is assumed and all excesses are considered.

4. Enter a value in the Line Max Excess field to represent a maximum allowable percentage of the total excess quantity for a line.

For example, suppose you enter a 10 in this field. If the maximum quantity is 20 and the onhand quantity is 21, this part would not appear on the excess list because the onhand quantity is less than 10% over the maximum quantity. If this field is left blank, a zero is assumed and all excesses are considered.

5. Enter a value in the Days Since Receipt field to represent the number of days you want to exclude when calculating the excess quantity.

This allows you to exclude recently received parts from the excess list. For example, if you enter a 10 in this field, then all of the parts received within the last ten days are ignored. If this field is left blank, a zero is assumed and all receipts are included in the excess calculation.

6. You can enter a value in either the Total Excess Value field OR the Top Excess Lines field.

Enter a value in the Total Excess Value to represent the percentage of total excess value that you want to see on the excess list. For example, if you enter a 80 in this field, the excess list will show the excess lines that comprise the top 80% of the total excess value.

Alternatively, you can enter a value in the Total Excess Lines field to represent the number of lines that you want to see on the excess list. For example, if you enter 50 in this field, the excess list will contain the 50 highest value lines.

7. You can enter or select a value for Category Set if you want to exclude an item category from return, such as supplies.

A category set is a feature in Inventory where you can define your own group of categories.

8. If you enter a value for Category Set, the Category field is enabled.

A category is a code used in Inventory to group items with similar characteristics.

9. Save your work.

Define Excess Reject Reasons

During review of excess recommendations, a planner might reject a particular excess line recommendation. You can set up excess reject reasons, which will enable better analysis of your excess recommendation process.

The list of lookups available to your Field Service operation is user extensible and can be modified throughout the lifecycle of the application.

Prerequisites

None

Responsibility

Field Service Dispatcher

Navigation

Field Service Dispatcher > Spares Management > Setup > Excess Reject Reasons

Steps

Use this process to set up the values available for your excess reject reasons:

1. This navigation path opens the Application Object Library: Excess Reject Reasons codes Lookups.
The lookup Type, User Name, Application, Descriptions fields are uneditable. The Access Level of User is also protected. You can add values in the spreadsheet below those fields.
2. Enter a code in the Code field.
This code is for internal purposes only and is not visible in the Spares Management UI.
3. In the Meaning field, enter name of the lookup that you want to appear in the list of values.
Note: The Meaning should be word that makes sense in relation to the excess reject reason you are trying to represent. For example, if the excess reason is because the parts are hazardous, you might want to enter the word Hazardous in the Meaning field.
4. Optionally, enter a description in the Meaning field.
5. For the Excess Reject Reason, leave the Tag field blank.
6. The Effective From date defaults current date.
Optionally, you can change the Effective From date, and add an Effective To date.
7. Repeat steps 1-6 for each addition Excess Reject Reason setup you want to add to the list of values.
8. Save your work.

Guidelines

To remove an obsolete Lookup, you can either disable the code (by deselecting the Enabled checkbox next to the lookup value), enter an end date, or change the meaning and description to match a replacement code.

Define Manual Override Reasons

You can define reasons that a planner may have for overriding the values of an existing stock list or creating a stocklist manually. Stock lists are determined through ASL recommendations that are accepted by a planner, or they can be created manually. In

either case, if a planner makes manual recommendations, he can enter a reason for that action.

The list of lookups available to your Field Service operation is user extensible and can be modified throughout the lifecycle of the application.

Prerequisites

None

Responsibility

Field Service Dispatcher

Navigation

Field Service Dispatcher > Spares Management > Setup > Manual Override Reason

Steps

Use this process to set up the values available for your manual override reason:

1. This navigation path opens the Application Object Library: CPS_ASL_REASON_CODE Lookups window
The lookup Type, User Name, Application, Descriptions fields are uneditable. The Access Level of User is also protected. You can add values in the spreadsheet below those fields.
2. Enter a Code for the Override Reason.
This code is for internal purposes only and is not visible in the Spares Management UI.
3. In the Meaning field, enter name of the Override Reason that you want to appear in the list of values, which appears in the Planner's Desktop UI used to manually create an Authorized Stock List (ASL).
Note: The Meaning should be word that makes sense in relation to the manual override reason you are trying to represent.
4. Optionally, enter a Description for the Override Reason.
5. For Override Reason setups, leave the Tag field blank.
6. The Effective From date defaults current date. Optionally, you can change the Effective From date, and add an Effective To date.
7. Repeat steps 1-6 for each additional Override Reason that you are setting up.
8. Save your work.

Guidelines

To remove an obsolete Lookup, you can either disable the code (by deselecting the Enabled checkbox next to the lookup value), enter an end date, or change the meaning and description to match a replacement code.

Define Task Parts

You can define a list of parts that are typically required for a specific task. This task parts definition provides an efficient method for creating an internal order for a specific task. Using task parts definitions saves time because there is no need to manually enter which parts are needed. When a task parts definition is used, the predefined list of parts can be overridden, if necessary.

Tasks Parts are defined for combinations of products and task templates in the Define Task Parts window.

Parts can be defined automatically by running the Create Task Parts History concurrent program, which collects usage information from the Debrief process in Field Service and populates the calculated fields (quantity used, times used, quantity, percentage, etc.) based on the usage history associated with the product.

The Manual region of the window allows for the manual entry of items used on the the product and task template, or you can manually define parts in this window. The Rollup region summarizes the usage information for supercessions, if applicable. The usage is rolled to the top part in the supercession.

The Calculated region summarizes usage information and is populated by the Create Task Parts History concurrent program. If you choose to enter the parts manually, your manually entered values override the calculated values.

Prerequisites

- A Task Template must be defined.
- Products and items must be defined.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Spares Management > Setup > Task Parts

Steps

Use this procedure to Create a Manual Task Parts Definition:

1. Close the Find Product Task window by clicking the New button.
The Define Task Parts window opens.
2. In the Product field, select one from the list of values.
The product description is displayed on the right. The Task Template list of values displays task templates that have been defined for the product you selected.
3. Enter a valid Task Template name or select one from the list of values.
4. The Auto or Manual field will default to Manual when you save your work.
5. Skip the Times Used field. It will be populated with the number of times this task template has been used for this product, after running the Create Task Parts History concurrent program.

6. Skip the Task % field. It will be populated with a number representing the percentage of times this task template was used for this product, after running the Create Task Parts History concurrent program.
7. In the Define Parts section, choose the first part number in the Item field that you want to associate with this task from the list of values.
8. The Unit of Measure defaults in the UOM field depending on the item you selected.
9. Enter a revision number in the Rev field, if applicable for this part.
10. Enter the quantity of parts required for this task.
11. Enter a value in the % (percentage) field to represent how often this part is expected to be used in this task template/product combination.

This percentage value is used to calculate the Priority.
12. Optionally, enter the Start Date or End Date to enable or disable this parts task definition on a specific day.
13. Repeat steps 7-12 for each additional part.
14. Save your work.

Define Parts Priorities

In order to aid scheduling, including Oracle Advanced Scheduler, in determining the priorities for assigning and scheduling technicians who require parts to fulfill their task requirement, you can define priorities, descriptions, and upper and lower percentages for parts.

There are two seeded priorities: All Parts and No Parts. These values, along with those defined by the user, are available for scheduling purposes, either through Advanced Scheduler functionality, or manually through the Advise button on the Dispatch Center.

Prerequisites

None

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Spares Management > Setup > Part Priorities

Steps

Use this process to set up the values available for parts priorities:

1. In the Parts Priorities UI, enter the Lower and Upper Range of the Parts Priority.

This is a numeric value and represents a percentage of part availability.
2. Enter a code for the Priority of the part.

This code can be alpha-numeric, but it should be meaningful for an end user. For example, if the priority is high, you might want to enter P1 as the Priority designation. If it were low, you might want to enter P4.

3. In the Meaning field, enter a meaning of the Priority, which will appear in the list of values in Advanced Scheduler.

Note: The Meaning should be text that makes sense in relation to the part priority you are trying to represent. A high percentage priority range, for example, should be reflected by a similar meaning (i.e. High range=100 : Meaning=P1).

4. Optionally, enter a Description of the Priority in the Meaning field.
For example, for a Priority = P1, then the description could be Description = Highest Priority.
5. Repeat steps 1-4 for each additional priority you want to create.
6. Save your work.

Define Delivery Times

Spares Management provides a method for specifying the delivery times for shipment methods that are defined in Oracle Inventory.

For example, if your carrier can guarantee overnight delivery by a specific time of day, this information allows Oracle Advanced Scheduler to schedule your field technician based on the arrival time for the part.

Prerequisites

Shipment methods must be defined in Oracle Inventory.

Freight Carriers must be defined in Oracle Inventory.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Spares Management > Setup > Delivery Time

Steps

1. From the Define Delivery Time window, execute a query for the organization you want to update.
You can do this either by using the Find All menu option, or if you know the organization you want to update, you can Query By Example.
The window displays the shipping methods and freight codes that have been defined in Oracle Inventory for each inventory organization.
2. Enter a value in the Lead Time field for the number of time units this freight carrier commits to make a delivery.
For example, for an overnight delivery, enter a 1 in this field and then choose Day in the UOM field.
3. In the UOM field, enter the unit of time that corresponds to the previous field, Lead Time.
4. Enter the carrier's expected delivery time in the Delivery Time field.

This value is expressed in military time. For example, if you enter a 1, the UI will display 01:00, or one o'clock in the morning.

5. Enter any time value between 0100 and 2400 in the Cutoff Time field.

The Cutoff Time is the time for which you must have the order entered to achieve the lead time and delivery time. For example, if the order is entered by 16:00 hours, then the part can be delivered by the next day (Lead Time = 1) by 10:30 (delivery time). Otherwise, if the order is entered after 16:00 hours, then the cutoff is missed for that method of shipment and the part would be delivered in two days where the lead time is set to 1.

6. The Time Zone field will default to the time zone associated with the organization that you choose.
7. Enter a number in the Comfort Zone in hours.

The Comfort Zone (Hours) is the time you want to allow between the expected delivery time of the part and the scheduled arrival of the field technician.

8. Save your work.

Defining Resource Addresses and Subinventories

You can assign ship to addresses and subinventories to your field technicians in the Resource Addresses and Subinventories window. A typical field service organization may have thousands of field technicians, so this window is designed to provide an efficient method for maintaining ship to addresses and subinventories for your field technicians. The addresses defined in this window appear in the list of values for the ship to address when you order parts in the Parts Requirement window.

The subinventories defined in this window appear in the list of values for the field technician's subinventories when you order parts in the Parts Requirement window. You can assign an owner for the subinventory, if needed. This feature can be used when more than one field technician shares a subinventory and one person needs to be assigned as an owner to be responsible for managing excess parts. When an owner is assigned, an organization and subinventory for returning the excess parts is also assigned.

Prerequisites

Field technicians must be defined as employees. Subinventories must be defined.

Responsibility

Field Service Administrator

Navigation

Spares Management > Resource Addresses and Subinventories

Steps

1. Select the appropriate resource type from the Resource Type list of values.
2. Select a field technician name from the Resource Name list of values. The list of values only displays the field technicians who have been assigned to the Resource Type you selected.
3. The Phone, Email, Start Date and End Date information for the field technician is displayed if these fields have been populated in Oracle HRMS.

4. The Addresses tab opens by default.
5. Select an address style for the appropriate country from the Address Style list of values.
6. Tab to the Address field to open the Location Address flexfield. Enter the details for the ship to address.
7. If you want this address to become the default address for this field technician, check the Primary Address check box. You can set only one address as the primary address and you must have one primary address.
8. You can define additional addresses for this field technician by adding more address lines.
9. Open the Subinventories tab to associate one or more subinventories to this field technician.
10. Enter an inventory organization or select one from the Organization list of values.
11. Enter a subinventory name or select one from the Subinventory list of values. The list of values displays only those subinventories which have been defined for the organization you selected.
12. You can select a value of Usable or Defective in the Condition field if the condition has not been defined in the parts loop. If the condition for this subinventory has been defined in the parts loop, this condition defaults in this field and cannot be updated.
13. The Start Date defaults to today's date. You can override this date with a future date, if needed.
14. Check the Default column if you want this subinventory to be used as the default subinventory for this field technician. Only one subinventory for each Condition Type can be designated as the default subinventory for this field technician. You must define one usable subinventory as the default.
15. The Start Date field defaults to today's date. You can override this value to a date later than today's date, if needed.
16. The End Date field is used to inactivate a subinventory assignment.
17. If you check the Owner box, the field technician name is assigned as the Owner Name for this subinventory. Each subinventory can have only one owner.
18. Assigning an owner enables the Org and Sub fields in the Return region so you can specify the subinventory for returning excess parts. This location may or may not be the same location as the subinventory you are assigning the field technician. This subinventory must be of the same Condition Type as the source subinventory.
19. You can assign multiple subinventories to a field technician. You can assign subinventories from more than one organization to a field technician.

Note that the address of the resource subinventory is not picked up from the resource address. You must enter this manually.
20. Save your work.

Setting up the Map

A Map is available to the user as part of the Field Service Dispatch Center functionality. Map display is supported by the MapViewer which is part of Oracle

9iAS and the installation of spatial data. The installation of spatial data is explained in the next step.

The installation and setup of the Oracle 9iAS MapViewer is described in the *Oracle 9iAS User Guide*.

The implementation of the Map, also referred to as eLocation map, specific to Field Service is done by setting specific profile options.

Plan and setup of the Oracle 9iAS MapViewer as described in the *Oracle 9iAS User Guide*:

- Verify MapViewer is Set Up Correctly and Running, page 5-45
- Check the eLocation Map Profile Options, *ERROR: linkend not in current document and TARGET_BOOK_TITLE missing*

Verify MapViewer is Set Up Correctly and Running

Use this procedure to make sure the MapViewer has been installed and is running.

Prerequisites

Oracle 9iAS is installed and setup.

Steps

- Open a browser and enter the following:
http://<mapserver name>:<mapserver port number>/mapserver/oms
The message returned should read the following:
[omslauncher] responding...
map server is registered as mapserver

Check the eLocation Map Profile Options

Set the profile options specific to the eLocation Map.

Prerequisites

None.

Steps

1. Switch to the System Administrator responsibility.
2. Navigate to Profile > System. The Find System Profile window is opened.
3. Check Site.
4. At Profile enter CSF%.
5. Click Find.

You can set the profile options described in the following table in any sequence. All profile options have been provided with default values.

eLocation Map Profile Options

Profile Option	Description
CSF: Use eLocation Map	Indicate you are using the eLocation map.
CSF: eLocation Map JDBC driver type	The JDBC driver type used to make a connection to the data source for the eLocation map, default set to 'thin'.
CSF: eLocation Map RMI binding name	The Remote Method Invocation binding name that is used for the eLocation map server.
CSF: eLocation Map RMI host name	The Remote Method Invocation host name that is used for the eLocation map server (typically the machine name where the map server is running).
CSF: eLocation Map RMI port number	The Remote Method Invocation port number that is used for the eLocation map server.
CSF: eLocation Map basemap name	The basemap name for the eLocation map as found in the data source maps table.
CSF: eLocation Map data source name	The unique name that is given to the collection of data source parameters for the eLocation map, e.g. csfmap. The name must be modified if any of the data source profile options change and the map server can not be restarted.
CSF: eLocation Map database SID	The database SID of the data source for the eLocation map. Typically the same as the SID of the database server.
CSF: eLocation Map enable java debugging	Optionally enable additional debugging output to the Java console for the eLocation map.
CSF: eLocation Map high latitude coordinate	Do not change, high latitude coordinate of the last view area of the eLocation map.
CSF: eLocation Map high longitude coordinate	Do not change, high longitude coordinate of the last view area of the eLocation map.
CSF: eLocation Map host name	The name of the host of the data source for the eLocation map. Typically the same as the database server machine name.
CSF: eLocation Map icon URL	The URL of the directory where the image files are stored for the eLocation map markers. The images are used to show instant status of the resource on the Map in the Field Service Dispatch Center.
CSF: eLocation Map last used service area number	Do not change, the identification number of the last viewed area on the eLocation map.

Profile Option	Description
CSF: eLocation Map low latitude coordinate	Do not change, low latitude coordinate of the last view area of the eLocation map.
CSF: eLocation Map low longitude coordinate	Do not change, low longitude coordinate of the last view area of the eLocation map.
CSF: eLocation Map maps table name	The name of the maps table in the data source for the eLocation map.
CSF: eLocation Map move factor (between 0.1 and 1)	The fraction of the width or height by which the eLocation map view should be moved when using the navigate buttons on the Map tab in the Field Service Dispatch Center.
CSF: eLocation Map port number	The listener port number for the data source for the eLocation map. Typically the same as the database server listener port number.
CSF: eLocation Map styles table	The name of the styles table in the data source for the eLocation map.
CSF: eLocation Map themes table	The name of the themes table in the data source for the eLocation map.
CSF: eLocation Map user identification	Leave empty, used for development purposes only.
CSF: eLocation mappers count	The highest number of parallel map requests that are required to be serviced at one time for the eLocation map.

Setting Up Spatial Data

Spatial data is a separate product and is used for Map Display (Dispatch Center), and Oracle Advanced Scheduler functionality such as Route Calculation (Time Distance Server) and Location finding (geocoding).

The supplier for Spatial Data is Navigation Technologies (Navtech). Navtech supplies spatial data standardized to be used with oracle applications by conforming to the Geographic Data Format (GDF). For installation instructions please refer to the installation documentation supplied with the Spatial Data bought from Navtech.

Before installing spatial data perform the following checks:

- Check if the Spatial Data Option is Installed on the Oracle RDBMS, page 5-48

After installation of the spatial data check the following:

- Check if the Normal and Domain Indexes are Created, page 5-48
- Check Whether the Layer Style Sheets Tables are not Empty, page 5-50
- Check Map Display, page 5-51

Check if the Spatial Data Option is Installed on the Oracle RDBMS

Even though it's impossible to install spatial data when the spatial data cartridge is not installed, a DBA's task is to check whether it is installed. Make sure the MDSYS user schema is there without any INVALID objects.

Check if the Normal and Domain Indexes are Created

After installing the spatial data, normal and domain indexes have been created. These indexes should have the status VALID. If the indexes don't exist or are INVALID, the Map won't display.

Use the following procedure to check whether the indexes have been created.

Prerequisites

Spatial Data is installed.

Steps

1. Logon as user csf/csf.
2. Execute the following statement:

```
select object_name, status_type from user_objects

where object_name like 'CSF%'
and object_type = 'INDEX';
```
3. In the list returned with objects make sure the following are listed:
 - CSF_MD_RDSEGS_N1
 - CSF_MD_RDSEG_NM_ASGNS_N1
 - CSF_MD_RDSEG_NM_ASGNS_N2
 - CSF_MD_NAMES_N1
 - CSF_MD_ADM_BNDS_N1
 - CSF_MD_RD_SEGS_N1
 - CSF_MD_HYDROS_N1
 - CSF_MD_RLSEGS_N1
 - CSF_MD_LND_USE_N1
 - CSF_MD_POIS_N1
 - CSF_LF_BLOCKS_N1
 - CSF_LF_BLOCKS_N2
 - CSF_LF_NAMES_N1
 - CSF_LF_NAMES_N2
 - CSF_LF_PLACES_U1
 - CSF_LF_PLACES_N2
 - CSF_LF_PLNMS_U1

CSF_LF_PLPCS_N1
CSF_LF_PLPCS_N2
CSF_LF_POIPL_N1
CSF_LF_POIS_N1
CSF_LF_PNAMES_N1
CSF_LF_PNAMES_N2
CSF_LF_POSTCODES_N1
CSF_LF_POSTCODES_N2
CSF_LF_RDSEGS_N1
CSF_LF_RDSEGNMS_N1
CSF_LF_RDSEGNMS_N2
CSF_LF_RDSEGPL_N1
CSF_LF_RDSEGPL_N2
CSF_LF_RDSEGMPC_N1
CSF_LF_RDSEGMPC_N2
CSF_TDS_BINARY_TILES_N1
CSF_TDS_BINARY_TILES_N2
CSF_TDS_BINARY_TILES_N3
CSF_TDS_TILES_N1
CSF_TDS_TILES_N2
CSF_TDS_TILES_N3
CSF_TDS_TILES_N4
CSF_TDS_SEGMENTS_N1
CSF_TDS_SEGMENTS_N2
CSF_TDS_SEGMENTS_N3
CSF_TDS_SEGMENTS_N4
CSF_TDS_SEGM_NODES_N1
CSF_TDS_SEGM_NODES_N2
CSF_TDS_SEGM_NODES_N3
CSF_TDS_SEGM_NODES_N4
CSF_TDS_SEGM_NODES_N5
CSF_TDS_NODES_N1
CSF_TDS_NODES_N2
CSF_TDS_NODES_N3
CSF_TDS_NODES_N4

CSF_TDS_NODES_N5
CSF_TDS_NODES_N6
CSF_TDS_CONDITIONS_N1
CSF_TDS_CONDITIONS_N2
CSF_TDS_COND_SEGS_N1
CSF_TDS_COND_SEGS_N2
CSF_TDS_COND_SEGS_N3
CSF_TDS_ROADBLOCKS_N1
CSF_TDS_ROADBLOCKS_N2
CSF_TDS_RDBLCK_INTVLS_N1
CSF_TDS_RDBLCK_INTVLS_N2
CSF_TDS_RDBLCK_SGMNTS_N1
CSF_TDS_RDBLCK_SGMNTS_N2
CSF_TDS_RDBLCK_SGMNTS_N3
CSF_TDS_INTERVALS_N1
CSF_TDS_INTERVALS_N2

Check Whether the Layer Style Sheets Tables are not Empty

Layer style sheets define the “display” of the spatial data. These are all predefined and optimized for the data set used but it is possible to modify the style sheets. By default in the style sheets it is defined per spatial object type (i.e., motor way, waterway, residential area, etc.) how and under what conditions it is displayed. For example when looking at an entire country there is no reason to display “local roads” as this kind of detail shows up as a colored blob on the screen. Also every object is given its own color. The color to display a road is different depending on the part of the world one is in, the style sheet also describes this information.

It is recommended to involve a consultant with experience in Geographic Information to define alternative settings in the layer style sheets. Knowledge required to modify the layer style sheets besides Oracle database is:

- Spatial cartridge and some geographic experience

Prerequisites

Spatial Data is installed.

Steps

1. Logon as user csf/csf.
2. Execute the following statements:

```
select count(*) from csf_user_sdo_maps;
```

```
select count(*) from csf_user_sdo_styles;
```

```
select count(*) from csf_user_sdo_themes;
```

For each statement, values should be returned higher than 0.

Check Map Display

After the preceding checks, perform a quick check to see if the data is really there and the map displays.

1. Navigate to the Dispatch Center in the Field Service application. Field Service Dispatcher > Dispatch Center.
2. Select the Map tab.
3. Make a selection from the list of values to select the map of your choice. The Map displays.

When the map doesn't display at all, the data isn't there.

Setting Up Oracle Advanced Scheduler

When Oracle Advanced Scheduler is installed make sure you set up Advanced Scheduler as described in Implementing Oracle Advanced Scheduler from the *Oracle Advanced Scheduler Implementation Guide*. Ensure that all the steps have been reviewed and completed as necessary.

Setting Up CRM Gateway for Mobile Devices

When you are going to use one of the following applications you need to setup the CRM Gateway for Mobile Devices:

- Oracle Field Service/Laptop
- Oracle Field Service/Palm™ Devices

The CRM Gateway for Mobile Devices consists of a mobile client and a central application. It provides data transport between the Oracle CRM enterprise database and the Oracle mobile client database.

Make sure you set up the CRM Gateway for Mobile Devices as described in *Oracle CRM Gateway for Mobile Devices Implementation Guide*. Ensure that all the steps have been reviewed and completed as necessary.

Setting Up Field Service/Palm Devices

Make sure you set up Oracle Field Service/Palm™ Devices as described in *Oracle Field Service/Palm™ Devices Implementation Guide* and the *Oracle Field Service/Palm™ Devices Installation Guide*. This includes the following setup screens on the CRM Enterprise database:

- Resources Subinventories Assignment
- Configuration Parameters

Setting Up Field Service/Laptop

Make sure you set up Field Service/Laptop as described in *Oracle Field Service/Laptop Implementation Guide*.

No additional Field Service specific setup steps are necessary.

Setting up Wireless Option for Service

Make sure you set up Oracle Wireless Option for Service as described in *Oracle Wireless Option for Service Concepts and Procedures Guide*.

This involves the following steps:

- Setting up the User with Wireless Responsibility
- Setting up the Profile Options for the Wireless User
- Setting the Profile Options for the Task Summary Display Screen Date Format
- Setting up the System for Route Directions
- Setting up the E-mail Server

Preventive Maintenance Setup Steps

This chapter covers the following topics:

- Preventative maintenance Setup Summary
- Preventive Maintenance Business Process
- Setting Up CMRO for Preventive Maintenance
- Implementation Task Sequence for Preventive Maintenance
- Create Users and Add Preventive Maintenance Responsibilities
- Create PM Request Type and Map to Responsibilities
- Create Task Status of 'Confirm'
- Create Resource Group of Preventive Maintenance
- Create Preventive Maintenance Territory and Assign Resources
- Create Task Template Groups and Task Templates
- Create Master Items
- Create Counter Groups and Counters
- Create Preventive Maintenance Programs
- Create Coverage Templates for PM Programs
- Set Up Service Program/Warranty for Service Contracts
- Add Service Program/Warranty Items to Price List

Preventative maintenance Setup Summary

This chapter provides an overview of the Preventive Maintenance business process and describes the setup steps for enabling the Preventive Maintenance module of the Field Service application suite.

A Preventive Maintenance program aids a Field Service operation in its proactive efforts to service customers in anticipation of service needs.

Customer's reactive service is effectively addressed in the Oracle Service suite of products. However, service centers also need systems that are equally effective in the proactive and reactive support scenarios. By leveraging Oracle Service and Contracts functionality, the Preventive Maintenance solution provides the capability to log service requests and allocate tasks to the appropriate resources with the right parts and schedule them in anticipation of the service need.

The following topics are detailed in this chapter:

- Preventive Maintenance Business Process, page 6- 2
- Setting Up CMRO for Preventive Maintenance, page 6- 3
- Implementation Task Sequence for Preventive Maintenance, page 6-10
- Create Users and Add Preventive Maintenance Responsibilities , page 6-11
- Create PM Request Type and Map to Responsibilities, page 6-12
- Create Task Status of 'Confirm', page 6-12
- Create Resource Group of Preventive Maintenance, page 6-12
- Create Preventive Maintenance Territory and Assign Resources, page 6-13
- Create Task Template Groups and Task Templates, page 6-13
- Create Master Items, page 6-14
- Create Counter Groups and Counters, page 6-14
- Create Preventive Maintenance Programs, page 6-15
- Create Coverage Templates for PM Programs, page 6-26
- Set Up Service Program/Warranty for Service Contracts, page 6-29
- Add Service Program/Warranty Items to Price List, page 6-30

Preventive Maintenance Business Process

The intent of the Preventive Maintenance (PM) solution is to provide the capability to log service requests automatically and allocate tasks to the appropriate resources with the right parts and schedule them in anticipation of the service need. The service need could be estimated based on item usage, calendar dates or a date range as specified in the contract.

In essence, Preventive Maintenance programs maintain products (customer owned or leased assets), by performing certain predefined "activities" at predefined intervals/times based on product's age, usage, current condition, environment it is installed at, wear and tear of the parts, past performance, and so on.

Currently, Oracle's Preventive Maintenance module employs a scheduling method of coverage, which can be based on manufacturer recommendations, customer requirements, or market demand. These PM activities are independent of abnormal conditions, or quality of the product performance. They are scheduled and performed at intervals, which are generally based on products usage and age

A comprehensive Preventive Maintenance process can be outlined as follows:

Defining PM Programs and PM Coverage and Authoring Service Contracts

This business process step involves the definition of suggested preventive maintenance programs (in CMRO module) and their respective coverage (in OKS module).

Defining PM programs and coverage templates is covered in this implementation guide.

PM Sales/Contracts, Instantiation and Contract Management

This is a process step in which a product and/or service with PM coverage is sold to the customer by the sales people. Once a product and respective service is sold, an instance of that product, coverage (contract) and program association are maintained by the service/contracts department to track and plan for PM activities.

PM Planning

Service departments generally plan in advance the PM activities they need to perform and resources required to fulfill those activities. Planning is an important step of the preventive maintenance process and enables optimal operations and effective delivery.

PM Execution

This process step involves the generation of PM requests (as a result of product usage, customer request and other events) and fulfilling them. The execution process involves, scheduling, reserving/allocating resources, capturing customer confirmation, delivering PM activities and billing customer.

Definitions

The following table provides some definitions of terms that used in this guide when referring to Preventive Maintenance:

Preventive Maintenance Definition Table

Term/Acronym	Definition
Preventive Maintenance	Preventive Maintenance (PM) refers to the Proactive Service of products by performing predefined activities at predefined intervals/times based on a product's age, usage, current condition, environment it is installed at, wear and tear of the parts, past performance, etc.
Program	The recommended grouping of predefined activities to maintain the product over its life span.
Activity	A set of tasks performed on a product as part of proactive service at a predefined interval or time or on a specific date or during a predefined date range.
Program schedule	The recommended date or date range the activities under a defined program as mutually agreed and contractually obligated to be performed.
Task	The smallest unit of work of a given activity.

Setting Up CMRO for Preventive Maintenance

Because the Preventive Maintenance module only uses a small portion of the available CMRO functionality, the set up of CMRO for Preventive Maintenance is minimal. This

includes setting some system profile options, defining some lookup values and a key flexfield.

Optionally, you can set up the approval workflow to enable approval of Maintenance Programs, Activities, and Routes. The only mandatory step to enable CMRO functionality is to set up the System Key Flexfield.

The following sections detail the manual and optional setups within CMRO:

- Set Up Route Management, page 6- 4
- Set Up Approval Workflow, page 6- 5
- Other CMRO Setup Considerations, page 6- 9

Set Up Route Management

To use Route Management in Preventive Maintenance, you must set up the Key Flexfield for the System attribute. In addition, you also can define some lookup values for attributes in the route definition.

Note: When defining routes in CMRO, the user is supported with a list of values for different available attributes. These attributes are optional and do not have functional usage in PM.

Route Management requires that a key flexfield for the definition of the System attribute be set up even though it is optional in Preventive Maintenance. If it's not set up, Route Management will not function properly.

Use the following procedure to set up the key flexfield for the definition of the System attribute.

Prerequisites

None

Responsibility

Application Developer

Navigation

Flexfield > Key > Segments

Steps

1. From the Segments form, query the Flexfield title, using "AHL Route."
This validates the existence of the Route Flexfield and returns a record.
2. Add segments to this flexfield by clicking the Segments button and entering records for the System Flexfield Segment.
3. In order to create Value Sets to be used by the Flexfield Segments, click the Value Set button
This opens the Value Sets form.
4. Define a Value Set Name.
5. Choose List of Values in the List Type field.

6. Choose No Security in the Security Type field
7. Choose Char as the Format Type.
8. Choose Independent as the Validation Type.
9. Update Flexfield Segments with the Value Sets you defined.
10. To create Values for the Value Sets, navigate to Flexfield > Key > Values.
11. Query the name of the Value Set that you defined in Step 4 and click Find.
12. In the Segment Values form, you can add values to the Value Set in the Values Effective tab.
13. When you have added the appropriate values, save your work.

This process enables the Route Management functionality to work properly. For detailed explanation on setting up flexfields, see the *Oracle Applications Flexfields Guide*.

Set Up Approval Workflow

If you plan to use an approval process to maintain your maintenance programs, activities and routes, you can set up an approval workflow. The Preventive Maintenance module has a seeded workflow that addresses the objects mentioned above, but you can also create your own approval workflows. In these cases, any CMRO object can have a specific approval rule with its approval workflow and list of approvers.

CMRO also has a pre-defined default approval rule that is used if the approval profile options are activated, but no object-specific rule is defined.

In order to use an approval process in Preventive Maintenance, the following profile options must be set to Yes:

- AHL: Enable approval workflow for Routes
- AHL: Enable approval workflow for Maintenance Requirement

If you enable these workflows you must also set the following system profile options:

- AHL: Workflow Loop Counter
- AHL: Workflow Timeout Minutes

The Loop Counter profiles requires a numeric value and determines how many times a notification is resent if the user does not respond. The Timeout Minutes profile option requires a numeric value and determines how long the system should wait before it times out a workflow in case the progress is halted.

The following sections detail CMRO setups that are applicable to Preventive Maintenance:

- Set Up Default Approval Role, page 6- 6
- Set Up Object Oriented Approval Roles, page 6- 6
- Associate Approval Employees to Roles, page 6- 7
- Adjust Default Approval Rule in CMRO, page 6- 7

In order to use the approval process in the Preventive Maintenance module, you must designate approvers within your organization, create approval roles and assign the roles to the appropriate approval employee.

Employees designated as approvers must be set up in Oracle Human Resources and they must be associated with a particular application user, which you set up in Oracle Applications. For details on setting up employees, see the *Oracle Human Resources Implementation Guide*.

Note: If you want to notify the approval user using email, you must set up the email address for the employee.

Once you create approvers, you can optionally create approval roles. CMRO provides a seeded default approval rule that is used when no object-specific approval rule has been set up. The default rule has one approval hierarchy with a seeded role defined.

Set Up Default Approval Role

To set up the role for the default approval rule, follow the steps in this section.

Prerequisites

None

Responsibility

CRM Resource Manager

Navigation

Setup > Role Types

Steps

1. From the Role Types form, query JTF_RS_ROLE_TYPE.
2. Create a role type code for the default approval role.
3. Save your work.
4. Navigate to Setup > Role and create a role with the code AHL_DEFAULT_APPROVER.
The code must be exactly as state above or the default rule will not recognize the role.
5. Associate the default approval role type code to this role.
6. Optionally, you can create additional roles if you have more than one level of approvers.

Note: For CMRO approval, only one user can be associated with a role. So you must create as many roles as you have approvers.

Set Up Object Oriented Approval Roles

If you have specific approval rules for different CMRO objects, use the following procedure to set them up.

Steps

1. Navigate to Setup > Role Types
2. From the Role Types form, query JTF_RS_ROLE_TYPE.

3. Create a role type code for the general approval role.
You can create multiple role type codes for grouping the roles together, but you must create at least one.
4. Save your work.
5. Navigate to Setup > Role and create a role for each approver in your organization.
6. Associate the appropriate approval role type code to each of the roles.
7. Save your work.

Associate Approval Employees to Roles

Use the following procedure to map approval employees to roles. Although each role must only have one employee associated with it, you can associate a single employee to multiple roles.

Prerequisites

Roles and employees must be set up.

Responsibility

CRM Resource Manager

Navigation

Maintain Resources > Import Resources

Steps

1. From the Selection Criterion form, select an approval employee.
2. Click Search.
3. In the results spreadsheet, select the employee and click Create Resource.
The Default Values form appears.
4. Choose the role you want to assign to the approver in the Role field from the list of values.
5. Click OK.
6. Click Save Resource.
7. If you want to assign this approver to additional roles, click Details.
8. In the Roles tab, add as many roles as you want to assign to this approver.
9. Click Save.

Adjust Default Approval Rule in CMRO

If you want to adjust the default approval rule

Prerequisites

None.

Responsibility

Preventive Maintenance

Navigation

Administration > Approvals

Steps

1. In the Search Approval Rules window, enter 'Default AHL Rule' in the Default Rule Name field and click Go.
2. In the search results spreadsheet, click the hypertext name 'Default AHL Rule.'
This opens the Update Approval Rule window.
3. In the Approver Details section, add any roles or users in the sequence you want the objects to be approved.
The first role is seeded and you can either change the hierarchy or delete this seeded role if necessary.
4. Click Apply.

Guidelines

Do not add any values to the Operating Unit attribute or the Priority attribute. These features are not supported by CMRO. Also, if you set the Status of the default rule to Obsolete you cannot return this rule to any other status.

Define Object Specific Approval Rules

You can optionally define specific approval rules with a specific hierarchy for the different CMRO objects. Follow this procedure, to create these rules.

Prerequisites

None.

Responsibility

Preventive Maintenance

Navigation

Administration > Approvals

Steps

1. From the Search Approval Rules window, click Create.
The Create Approval Rule window opens.
2. In the Approval Rule Info section, choose either Maintenance Request or Route Management in the Create Approval Rules For field.
3. Choose Concept as the Approval Type.
4. Select a Status of Active.
5. Enter an Approval Rule Name.

6. Click Apply.
The Update Approval Rule window appears.
7. In the Approver Details section, add roles or users in the sequence you want the objects to be approved.
8. Click Apply.
9. To map the CMRO objects to the Approval workflow, navigate to the Workflow tab.
The Workflow Process Mapping window is displayed.
10. In the Object field, choose the object you want to map.
11. In the Process Name field, choose the approval workflow that you want to map to the object.
The CMRO default workflow is called ASO Generic Approval Process.
12. Repeat steps 10-11 for each object-workflow mapping you want to create.

Guidelines

If you want to use the same approval workflow for all your CMRO objects, leave the Object field blank.

Other CMRO Setup Considerations

In order to use the Preventive Maintenance module for Field Service, keep in mind the following:

Fleet Maintenance Program Setup

CMRO's Fleet Maintenance Program can be used with no additional setup steps. Optionally, you can define the Category attribute for the Maintenance Program or Activity. All other lookups for Fleet Maintenance are either pre-seeded or are not available for Preventive Maintenance.

Unit Maintenance Plan (UMP) Setup

In the Unit Maintenance Plan setup, the only additional consideration is whether or not you want to set the profile option to enable the planning window.

The definition of the planning window in UMP specifies how far out upcoming preventive maintenance requirements will be calculated. If the following profile options are not set, calculation will occur only up to the current day.

- AHL: Maximum Planning Window (Number) - This profile uses a numeric value that defines the days, weeks, months, or years to be considered for calculation.
- AHL: Maximum Planning Window (UOM) - This profiles sets the unit of measure used in the calculation. Seeded values include days, weeks, months, or years.

There is a functional setup of the forecast if you do not use the contracts for your maintenance schedule. Defining forecasts is detailed in the *CMRO User's Guide*. To validate the correct installation of the UMP, check whether or not the Unit Effectivity build routine has been installed.

UMP requires no preventive maintenance specific setups in the Lookups.

To calculate the Unit Maintenance Plan, you must run the Building Unit Effectivity concurrent program, which is pre-seeded and can be set up to run at intervals or on demand.

Implementation Task Sequence for Preventive Maintenance

To ensure a successful implementation, the following task sequence should be followed. Each of these tasks contains Preventive Maintenance-specific steps, which are detailed in the documentation:

Preventive Maintenance Implementation Task Sequence

Step	Required	Step Title
1	Yes	Create Users and Add Preventive Maintenance Responsibilities, <i>ERROR: linkend not in current document and TARGET_BOOK_TITLE missing</i>
2	Yes	Create PM Request Type and Map to Responsibilities, page 6-12
3	Yes	Create Task Status of 'Confirm', page 6-12
4	Yes	Create Resource Group of Preventive Maintenance, page 6-12
5	Yes	Create Preventive Maintenance Territory and Assign Resources, page 6-13
6	Yes	Create Task Template Groups and Task Templates, page 6-13
7	Yes	Create Master Items, page 6-14
8	Yes	Create Counter Groups and Counters, page 6-14
9	Yes	Create Preventive Maintenance Programs, page 6-15
10	Yes	Create Coverage Templates for PM Programs, page 6-26
11	Yes	Set Up Service Program/Warranty for Service Contracts, page 6-29
12	Yes	Add Service Program/Warranty Items to Price List, page 6-30

Create Users and Add Preventive Maintenance Responsibilities

In order to implement and use the Preventive Maintenance module you must create a user and assign the user appropriate responsibilities. At a minimum, the following responsibilities need to be assigned to a user:

- Preventive Maintenance

- Preventive Maintenance Reports

For more information on setting up users and assigning responsibilities, see *Setting Up the System Administrator*, page 4- 3 .

Create PM Request Type and Map to Responsibilities

You must create a Request Type of "Preventive Maintenance" and you must map it to the Preventive Maintenance and the Preventive Maintenance Reports responsibilities.

For more information, on setting up request types, see *Confirming Setup of Service Request*, page 4-20.

To map the Preventive Maintenance Request Type to the appropriate responsibilities perform the following steps.

Prerequisites

You must have created a Request Type called "Preventive Maintenance."

Responsibility

Field Service Manager

Navigation

Field Service Setup > Service Requests > Request Types

Steps

1. From the Request Types form, query for the Request Type of "Preventive Maintenance" in the Type field and select it.
2. Click the Map Types button.
The Mapping Service Request Types form opens.
3. Select Preventive Maintenance in the Request Type field.
4. In the Responsibility Field, choose Preventive Maintenance from the list of values.
5. Create a second line and repeat steps 3-4 and choose Preventive Maintenance Reports from the list of values.
6. Save your work.

Create Task Status of 'Confirm'

You must create a Task Status of type "Confirm," which is used if you are setting the profile option "CSF: PM Task Confirm Status" to yes, which will require customer confirmation on the relevant tasks.

For more information on creating a task status, see *Set up Task Status and Transition Rule*, page 4-23 for details.

Create Resource Group of Preventive Maintenance

You must create a resource group called Preventive Maintenance and add those Field Service representatives to it that are supporting your program.

For more information on this process, see *Confirming Set Up of Resources*, page 4- 8 .

Create Preventive Maintenance Territory and Assign Resources

The requirements necessary for assigning/routing of Service Requests in Preventive Maintenance are different than assigning/scheduling Field Service technicians. Furthermore, the users and groups being assigned are also different.

You must create a territory called "Preventive Maintenance" in Oracle Common Application Components with the following properties:

- From the Overview tab enter Preventive Maintenance in the Name field and in the Transaction Types field, choose Service Request.
- From the Transaction Qualifiers tab, in the Name field, choose Request Type from the list of values. In the Qualifier Values block, choose equal to (=) in the Operator Field and choose Preventive Maintenance in the Value From field.
- From the Resources tab, assign all the resources who were assigned to the Preventive Maintenance Resource Group to the territory. Give each of these resources an Access Type of Service Request. Also, add the created Preventive Maintenance group to the territory and give this group resource the Access Type of Service Request.

For more details on setting up territories in Oracle Common Application Components, see the *Oracle Common Application Components Implementation Guide*.

Create Task Template Groups and Task Templates

You need to create task template groups and task templates, which will be used by Preventive Maintenance to initiate service requests in your Field Service operation. Task templates are associated with routes when you are setting up your PM program in CMRO.

First you will create Task Template Groups, where you can pre-define multiple commonly used tasks for different activities, such as service requests, escalations, or tasks. When creating tasks from a task template, you can select the appropriate template group to generate tasks simultaneously.

Use task templates to make task creation simple and quick. Once a template is defined, you can specify resource requirements, create dependencies, and schedule repeating tasks.

For complete details on creating Task Template Groups and Task Templates, see Part IV Task Manager of the *Oracle Common Application Components User's Guide*.

Prerequisites

None.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Field Service Setup > CRM Foundation > Task and Escalation Manager > Tasks > Task Templates

Create Master Items

You must setup master items in Oracle Inventory in order to create PM programs.

One of the methods for scheduling maintenance on an item through a PM program is by associating a counter to the item. Counters allow you to track usage and schedule preventive maintenance based up a pre-determined usage level you associate with the items.

For more details on creating master items for Field Service, see Define Items, *ERROR: linkend not in current document and TARGET_BOOK_TITLE missing* of this manual.

Standard set up is required for items, based upon the procedures detailed in the *Oracle Inventory User Guide*. In order to ensure that master items are accessible in Preventive Maintenance, however, you must also set the following attribute for each master item:

- In the Service tab, select Enabled in the Service Request Enabled field, and check the Serviceable Product check box.
- In the Inventory tab, only items that are serialized are supported in Preventive Maintenance. In the Serial block, select a Generation type (for example, At Receipt) from the list of values, and enter the Starting Number and Starting Prefix for the item.

Note: The Serial fields Starting Prefix and Starting Number are mandatory ONLY when the Generation value equals Predefined. In all other cases, the serial fields are optional.

Prerequisites

None.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Spares Management > Inventory > Items > Master Items

Guidelines

Once you have created master items, you must assign them to the appropriate organization. This function can be done by navigating to Tools > Organization Assignment. Master items can be assigned to multiple organizations.

Refer to the *Oracle Inventory User's Guide* for detailed instructions on how to set up and administer inventory organizations.

Create Counter Groups and Counters

You must create counter groups and counters and associate them to master items in order to enable PM programs to schedule maintenance based upon item usage levels.

Counters are used in setting interval thresholds for PM activities. This is one of the methods for determining the preventive maintenance schedule. When determining an interval threshold for a particular effectivity, only those counters associated with the item will be available in the list of values.

Once you have set up the counter groups and related counters, associate them with the related master items. For details on setting up counter groups and counters, see the *Implementing Counters* section of the *Oracle Service Implementation Guide*. There are no preventive maintenance specific setups required.

Prerequisites

Items must be set up in order to associate them with counter groups.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Field Service Setup > Counters > Define Counters

Create Preventive Maintenance Programs

From the CMRO application, you must create the preventive maintenance programs that you will use in your proactive Field Service operation. These programs will be associated with coverage templates in Oracle Service Contracts, which will be used when you author service contracts that contain a preventive maintenance coverage plan.

In order to effectively set up Preventive Maintenance programs for Field Service, you must follow the general implementation procedures for Oracle Complex Maintenance Repair and Overhaul. For details on implementing this module, see the *Oracle Complex Maintenance, Repair and Overhaul Implementation Guide*.

Preventive Maintenance utilizes CMRO's Unit Maintenance Plan functionality, which during the execution phase of Preventive Maintenance, contains the list of Activities that automatically generate Service Requests. This functionality must be fully implemented in order to execute a Preventive Maintenance program.

Once you have completed the general implementation of CMRO, the following setup steps are required for creating a PM program:

- Set Preventive Maintenance Profile Options, page 6-16
- Create Routes, page 6-17
- Create PM Programs, page 6-18
- Add Effectivities and Interval Thresholds to a Program, page 6-19
- Create Activities, page 6-21
- Associate Routes to Activity, page 6-22
- Add Effectivity and Interval Thresholds to Activities, page 6-23
- Associate Activities to Program, page 6-25

The following sections detail the steps required to set up PM programs. You must consult the *Oracle Complex Maintenance, Repair and Overhaul User's Guide* for complete details on setting up the various components of the PM program.

Prerequisites

Task templates, items, and counters must be set up.

Set Preventive Maintenance Profile Options

There are several profile options that must be set in order to properly configure and run the Preventive Maintenance program.

Initially, you must set the CMRO application to run in Preventive Maintenance mode in order to set up PM programs and activities. This is accomplished by setting the profile option "AHL: Preventive Maintenance Installation" to Yes.

After you set this profile option, when you log into the CMRO application, you will see the Preventive Maintenance mode, which contains UIs specifically designed for setting up PM programs.

You can streamline the PM approval process by setting the following profile options to No:

- AHL: Enable approval workflow for Routes
- AHL: Enable approval workflow for Operations
- AHL: Enable approval workflow for Maintenance Requirement

The default value for this profile option is Yes, which enables the Oracle Workflow process for approvals in CMRO. If you set these profile options to No, then when you create routes, programs, and activities, you can approve them at the time of creation by clicking the Approval button.

The following table contains other PM-related profile options, a description, and a suggested setting:

Profile Options Relating to Preventive Maintenance

Profile Option Name	Descriptions	Value
AHL: Maximum Planning Window (Number)	Used to define the planning window for the UMP	numeric
AHL: Maximum Planning Window (UOM)	Used to define the planning window for the UMP	Date (years, months, etc.)
CSF: PM Incident Status	Defines the status of the generated Service Request	Open
CSF: PM Incident Type	Defines the type of the generated Service Request	Preventive Maintenance
CSF: PM SR Generation Last Run Date	This is a display only profile option that shows that last time this concurrent program was run	Date
CSF: PM Task Confirm Status	Defines the task status of tasks requiring customer confirmation	Confirm

For more information on setting up profile options, see the *Oracle Application User's Guide*.

The following steps detail the process of accessing and setting profile options.

Prerequisites

None

Responsibility

System Administrator

Navigation

Profile > System

Steps

1. At the Profile field of the Find System Profile Values field, perform a search by entering a partial value followed by the wildcard (%) and clicking Find.
2. Select profile option you want to set from the list of profile options displayed.
3. In the Site field, select the value you want to set to the profile option.
4. Save your work.
5. Repeat steps 1-4 for each profile option you want to set.

Create Routes

When creating PM programs with associated activities, you must create routes, which manage the work definition of scheduled and unscheduled maintenance tasks. It allows maintenance organizations to create work cards specifying the zone, work location, supporting process types, skill types, and significant maintenance tasks.

Task Template Groups and Task Templates also are associated with the routes and it is this connection that links service requests in Field Service to the PM programs associated to particular customers. This will be used for task generation at the time of PM Program/Activity execution in Field Service.

For detailed step by step information on setting up Routes, see the Managing Maintenance Routes section of the *Oracle Complex Maintenance, Repair and Overhaul User's Guide*.

Note: The Task Template Group field is not covered in CMRO documentation, as it is specific to the PM module. Select the predefined Task Template Group that you want to associate with the route.

Prerequisites

Task Template Groups and Task Templates must be set up.

Responsibility

Preventive Maintenance

Navigation

Engineering > Route Management > Routes > Create

Guidelines

The mandatory fields for routes are Route Number, Title, Time Span and Start Date. Time Span defines the total duration of a route in hours, however, it is used in CMRO's Visit Work Package module and is not a part of the PM module. Enter any numeric value.

The Task Template Field is required for PM programs.

Once a route is created, if the profile option AHL: Enable Approval WorkFlow for Routes" is null or set to No, you do not need to access Oracle Workflow. You only need to click Approve to approve the route.

Create PM Programs

Preventive Maintenance programs represent the recommended grouping of predefined activities to maintain the product over its life span. These programs, once defined and associated with activities, can be associated with coverage templates in Oracle Service Contracts, which provides the basis for providing coverage in a Preventive Maintenance Program.

A Preventive Maintenance Program is associated to a product and is governed by a set of effectivity rules. Each Activity thus contained in the Preventive Maintenance Program is a collection of tasks and/or task sets. An Activity contains the information on what tasks or task sets need to be performed and when it needs to be performed. The Preventive Maintenance request generating program creates one Service Request for every Activity.

Normally a Preventive Maintenance Program is a manufacturer suggested maintenance requirement. A typical Preventive Maintenance Program is generally defined for a product or group of products and contains the "what", "when," and "how" of the Preventive Maintenance Activities.

For more details on this process, see the Managing Maintenance Requirements section of the *Oracle Complex Maintenance, Repair and Overhaul User's Guide*.

Prerequisites

You should know the Maintenance Requirement Category, Program Type, and the Service Type. These values must exist in the database.

Responsibility

Preventive Maintenance

Navigation

Fleet Management > Overview > Create > Create Maintenance Program

Steps

To set up a Preventive Maintenance Program, follow these required steps:

1. At the Type field, choose Program from the list of options.

This is the point where you differentiate between setting up a Program and setting up an Activity. This is specific to the PM Mode of CMRO and not covered in the CMRO documentation.

2. Enter a name for the program in the Title field.
3. Choose a program Category from the list of values.

This is the user-defined category of the program. A common method of categorization would be based on the equipment type to which the maintenance requirement applies.

4. Enter a Program Type. If you do not know the name of the Program Type, perform a search and select the appropriate Program Type from the list of values.

This is the user-defined maintenance requirement program type. Program Types are used to classify or group PM programs. Program Sub-Types are not used in Preventive Maintenance.

5. Choose a seeded Implement Status from the list of values.

The options are: Mandatory, Optional Implement, or Optional Do Not Implement.

For PM programs, DO NOT choose "Optional Do Not Implement," or the Program will not be picked up by the Unit Maintenance Plan (UMP).

6. Choose whether or not the Program will be Repetitive.

The field values can be Yes or No. The field value indicates whether the maintenance requirement is one time or repetitive. If you choose Yes, then you must choose a value in the Show field.

7. Choose the Whichever Comes value for the PM program.

The possible values are First or Last. This is used to determine whether to choose the first or the last due date calculated based on all the interval thresholds defined for the program. Choosing First would indicate an OR condition, and Last would indicate an AND condition for the interval threshold records.

8. Enter an Effective From Date.

9. Click Apply to save your work.

Guidelines

The side navigation displays links to Effectivities and Relationships, which are used to associate Effectivities and Activities to a PM Program.

Add Effectivities and Interval Thresholds to a Program

Once you create a PM Program, you must add effectivities and interval thresholds to the program.

Effectivities are the specific items -- set up in Oracle Inventory -- which are to be serviced in under this specific Preventive Maintenance Program. These effectivities can also be associated with one or more Activities that are associated with the Program. Please note that ALL effectivities that are to be associated to the activities must be associated to the PM program.

The interval thresholds determine the total duration of the program as it relates to the specific effectivity it is associated with. The interval threshold for the program's duration can be represented in terms of calendar date, or by usage. For example, if a program is set up to be effective for one year for all the effectivities associated with it, you must set that value for each effectivity on the program. Similarly, if the interval threshold is based upon usage, you can set the usage limits and select the appropriate counters.

Prerequisites

The PM Program must be set up. Master Items must also be set up in Oracle Inventory. Counters must also be set up.

Responsibility

Preventive Maintenance

Navigation

Fleet Management > Overview > Maintenance Program > Search Maintenance Program

Steps

To add effectivities and interval thresholds to an existing Preventive Maintenance Program, follow these steps:

1. Enter some search criteria for the Preventive Maintenance Program you want to access and click Go.

The Preventive Maintenance Program you searched for will appear in the Maintenance Requirements Results table. You can either click the hypertext title of the program to navigate to the Update form, or you can click the Effectivity icon to navigate directly to the Effectivity form. (If you go to the Update form, click the Effectivities hypertext link on the side navigation bar.)

2. Click the Add More Rows button to create some blank rows in the Effectivities List table.
3. In the Effectivity field, enter a text name.
4. Enter a % character (or enter a partial value if you know the item number) in the Item Number field and click the Flashlight icon to search for the Item you want to represent the effectivity.
5. Select the item from the list of values.
6. Click Apply to save the effectivity to the program.

Once the effectivity is saved, the Interval Threshold icon appears to the right of the Item Number.

7. To add the Interval Threshold for the effectivity, click the icon.

The Update Interval Threshold form appears.

8. If you are using a calendar date-based threshold, enter a numeric value in the first Program Duration field and select the date interval you are using in the second field.

Possible values in the second field are Days, Weeks, Months, and Years. So, for example, if you want your program to be effective for eight months, enter 8 in the first field and choose Months in the second.

9. If you are adding a usage-based threshold interval (these are not mutually exclusive and you can have both), then click the Add More Rows button.

The value that you want the program to begin defaults to 0 in the Start field.

10. Enter the value that you want the program to End in the Stop field.

11. Choose the Counter that you want to associate with this interval threshold from the list of values.

The UOM defaults from the Counter.

12. Click Apply to save your work
13. Repeat steps 3-12 for each effectivity and interval threshold you want to add to the program.

Guidelines

Be sure to add every effectivity to the program that you want to add to the activities associated with this program. All activity effectivities must exist as program effectivities.

Create Activities

A Preventive Maintenance Activity is the work definition or work scope per Preventive Maintenance service request. The work definition is in terms of tasks and/or task sets. Generally, a Preventive Maintenance visit is initiated by an Activity defined within the Preventive Maintenance Program, based on the predefined trigger rules, such as usage or time elapsed. Preventive Maintenance Activities also contain the fulfillment requirements such as parts, tools and labor. One Activity will result in creation of one Service Request.

When you set up activities you navigate to the same form where you set up the Preventive Maintenance Programs. One or more PM Activity is associated with a PM Program and, as such, the Activity always reflects the status of "child" to a "parent" PM Program. This is relevant when you are creating the association between the two.

Once you create an Activity, you can associated Routes, Effectivities, and Threshold Intervals to it. These associations are what determines the terms and duration of coverage of the activities that you are including in your PM program.

Prerequisites

You should know the Maintenance Requirement Category, Program Type, and the Service Type. These values must exist in the database.

Responsibility

Preventive Maintenance

Navigation

Fleet Management > Overview > Create > Create Maintenance Program

Steps

To set up a Preventive Maintenance Activity, follow these required steps:

1. At the Type field, choose Activity from the list of options.
This is the point where you differentiate between setting up a Program and setting up an Activity. This is specific to the PM Mode of CMRO and not covered in the CMRO documentation.
2. Enter a name for the activity in the Title field.
3. Choose an activity Category from the list of values.

This is the user-defined category of the program. A common method of categorization would be based on the equipment type to which the maintenance requirement applies.

4. Enter a Program Type. If you do not know the name of the Program Type, perform a search and select the appropriate Program Type from the list of values.

5. Choose a seeded Implement Status from the list of values.

The options are: Mandatory, Optional Implement, or Optional Do Not Implement.

For PM activities, DO NOT choose "Optional Do Not Implement," or the Activity will not be picked up by the Unit Maintenance Plan (UMP).

6. Choose whether or not the Activity will be Repetitive.

The field values can be Yes or No. The field value indicates whether the maintenance requirement is one time or repetitive. If you choose Yes, then you must choose a value in the Show field.

7. Choose the Whichever Comes value for the PM program.

The possible values are First or Last. This is used to determine whether to choose the first or the last due date calculated based on all the interval thresholds defined for the program. Choosing First would indicate an OR condition, and Last would indicate an AND condition for the interval threshold records.

8. Enter an Effective From Date.

9. Click Apply to save your work.

Associate Routes to Activity

Preventive Maintenance programs are linked to Field Service through the tasks template groups and task templates that are attached to routes. In order to complete this linkage, you must associate the routes to PM activities in order to make them available to the program.

Each activity in a PM program generates a service request in Field Service, the parameters of which are determined by which task templates are associated with it.

For more details on this process, see the *Complex Maintenance, Repair and Overhaul User's Guide*.

Prerequisites

A Preventive Maintenance Activity must be set up and Routes must be set up.

Responsibility

Preventive Maintenance

Navigation

Fleet Management > Overview > Maintenance Program > Search Maintenance Program

Steps

To add routes to an existing Preventive Maintenance Activity, follow these steps:

1. Enter some search criteria for the Preventive Maintenance Activity you want to access and click Go.

The Preventive Maintenance Activity you searched for will appear in the Maintenance Requirements Results table. Click the hypertext title of the program to navigate to the Update form.

2. On the left-hand side navigation, click the Routes hypertext link.

The Update Attached Routes form appears.

3. In the Routes List table, click Add More Rows to create blank rows.
4. In the Route Number field, enter a partial value or the % character and click the Flashlight icon to search for the Route you want to attach to the Activity.
5. Select the Route Number from the list of values.

The Route Description, Product Type, Operator, and Revision Number default from the Route Number.

6. Click Apply to save your work.

Add Effectivity and Interval Thresholds to Activities

Once you create a PM Activity, you must add effectivities and interval thresholds to it.

Effectivities are the specific items -- set up in Oracle Inventory -- which are to be serviced when a specific Preventive Maintenance Activity is undertaken by a Field Service representative. Please note that ALL effectivities that are to be associated to the activities must be associated to the PM program that the activity is in relationship with.

With activities, the interval thresholds differ from those attached to the program in that they determine when a service activity is to take place. Whereas interval thresholds for programs set the maximum time that the program will be in effect, the activity's interval threshold determines the schedule for the preventive maintenance.

The number of interval and threshold values defined for an activity can be unlimited, and maintenance personnel can select whether the combined intervals will come due at "whichever occurs first" or "whichever occurs last". The interval thresholds are directly related to one of the effectivities of an activity, allowing an activity to have several useful interval threshold sets, depending on the effectivity.

The interval threshold for the activity can be represented in terms of calendar date, or by usage or both. For example, if a activity is set up to provide service for a copy machine every six months, or every 10,000 copies, you must set the interval threshold to account for both parameters.

For detailed information on setting up interval thresholds, see the Managing Maintenance Requirements section of the *Complex Maintenance, Repair and Overhaul User's Guide*.

Prerequisites

The PM Activity must be set up. Master Items must also be set up in Oracle Inventory. Counters must also be set up.

Responsibility

Preventive Maintenance

Navigation

Fleet Management > Overview > Maintenance Program > Search Maintenance Program

Steps

To add effectivities and interval thresholds to an existing Preventive Maintenance Activity, follow these steps:

1. Enter some search criteria for the Preventive Maintenance Activity you want to access and click Go.

The Preventive Maintenance Activity you searched for will appear in the Maintenance Requirements Results table. You can either click the hypertext title of the program to navigate to the Update form, or you can click the Effectivity icon to navigate directly to the Effectivity form. (If you go to the Update form, click the Effectivities hypertext link on the side navigation bar.)

2. Click the Add More Rows button to create some blank rows in the Effectivities List table.
3. In the Effectivity field, enter a text name.
4. Enter a % character (or enter a partial value if you know the item number) in the Item Number field and click the Flashlight icon to search for the Item you want to represent the effectivity.
5. Select the item from the list of values.
6. Click Apply to save the effectivity to the activity.

Once the effectivity is saved, the Interval Threshold icon appears to the right of the Item Number.

7. To add the Interval Threshold for the effectivity, click the icon.

The Update Interval Threshold form appears.

8. Click the Add More Rows button to create blank rows in the Interval Threshold List table.
9. Fill out the appropriate fields in the row to set your interval threshold.

The available fields and definitions are as follows:

- **Start Date** - This is the start date of the range after which the interval specified is valid. This date begins the range for the interval in relation to the associated counter.
- **Stop Date** - This is the stop date of the range before which the interval specified is valid. This date begins the range for the interval in relation to the associated counter.
- **Start** - This is the start counter value of the range from which the interval specified is valid. This date begins the range for the interval in relation to the associated counter.
- **Interval** - The interval value for repetitive PM Activity, and drop-dead counter values for one time activities. When used with one time activities, interval will be a count down of the associated counter. When used with repetitive activities, interval will represent the frequency of occurrence according to the associated counter.
- **Stop** - This is the stop counter value of the range before which the interval specified is valid. This date ends the range for the interval in relation to the associated counter.

- **Tolerance Before** - The number of counter units of measure that is acceptable for activity accomplishment before the specified interval. This value aids in planning maintenance jobs.
 - **Tolerance After** - The number of counter units of measure that is permissible for activity accomplishment before the specified interval. This value aids in planning maintenance jobs.
 - **Counter Name** - The associated counter identifier. This identifier is used to set all numerical values in the row, including Interval, Tolerances, Start and Stop.
 - **UOM** - The Unit of Measure as per the associated counter. This value is defaulted when you select the counter.
10. Click Apply to save your work.
 11. Repeat steps 3-10 for each effectivity and interval threshold you want to add to the program.

Guidelines

Be sure to that you only add effectivities to the activity that you already associated with the program.

Associate Activities to Program

In order for a Preventive Maintenance Program to have usefulness, you must associate activities to the program. You can associate as many activities to the program as necessary for your business needs.

Typically, a PM Program can be thought of as a collection of related activities. For example, if you have a Program called "Commercial Truck Maintenance," you might relate several activities to that program that all deal with different maintenance issues for commercial trucks. You might have one preventive maintenance activity to track and service tires, another to service the engine maintenance, another to deal with fluid replacement, and so on.

Activities and Programs can be associated with one another from either the Program UI, or the Activity UI. The key to the association is that the PM Program is always the "parent" in the relationship and the Activity is always the "child."

Prerequisites

The PM Program and activities must be set up.

Responsibility

Preventive Maintenance

Navigation

Fleet Management > Overview > Maintenance Program > Search Maintenance Program

Steps

To associate activities to programs, follow these steps:

1. Enter some search criteria for the Preventive Maintenance Program you want to access and click Go.

The Preventive Maintenance Program you searched for will appear in the Maintenance Requirements Results table. You can either click the hypertext title of the program to navigate to the Update form, or you can click the Relationships icon to navigate directly to the Maintenance Requirements Relationships form. (If you go to the Update form, click the Relationships hypertext link on the side navigation bar.)

2. Click Add More Rows to create some blank rows in the Maintenance Requirements List table.
3. In the Title field, search for the Activity you want to associate with the program and select it from the list of values.
4. In the Relationship Type field, choose Child if you are associating an activity to a program.

Relevant information about the activity is defaulted upon selection, including Type, Program Type, Status, and so on.

You can also associate a program to an activity using this same process, but if you do so, you must choose Parent in this field.

5. Repeat steps 3-4 for each activity you want to associate with the program.
6. Click Apply to save your work.

Guidelines

In order to associate programs and activities to a coverage template, both need to be approved.

Once programs and activities are, if the profile options "AHL: Enable Approval WorkFlow for Maintenance Programs" and "AHL: Enable Approval WorkFlow for Operations" are null or set to No, you do not need to access Oracle Workflow. You only need to click Approve to approve them.

Create Coverage Templates for PM Programs

A Preventive Maintenance Program can be associated with a Coverage Template in Service Contracts. "Confirmation Required" can be defined at this point. Stream levels can be also set up. The coverage template, with an associated PM program, also may be linked to a service item in Oracle Inventory module.

A PM Program consists of pre-defined activities, which you set up in CMRO. A user can associate a Preventive Maintenance Program to a coverage template by picking up a Preventive Maintenance Program from a list of values. The "Description" field is populated automatically from the PM Program source, once a program name is chosen and can not be edited. The "Schedule" button is enabled only when a PM program is associated to the coverage template. By clicking the "Schedule" button, the Preventive Maintenance Schedule form is invoked, which allows users to schedule coverage streams and to enter or modify the information related to the selected PM program.

Note: Only those PM Programs and Activities that have been approved and carry a status of "Complete" can be associated with coverage templates.

For an instantiated coverage, if the status of the contract is not "Entered", the user cannot change or select another PM program. If the status of the contract is "Entered" when

another PM Program is chosen, the originally defined stream levels are associated with the new PM Program.

Coverage templates are used when you are creating a Service Program/Warranty which details the coverage and pricing of a particular preventive maintenance program. An approved Service Program/Warranty is selected when you are creating a Service Contract.

For step-by-step details on creating Coverage Templates, see the *Oracle Service Contracts Concepts and Procedures* guide.

The following topic related to the Preventive Maintenance Schedule is covered in this section:

- Setting Up Preventive Maintenance Schedule, page 6-27

Prerequisites

Items and PM programs must be set up.

Other prerequisites include: Coverage type lookup codes in Service Contracts and price lists and time zone in Order Management. In Customer Support you must set up the following: service request severity, business processes, resource types, resources, billing types and billing rates.

Responsibility

Service Contracts Manager

Navigation

Coverage Templates

Guidelines

When creating a coverage template for Preventive Maintenance, choose a Preventive Maintenance Program Name from the list of values. The Program Description field will automatically populate.

Once you have associated a Preventive Maintenance program to the coverage template, the Schedule button is enabled. Click this button to open the Preventive Maintenance Schedule form to set coverage schedules and to view or modify the other information related to the selected Preventive Maintenance program.

Setting Up Preventive Maintenance Schedule

Once you choose a Preventive Maintenance Program for the coverage template, you can navigate to the Preventive Maintenance Schedule form, which provides access to details about the program and related activities and also allows you to set up stream levels.

There are two tabs within this form:

Program Schedule

The Program Schedule tab displays the Program Name and Program Description and the Coverage Effectivity defaults to the current date. Click the View Program button to access the details of the PM Program, which you set up in the CMRO Preventive Maintenance Mode. See Create Preventive Maintenance Programs, page 6-15 for additional details.

When defining a coverage template, only the following fields within the Stream Levels block are enabled and made navigable: Sequence Number, Periods, UOM/Period, UOM, Offset Period, and Offset UOM. The Auto Schedule checkbox is automatically selected and the Schedule block is grayed out during template creation.

Setting up Stream Levels allow you to determine the coverage cycle you want to associate with the PM Program and activities you have associated with this Service Contract coverage template. A coverage schedule may have many coverage streams and each stream level is a set of coverage periods.

Note: If the coverage set on the template is different from the default schedule dictated by the Preventive Maintenance Program, it takes precedence over the default schedule.

Activity Schedule

The Activity Schedule tab displays the Activities that are associated with the PM Program that you selected for this coverage template. Click the View Activity button to access the details of the Activity, which you set up in the CMRO Preventive Maintenance Mode. See Create Preventive Maintenance Programs, page 6-15 for additional details.

You can manually fill in the Stream Levels for each activity for the same enabled fields as in the Program Schedule, or you can default the values from the Program Schedule by clicking the Populate From Program button.

Note: If the Activity Schedule is different from the Program Schedule, it takes precedence over the Program Schedule.

Prerequisites

Items and PM programs must be set up.

Responsibility

Service Contracts Manager

Navigation

Coverage Templates > Schedule (B) > Preventive Maintenance Schedule

Steps

To set up Stream Levels for PM Programs, follow these steps:

1. In the Stream Levels block, enter a numeric Sequence Number in the Seq No field.
This is the sequence in which you wish to have the coverage stream levels instantiated.
2. Enter a numeric value for the number of Periods you want included in the Stream Level.
For example, if you want to set up a stream level of "coverage for 1 period of 15 days," the value in this field should be "1."
3. Enter the number of periods to be included in this stream level in the Periods/UOM field
In the previous example, the value in this field should be "15."

4. Select the Unit of Measure for the period in the UOM field from the list of values.
In the example, you would select "Days" as the UOM value.
5. Optionally, you can enter values for Offset Period and Offset UOM if you want the coverage to start at some point after the Coverage Effectivity date.

If you enter a value in either of these fields, you must enter values in both. Offset Period can be any numeric value you choose and will relate directly to the Offset UOM you choose. For example, if you choose "8" for the Offset Period, and "Weeks" for the Offset UOM, then the coverage will begin eight weeks after the Coverage Effectivity date.
6. Repeat steps 1-5 for each Stream Level you want to associate to the Program for this coverage template.
7. If you want to add Stream Levels to the Activity Schedule, click the Activity Schedule tab.
8. To default the values from the Program tab, click the Populate From Program button.

You can also manually enter values for Stream Levels for each Activity. You may want to set up coverage cycles that differ from one activity to the next.
9. Click OK to save the values and return to the Coverage Template form.

Set Up Service Program/Warranty for Service Contracts

A Preventive Maintenance service program or warranty is used to instantiate a particular PM program when you author a service contract. When you create the service program/warranty you attach it to the appropriate coverage template. Once created in Oracle Inventory, you create a price list for this item, which defaults down to the contract.

A Service Programs/Warranty is set up as a master item and is associated with a coverage template.

At a minimum, set the following attributes for the service program/warranty:

- From the Main tab, select Service Program/Warranty in the Item Type field.
- From the Order Management tab, select Customer Ordered and OE transactable checkboxes.
- From the Invoicing tab, select the Invoiceable Item checkbox.
- From the Service Tab, select Service from the list of values in the Contract Item Type. In the Contract block, select a Duration Period and enter a Duration to establish the length of the contract coverage. In the Template field, choose the Coverage Template you want to associate with the service program/warranty. In the Service Request Enabled field, select Enabled.

For detailed step-by-step instructions on setting up master items, see the *Oracle Inventory User's Guide*.

Prerequisites

Coverage templates must be set up

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Spares Management > Inventory > Items > Master Item

Add Service Program/Warranty Items to Price List

Once you have created all Service Program/Warranty entries in Oracle Inventory that you will need to author preventive maintenance service contracts, you must create a price list entry for each Service Program/Warranty.

At a minimum, you must enter the following information for each entry on the List Lines tab of the Price Lists page:

- Select Item in the Product Context field
- Select Item Number in the Product Attribute field
- Choose the relevant Service Program/Warranty in the Product Value field
- Enter the price of the Service Program in the Value field.

For details on creating price lists and adding items to the list, see Setup of Price Lists, page 4-17.

Prerequisites

Service Program/Warranty items must be set up in Oracle Inventory.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Spares Management > Order Management Pricing > Price Lists > Price List Setup

Profile Options

This appendix covers the following topics:

- Overview of Profile Options

Overview of Profile Options

The following profile options are unique to Oracle Field Service and include profile options for the Spares Management and Preventive Maintenance modules.

Profile options required for enabling Oracle Advanced scheduler are covered in the *Oracle Advanced Scheduler Implementation Guide*.

Note: The profile options numbered 1 to 4 regarding task statuses have seeded values. There is no immediate need to set these up differently. When a new status flow is implemented these profile options need to be changed to match the change in state transitions.

Prerequisites

None

Responsibility

System Administrator

Navigation

Profile > System

Steps

1. After you navigate to the Find System Profile window, check Site.
2. At the Profile field enter CSF%.
3. Click Find.

You can set the profile options described in the following table in any sequence. All profile options have been provided with default values.

1. After you set each profile option, save your work.

Profile Options and Descriptions

Step	Profile Option	Description
1	CSF: Address of the Database machine	Enter the address of the hosting database machine.
2	CSF: Address of the Map server	Enter the address of the MapXtreme server.
3	CSF: Allow overlapping labor lines	Allows creation of overlapping labor lines on Field Service/Laptop Classic and Field Service/Palm™ Devices.
4	CSF:Business Process	<p>This profile sets the order in which tasks are scheduled. The possible values are:</p> <ul style="list-style-type: none">1 - One task at a time in a fixed order2 - One task at a time but in any order3 - All open tasks in any order
5	CSF: Capture Travel Information	<p>This profile option sets the specific type of travel information to capture through the Field Service Technician's Portal when a technician is performing task-related work at a customer site. Capturing travel information is optional functionality.</p> <p>Possible values include: None, Time, Time and Distance, and Distance.</p>

Step	Profile Option	Description
6	CSF: ConflictRule_L	<p>Profile option for the Field Service/Laptop Classic application to handle updates to the CRM database from the mobile devices. Options are:</p> <ul style="list-style-type: none"> <li data-bbox="1211 453 1471 604">• Client wins. No timestamp checking is done, mobile record always overwrite record in CRM database. <li data-bbox="1211 632 1471 1104">• Timestamp. When the last update date of the CRM record is greater then the last sync date (date when the mobile device originally got the record), the mobile record won't be applied to CRM. When the last update date of the CRM record is smaller or equal to the last sync date the mobile record will be applied to CRM.

Step	Profile Option	Description
7	CSF: ConflictRule_M	<p>Profile option for the Field Service/Palm Devices application to handle updates to the CRM database from the mobile devices. Options are:</p> <ul style="list-style-type: none"> • Client wins. No timestamp checking is done, mobile record always overwrite record in CRM database. • Timestamp. When the last update date of the CRM record is greater than the last sync date (date when the mobile device originally got the record), the mobile record won't be applied to CRM. When the last update date of the CRM record is smaller or equal to the last sync date the mobile record will be applied to CRM.
8	CSF: Conform to schedule	To define whether the service representative must conform to the schedule or is allowed to do the tasks in any sequence on his or her Laptop or Palm device.
9	CSF: Database port to receive data.	This profile sets the port to receive data. This is a numeric value.
10	CSF: Default New tasks status	Default status that is assigned to a new task.
11	CSF: Default "In planning" task status	Note: Default status that is assigned to tasks that are set to "In planning" in the Field Service Dispatch Center.
12	CSF: Default Assigned task status	Default status that is assigned to tasks that are set to "Assigned" in the Field Service Dispatch Center.

Step	Profile Option	Description
13	CSF: Default Cancelled tasks status	Default status that is assigned to tasks that are set to "Canceled" in the Field Service Dispatch Center.
14	CSF: Default Query	Select what query is defaulted in the Dispatch Center to View Tasks by in the task list.
15	CSF: Default Spares Availability	Default likelihood value of spare parts availability used for automatic scheduling.
16	CSF: Default Status Responsibility	Choose a default responsibility to define which state transition rule is used. This profile option is set for the users from the mobile applications.
17	CSF: Default travel distance for Time Distance Server	The value is used as the default travel distance between two tasks.
18	CSF: Default travel duration for Time Distance Server	The value is used as the default travel duration between two tasks.
19	CSF: Default Debrief Service Activity Code	You can set a default Service Activity Code to be displayed in Debrief from this profile option. Default is null.
20	CSF: Default Scheduling Type	This is the scheduling type to be used by default for scheduling service requests. Possible values are: Window to Promise, Schedule for Resource, or Intelligent.
21	CSF: Default Scheduling Scenario	This profile determines the default scenario to use for scheduling service requests.
22	CSF: Default Debrief Business Process	This profile options sets the default business process that you want associated with the service activity code displayed in the Debrief screen.

Step	Profile Option	Description
23	CSF: Default Working task status	This profile sets the default task status to display when an task is being worked on. (For example, Working, In Progress, Planning, etc.)
24	CSF: Default Blocked working task status	This is the default task status for those tasks that are in a state of 'Blocked working.' (For example, Working, In Progress, Planning, etc.)
25	CSF: Default Task Blocked 'In Planning' Status	This is the default task status for those tasks that are in a state of 'Blocked In Planning.'
26	CSF: Default Service History Display	This determines which query is executed relating to service history. Values include: Customer, Site, Item, and Instance.
27	CSF: Default Source for Contact	This sets the default source for the contact details. The possible values are Service Request or Task.
28	CSF: Default Task Blocked Assigned Status	This is the default task status for those tasks in a state of 'Blocked Assigned.' Choose from the list of values.
29	CSF: Display shifts in scheduling results Gantt chart	This profile controls if shift information is queried and displayed in the Gantt chart with scheduling results. Values are Yes/No.
30	CSF: History_L	Define the number of days for data to remain on Field Service/Laptop Classic without editing it. When the number of days has expired it is removed from the Field Service/Laptop by the CRM Gateway for Mobile Devices.
31	CSF: History_M	Define the number of days for data to remain on Field Service/Palm Devices without editing it. When the number of days has expired it is removed from the Field Service/Palm Devices by the CRM Gateway for Mobile Devices.

Step	Profile Option	Description
32	CSF: InstalledBaseProduct_L	<p>Define what information from the Install Base you want to send to Field Service/Laptop Classic:</p> <ul style="list-style-type: none"> • 1 for just the product related to the Service Request. • 2 for the product related to the Service Request and the parent products. • 3 for the product related to the Service Request, the children, and parent products.
33	CSF: InstalledBaseProduct_M	<p>Define what information from the Install Base you want to send to Field Service/Palm Devices:</p> <ul style="list-style-type: none"> • 1 for just the product related to the Service Request. • 2 for the product related to the Service Request and the parent products.
34	CSF: Inventory Organization ID	You can set the default Inventory Organization ID by selecting one from the list of values.
35	CSF: Laptop Item Organization	All system items from the inventory organization are always replicated to the mobile client of Field Service/Laptop Classic.
36	CSF: Location Finder Installed	Value set to check if the location finder is installed. It is launched when a location for a task is missing, see profile option CSR: Create location.
37	CSF: Map Move Factor (between 0.1 and 1)	Define how much you want the Field Service Map to move when using the navigation left/right and up/down arrows. Choose a value between 0.1 and 1.0 (centimeters).

Step	Profile Option	Description
38	CSF: Material Transfer History	Define the number of days to replicate the history of specifically material transfers to the Field Service/Laptop Classic application, if beyond date set they are not replicated anymore.
39	CSF: Palm Item Organization	All system items from the inventory organization are always replicated to the mobile client
40	CSF: Port of the Map Server	TCP/IP port for the Map server.
41	CSF:PM Incident Status	This determines the default Preventive Maintenance service request status. Choose from a list of values.
42	CSF:PM Incident Type	This determines the default Preventive Maintenance service request type. Choose from a list of values.
43	CSF:PM Task Confirm Status	This is the Preventive Maintenance profile to hold the task confirm status. Choose from the list of values. Suggested value: Confirm.
44	CSF: Task Signal Color	This allows you to enable a "signal" color to identify incorrect or incomplete data that's displayed on the Plan Board or Gantt of the Dispatch Center. Colors are listed as RGB values.
45	CSF:PM SR Generation Last Run Date	This profile displays the Preventive Maintenance SR Generation last run date.
46	CSF: Replicate_Categories_L	Define if you want to replicate item categories to Field Service/Laptop: <ul style="list-style-type: none"> • 1 is Yes. • 2 is No.

Step	Profile Option	Description
47	CSF: Resource progress delay margin	Add a value for the period of time, minutes, a resource is allowed to be late in his trip before it is escalated. This affects the instant shown status of the resources on the Field Service Map.
48	CSF: Return Reason	Used to default a Return Reason on the Field Service Report window for a material line created. Select which one should be defaulted from the list of values. It's a mandatory field for Order Management. Especially use this profile option when working with one of the mobile applications.
49	CSF: Service History Time Frame Number	This profile, combines with CSF: Service History Time Frame UOM to determine the default amount of time for which you want to retrieve the service history. For example, if you set 30 as the number and Days as the UOM, then the service history for the past 30 days is retrieved.
50	CSF: Service History Time Frame UOM	This profile, combines with CSF: Service History Time Frame Number to determine the default amount of time for which you want to retrieve the service history. For example, if you set 30 as the number and Days as the UOM, then the service history for the past 30 days is retrieved.
51	CSF: Skill Level Match	This profile options sets the comparison type to be used to compare the skill level of a resource and a task. Possible values are: <ul style="list-style-type: none"> • Equal to • Equal to or smaller than • Equal to or greater than

Step	Profile Option	Description
52	CSF: Skip Scheduling Preferences	Enabling this profile options enables you to skip the scheduling preferences screen. Possible values are Yes/No.
53	CSF: SID of the database	Enter the database name for the MapInfo map.
54	CSF: Time distance server cache radius	Leave empty.
55	CSF: Time distance server calculation factor	If the factor is set the Time Distance Server calculates travel distance and duration faster but less accurate.
56	CSF: The unit of measure for hours	The setting of the unit of measure for hours must be entered and correspond with the MTL_UNITS_OF MEASURE. Default setting is HR (hours).
57	CSF: The unit of measure for minutes	The setting of the unit of measure for minutes must be entered and correspond with the MTL_UNITS_OF MEASURE. Default setting is MIN (minutes).
58	CSF: Update planned/scheduled times allowed	Laptop HTML. To define whether a service representative is allowed to change the planned/schedules times of the tasks he received on his laptop device.
59	CSF: Use Custom Color Coding Scheme	By setting this profile option to Yes, you can enable the use of custom color coding for tasks. The default value is No, which keeps the standard seeded color coding scheme active.
60	CSF: Use eLocation Map	Indicate if you are using the eLocation map or the MapInfo map.
61	CSF: View scheduling results in Gantt chart	To view scheduling results in the Gantt chart set to Y (yes); set to N (no) if you want to default to the table view.

Step	Profile Option	Description
62	CSF: Web server address where the images are stored for the map	Enter the address of the web server where the images are stored. The images are used to show instant status of the resource on the Map on the Field Service Dispatch Center.
63	CSF: eLocation Map JDBC driver type	The JDBC driver type used to make a connection to the data source for the eLocation map, default set to 'thin'.
64	CSF: eLocation Map RMI binding name	The Remote Method Invocation binding name that is used for the eLocation map server.
65	CSF: eLocation Map RMI host name	The Remote Method Invocation host name that is used for the eLocation map server (typically the machine name where the map server is running).
66	CSF: eLocation Map RMI port number	The Remote Method Invocation port number that is used for the eLocation map server.
67	CSF: eLocation Map basemap name	The basemap name for the eLocation map as found in the data source maps table.
68	CSF: eLocation Map data source name	The unique name that is given to the collection of data source parameters for the eLocation map, e.g. csfmap. The name must be modified if any of the data source profile options change and the map server can not be restarted.
69	CSF: eLocation Map database SID	The database SID of the data source for the eLocation map. Typically the same as the SID of the database server.
70	CSF: eLocation Map enable java debugging	Optionally enable additional debugging output to the Java console for the eLocation map.
71	CSF: eLocation Map high latitude coordinate	Do not change, high latitude coordinate of the last view area of the eLocation map.

Step	Profile Option	Description
72	CSF: eLocation Map high longitude coordinate	Do not change, high longitude coordinate of the last view area of the eLocation map.
73	CSF: eLocation Map host name	The name of the host of the data source for the eLocation map. Typically the same as the database server machine name.
74	CSF: eLocation Map icon URL	The URL of the directory where the image files are stored for the eLocation map markers. The images are used to show instant status of the resource on the Map in the Field Service Dispatch Center.
75	CSF: eLocation Map last used service area number	Do not change, the identification number of the last viewed area on the eLocation map.
76	CSF: eLocation Map low latitude coordinate	Do not change, low latitude coordinate of the last view area of the eLocation map.
77	CSF: eLocation Map low longitude coordinate	Do not change, low longitude coordinate of the last view area of the eLocation map.
78	CSF: eLocation Map maps table name	The name of the maps table in the data source for the eLocation map.
79	CSF: eLocation Map move factor (between 0.1 and 1)	The fraction of the width or height by which the eLocation map view should be moved when using the navigate buttons on the Map tab in the Field Service Dispatch Center.
80	CSF: eLocation Map port number	The listener port number for the data source for the eLocation map. Typically the same as the database server listener port number.
81	CSF: eLocation Map styles table	The name of the styles table in the data source for the eLocation map.

Step	Profile Option	Description
82	CSF: eLocation Map themes table	The name of the themes table in the data source for the eLocation map.
83	CSF: eLocation Map user identification	Leave empty, used for development purposes only.
84	CSF: eLocation mappers count	The highest number of parallel map requests that are required to be serviced at one time for the eLocation map.
85	CSF: eLocation Map last used service area number	This is the identification number of the service area that was last viewed in the eLocation map.
86	CSF: eLocation Map basemap name	This is the basemap name identification for the map definition in the maps table for the eLocation map.
87	CSF: Map Left Top Y-coordinate	This is the Left/Top-Y of the shown area of the map (set automatically).
88	CSF: Map Right bottom Y-coordinate	This is the Right/Bottom-Y of the displayed area on the map (set automatically).
89	CSF: Map Left Top X-coordinate	This is the Left/Top-X of the shown area of the map (set automatically).
90	CSF: Map Right bottom X-coordinate	This is the Right/Bottom-X of the displayed area on the map (set automatically).
91	CSFW: Service History Days	When viewing service history, all the service request numbers that fall between the system date (sysdate) and the date entered here will be displayed.
92	CSFW: Audio Path	This the URL that displays where all the audio files for Field Service Voice are located.
93	CSFW: Home page	This setting dictates what to display on the User's home page. Possible values are: <ul style="list-style-type: none"> • Main menu • Today's tasks

Step	Profile Option	Description
94	CSFW: Default Distance Unit	This is the distance unit for measurement purposes in Wireless. This profile option also is used in the Technician's Portal in capturing travel information. Available values are: <ul style="list-style-type: none"> • Mile • Kilometer
95	CSFW: Return Router	This is the URL address used for coming back to APPS from 9iAS WE.
96	CSFW: Task Max	This is a numeric value that determines that maximum number of tasks to display on a screen.
97	CSFW: Task display1	This is the task summary display1 for Field Service Wireless.
98	CSFW: Task display2	This is the task summary display2 for Field Service Wireless.
99	CSFW: Date Format	This sets the format style of the date to be displayed in Wireless. (For example, 12/31/01, 12/31/2001, or 12-31-2002, etc.)
100	CSFW: Router Location	This is the URL of the Router Skeleton at the 9iAS server.
101	CSP: Move Order Intransit Subinventory	Use this profile option to set the default subinventory for move orders that are intransit. Choose from the list of values.
102	CSP: Excess Parts Order Type	This profile option is used to define the type of internal order to use when the excess returns order is automatically created. The recommended profile value is Intransit.
103	CSP: Function Security Enabled	When enabled this allows you to show or hide tabs and tree menus.

Step	Profile Option	Description
104	CSP: Include Alternates	Determines whether or not alternate parts should be included when checking availability of parts. Default value is never. Options include: Always, Never, Parts Requirement Only, Scheduler Only.
105	CSP: Include Care Stock	Determines when, if ever, car stock should be included in availability calculations. Default value is Always. Options include: Always, Never, Parts Requirement Only, Scheduler Only.
106	CSP: Order Type	This profile option is used to provide a default value for order type when creating internal orders in the Parts Requirement UI. Choose from any valid order type in the list of values.
107	CSP: Product Task History Threshold	This profile option is used for comparing task times used with the profile option to make a decision whether or not to populate parts in Parts Requirement.
108	CSP: Purchasing Line Type	Sets the default line type for Spares Management. Choose from the list of values.
109	CSP: Ship complete	Can set to Yes/No to determine whether or not to require a ship complete notification. Default is null.
110	CSP: Usage Run Date	This profile displays that last run date of the Usage for ASL Recommendations concurrent program.
111	CSR: Include Commutes in Shift	In order to include or exclude a technician's commute time into shift calculations, you must set this profile option.

