Oracle® Field Service

User Guide

Release 11*i*

Part No. B10649-01

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ORACLE®

Oracle Field Service User Guide, Release 11*i*

Part No. B10649-01

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

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Preface

Audience for This Guide

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

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

- The principles and customary practices of your business area.
- Oracle Field Service/Wireless

  If you have never used Oracle Field Service/Wireless, Oracle suggests you attend one or more of the Oracle Field Service/Wireless training classes available through Oracle University.
- The Oracle Applications graphical user interface.

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

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

How To Use This Guide

This document contains the information you need to understand and use Oracle Field Service/Wireless.

- Chapter 1 provides an overview of the applications features, business processes, applications process, and use.
- Chapter 2 provides task based topics on how to use the Field Service Dispatch Center.

- Chapter 3 provides task based topics on how to use the Field Service Report.

Documentation Accessibility

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

Accessibility of Code Examples in Documentation

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

Other Information Sources

You can choose from many sources of information, including online documentation, training, and support services, to increase your knowledge and understanding of Oracle Field Service/Wireless.

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

Online Documentation

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

Related Documentation

Oracle Field Service/Wireless shares business and setup information with other Oracle Applications products. Therefore, you may want to refer to other product documentation when you set up and use Oracle Field Service/Wireless.

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

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

Documents Related to All Products

Oracle Applications User's Guide

This guide explains how to enter data, query, run reports, and navigate using the graphical user interface (GUI) available with this release of Oracle Field Service/Wireless (and any other Oracle Applications products). This guide also includes information on setting user profiles, as well as running and reviewing reports and concurrent processes.

You can access this user's guide online by choosing, "Getting Started with Oracle Applications" from any Oracle Applications help file.

Documents Related to This Product

Oracle Field Service/Wireless Implementation Guide

This guide explains how to implement the Oracle Field Service application and set it up effectively across the E-Business suite. It includes information on setting user profiles, as well as profile options and concurrent processes.

Oracle CRM Foundation Concepts and Procedures

Oracle Field Service uses a lot of the modules from CRM Foundation. Refer to this guide for details on the usage of each module.

Oracle Scheduler Concepts and Procedures

When Advanced Scheduler is installed the usage is tightly integrated with the Field Service application. This guide explains the 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 send 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 send to the palm device to be handled by the field service representative.

Oracle Field Service/Wireless Concepts and Procedures

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

Installation and System Administration

Oracle Applications Concepts

This guide provides an introduction to the concepts, features, technology stack, architecture, and terminology for Oracle Applications Release 11*i*. It provides a useful first book to read before an installation of Oracle Applications. This guide also introduces the concepts behind Applications-wide features such as Business Intelligence (BIS), languages and character sets, and Self-Service Web Applications.

Installing Oracle Applications

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

Oracle Applications Supplemental CRM Installation Steps

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

Upgrading Oracle Applications

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

Maintaining Oracle Applications

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

Oracle Applications System Administrator's Guide

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

Oracle Alert User's Guide

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

Oracle Applications Developer's Guide

This guide contains the coding standards followed by the Oracle Applications development staff. It describes the Oracle Application Object Library components needed to implement the Oracle Applications user interface described in the *Oracle Applications User Interface Standards for Forms-Based Products*. It also provides information to help you build your custom Oracle Forms Developer 6*i* forms so that they integrate with Oracle Applications.

Oracle Applications User Interface Standards for Forms-Based Products

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

Other Implementation Documentation

Multiple Reporting Currencies in Oracle Applications

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

Multiple Organizations in Oracle Applications

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

Oracle Workflow Guide

This guide explains how to define new workflow business processes as well as customize existing Oracle Applications-embedded workflow processes.You also use this guide to complete the setup steps necessary for any Oracle Applications product that includes workflow-enabled processes.

Oracle Applications Flexfields Guide

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

Oracle eTechnical Reference Manuals

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

Oracle Manufacturing APIs and Open Interfaces Manual

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

Oracle Order Management Suite APIs and Open Interfaces Manual

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

Oracle Applications Message Reference Manual

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

Oracle CRM Application Foundation Implementation Guide

Many CRM products use components from CRM Application Foundation. Use this guide to correctly implement CRM Application Foundation.

Training and Support

Training

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

Support

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

Oracle*MetaLink*

Oracle*MetaLink* is your self-service support connection with web, telephone menu, and e-mail alternatives. Oracle supplies these technologies for your convenience, available 24 hours a day, 7 days a week. With Oracle*MetaLin*k, you can obtain information and advice from technical libraries and forums, download patches,

download the latest documentation, look at bug details, and create or update TARs. To use MetaLink, register at (http://metalink.oracle.com).

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

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

Do Not Use Database Tools to Modify Oracle Applications Data

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

Oracle provides powerful tools you can use to create, store, change, retrieve, and maintain information in an Oracle database. But if you use Oracle tools such as SQL*Plus to modify Oracle Applications data, you risk destroying the integrity of your data and you lose the ability to audit changes to your data.

Because Oracle Applications tables are interrelated, any change you make using Oracle Applications 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.

About Oracle

Oracle Corporation develops and markets an integrated line of software products for database management, applications development, decision support, and office automation, as well as Oracle Applications, an integrated suite of more than 160 software modules for financial management, supply chain management,

manufacturing, project systems, human resources and customer relationship management.

Oracle products are available for mainframes, minicomputers, personal computers, network computers and personal digital assistants, allowing organizations to integrate different computers, different operating systems, different networks, and even different database management systems, into a single, unified computing and information resource.

Oracle is the world's leading supplier of software for information management, and the world's second largest software company. Oracle offers its database, tools, and applications products, along with related consulting, education, and support services, in over 145 countries around the world.

1

Understanding Field Service

This topic group provides overviews of the application and its components, explanations of key concepts, features, and functions, as well as the application's relationships to other Oracle or third-party applications.

Topics covered are:

- Section 1.1, "Introduction to the Field Service Suite"
- Section 1.2, "The Field Service Process"
- Section 1.3, "Overview of Field Service"
- Section 1.4, "How Field Service Relates to the E-Business Suite"
- Section 1.5, "What is the Field Service Dispatch Center?"
- Section 1.6, "What is Debrief?"
- Section 1.7, "What is Preventive Maintenance?"
- Section 1.8, "The Scheduling and Task Assignment Process"
- Section 1.9, "What is Spares Management?"

1.1 Introduction to the Field Service Suite

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 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
TeleService	Customer Care is not really a product of the Field Service suite but the Service Request form is delivered with the Field Service application. The Service Request form takes the customer's call for service and creates a service request.
CRM Foundation	The products in CRM Foundation are essential to use Field Service. They are used to create tasks, territories, define resources, and help in the assignment of tasks to resources. CRM Foundation comes with Field Service.
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. You can also administer Preventive Maintenance programs from within this application.
Spares Management	The Spares Management component provides additional logistics and planning features to manage a service parts inventory in a multi-location environment.
Advanced Scheduler	Advanced Scheduler provides comprehensive scheduling capabilities and enables the optimization of tasks to qualified resources. It uses a set of predefined constraints and associates costs for creating the most-optimized and cost-effective schedules for representatives. It takes into account driving time, distance, availability, SLA response times, preferred engineers, skills and spare parts.
Mobile Field Service/Laptop	Mobile Field Service/Laptop is a disconnected remote application typically installed at a service representative's laptop to receive his daily schedule and report on progress, material, expense, and labor.
Mobile Field Service/Palm™ Devices	Mobile Field Service/Palm™ Devices is a disconnected remote application for a handheld device so a service representative can receive his daily schedule and report on progress, material, expense, and labor.
Mobile Field Service/Wireless	Field Service Wireless is a connected remote application that provides continuous connectivity access to enterprise applications. Using the wireless enabled devices, the technicians can remotely access the critical information required to complete their job at the customer's location. They can also report on progress of the task assignment and capture parts, expenses and labor information real time.

1.2 The Field Service Process

The entire field service process includes several major areas. The process is initiated by the creation of a field service request. To perform service out in the field, tasks are linked to the service request. These tasks are assigned to service representatives. If applicable, required spares will be reserved or ordered. At the end, the service representative reports on the performed tasks, charges are created and, if billable, an invoice is created. This process is driven by service request status and task status changes.

The following topics are reviewed in more detail:

- The Field Service Business Process
- How this Process Relates to the E-Business Applications Suite

The Field Service Business Process

The steps in the field service process are described in the table below.

Step		Description
1.	Field Service Request intake & validation	There are several ways to report a request for service. The customer can create the request by using the Web, using Computer Telephone Integration (CTI), using e-mail, or by dialing into a call center where an agent takes the call. A field service request can also be created by a service representative. When the request is received, the customer, product, and contract are checked in the validation step.
2.	Field Service Request screening & qualification	After a service request is created, it is screened to avoid a field visit. The service request is analyzed by a support agent who searches the knowledge base for a solution. As an outcome of this process, the request may be closed, a part may be shipped to the customer, or the customer might ship the product or a part for in-house repair. When a field visit is required, a task is created based on the problem description and action is needed to resolve the problem. A definition for the parts necessary to resolve the task can also be given. For those enterprises employing proactive Preventive Maintenance programs, the solution provides 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.

Step		Description
3.	Field Service Request planning and dispatch	The tasks must be scheduled and assigned to the service representatives. The scheduling of the tasks is done based on various constraints such as skills, location, availability, and required parts. (Note: available constraints for scheduling may vary dependant on the installation of Advanced Scheduler.) When the tasks assignment is done the task or schedule is available for the service representatives. The service representative can accept or reject the task.
4.	Parts Request, Planning and Replenishment	If parts are needed, the Spares Management component is used to replenish the field service warehouses, prioritize and replenish orders for the field technician, provide a process for managing excess parts, facilitate recovery, consolidation and repair of defective parts, and provide inventory planning for both the technician and field service warehouses.
5.	Field Service Request delivery and reporting	Upon receipt of an assigned task or schedule, the service representative delivers the service at the customer's site. He reports on progress, materials used, materials recovered, expenses made, and time spent. Additionally he can record a counter reading or provide information about how the problem has been resolved. It might be necessary to create new tasks or service requests if he can't help the customer immediately. He can recover the product or part of the product for repair and assign it an RMA (Return Material Authorization) to track the customer product. All the reported information is used for charges and, in case of billing requests, invoicing the customer. Reporting on materials used also results in auto replenishment of the service representative's car stock as well as updates to the install base configuration, if applicable.
6.	Field Service Request monitoring	Things can happen any time during the process that endanger the execution of a field visit or task assignment. Escalations are raised to act accordingly.
7.	Field Service Request completion and billing	When the service representative is completely done with the task, he marks the task assignment status as complete and moves on to the next task. The information can be validated by Service Manager in the office for any service contract or warranty coverage and charges will be generated. If billable, an invoice is created. Inventories, subinventories, and installed base are updated.

Note: Depending on your organization these steps can be separated or combined.

How this Process Relates to the E-Business Applications Suite

This section shows how this process relates to the E-Business Applications suite of products. The following table lists the possibilities for a field service solution based upon the process above.

Step	Application
1. Field Service Request intake and validation	Oracle iSupport A service request can be initiated by the customer or by an agent through the web. TeleService A service request can be initiated by an agent from the Contact Center and/or Service Request form. Oracle Mobile Field Service A service request and/or task can be created by a Field Service Representative using the Oracle Mobile Field Service application. For each service request: ■ Write down the customer information. ■ Capture the Product to validate any warranty or contract coverage for service.
2. Field Service Request screening and qualification	TeleService Service Request form ■ Analyze and record the problem. ■ When a field visit is required, take down the address where the product is to locate the product at the customers site. ■ Create tasks to perform the visit. Define the field service task type, define when a service representative is supposed to arrive at the customers site at Planned Start and End date. Define how much effort the task takes for completion, for example, 1 hour, half a day, or 1 day.

Step		Application
3.	Field Service Request planning and dispatch	Field Service Use the Dispatch Center to schedule and dispatch assign tasks. The Schedule Advise UI will drive the assignment options used for finding a qualified resource for the task. Assisted and Unassisted assignment options are available to all Oracle Field Service clients. Intelligent and Window to Promise assignment options including, travel time and distance calculations and spares integration is only available when Oracle Advanced Scheduler is installed as well. Advanced Scheduler Provides comprehensive scheduling capabilities and enables the optimization and re-calculation of scheduling tasks to qualified resources. It uses a set of predefined constraints and associates costs for creating the most-optimized and cost-effective schedules for representatives. Spares Management Access the Spares Management application to order spare parts. When Advanced Scheduler is installed, and there is a parts requirement, the parts are automatically reserved or ordered at task assignment.

Step		Application
4.	Field Service Request delivery and reporting	Mobile Field Service/Laptop After synchronization, the schedule is received by the service representative on his mobile device. He reports on material used, time spent, expenses made, and counter readings, if applicable. Mobile Field Service/Palm™ Devices After synchronization, the schedule is received by the service representative on his mobile device. He reports on material used, time spent, expenses made, and counter readings, if applicable. Mobile Field Service/Wireless The schedule is available at all times for the service representative on his mobile device. He reports on material used, time spent, and expenses made. Depot Repair To create an RMA for a recovered product or part of a product. Field Service All information is received back from the mobile devices and consolidated in Debrief. This information is then updated to Inventory, Installed Base, and Charges.
5.	Field Service Request completion and billing	TeleService From Charges updates are made to create an invoice for billable expenses. Order Management In case of billable expenses, charges will be received in Order Management to create an invoice.

1.3 Overview of Field Service

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. This ultimately ensures that the right person is in the right place at the right time with the right parts. The Field Service Report enables you to report all activities performed out in the field. And Spares Management provides the logistics and planning functionality needed to manage a service parts inventory.

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

- Field Service Dispatch Center Features
- Field Service Debrief Features
- Field Service Preventive Maintenance Features
- Field Service Spares Management Features

Field Service Dispatch Center Features

These are the features of the Field Service Dispatch Center:

- Shows information for a selected task such as a related service request, escalations, parts requirements and transactions, installed base related information, resources assigned for a task, customer address information, and required skills.
- Schedules and assigns tasks, either automatically or manually, to one or more service representatives. If Advanced Scheduler is installed, the automatic process of scheduling tasks can also be run as a background process.

  Task assignment can also be done by the use of the Schedule Advise UI launched from the assignee button on the task tab in the Service Request form.

  When Advanced Scheduler is installed, it brings you comprehensive scheduling capabilities and enables the optimization of scheduling tasks to qualified resources you can optimize your scheduling capabilities. Driving time and distance for the service representative is provided, required skills are reviewed and parts reservations or orders are made for the parts requirements. For more information, see the *Oracle Advanced Scheduler User Guide*.
- Manages parts information. Locating, ordering, and monitoring parts for specific tasks.

  If Advanced Scheduler is installed, locating parts and creating reservations or orders is done automatically.

- Commits individual tasks and daily schedules to service representatives, either automatically or manually. When parts orders are created, this process initiates the booking of the order for the parts.

  Committed tasks or daily schedules are now available for the service representative's mobile application with information about the task, related service request, problem and resolution, customer address information, installed base information when applicable, and counters.

- Monitors 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. A task becomes non-conforming when not scheduled within a given time frame, for example, or when contract response times cannot be met. All cases should be set up in escalation management by rules to be monitored.

- Makes a selection of tasks based on characteristics defined in customizable queries, such as ready to be planned, planned for today, or escalated.
- Views service history for a customer or a product.
- Manages resource availability for single or multiple technicians. Through the Trips Managment 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

These are the features of Debrief:

- Reports on parts, expenses, and labor for a task assignment. This ultimately results in updates to Inventory, Installed Base, and Charges.
- Reports on Counters. From Field Service Debrief you can easily access the Capture Counter Reading functionality from Oracle Service to capture counter readings.

- Offers direct access to specific Spares Management functionality such as Parts Requirements and View Onhand Quantity.
- Offers direct access to Notes, Calendar, or Service Request and a Pro Forma invoice.

Field Service Preventive Maintenance Features

These are the features of Preventive Maintenance program in Field Service:

- Maintains and administers Preventive Maintenance programs.
- 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.

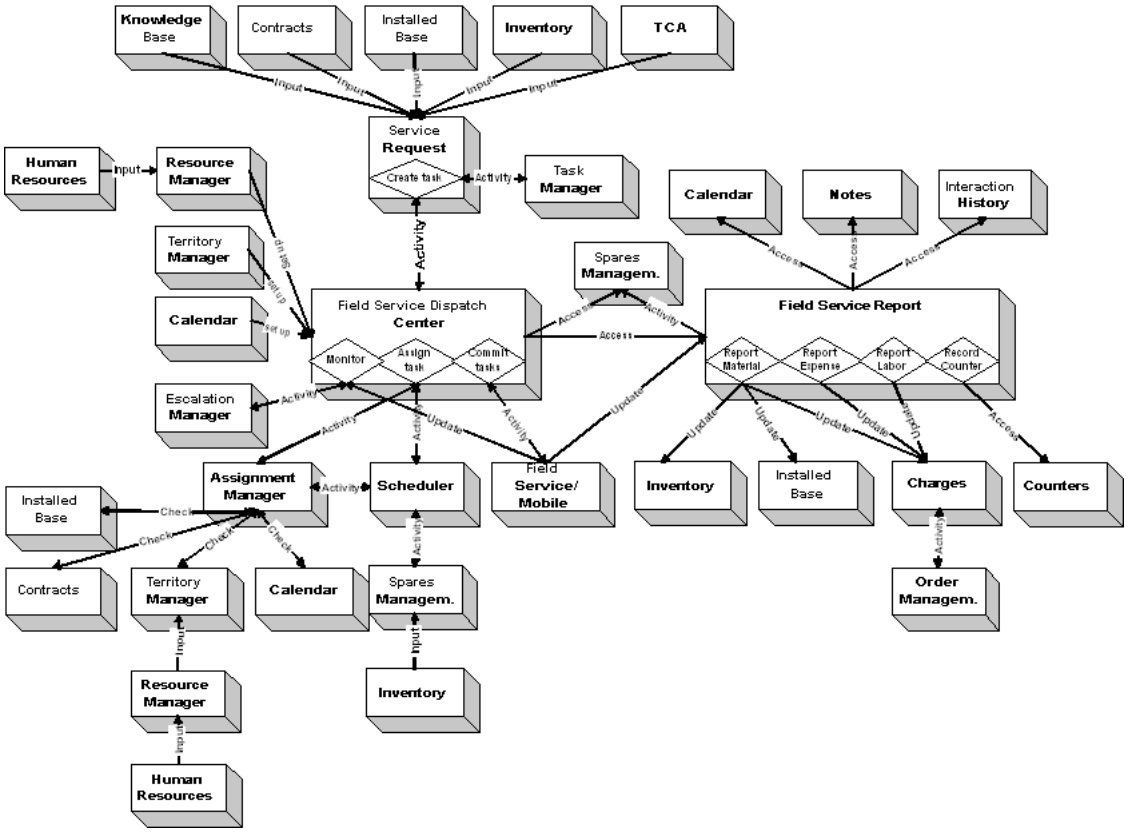
Field Service Spares Management Features

These are the features of Spares Management:

- Provides a process to automate the creation of the Authorized Stock List (ASL), which is used to define for field service technicians and warehouses recommended min-max levels.
- Provides a robust logistics process, which deals with those activities associated with order processing, physical handling, and movement of parts through field service warehouse to field technicians.
- Effectively tracks both usable and defective parts through the logistics cycle, including the recovery, consolidation, and repair of defective parts, which are key components in the overall field service logistics process. Once parts are repaired, they are received into the central warehouse and redistributed back to the technicians and field service warehouses.
- Provides a process for managing excess parts and incorporates supersession functionality, where one part may be replaced by another.

1.4 How Field Service Relates to the E-Business Suite

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



Service Request

A Service Request is created when a customer calls for assistance and it is determined that a service representative must visit the customer site. The following applications have a relation with Service Request:

- Knowledge Base provides input for resolution of the problem.

- Contracts, including both 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.
- Installed Base provides input on the installed base information sent 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 individually in the resource manager. 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 Schedule Advise UI and Advanced Scheduler to retrieve a qualified service representative for a task.

Calendar

Working hours, shifts, and non-available working hours such as public holidays or vacations need to be defined for each service representative. This information is used for scheduling.

Dispatch Center Schedule Advise UI

The Schedule Advise UI assists in the task assignment from the Service Request form - Task tab - assignee button or Field Service Dispatch Center by finding a qualified service representative to resolve the task. The following applications have an indirect relationship with the Schedule Advise UI:

- Installed Base—A preferred service representative to perform the field visit can be recommended from the installed 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 provides comprehensive scheduling capabilities and enables the optimization and re-calculation of scheduled tasks to qualified resources. It takes into account driving time and distance, availability, SLA response times, preferred engineers, territories, skills and spare parts. Advanced Scheduler is tightly integrated with Dispatch Center and Spares Management.

Spares Management

Often, you need parts to resolve a problem at the customers site. You can access Spares Management manually to order parts for a task. If Advanced Scheduler is installed, and there is a Parts Requirement recorded against the task, a reservation, or internal order, for the part is created automatically at task assignment. In case of an internal order, the order for the part will be booked. You can update Spares Management indirectly from Debrief with parts usage for a task. The update is done to maintain stock levels at different locations, 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 summarizes and shows escalations for tasks that need to be or are scheduled.

Field Service Mobile

After task assignment, the schedule is committed and then tasks are available for one of the following mobile applications:

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

- Mobile Field Service/Wireless

Inventory

Inventory provides input for Service Request to determine which product needs service. You can update Inventory (Spares Management) from 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.

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

Installed Base

Installed Base provides input for the service request to indicate if it is an installed base item. It also provides input to the Dispatch Center and Advanced Scheduler as to which service representatives are preferred to perform the field visit.

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

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

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. After 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 Debrief.

Charges

You can update Charges with parts usage, counter information, labor time, and expenses for a task from Debrief. All information recorded is transmitted to the Charges database on update. In Charges, this information is checked against any contracts and charges are then sent to Order Management and a final invoice is generated.

You cannot modify reported information in Debrief after it has been transmitted successfully to Charges.

1.5 What is the Field Service Dispatch Center?

The Field Service Dispatch Center is a one-stop planning area where you can schedule, dispatch, and monitor tasks for service representatives out in the field.

A dispatcher can view all incoming tasks and then schedule these tasks to create a trip for each service representative. A trip includes all tasks for one service representative within a working day. A trip consists of a start time and location, which is defined as a departure task, and an end time and location, which is defined as an arrival task.

All tasks are scheduled between the departure and arrival tasks. In addition to scheduling tasks, the Dispatch Center allows you to act on escalations and monitor the service representative's progress and schedules using the plan board and gantt. You can also make last minute changes to schedules and, if Advanced Scheduler is installed, view your service group's status and location on the map.

The following topics are reviewed in more detail:

- What Tasks and Resources Do I See?
- Navigating in the Dispatch Center

What Tasks and Resources Do I See?

This topic describes the tasks that are available to you and the resources you see when you enter the Dispatch Center.

When Field Service is implemented, you define which resources are shown by default. You create dispatcher groups of which you are a member (mandatory) and you create territories with service representatives assigned to them. You establish a relation between the dispatcher groups and the territories.

These are the service representatives shown to you in the Dispatch Center on the plan board, gantt, and map. This feature is mainly meant for monitoring purposes. A large organization usually monitors a group of service representatives and not all of them. However, you can always choose to view all territories or a selection of territories using the corresponding option on the Navigate menu.

By default, all tasks that can be scheduled are available to you and could be offered to you for scheduling. You can narrow down the task selection by choosing an appropriate query from the Tasks list or by defining your own query.

You can also choose to see only the tasks that you are allowed to schedule. You were defined as owner of these tasks at setup. For the tasks that you can schedule, it's possible that the most eligible service representative is not one of the service

representatives you monitor. Even so, he or she is presented to you as the best option.

Navigating in the Dispatch Center

In the Tasks list in the left region of the Dispatch Center window, you can view tasks by selecting from the list of values. You can also use the flashlight icon to define your own query to find tasks. When you move your cursor over a task from the task list, details are displayed in the upper region of the Dispatch Center. Bold print indicates that a task is ready for planning. To select a task for planning you need to check it and press the Advise button at the bottom of the Dispatch Center or right mouse-click to select the schedule advise option.

In the upper region of the Dispatch Center you can view Task Details. All tabs display the task number, status, response time, and planned effort, defined at task creation.

The following information is displayed in more detail in the various tabs:

- Overview: This shows task description, customer information, task urgency, planned start and end dates (the date when a service representative is supposed to arrive at a customer site), and scheduled start and end date (the date when a service representative is actually scheduled to visit the customer). If parts are necessary to resolve the task, this is indicated by the checkbox.
- Service Request: This shows the service request number, date service was requested, a summary, and problem and resolution description. Select and right-click the Request field to bring up a pop-up menu to access the source document (the Service Request UI).
- Escalations: If for some reason a task becomes non-conforming, escalation notifications show the reason. This tab shows a summary of escalations.
- Spares: The required parts are shown as well as the status in case the task has already been scheduled. You can access the Parts Requirement UI in the Spares Management application for the task selected to view more details.
- Product: This shows customer product description, serial number and lot number. Contract type, contract description, and product revision. If it is an installed base product, this is indicated.
- Resources: This shows the service representatives assigned to the task, as well as their status and travel time from the previous location to the selected task.
- Address: The address to visit is shown. This is also known as the installed at address.

In the lower region of the Dispatch Center you can monitor and schedule tasks for a group of service representatives on the plan board, gantt, and, if Advanced Scheduler is installed, also the map. By default, you see the group of service representatives defined at setup as described in the previous section. You can choose to view other groups of service representatives from the Navigate Menu on the tool bar. Choose Select Territories to show the territories with service representatives assigned to them on the plan board, gantt, and map.

How to use the plan board, gantt, and map:

- Plan Board: The plan board contains a grid populated with the service representative's name and his trip. A trip consists of departure and arrival tasks, and scheduled tasks for the day. Today's date is shown but you can select any date you like. Select and right-click the service representative's name to commit schedule, view resource information, resource addresses and subinventories and skills management. Select and right-click the departure task to block, optimize (sequence of tasks) or recalculate his trip. (Please not that only an empty trip can be blocked.) Select and right-click one of the tasks to show the source document, start a Debrief, send a message, request for a new schedule advise, or view and update the parts requirement in Spares Management.
- Gantt: The gantt chart view is a graphical overview of the scheduled tasks based on time. The date range shown by default is two days before the actual date and two weeks ahead of it. The date range is adjustable. The gantt displays a service representative's shift, his assigned tasks and the travel time between tasks (if Advanced Scheduler is installed). Put your cursor on a task to see task details. Select and right-click a task to access the source document.
- Map: The map is a geographical overview of a service representative's location when a task in a status of "working." The date shown for the map is the actual date.You can also get an overview of tasks with their location, by first selecting and checking them in the task list and then clicking the Tasks button on the map. From the map you can easily assign tasks and access source document details. Select and right-click a service representative or task to access source document details. When a task is checked from the task list, double click a service representative to start task assignment.

The buttons at the bottom of the screen enable you to do the following:

- Auto Schedule: Before using this button, check a task or multiple tasks from the task list. It automatically schedules tasks to resources using the selection criteria from the Schedule Advise UI or Advanced Scheduler (if installed). For more

information on scheduling criteria, refer to Section 1.8, "The Scheduling and Task Assignment Process".

- Advise: Before using this button, check a task from the task list. The Scheduling Advice window opens to assist you in assigning a task to a resource using selection criteria from the Schedule Advise UI or Advanced Scheduler. For more information on scheduling criteria, refer to Section 1.8, "The Scheduling and Task Assignment Process"
- Go to: Click in combination with the plan board, gantt, or map. You can search for a particular resource to be presented on the plan board, gantt, or map.
- Refresh: Click to refresh the plan board, gantt, or map.
- More: Click to enlarge the plan board, gantt, or map.

Use the Navigate menu from the tool bar to access the Commit Schedule window to manually commit tasks or schedules to service representatives. This can also be done automatically via a concurrent request if you set it up. Use the Navigate menu to navigate to the service request or spares management application populated with the details for the task selected from the task list.

You can also use it to populate the plan board, gantt, or map with territories of service representative other than the ones shown to you. Skills Assignment, Skills Management, Parts Requirement, and Resource Addresses and subinventories can also be accessed from the Navigate menu from the tool bar.

1.6 What is Debrief?

Debrief documents information related to a specific assignment task performed at a customer site. Use Debrief to record all the day-to-day activities out in the field. This includes parts used and recovered, expenses accrued, amount of labor time spent, and capture counter readings. After the information is collected and captured on the screen, you can update the customer's installed base, maintain your spares inventory, and update charges information.

When all the information has been captured on one of the Field Service/Mobile applications, it is uploaded and displayed in Debrief. There it can be used for review and to update the customer's installed base, spares inventory, and charges information.

The upper half of Debrief is populated with task assignment details. You can change the task assignment status to reflect the current status.

The main features in Debrief are:

- Reporting on Materials
- Reporting on Expenses
- Reporting on Labor
- Reporting on Counters
- Ability to view and create Notes
- Accessing Calendar
- Integration with Spares Management
- Quick Menu

Reporting on Materials

The Materials tab records and updates all material transactions performed while at work at the customer site. These transactions include parts usage and recovery and Installed Base, Inventory, and Charges updates.

Initially one item is associated with a service request. This can be an item from a customer's installed base or an item from the Inventory list. One or more tasks are created for this service request and you can create a Debrief for each task. If multiple resources are assigned to a task, multiple Debriefs can be created for each task assignment. You can report several material transactions in Debrief. For each material transaction a separate line is created in Charges. This line includes information about the following:

- For parts that are recovered from customers' installed base, it shows in which subinventory the parts were recovered, the reason for recovering the part, and the impact on installed base and inventory.
- For parts that are installed at the customer's site, it shows from which subinventory the parts were installed from. Optionally, the user can enter the reason for installing the part and the impact on installed base and inventory.

Based on the material transaction type you have chosen, you must fill out a set of mandatory fields in Debrief. Additionally you can capture specific material information such as serial numbers or lot numbers when applicable. When dealing with a material transaction such as a replacement for a customer's Installed Base you need to carefully define what part you have taken out of the customer's Installed Base and what part you are putting back in. This is done by capturing two material transaction detail lines.

In cases where a task has been created using a task template, and the task has parts associated with it, the Parts Requirement button on Debrief UI will be enabled. When the user clicks on the button, the parts that have been associated with the tasks will default on the Materials line. The representative can verify the results and modify them in case modification is required and save the Material debrief line.

When the task assignment is complete, Inventory, Installed Base, and Charges are updated with the material transaction lines created. The Installed Base update results in an update of the items in the customer's Installed Base. The Charges updates results in checking what material is covered by contract and what needs to be invoiced to the customer.

Reporting on Expenses

On the Expenses tab you can document expenses accrued during your visit. For each expense transaction user can create a separate line in Debrief. You can select a predefined expense item with a related price list or to enter the actual amount accrued. This can include expenses such as driving costs, parking tickets, and meals.

When the task assignment is completed, the Charges updates results in checking what expenses are covered by contract and what needs to be invoiced to the customer.

Reporting on Labor

On the Labor tab you can report labor and travel time. You can also record your car mileage for reference. For each labor transaction, user can create a separate line in Debrief.

When the task assignment is completed, the Charges updates results in checking what labor times are covered by contract and what needs to be invoiced to the customer.

Reporting on Counters

Counter readings can only be recorded for customer products defined in the installed base which have a counter assigned to them. When the button is greyed out, it means there are no counter readings associated with the product. In case when a product against which service request is created has counters associated with it, the counters button will be enabled.

When you select the Counters button, the Counters window is opened. This window displays in a spread table all of the counters that are set up for that customer product. Double clicking a line from that spread table opens the Capture Counter Reading window.

Ability to view and create Notes

At any time during the process of scheduling service requests, assigning tasks and debriefing, a service representative or call center agent can add a note to a task. In the Debrief window a service representative cannot only add to a task but can also view notes associated with the service request and a task. This feature allows a consolidated view of a task and all the related notes added during the lifecycle of the task.

Accessing Calendar

At any time you can access your Calendar from Debrief by clicking on Calendar button in Debrief window. The Calendar is a scheduling tool used to define and view available and non-available time for a resource or group of resources.

Integration with Spares Management

From the Tools menu on the tool bar of the Debrief main window, the following Spares Management functions can be started and populated with information regarding the service request or task:

- View Onhand Quantity: Used to review onhand balances for the Item at the subinventory level.
- Parts Requirement

For details regarding Spares Management, refer to Part II, "Spares Management" of this guide.

Quick Menu

Use Quick Menu, available on your tool bar, to navigate to the following applications and windows:

- Parts Requirement
- Service Request
- View onhand quantity
- Pro Forma Invoice

The applications are populated with the task or service request information for which you have opened a Debrief.

1.7 What is Preventive Maintenance?

In addition to solutions that address reactive service needs, more and more service centers require systems that are equally effective in supporting proactive support scenarios. The Preventive Maintenance (PM) solution, the latest addition to the Oracle Service suite of products, 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 service need can be estimated based on item usage, calendar dates as specified in the contract, or a date range. Preventive Maintenance combines Oracle's Complex Maintenance, Repair and Overhaul (CMRO) functionality with Oracle Service Contracts and Oracle Field Service to enable service centers to author PM contracts for PM programs, which can be sold with the product and thereby attribute to revenue generation for the company.

PM programs can be defined for products that need preventive maintenance and then the program can track customer products, their installations, and their usage. A comprehensive PM process can be categorized as follows:

- **PM Program Definition, PM Coverage Definition & Contracts Authoring:** This business process step involves the definition of suggested preventive maintenance programs and their respective coverage. These setups are handled in CMRO's Preventive Maintenance mode, and Oracle's Service Contracts.
- **PM Sales/Contracts, Instantiation and Contract Management:** This is a process step in which a product and/or PM coverage is sold to the customer. Once a product and respective coverage is sold, an instance of that product, coverage (contract) and program 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 the customer.

Field Service picks up the Preventive Maintenance program during the execution phase. In general, once a customer is "in contract" and has purchased a Preventive Maintenance plan, a Field Service operation executes the maintenance spelled out in the contract. Service request and tasks related to PM programs are created through a concurrent program, field technicians carry out work and close the task, and the PM is updated by another concurrent program, reflecting the closure of the task.

For detailed information on setting up, implementing, and maintaining Preventive Maintenance, see the *Oracle Field Service Implementation Guide*.

1.8 The Scheduling and Task Assignment Process

Task scheduling or task assignment is the core functionality of the Field Service application. Task assignment in Field Service is assisted by the Schedule Advise UI. Advanced Scheduler functionality is used for enhanced task scheduling. The task assignment process uses criteria based on preferred resources, resource availability, skills, and territories to select a qualified resource for a task. If Advanced Scheduler is installed, you can optimize your scheduling capabilities with a set of business-driven weighting criteria defined at implementation, and calculate travel time and distance in between tasks. With Advanced Scheduler installed you can also create reservations or internal orders for spare parts when scheduling tasks.

There are four options presented to you for scheduling and task assignment. If Advanced Scheduler is not installed only two options for task assignment are active.

Tasks change status during the field service process of scheduling or assigning tasks. Depending on the current status, different subsequent actions (or transitions) and statuses are possible. Task statuses and task assignment statuses are shown in the Dispatch Center, and enable the dispatcher to keep track of progress. The task status flow is specific to the Field Service application and is therefore explained in more detail.

Review the following topics to understand more about the scheduling and task assignment process:

- Scheduling versus Task Assignment
- Scheduling and Task Assignment Dependencies
- Scheduling and Task Assignment Criteria
- Scheduling and Task Assignment Options
- Task Status Flow

Scheduling versus Task Assignment

Scheduling and task assignment are two different things. When scheduling, your goal is to create a trip for each service representative within a working day consisting of the most logical sequence of tasks and load. It is thus important to be able to calculate travel time and distance between tasks, and to be able to recalculate a schedule to optimize the sequence of tasks in a trip. These are features specific to scheduling. For task assignment, the application does not consider the sequence of tasks already scheduled or the definition of a service representative's working hours (shifts). It assigns a task to a resource based on a very small set of criteria. In addition, when scheduling, spare part availability is considered and reservations or internal orders for parts are created. Scheduling is recommended over task assignment.

Scheduling and Task Assignment Dependencies

The task assignment and scheduling processes use criteria based on preferred resources, resource availability, skills, territories, parts availability, and travel time and distance to select a qualified resource for a task. There are a few dependencies task assignment and task scheduling rely on. The following table lists the dependencies.

Dependency	Description
Preferred resource information	A preferred resource is a single person that is defined in Oracle Contracts or recommended from the Installed Base in Oracle Service.
Skill	Skills are the field service representative's competencies. Skills fall into three major categories: technical product skills, other technical skills, and non-technical skills (for example, specific knowledge of a certain language). When scheduling each task, Advanced Scheduler matches the field service representatives' skills to the skills required to perform the task

Dependency	Description
Skill level	The skill level indicates the expertise scale of the field service representative's skill.
Territory definition	Territories are defined in Territory Manager. For more information, refer to Territory Manager.
Task duration information	Task duration is essential for checking the availability of the resource and for designating a resource as unavailable in the resources calendar after a task has been assigned. Task duration information is the amount of Effort defined at creation of the task.
Task planned - Start and End date and time	Task planned start and end date and time is the time window within the Schedule Advise UI will look for resources.
Resource's availability information	Availability of the resource is provided by the Calendar component in which resource shifts and unavailability are defined. For more information, refer to Understanding Calendar.
Spare parts location and availability	Spare part location and availability information is a dependency for Advanced Scheduler to make a reservation or internal order at task assignment. Spare part information is provided by Spares Management.
Road network for calculation of travel time and distance	A road network is a dependency for Advanced Scheduler to be able to calculate travel time and distance in between tasks.

Scheduling and Task Assignment Criteria

There is a difference in how Schedule Advise UI and Advanced Scheduler consider selection criteria to retrieve a qualified resource for a task. When you schedule manually, you can also influence how the selection criteria are applied. When you schedule automatically (Advanced Scheduler functionality) an assumption is made on how selection criteria are applied. You can start automatic scheduling manually or you can run it as a background process, called autonomous scheduling.

Review the following table to learn about the differences and how the criteria are used to select a qualified resource for a task:

Criteria	Schedule Advise UI (Assisted and Unassisted schedule options)	Advanced Scheduler (Intelligent and Window to Promise schedule options)	Automatic and Autonomous Scheduling
Territory Qualifiers	Used to retrieve all the qualified resources for the assignment from the selected territories.	Used to retrieve all the qualified resources for the assignment from the selected territories.	Used to retrieve all the qualified resources for the assignment from **all** territories defined.
Contracts	When selected, this is the first resource criteria considered.	When selected, this is the first resource criteria considered.	Selected as the first criteria considered.
Installed Base	When selected, this is the first resource criteria considered.	When selected, this is the first resource criteria considered.	Not used.
Skills	Not used.	Matched are the field service representative's skills to the skills required to perform the task.	Matched are the field service representative's skills to the skills required to perform the task.
Resource Available	When a resource is found based on the criteria above, its availability is considered.	Advanced Scheduler always considers the availability of the resource.	The availability of the resource is always considered.
My Suggestion	When entered, the suggestion is always returned as a plan option.	When entered, the suggestion is always returned as a plan option.	Not used.
Spares (Advanced Scheduler functionality)	Not used.	A list of qualified resources based on the criteria above is passed on to Spares Management, which checks parts availability based on the availability condition selected.	A list of the qualified resources based on the criteria above is passed on to Spares Management, which checks parts availability based on a **predefined** availability condition.

Criteria	Schedule Advise UI (Assisted and Unassisted schedule options)	Advanced Scheduler (Intelligent and Window to Promise schedule options)	Automatic and Autonomous Scheduling
Travel time and distance (Advanced Scheduler functionality applied automatically)	Not used.	The travel time and distance for each plan option are calculated for the resources returned from the Schedule Advise UI (when no parts are used) or Spares Management.	The travel time and distance for each plan option are calculated for the resources returned from the Schedule Advise UI (when no parts are used) or Spares Management.
Cost Related Constraints (Advanced Scheduler functionality applied automatically)	Not used.	Advanced Scheduler applies pre-defined business driven constraints for each plan option to produce a list with qualified resources or available time slots.	Advanced Scheduler applies pre-defined business driven constraints for each plan option to produce a list with qualified resources.

Scheduling and Task Assignment Options

When you schedule manually, there are four options presented to you for scheduling or task assignment. This is also referred to as assistance level. The enabled options presented to you depend on whether Advanced Scheduler is installed or not.

Refer to the following table to learn more about the options for scheduling manually:

Assistance Level	Description
Unassisted	Use this option to assign a task to a service representative of your choice without taking into account any of the criteria.
Assisted	Use this option if you want Schedule Advise UI to find qualified resources to perform the task in the given planned start and end date and time frame. A list of resources is displayed in the Advice tab.

Assistance Level	Description
Window to Promise	This option is specific to Advanced Scheduler. Use this option if you want Advanced Scheduler to find available time slots.The Advice tab displays time slots at which a resource can visit the customer to perform the task with related cost. These time slots are offered to the customer and after selection the Planned Start and End date is set accordingly. The schedule can be optimized at a later stage.
Intelligent	This option is specific to Advanced Scheduler. Use this option if you want Advanced Scheduler to find qualified resources. The Advice tab displays the resources and their related cost. Typically the resource with the lowest cost is the best option.

Task Status Flow

The scheduling and task assignment process is driven by task status changes specific to Field Service. When a task enters the Dispatch Center it has the status it was given at creation and it is suitable for scheduling. When the task is assigned to a resource, a task assignment is created. A task assignment consists of a resource and a related task. One task can have multiple task assignments if multiple resources are assigned to the task. After task assignment you can still optimize your schedule up until the moment the schedule is committed. When the schedule is committed, tasks change status to "assigned," and the task assignments are available for the service representatives. Service representatives report on the task assignment status. The task assignment status is displayed in the Resources tab to monitor progress. The task status is displayed on the plan board, gantt, and across all tabs in the upper region of the Dispatch Center.

The following table lists all seeded task statuses, their behavior, and possible statuses to change to. When each task assignment for a task is completed, the task status will change to completed.

Table 1–1 Seeded Tasks Statuses

Task Status	Task Assignment Status	Behavior	Following Possible Statuses
In Planning	In Planning	The task is ready for planning or already assigned to a service representative. The planner is still optimizing the schedule and can still assign the task to another service representative.	Assigned/ Auto Reject/ Cancelled

Task Status	Task Assignment Status	Behavior	Following Possible Statuses
Auto Reject		When scheduling automatically, a task assignment can fail. The task status is set to auto reject.	In Planning/ Cancelled
Assigned	Assigned	The task is assigned to a service representative and the schedule is committed.	Accepted/ Rejected/ Working/ Completed Cancelled
	Accepted	The task is accepted by the service representative. Reporting on the task is possible.	Reject/ Working/ Interrupted/ Cancelled
	Rejected	The task is rejected by the service representative. The dispatcher can change it back to Assigned to force the service representative to accept it, or change it to In Planning to assign it to another service representative. Reporting on the task is possible.	In Planning/ Assigned/ Accepted/ Working/ Cancelled
	Working	The service representative has started working on the task. The actual start time is entered, enabling the dispatcher to view progress on the schedule and to view the predicted start times of the tasks scheduled next. Reporting on the task is possible.	Interrupted/ Completed/ Cancelled
	Interrupted	The work on a task has stopped. The dispatcher can assign it to another service representative, changing the status to In Planning, or assign it to the same service representative later. The service representative can also continue working on the task. Reporting on the task is possible.	In Planning/ Assigned/ Working/ Completed/ Cancelled

Task Status	Task Assignment Status	Behavior	Following Possible Statuses
Cancelled	Cancelled	The task is cancelled. The dispatcher can assign it to the same representative again by changing the task status to Assigned, or he can change the status to In Planning to assign it to another service representative. Reporting on the task is possible.	In Planning/ Assigned/ Closed
Completed	Completed	The task is done and frozen. No updates or reporting on the task is allowed anymore.	Closed
Closed		The Debrief for the task is reviewed and pushed to charges. Updates to the installed base and knowledge base are made.	None

1.9 What is Spares Management?

Spares Management is positioned in the field service solution as a module providing both the logistics and planning functionality needed to manage a service parts inventory. Logistics processes deal with those activities involved in order processing and physical distribution of parts. Planning, on the other hand, determines how much inventory is required for a technician or warehouse to support the required level of service at the forecasted level of usage.

The product uses core ERP foundation functionality from Oracle Inventory, Order Management, Purchasing, and ATP extending those products where necessary with additional functionality to satisfy field service needs. There is also extensive integration with Oracle Field Service, including the Dispatch Center, Advanced Scheduler, Field Service Debrief and Field Service mobile products.

Spares Management is a complete solution that includes both logistics and planning processes that perform the following:

- Replenish the field service warehouses
- Create priority and replenishment orders for the field technician
- Provide a process for managing excess parts
- Facilitate recovery, consolidation and repair of defective parts
- Provide inventory planning for both the technician and field service warehouses.

Spares Management also uses "reverse logistics" functionality, consisting of recovery, consolidation, and repair of defective parts, which are key components in the overall field service logistics process. Once parts are repaired, they are received into the central warehouse and redistributed back to the technicians and field service warehouses.

This section includes the following:

- Section 1.9.1, "Integration with Field Service"
- Section 1.9.2, "Field Service Logistics"
- Section 1.9.3, "Field Service Inventory Planning"

1.9.1 Integration with Field Service

In a Field Service operation, the parts ordering and deployment activities need to be closely coordinated with the scheduling and assignment of technicians. To be effective, the dispatching process needs to consider the availability of both technician and parts. When the right technician and right parts are available for the field service task, costs will go down and customer satisfaction will go up.

Integration with Advanced Scheduler

Advanced Scheduler is the Field Service product that provides automated scheduling and assignment of field technicians. Using powerful integration features with Spares Management, Advanced Scheduler can schedule technicians based on both technician and parts availability.

Spares Management interacts with Advanced Scheduler to define parts availability for those field technicians that can be assigned to a task. Advanced Scheduler uses the parts availability profile, along with other cost information, to schedule the technician best able to complete the task at the lowest total cost in the time required.

Spares Management provides the capability to define parts required for a product and predefined task or task template. This can be done manually if, for example, specific parts are known; or it can be done automatically through the analysis of "frequently used parts" based on debrief transactions.

In the debrief process, the technician reports parts used (along with labor and expense) on the task. Specific parts required for a unique follow-up task can also be defined in Spares Management and processed through Advanced Scheduler.

Other Integration features with Field Service

Effective field service dispatching considers the availability of both resources and parts. The Dispatch Center is the backbone of Field Service, providing functionality that executes the scheduling and assignment of field service tasks. Integration functionality with the Dispatch Center includes the following:

- View parts required for the task
- Point and click parts search tool
- Create parts orders for the technician
- View order status

When a task has been completed, the Field Service Debrief module is used to report labor, material, and expense. Parts used and parts recovered also can be reported. Transactions are automatically created to update the technician's inventory balances.

1.9.2 Field Service Logistics

Fast cycle delivery of parts to the field technician is mission critical to the Field Service logistics operations. Logistics processes deal with those activities associated with order processing, physical handling, and movement of parts through the Field Service warehouses and out to the field technician.

Spares Management makes extensive use of core foundation logistics functionality found in core Oracle applications, such as Order Management, Inventory, Purchasing, and ATP, extending these products where necessary to satisfy requirements unique to the Field Service environment.

The product uses logistics process built around the internal order using Order Management functionality. Field Service warehouses are modeled as inventory organizations. Technicians are linked to sub-inventories and grouped into organizations. With this structure, the user can take advantage of sourcing rules to define the supply chain for the technicians, and ATP to define sourcing for technician orders.

The move order from Oracle Inventory is also supported where a single organization model can be used. The Spares Management version of the move order has been enhanced to include pick, pack and ship functionality.

Track Usable and Defective Parts

Spares Management functionality 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.

Parts are tracked at the technician level by assigning sub-inventories to the technician and designating them as either usable or defective. When the technician debriefs and reports a recovered part, a transaction to add the part(s) to the technician's defective sub-inventory is automatically created. When the technician reports a part used, a transaction is automatically created to reduce the balance of the usable sub-inventory.

Each technician would normally be assigned one usable and one defective sub-inventory. However, additional sub-inventories of either type can be assigned depending on business need. Also multiple technicians can be assigned to a single sub-inventory.

Usable sub-inventories would be assigned to the technician even in the Spares Management scenario where the technician is not routinely authorized to stock parts. In this scenario, the usable sub-inventory would be used to track parts shipped to the technician for specific tasks.

Parts not used as planned, would remain in the on-hand balance of the technician's usable sub-inventory until either used on another task or returned as excess.

Define Parts Used on the Task

Spares Management provides the capability to define parts required for a pre-defined task and product combination. The pre-defined task is created in a task template.

Parts required can be defined manually if the parts are known, or automatically from the analysis of parts used, which is recorded in the debrief transaction history. The likelihood (by percentage) that a part will be used on a task and the likelihood that a task will be used on a product is included in the functionality. The define parts functionality also includes supersession roll-up to filter out duplicate parts.

This functionality is used in Advanced Scheduler integration. It can also be used to automatically populate the Parts Requirement UI when an internal order or parts requirement is being created.

The parts required for a task can also be specified for a task that is not pre-defined. A good example of this might be a follow-up task requiring a specific part that was not planned. In this scenario, the parts required for the task would be defined in the Parts Requirement UI.

Priority Orders for a Field Technician

Field technicians may need additional parts to complete a task. Spares Management includes an order entry UI designed specifically to handle the technician's parts orders. The UI can be used to create either an internal order or a Parts Requirement for a specific task. The Parts Requirement defines what parts are required for a specific task and is used in the Advanced Scheduler integration functionality.

The Parts Requirement can be automatically created from the service request and task. This occurs when a task template is used to create the task and parts have been defined for the template and product referenced on the service request.

Used primarily by the dispatcher, this UI has many special features to address the unique needs of the service business, such as:

- Internal order can be linked to the service request and task
- Parts linked to the task are automatically entered
- View of technician’s inventory for parts being ordered
- Integration with ATP functionality to determine source and availability
- View and selection of alternate parts
- Can create purchase requisition for drop shipment to/from supplier
- Technician or customer address can be easily entered or updated, or a special address can be added
- Scratch pad available to use when the technician does not know the specific Part Number.

The UI is used to create an internal order that can be processed through the standard pick, pack and ship process in Order Management.

Spares Management also provides a detailed view of order status starting from when the order is created to receipt at the destination sub-inventory. The UI provides figures for quantities processed as well as dates and times. Physical distribution details, such as pick list and pack list numbers, can also be viewed. Shipment details for carrier and waybill are available.

Excess Returns Process

Excess inventory happens in a field service operation. Parts shipped to a technician for a task and not used as planned, for example, could end up exceeding the technician's authorized stock level. The excess returns process consolidates the excess inventory from many technicians (or warehouses) and routes it back into designated warehouses where it can be more effectively utilized. Reacting quickly

and efficiently to the excess condition is one of the keys to effective control of the Field Service inventory.

Spares Management has an excess returns process with features specifically designed to address the needs of the Field Service business. Key features include:

- Excess identification based on max levels
- Business rules to focus on high-impact excess
- Review and execution tools for the planner
- Auto-creation of excess orders from the planner review

The business rules are used to filter and prioritize the excess that has the highest impact on inventory value. The business rules are designed with mobile field service in mind where short, high-impact lists are easier to use. The planner can use the execution tools to either create an internal order or an inter-organization transfer depending on location of the parts.

The excess returns process can be used for both technicians and warehouses. The execution tools can be used to create an internal order for excess at a warehouse and an inter-organization transfer order for a technician.

The excess return process can be used for both usable and defective parts. The consolidation of defective parts from the field technicians is typically required before they can be integrated into the planning process and sent out for repair.

Hierarchical View of Inventory

Dispatchers and inventory planners need a complete view of status so parts can be quickly located and shipped to the technician. In the Planner's Desktop, the Spares Planning tree, in combination with the Parts Status tab, provides an easy-to-use point-and-click tool that can be used to view, locate, and order parts.

The view combines a hierarchical tree structure combined with a status tab that includes on-hand and on-order information. The user can create the tree structure using nodes to which either sub-inventories or organizations can be attached.

Some of the more important features include:

- Hierarchical presentation using tree structure
- Status information is summarized for the node
- Find function is available to locate specific parts
- Complete view of status that includes both on-hand and on-order

- Alternate parts search
- Integration with the Parts Requirement UI to order parts

This hierarchical view of inventory is integrated into the Dispatch Center functionality using a configuration specifically designed for the dispatcher to locate parts.

1.9.3 Field Service Inventory Planning

Service agreements often require that parts inventories be deployed in numerous locations across a broad geography, and close to the point of use. For example, same day service requires that parts be stocked in the metro area where the service is needed. As a result, many of the service scenarios require that parts be stocked at numerous warehouses and with many field technicians.

With the potential of a large number of stocking sites, an automated planning process greatly enhances productivity by streamlining the restocking process. Spares Management planning defines what parts need to be stocked where, and in what quantities, for both the technician and warehouse.

The Planner's Desktop provides for an organized presentation of the planning functionality in Spares Management.

Authorized Stock List for the Warehouse or Field Technician

The Authorized Stock List (ASL) defines which parts should be stocked, where they should be stocked and in what quantities. The ASL functionality available in Spares Management includes:

- Automated min-max recommendations for technicians and warehouses
- Flexible planning parameters for both service and inventory
- Min-max levels synchronized to service level
- Planning parameters that can be defaulted from higher-level nodes
- Functionality to handle complex planning scenarios

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, such as those outlined below, can be used to address the more complex scenarios typical in a field service environment:

Personal Usage Method

The "personal usage" method produces ASL recommendations based on a combination of usage for the technician or warehouse, and planning parameters for service and inventory. This functionality satisfies the scenario where the technician or warehouse is in a reasonably stable situation. Usage at the warehouse is determined by accumulating the usage data from the various technician groups supported by the warehouse.

Territory Norm Method

The "territory norm" method is used in those scenarios where the technician is either totally new to the service organization, or has been transferred into a new territory. In these cases, the technician does not have any usage history at all (in the case of a new technician), or, in the case of a transferred technician, the usage history from the old territory may be different than what will be experienced in the new territory. The territory norm represents what is typical or average for parts usage in the territory.

The territory norm can also be used in combination with personal usage. This method can be used to handle the situation where the technician is not doing normal Field Service activities for a certain period of time. In this scenario, the technician has personal usage but it does not represent a normal level of activity.

Product Norm Method

The "product norm" method satisfies the scenario where a technician or warehouse needs to support a new product. The product norm can also be used to plan for product population changes and extensions of product into new geographical areas. The product norm defines the product in terms of parts, populations, and failure rates. The product norm can also be used in combination with personal usage.

Notifications for the Central Warehouse

Standard min-max functionality from Oracle Inventory works well in a warehouse transfer scenario. In the more complex central warehouse environment, however, where parts are purchased from external suppliers, additional functionality is required for repair and excess utilization.

In the central warehouse, defectives accumulated from technician recovery activities must be repaired and excess parts from other warehouses often need to be utilized before purchases are made against external suppliers.

In the Spares Management solution, the central warehouse serves as an entry point for parts ordered from new-buy and repair suppliers. Repair suppliers are used to

convert defective parts (recovered from customer sites) into usable parts, which are then made available for redistribution from the central warehouse.

In addition, the central warehouse planner needs to recognize and possibly react to excess inventory at other warehouses before placing an order for either repair or new-buy.

Spares Management notifications alert the planner to the condition where replenishment is required for the central warehouse. When replenishment is required, excess and defective quantities can be viewed in the notification. Execution tools to create purchase requisitions and internal orders are also provided. Notifications also alert the planner to the situation where too much is on-order. Filters for excess on-order are available to eliminate the low impact notification.

Loop Planning

Spares Management supports the planning approach where individual sub-inventories can be grouped into Planning Loops for control of the total inventory across all sub-inventories in the loop. This is sometimes referred to as aggregate planning where the planning loop is used to coordinate planning and execution activities across multiple locations.

Spares Management has the flexibility to configure multiple planning loops within a single service operation. The planning loop can include sub-inventories from different inventory organizations and can also include both usable and defective sub-inventories.

Spares Management uses a Master Stock List (MSL) to define the plan for the Loop. The MSL defines the parts and total quantities to be stocked in the loop. In addition, the MSL provides for a minimum usable quantity to insure that the loop maintains a reasonable balance of usable parts.

Notifications can be generated by running a concurrent program when the total available is above or below plan conditions, as defined in the Master Stock List. Notifications will also be generated when the level of usable parts has dropped below the minimum usable on-hand level as designated in the Master Stock List.

Planner's Desktop

The Planner's Desktop in Spares Management provides an organized presentation of the functionality used for planning and execution at the location and loop levels. Included on the desktop are the loops, reporting hierarchies, notifications, and the planning tree. Within the planning tree, you can enter planning parameters, make recommendations, and calculate failure rates. The desktop also includes the Master

Stock Lists and the Authorized Stock Lists. The view of part availability data for the loop, location and hierarchy is on the desktop as well.

Part I

Debrief and Dispatch Center

Part 1 of the *Oracle Field Service User Guide* contains the following chapters:

- Chapter 2, "Using Field Service Dispatch Center": a detailed examination of the Dispatch Center, including procedures.
- Chapter 3, "Using Debrief": a detailed examination of Debrief, including procedures.

2

Using Field Service Dispatch Center

This topic group provides process-oriented, task-based procedures for using the application to perform essential business tasks.

Please refer to Section 2.1, "Working with the Field Service Dispatch Center" for more information.

2.1 Working with the Field Service Dispatch Center

The Field Service Dispatch Center assists you to schedule tasks and monitor the schedules for service representatives.

Choose one of the following topics to guide you through the application:

- Section 2.2, "Finding Tasks"

  You need to populate the Dispatch Center with tasks. Use this procedure to learn different ways to populate the Dispatch Center with tasks.

- Section 2.3, "Viewing Task Details"s

  Different tabs are available that give you a good overview on all the information related to a task. Use this procedure to learn about all the tabs.

- Section 2.4, "Selecting Territories"

  The Dispatch Center is populated with a group of service representatives that show up on the plan board, gantt, and map. Use this procedure to learn how to populate the Dispatch Center with a different group of service representatives.

- Section 2.5, "Managing Skills and Skill Levels" or Section 2.6, "Assigning Skills to Tasks"s or Section 2.7, "Assigning Skills to Task Templates"

A resource, service representative, or a task require certain competencies, skills, to resolve the task. Use either of these procedures to define the skills for either the service representative or task.

- Section 2.8, "Access Spares Management" or Section 2.9, "View Resource Addresses and Sub Inventories" or Section 2.10, "View the Parts Requirement of a Task"

  Use either of these procedures for parts related matters.

- Section 2.11, "Working with the Plan Board"

  The plan board provides information on service representative schedules in a daily view. From the plan board you can start a Debrief, assign a task, send a message, access the source document, recalculate a trip, and get resource details. Use this procedure to learn how to use the plan board.

- Section 2.12, "Working with the Gantt"

  The gantt provides information on service representative schedules for a period of time. The gantt allows for task reassignment. Use this procedure to learn how to use the gantt.

- Section 2.13, "Working with the Map"

  The map provides a geographic visualization on service representative schedules for the current date. The map gives you the opportunity to display tasks and their location and allows for task assignment. Use this procedure to learn how to use the map.

- Section 2.14, "Scheduling Tasks"

  There are several ways and options to assign, or schedule, tasks to service representatives. After task assignment you can also optimize a service representative's trip, re-assign a task, or cancel a scheduled task. Use this procedure to learn how to schedule tasks, cancel tasks, recalculate a trip, or reassign a task.

- Section 2.15, "Manage Field Service Resource Availability"

  The Field Service Dispatch Center provides a centralized view and point-of-control for scheduling, monitoring, dispatching and prioritizing field service representatives. In order to manage field service availability and to quickly deal with unexpected unavailability (i.e. illness), Field Service provides the Trips Management UI, where a dispatcher can quickly intervene and block a representative's availability, and replan the representative's tasks. When a resource is blocked, Advanced Scheduler will not schedule tasks into blocked

trips. The Trips Management UI also allows a dispatcher to block single, or multiple trips and tasks in one action.

- Section 2.16, "Committing the Schedule"

  After task assignment you need to commit the schedule so that it is sent to the service representatives. Use this procedure to learn how to commit the schedule.

- Section 2.17, "Reporting on Tasks"

  Use this procedure to learn how to access Debrief to open or create a Debrief.

- Section 2.18, "Viewing Service History"

  You can view the service history for a customer site or a product. Use this procedure to learn how to view service history.

2.2 Finding Tasks

Use this procedure to populate the Tasks list in the Dispatch Center with tasks. Once you have populated the Dispatch Center with tasks, you can assign them or review them. Tasks that are shown in bold can be scheduled.

Prerequisites

None.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Dispatch Center

Steps

1. Make a selection from the View By list of values in the Tasks list to use a predefined query to search for tasks. By default the following queries have already been created with the following values:

Query Name	Description	Query Definition
Inbox	All tasks that can be scheduled, entered today, and haven't been assigned yet.	creation_date > trunc(sysdate) and scheduled_start_date is null and nvl(status_schedulable_flag,'N') = 'Y' and nvl(type_schedulable_flag,'N') = 'Y'
All Open	All tasks that are available for planning and can be scheduled.	nvl(status_schedulable_flag,''N'') = ''Y'' and nvl(type_schedulable_flag,''N'') = ''Y'' and not exists (select '''' from csf_ct_task_assignments where task_id = csf_ct_tasks.task_id)
Auto Rejected	All tasks that are rejected by the Autonomous Advanced Scheduler.	task_status_id = 27
Assigned	All task that are already assigned.	task_status = assigned
Non-Schedulable	All tasks that cannot be scheduled.	tasks with schedulable_flags = "N"
Auto Scheduling	All tasks that can be scheduled by the Autonomous Advanced Scheduler.	Task_status = Auto in planning

2. To find tasks that do not conform to one of the predefined queries, click the flashlight icon on the tool bar. The Find Tasks window is opened.
3. Enter information to retrieve the kind of tasks you want to view. You can create a query based on a combination of the following search criteria:
   - a specific task or service request number
   - a specific service request or task specifications
   - tasks that you are the owner of
   - tasks that are assigned to you
   - tasks for a specific customer
   - tasks that need to be scheduled
   - tasks that have been scheduled
   - tasks that have been started for a selected date or date range
4. Click Find.

The Tasks list of the Dispatch Center is populated with tasks matching the query definition.

5. To add your query to the list of values from the Tasks list, choose Save Query As from the Tools menu on the tool bar.

   The Save Query As window is opened.

6. Enter a Name for the query, this name is returned in the list of values in the Dispatch Center. Enter a Description for the query and an Active Start and End Date.

7. Click OK.

   The query is added to the list of values when selecting View By from the Tasks region.

8. To edit the query choose Edit Query from the Tools menu on the tool bar.

   The Edit Query window is opened. You can modify the information but you cannot delete a query. When the Active End date is reached the query disappears from the list of values that you see when you select View By from the Tasks region.

9. Right-clicking a task in the Tasks list brings up a popup menu:

   a. Click Show Service Request to show the window of the Service Request the task belongs to.

   b. Click Parts Requirement to show the window of the required parts of the task. It is possible to add part requirements when these are not yet there.

   c. Click Schedule Advise to assign the task.

      The Scheduling Advice window is opened. This option will not be accessible when the task cannot be scheduled. Please note that it is not necessary to also select the task (by checking the checkbox).

2.3 Viewing Task Details

The upper region from the Dispatch Center provides you with detailed information for a selected task from the Tasks list.

Use this procedure to learn about the details displayed in the following tabs:

- Overview
- Service Request

- Escalations
- Spares
- Product
- Resources
- Address
- Contacts
- Required Skills

Prerequisites

None.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Dispatch Center

Steps

1. Populate the Tasks list with tasks.
2. Select a task from the Tasks list.
3. Choose one of the following tabs:
    - Overview
    - Service Request
    - Escalations
    - Spares
    - Product
    - Resources
    - Address
    - Contacts
    - Required Skills

Overview tab

The Overview tab displays the task details as described in the following table.

Field	Description
Number	Task number, generated at creation of the task.
Status	Task Status.
Effort	When a task is created, the amount of time it takes to perform the task is estimated.
Name	A description of the task is given.
Respond By	Response time agreed upon with the customer either by contract or other means of communication. If the response time is not met, the task becomes non-conforming and an escalation notification is created.
Priority	The urgency given to the task.
Type	Task type definition. (For tasks that can be scheduled, the task type rule must be Dispatch. This is defined at implementation)
Parts	Indicates if spare parts need to be ordered, when Advanced Scheduler is installed this is done at task assignment.
Customer	Customer's name.
Telephone	Customer's telephone number.
Fax	Customer's fax number.
Planned Start and Planned End	A service representative is supposed to arrive at the customer site between the planned start and end date.
Scheduled Start	The actual scheduled time a service representative arrives at the customer site.
Scheduled End	The scheduled end date is either the start date plus the effort or the end date of the time window that was offered to a customer when it was scheduled with the Window to Promise.

Service Request tab

When the task originates from a service request, details for the service request are displayed in the Service Request tab, as described in the following table.

Field	Description
Request	Service request number. Right-click this field to bring up a pop up menu to access the service request form.
Order Date	Date the service request was created.
Summary	A summary of the service request.
Organization Unit	The organization unit that the service request belongs to.
Problem	A problem description for the service request.
Resolution	A resolution description for the service request.
Service History	You can view the service history for a customer site or a product by clicking this button. For more details, see Section 2.18, "Viewing Service History"
Task	Task information for your reference is displayed.

Escalations tab

The Escalations tab gives you a summary and status of all the present escalation notifications. An escalation occurs when a task becomes non-conforming. A task becomes non-conforming when some of the criteria for it to be assigned and resolved either cannot be met or are close to not being met. For example, suppose the contract agreement guarantees a four hour response time, and after 3.5 hours the task has not yet been assigned. The task then becomes non-conforming and is escalated.

Spares tab

The Spares tab gives a summary of the spare parts necessary to resolve the task and their status. Selecting the Requirement Number (hyperlink) in the results spread-table opens the Parts Requirement window for this task.

To access the Spares Management application choose Spares Management from the Navigate menu on the toolbar. The Parts Search user interface is shown, allowing you to search for specific parts. For more information on Spares Management, see Part II, "Spares Management" in this guide.

Product tab

The Product tab shows details about the product from the service request. Additional information is displayed when the product is defined as an installed base item. The Installed Base flag is checked if Installed Base validation was selected on the service request.

Field	Description
Request	The related service request number.
Description	A description of the product.
Serial number.	Serial number, if applicable.
Lot	Lot number, if applicable.
Installed base	Indicates if the product is defined as an installed base item.
Contract Type	The contract type for the product, if applicable.
Description	A description of the contract type.
Revision	Revision number, if applicable.
Task	Task information for your reference is displayed.

Resources tab

When the task is scheduled, the Resources tab shows you which service representative or service representatives are assigned (Assignee) to the task and their status. If Advanced Scheduler is installed, a route description is given.

Field	Description
Assignee	The name of the service representative to whom the task is assigned.
Type	The resource type.
Status	The status of the service representative assigned to the task. This status field is updated when a service representative in the field updates it.
Travel Time	The amount of travel time from the previous task to the current task.
More	Click More to display the route information.
Task	Task information for your reference is displayed.

Address tab

The addresses of the customer and the product that needs service are shown.

Contacts tab

Shown is the title, first name, last name, and phone number, extension and email address of the contact person. This can be the contact person of the service request or the contact person of the task, for these can be different. You can select the Source from the list of values (showing only Service Request and Task). Default the contact person of the service request is shown.

Required Skills tab

Shown are the required skills for the task: Skill Type, Skill Name and Skill Level. It is not possible to make any changes in this tab. If a skill is disabled in the Assign Skills to Task module, the Disabled checkbox is checked.

2.4 Selecting Territories

Use this procedure to select a group or groups of service representatives. The Dispatch Center shows the group or groups selected on the plan board, gantt, and map.

Prerequisites

None.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Dispatch Center

Steps

1. From the menu in the Dispatch Center, go to Navigate and choose Select Territories.
2. Make a selection from the territories assigned to you.
3. To view all territories, including the ones not assigned to you, check the Show All Territories box.
4. Click OK.

   The groups of service representatives selected are displayed on the plan board, gantt, and map.

2.5 Managing Skills and Skill Levels

Skills are the field service representative's competencies. 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. Learn from this procedure how to setup skills and skill levels and how to assign them to field service representatives.

Use this procedure to assign skills and skill levels to field service representatives.

Prerequisites

None.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Dispatch Center

Steps

1. From within the Dispatch Center, go to Navigate and select Skills Management. Alternatively, select the Plan Board tab, right-click on the Resource Name and choose Skills Management.

   The Skills Management window is opened.

2. Select the Resources tab.
3. Select the appropriate resource type from the Resource Type list of values.
4. Select a field service representative name from the Resource Name list of values. The list of values only displays the field service representatives who have been assigned to the Resource Type you selected.
5. Select a Skills Type from the Skills Type list of values.
6. The Skills Name is filled in automatically
7. Select a Skill Level from the Level list of values.
8. The start date (From date field) defaults to today's date. You can override this value if needed.

9. The end date (To date field) is used to inactivate the relevant skill of the field service representative.
10. Save your work.
11. Selecting the Switch View button shows all resources having the selected skill.
12. Select the Skills tab.
13. Enter the Skill Type Name.
14. Enter a Skill Type Description (optional).
15. Enter the Use Scale by selecting from the Use Scale list of values.
16. The start date (From date field) defaults to today's date. You can override this value if needed.
17. The end date (To date field) is used to inactivate the Skill Type. This applies to all skills of this Skill Type.
18. Enter the Skills Name.
19. Enter the Skill Description (optional).
20. Enter a possible Alias (optional).
21. The start date (From date field) defaults to today's date. You can override this value if needed.
22. The end date (To date field) is used to inactivate the Skill.
23. Save your work.
24. Select the Skill Levels tab
25. Enter the Rating Scale Name.
26. Enter the Rating Scale Description (optional).
27. The start date (From date field) defaults to today's date. You can override this value if needed.
28. The end date (To date field) is used to inactivate the Rating Scale.
29. Enter the Order of the Skill Level (lowest number is highest in rank).
30. Enter the Level Name.
31. Enter the Level Description (optional).
32. The start date (From date field) defaults to today's date. You can override this value if needed.

33. The end date (To date field) is used to inactivate the Level.
34. Save your work.

2.6 Assigning Skills to Tasks

If a task has skills assigned, Advanced Scheduler can take these skills into account when searching for the best possible resource to do the job. Learn from this procedure how to assign skills and skill levels to Tasks.

Use this procedure to assign skills and skill levels to tasks.

Prerequisites

Skills and skill levels are set up.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Dispatch Center

Steps

1. From the Dispatch Center, choose Skills Assignment to Tasks. Alternatively, go to Navigate on the tool bar and choose Skills Assignment.

   The Find Tasks window is shown. The Skills Assignment window is opened directly if a task is active only.

2. Enter the search criteria and click Find.

   The Result Window form appears.

3. Select a task by double-clicking one of the Results lines or by selecting a line and clicking OK.

   The Skills Assignment window is opened for the selected task (the task details are filled in the header part of the window).

4. Select the Task tab.
5. Select the Skill Type from the Skill Type list of values.
6. Select the Skill Name from the Skill Name list of values.

   The Skill Description - if setup - is displayed automatically.

7. Select the Skill Level from the Skill Level list of values.
8. Check the Disable Skill checkbox only if Advanced Scheduler should not take this skill into account.
9. Save your work.
10. Click the Next button to continue assigning skills for the next task from the Results Window.
11. Click the Previous button to continue assigning skills for the previous task from the Results Window.
12. Select the flashlight icon to open the Find Tasks window again.

2.7 Assigning Skills to Task Templates

If a task has skills assigned, Advanced Scheduler can take these skills into account when searching for the best possible resource to do the job. Learn from this procedure how to assign skills and skill levels to Task Templates.

Use this procedure to assign skills and skill levels to task templates.

Prerequisites

- Skills and Skill levels are set up.
- Task Templates are set up.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Dispatch Center

(Alternatively) Field Service Dispatcher > Skills Assignment to Task > Task Template tab

Steps

1. From the Dispatch Center, go to Navigate on the Toolbar and select Skills Assignment.
2. Close the Find Task window and choose the Task Template tab on the Skills Assignment to Task window.

3. Select the Task Template group name from the Task Template Group Name list of values.

   The Task Template Description, start date (From date field), and end date (To date field) values are displayed automatically.

4. Select the Task Template from the Task Template list of values.
5. Select the Skill Type from the Skill Type list of values.
6. Select the Skill Name from the Skill Name list of values.

   The Skill Description (if set up) is displayed automatically.

7. Select the Skill Level from the Skill Level list of values.
8. Check the Disable Skill checkbox only if Advanced Scheduler should not take this skill into account.
9. Save your work.

2.8 Access Spares Management

Access to Spares Management from the Dispatch Center allows you to search for certain parts. This will be possible throughout all inventory organizations and subinventories. Use this procedure to search for certain parts. From the Dispatch Center, go to Navigate on the toolbar and select Spares Management. The Parts Search user interface is opened.

For more information on Parts Search, see Part 2 Using Spares Managment.

Prerequisites

None.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Dispatch Center

2.9 View Resource Addresses and Sub Inventories

A typical field service organization may have hundreds and even thousands of field service representatives. This window is designed to provide an efficient method for

viewing ship to addresses and subinventories for your field service representatives. Perform the following to view the ship to addresses and sub-inventories of a field service representative:

From the Dispatch Center, go to Navigate on the toolbar and select Resource Addresses and Sub inventories. Alternatively, from the Plan Board tab, right-click on a resource name and choose Resource Addresses and Sub inventories.

The Resource Addresses and Sub-inventories window is opened.

Prerequisites

- Field service representatives must be defined as employees.
- Sub inventories must be defined.
- Spares Management must be installed and setup.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Dispatch Center

2.10 View the Parts Requirement of a Task

When a field service representative requires additional parts to complete a service request task, he usually notifies the dispatcher. The dispatcher then creates a follow-up task and uses the functionality provided in the Spares Management Parts Requirement form to generate an internal order for the required parts.

When parts are required to resolve a task, the Spares tab gives you an overview of the needed spare parts. Use the following navigations paths to view the required parts to resolve the task.

For more information on using the Parts Requirement UI, see Creating the Parts Requirement.

Prerequisites

None.

Responsibility

Field Service Manager

Navigation

There are several ways to navigate to the Parts Requirement UI:

- Field Service Dispatcher > Dispatch Center > (M) Navigate > Parts Requirement.
- (R) Field Service Dispatcher > Dispatch Center > (T) Plan Board > Right-click on a task (Tasks list) > Parts Requirement.
- (R) Field Service Dispatcher > Dispatch Center > Right-click on a task (Tasks list) > Parts Requirement.
- (R) Field Service Dispatcher > Dispatch Center > (T) Spares > Select Requirement number (hyperlink) > Parts Requirement.

  The Parts Requirement window is opened.

2.11 Working with the Plan Board

The Plan Board provides information on a service representative's schedule in a daily view. From the Plan Board you can also start a debrief re port, assign a task, send a message, access the source document, recalculate a trip, optimize a trip, block / unblock a trip, view the required parts for a task, get the resource's addresses and sub inventories, and get resource details.

Also Field Service's advanced color coding feature makes the various tasks within the Plan Board easily identifiable, buy changing the colors of the cells in the plan board, depending upon a number of factors, including the task's priority, status. type or plan option. Color coding setup is done during implementation and can be modified to fit your business needs. For more information, see the *Oracle Field Service Implementation Guide*.

Learn from this procedure how to use the Plan Board.

Prerequisites

None.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Dispatch Center

Steps

1. From the Dispatch Center, select the Plan Board tab.

   The tasks and trips for the current day for the group of service representatives you are monitoring are shown.

2. Click More to enlarge the plan board.

3. Select Date to change the date to view.

4. Click Goto to focus on a specific service representative.

   The service representative's name is highlighted and visible on the plan board.

5. Right-click the service representative's name on the plan board to bring up a popup menu.

   a. Click Resource Information to view service representative details such as Name, Phone number, and Email address.

   b. Click Commit Schedule to commit the resource's schedule.

   c. Click Resource Addresses and sub inventories to view the resource's addresses and sub inventories.

   d. Click Skills Management to view the resource's skills and corresponding skill levels. The Resources tab of the Skills Management form is opened for the selected resource.

6. Right-click a task to bring up a popup menu.

   a. Click Show Source Document to open the window the task is created from.

   b. Click Debrief to report on a performed task.

      The Debrief Report window is opened.

   c. Click Send Message to send a message to another user.

   d. Click Schedule Advise to assign a task to the service representative.

      The Scheduling Advice window opens with the service representative's name populated in the My Suggestion field.

   e. Select Parts Requirement to view the required parts for the selected task.

      The Parts Requirement window is opened for the selected task.

7. Right-click a departure task on the plan board to bring up a popup menu.

a. Click Block this Trip to block a trip. As a result, the trip will no longer be available when scheduling a task. This function is available only for an empty trip (so not containing any tasks) that is not yet blocked.

b. Click Unblock this Trip to undo the block of a trip. This function is available only for an empty trip (so not containing any tasks) that is blocked.

c. Click Optimize Trip to optimize the trip. This might affect the tasks order in the trip. This function is available only when Advanced Scheduler is installed.

d. Click Recalculate Trip to eliminate time conflicts within the trip. The tasks order in the trip will not be altered. This function is available only when Advanced Scheduler is installed.

8. To view other service representatives, choose Select Territories from the Navigate menu on the tool bar.

2.12 Working with the Gantt

Use the gantt to view progress on the service representative schedules or for task assignment. A time line is shown to indicate the current date and time. Use this procedure to learn the possibilities of using the gantt.

In previous releases of Field Services colors for task were hard coded with the following configurations: Shifts were indicated in yellow. Scheduled tasks showed up in blue bars, escalated tasks showed up in red bars, and travel time was shown as a transparent beginning of a scheduled task (Advanced Scheduler functionality).

Although you can still configure your Dispatch Center to display that configuration (by setting the "CSF: Use Custom Color Coding Scheme" profile option to No), you can now use enhanced color coding for tasks, which is user extensible and available for the following conditions:

Task Type

Task Priority (i.e. Task Assignment Status)

Plan option

Use the scroll bars in the Resource section and gantt chart to view more details or dates.

Prerequisites

None.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Dispatch Center

Steps

1. From the Dispatch Center, select the Gantt tab.

   Service representatives, along with their shifts and assigned tasks, are displayed.

2. Click More to enlarge the gantt.
3. Select a date at From and To to define a date range you want to view.
4. Click Goto to focus on a specific service representative's schedule.

   The service representative's name is highlighted and visible.

5. Right-click the date or time on the Gantt chart header to change the view of the Gantt chart.

   You can choose from one of the following options: 15 Minutes, 30 Minutes, Hours, Three Hours, Six Hours or Days.

6. View a task description by moving the mouse over a task. Wait a moment and a task description is shown.
7. To view task details, double-click a task.

   The source document opens, showing the task details. For example, for a service request task the Service Request window opens.

8. You can optionally move a task from one service representative to another by dragging and dropping it.

> **Note:** When you use drag and drop, no check is performed to confirm whether it is the best option or even a possible option.

2.13 Working with the Map

On the map the service representatives are shown in a geographical representation with an easy-to-view status for the current date. Use this procedure to learn the

possibilities of using the map. You can use the map for monitoring as well as scheduling purposes.

Prerequisites

A spatial data product should be installed for map display.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Dispatch Center

Steps

1. From the Dispatch Center select the Map tab.

   The service representatives you are managing are shown.

2. You can also click Reset to show the map in its entirety when only a fragment is shown.

3. To change the map, choose it from the list of values in the Service Area.

4. Click More to enlarge the map to full window size.

5. Click Goto to focus on a specific service representative.

6. Use the Zoom and Navigate buttons to navigate through the map.

   You can also draw a box on the map with your pointer device to zoom in to that particular area.

7. To view a task or tasks on the map, select them from the task list by checking them and click Show from the Tasks area.

   The selected tasks with their location are shown on the map.

8. Double-click on a task for details.

   The Service Request window opens, showing the Task tab.

9. To assign a task to a service representative, check a task from the task list and double-click on a service representative of your choice.

   The Schedule Advise UI or Advanced Scheduler (if installed) opens. The service representative is defaulted as the option for My Suggestion.

10. Click Clear to remove the tasks from the map.

> **Note:** The tasks remain checked in the task list.

11. Click Save to save your current map settings. This is used to display the map the next time you use the map.

2.14 Scheduling Tasks

There are different ways to schedule tasks from the Dispatch Center. Choose one of the following options to learn more about scheduling tasks.

Options for scheduling are:

- Scheduling a Task Manually
- Selecting a Schedule Option:
  - Scheduling Using the Unassisted Option
  - Scheduling Using the Assisted Option
  - Scheduling Using the Window to Promise Option
  - Scheduling Using the Intelligent Optionn
- Scheduling a Task for Multiple Resources
- Scheduling a Task or Tasks Automatically
- Viewing Failed Autonomous Schedule Assignments
- Optimizing a Service Representative's Trip
- Recalculating a Service Representative’s Trip
- Recalculating All Trips
- Canceling a Scheduled Task
- Re-assigning a Scheduled Task
  - Re-assigning a Scheduled Task from the Gantt chart
  - Re-assigning a Scheduled Task from the Plan Board

2.14.1 Scheduling a Task Manually

You can manually assign a task to one or more field service representatives in three ways:

- From the Plan Board (right-click on a task)
- From the Dispatch Center (Advise button)
- From the Tasks list (right-click on a task)

The Scheduling Advice window is always opened to assist you in the assignment. When the Advanced Scheduler is installed all options for scheduling are available

to you. When the Advanced Scheduler is not installed only the Assisted and Unassisted options are available and you make use of Schedule Advise UI functionality.

When scheduling from the plan board or map, you make a suggestion for a field service representative to be taken into account when the scheduling criteria are applied. When based on the scheduling criteria no suitable service representative was found, your suggestion is still presented as an option. When scheduling from the Dispatch Center (Advise button) only those service representatives that are suitable based on the scheduling criteria applied are presented to you. It could happen no service representatives are found.

Use this procedure to schedule a single task manually.

Prerequisites

Make sure you read Section 1.8, "The Scheduling and Task Assignment Process" to understand this procedure.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Dispatch Center

Steps

1. From the Dispatch Center, populate the Tasks list with tasks.
2. There are several options to plan manually, choose one of the following:
   - In the Tasks list, select the checkbox next to the task you want to schedule and click Advise
   - In the Tasks list, right-click the task you want to schedule and select Schedule Advise from the popup menu
   - From the Plan Board, right-click the task you want to reschedule and select Schedule Advise from the popup menu

   The Scheduling Advice window is opened.
3. Choose an Assistance Level to help you with the assignment. For more information please refer to Selecting a Schedule Option or choose one of the following options directly:

- Scheduling Using the Unassisted Option
- Scheduling Using the Assisted Option
- Scheduling Using the Window to Promise Option
- Scheduling Using the Intelligent Option

2.14.2 Scheduling Using the Unassisted Option

Use the Unassisted option to assign a task to a resource of your choice. None of the criteria or Advanced Scheduler features are applied. This means that if parts are required for the task, you need to order them separately.

Prerequisites

Make sure you read Section 1.8, "The Scheduling and Task Assignment Process" to understand this procedure.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Dispatch Center

Steps

1. Navigate to the Scheduling Advice window
2. Select the Preferences tab.
3. Click Unassisted.
4. In the My Suggestion region make an entry for the resource Type or Name.
5. Click Search. The resource or resources are displayed in the Advice tab.
6. Double-click on a resource of your choice. The Start and End fields are populated with the scheduled date.
7. Click Schedule. A task assignment is created.
8. The plan board and gantt are refreshed.

2.14.3 Scheduling Using the Assisted Option

Use the Assisted option to assign a task to a resource based on a selection of criteria using Schedule Advise UI functionality. Spare parts availability is not taken into account. This means that if parts are required for the task, you need to order them separately.

Prerequisites

Make sure you read Section 1.8, "The Scheduling and Task Assignment Process" topic.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Dispatch Center

Steps

1. Navigate to the Scheduling Advice window.
2. Select the Preferences tab.
3. Click Assisted.
4. In the Resources region make a selection of Territory Qualifiers, a preferred resource defined in Contracts, a resource recommended from Installed Base or Skills. Also select if you want to check resources availability.
5. In the My Suggestion region enter a resource Type or Name if you want it to be considered as a plan option in addition to previous selections made.
6. Click Search.

   The qualified resources found are displayed in the Advice tab. Already assigned tasks show up in blue, schedule options show up in green.
7. Double-click on a resource of your choice. The Start and End fields are populated with the scheduled date.
8. Click Schedule.

   A task assignment is created and the plan board and gantt are refreshed.

2.14.4 Scheduling Using the Window to Promise Option

The Window to Promise option is only available when Advanced Scheduler is installed. Use the Window to Promise option to assign a time slot to a resource based on a selection of criteria using Advanced Scheduler functionality. Displayed are possible time slots to offer a customer with related cost.

After task assignment with the Window to Promise a time slot is reserved for a customer and the Planned Start and End dates are set accordingly. A time slot is also assigned to a resource but later in the process you can choose to optimize the assignment by assigning it to another resource or by optimizing the resources trip.

Prerequisites

Advanced Scheduler is installed. Make sure you read Section 1.8, "The Scheduling and Task Assignment Process" topic.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Dispatch Center

Steps

1. Navigate to the Scheduling Advice window.
2. Select the Preferences tab.
3. Click Window to Promise.
4. In the Resources region make a selection of Territory Qualifiers, a preferred resource defined in Contracts, a resource recommended from Installed Base or Skills. Also select if you want to check resources availability.
5. In the My Suggestion region enter a resource Type or Name if you want it to be considered as a plan option in addition to previous selections made.
6. In the Spares region choose an Availability Condition from the list of values. For more information on availability conditions please refer to Understanding Advanced Scheduler.
7. Click Search. The possible time slots with related cost are displayed in the Advice tab.

8. Select an option from the list of values at View Window to view only the options for a certain time slot.
9. Select a time slot of your choice and click Schedule. The Planned Start and End date for the task is set accordingly. A task assignment is created.
10. The plan board and gantt are refreshed.

Guidelines

The time slot with the lowest cost addressed is in most cases the best option to offer your customer.

2.14.5 Scheduling Using the Intelligent Option

The Intelligent option is only available when Advanced Scheduler is installed. Use the Intelligent option to assign a task to a resource based on a selection of criteria using Advanced Scheduler functionality.

Prerequisites

Advanced Scheduler is installed. Make sure you read the The Scheduling and Task Assignment Process topic in Section 1.5, "What is the Field Service Dispatch Center?"

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Dispatch Center

Steps

1. Navigate to the Scheduling Advice window.
2. Select the Preferences tab.
3. Click Intelligent.
4. In the Resources region make a selection of Territory Qualifiers, a preferred resource defined in Contracts, a resource recommended from Installed Base or Skills. Also, select if you want to check resources availability.
5. In the My Suggestion region enter a resource Type or Name if you want it to be considered as a plan option in addition to previous selections made.

6. In the Spares region, choose an Availability Condition from the list of values. For more information on availability conditions, please refer to Understanding Scheduler.
7. Click Search.

   The qualified resources with related cost found are displayed in the Advice tab.

   Already assigned tasks show up in blue, schedule options show up in green. Travel time in between tasks are transparent.
8. Double-click on a resource of your choice. The Start and End fields are populated with the scheduled date.
9. Click Schedule. A task assignment is created.

2.14.6 Scheduling a Task for Multiple Resources

You can assign a task to multiple resources, this can only be done assisted by the Schedule Advise UI and has to be done manually.

Use this procedure to assign a task to multiple resources.

Prerequisites

Make sure you read Section 1.8, "The Scheduling and Task Assignment Process" topic.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Dispatch Center

Steps

1. Navigate to the Scheduling Advice window.
2. Select the Preferences tab.
3. Click Assisted.
4. In the Resources region make a selection of Territory Qualifiers, a preferred resource defined in Contracts, or a resource recommended from Installed Base. Also select if you want to check a resources availability.

5. In the My Suggestion region enter a resource Type or Name if you want it to be considered as a plan option in addition to previous selections made.
6. Click Search.

   The qualified resources found are displayed in the Advice tab. Already assigned tasks show up in blue, schedule options show up in green.
7. Select a resource of your choice and to add it to an already assigned task, check the Add Resource checkbox.
8. Click Schedule. A task assignment is created.

2.14.7 Scheduling a Task or Tasks Automatically

You can schedule a single task or multiple tasks automatically directly from the dispatch center. The scheduling criteria applied come from Advanced Scheduler and use default settings. It is also possible to run a concurrent program, Autonomous Scheduler, that schedules tasks automatically in the background without interference of a dispatcher. This is setup at implementation.

Use this procedure to schedule a single task or multiple tasks automatically from the Dispatch Center.

Prerequisites

Advanced Scheduler is installed. Make sure you read Section 1.8, "The Scheduling and Task Assignment Process" topic.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Dispatch Center

Steps

1. From the Dispatch Center, populate the Tasks list with tasks.
2. Check the box next to the task you want to schedule. To check all tasks at once choose Select All Tasks from the Tools menu on the toolbar.
3. Click Auto Schedule.

   The plan board and gantt are refreshed. When during the scheduling process an assignment for a task fails, you are prompted with an error message telling you

why scheduling failed. Resolve the issue for the task. The Auto Schedule process needs to be re initiated to schedule the remainder of the tasks.

2.14.8 Viewing Failed Autonomous Schedule Assignments

Use this procedure when a concurrent program, Autonomous Scheduler, is active that schedules tasks automatically in the background without involvement of a dispatcher. The program picks up tasks to schedule at set time intervals. This is Advanced Scheduler-specific functionality.

When Advanced Scheduler is not able to schedule a task for some reason, the task status is set to Auto Rejected. This enables you to find failed tasks more easily from the Dispatch Center. An output file is generated with a problem description for the failed task. When the problem for the task has been resolved, change the status back to a can be scheduled status.

Use this procedure to view the output file with the problem description for the task.

Prerequisites

Advanced Scheduler is installed.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Other > View Requests

Steps

1. Open the Find Requests window.
2. Click Submit a New Request.

   The Submit a New Request window is opened.
3. Choose the Single Request option.
4. Click OK.

   The Submit Request window is opened.
5. At Name, choose Autonomous Auto Schedule from the list of values and click OK.
6. Click Submit.

The Decision window is opened.

7. Click No.

   You will return to the Find Requests window.

8. Click Find.

   The Request window is opened.

9. Look for the requests with the Name Autonomous Auto Schedule. Check the Phase and Status. If Phase is Completed and the Status is something other then Normal, something went wrong during the process of assigning a task to a resource when executing the Autonomous Auto Schedule program.

10. Click View Output to view the output file with the problem description for the task.

2.14.9 Optimizing a Service Representative's Trip

Use this procedure to optimize a service representative's Trip. This might affect the task's order in the trip.

Prerequisites

None

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Dispatch Center

Steps

1. From the Dispatch Center, open the Plan Board tab.
2. Right-click on a departure task and choose Optimize Trip.

   The function is carried out immediately.

2.14.10 Recalculating a Service Representative's Trip

Use this procedure to update and optimize a service representative's trip after task assignment and before task commitment. This will eliminate time conflicts within the trip and reset the scheduled start times of all tasks in the trip, accordingly.

Prerequisites

Advanced Scheduler must be installed.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Dispatch Center

Steps

1. From the Dispatch Center, choose the Plan Board tab.
2. Select the service representative's name and right-click it.

   The popup menu appears.
3. Click Recalculate Trip.

2.14.11 Recalculating All Trips

Use this procedure to update and optimize all service representatives trips shown on the plan board after task assignment, and before task commitment. This will eliminate time conflicts within the trip and reset the scheduled start times of all tasks in the trip, accordingly.

Prerequisites

Advanced Scheduler must be installed.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Dispatch Center

Steps

1. From the Dispatch Center, select the Plan Board tab.

   Make sure all the service representatives you want to recalculate the trips for are shown on the plan board.

Refer to Section 2.4, "Selecting Territories" to reference the procedure to do so.

2. From the Tools menu select Recalculate All Trips.

2.14.12 Canceling a Scheduled Task

To cancel a scheduled task you need to cancel all task assignments for the task. Once a task is canceled you can choose to schedule it again or close it.

Use this procedure to cancel a scheduled task or task assignment.

Prerequisites

None.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Dispatch Center

Steps

1. Populate the Tasks list with the task.
2. Select the task.
3. Select the Resources tab.
4. Change the task assignment Status for each resource to Cancelled.
5. Click Save.
6. Click Refresh, the task status is changed accordingly.

2.14.13 Re-assigning a Scheduled Task

Use either of the following procedures to assign an already assigned task from one service representative to another.

- Section 2.14.13.1, "Re-assigning a Scheduled Task from the Gantt chart"
- Section 2.14.13.2, "Re-assigning a Scheduled Task from the Plan Board"

2.14.13.1 Re-assigning a Scheduled Task from the Gantt chart

Prerequisites
None.

Responsibility
Field Service Manager

Navigation
Field Service Dispatcher > Dispatch Center

Steps
1. From the Dispatch Center, select the Gantt tab.
2. Select a task in the service representative's trip, drag and drop it onto the service representative you want to assign the task to.

   Note: When using drag and drop, no check is performed if it is the best or even a possible option.

3. Click Undo to cancel the drag and drop action.

2.14.13.2 Re-assigning a Scheduled Task from the Plan Board

Prerequisites
None.

Responsibility
Field Service Manager

Navigation
Field Service Dispatcher > Dispatch Center

Steps
1. From the Dispatch Center, select the Plan Board tab.
2. Right-click on Task and choose Scheduling Advise.

The Scheduling Advice window is opened.

2.15 Manage Field Service Resource Availability

Through the Trips Managment 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. This function is necessary in the event that a field technician unexpectedly becomes unavailable. In this case, the dispatcher can not only unplan and/or reschedule tasks, but can block Scheduler from automatically scheduling any further tasks for the technician.

By default, the Trips Management UI displays all the field technicians associated with the selected territory for the dispatcher. If you navigate to this window by right-clicking on a resource (in the Plan Board or Gantt) the Trips Management UI will contain only the resource selected.

This section covers the following procedures:

- Block Trip
- Unplan Task
- Reschedule Task
- Unblock Trip

2.15.1 Block Trip for Technician

From the Trips Management UI, a dispatcher can block a single trip or multiple trips, the latter by entering a date range. This action prevents new assignments being made for a technician and temporarily freezes the task assignments in the blocked trip. Use the following procedure to block a technician's trip.

Prerequisites

None.

Responsibility

Field Service Manager

Navigation

Use the following navigation paths to access the Trips Management UI:

Field Service Dispatcher > Dispatch Center > Navigate > Trips Management

Field Service Dispatcher > Dispatch Center > Plan Board tab or Gantt tab > Right-click Resource Name > Trips Management

Note: If you navigate to the Trips Management UI from the Plan Board or the Gantt, only the resource you selected will be displayed.

Steps

1. From the Trips Management UI, select the technicians that you want to block trips for by choosing the Selected checkbox next to the resource name.

   You can select as many technicians as you like to block trips for. If you want to block trips for all technicians, click the Select All check box.

2. In the Trips section, choose the Start and End dates and times for the trips you want to block.

   The entire block of time within the start and end date and time will be blocked.

3. In the Actions section of the UI, choose Block in the Trips field.

4. Click OK.

   The trips for the date range you specified are blocked and reflected in the Plan Board and the Gantt.

Guidelines

You can block trips and unplan or reschedule tasks at the same time through the Trips Management UI.

2.15.2 Unplan Task for Technician

If a task assignment has not been completed or "closed," it can be unplanned from the Trips Management UI. If an assigned task has been committed to a field technician's mobile device, the task can be unplanned and rescheduled. Unplanning such asks will automatically send cancellations to the mobile device.

Use the following procedure to unplan tasks.

Prerequisites

A task must be schedule and assigned to a technician and it must have a status other than "completed" or "closed."

Responsibility

Field Service Manager

Navigation

Use the following navigation paths to access the Trips Management UI:

Field Service Dispatcher > Dispatch Center > Navigate > Trips Management

Field Service Dispatcher > Dispatch Center > Plan Board tab or Gantt tab > Right-click Resource Name > Trips Management

> **Note:** If you navigate to the Trips Management UI from the Plan Board or the Gantt, only the resource you selected will be displayed.

Steps

1. From the Trips Management UI, select the technicians that you want to unplan tasks for by choosing the Selected checkbox next to the resource name.

   You can select as many technicians as you like to block trips for. If you want to unplan tasks for all technicians, click the Select All check box.

2. In the Trips section, choose the Start and End dates and times for the tasks you want to unplan.

   The entirety of the task must fall within the start and end dates and times that you choose.

3. In the Actions section of the UI, choose Unplan in the Tasks field.

4. Click OK.

   A popup window displays a message confirming that you are unplanning one or more tasks.

5. If you are sure you want to unplan the tasks, click OK on the popup message.

   A second message confirms the number of tasks you unplanned.

6. Click OK to close this window.

   The tasks are unplanned.

Note: You can block trips and unplan tasks during the same specified period at one time by choose Block and Unplan at the in the respective Actions fields.

Guidelines

To unplan a specific task for a technician, you can right-click the task in the Plan Board and choose the Unplan Task option.

2.15.3 Reschedule Technician's Tasks

In the event that tasks have been scheduled and assigned to a technician who, for some reason, becomes unavailable, a dispatcher can reschedule the task or tasks through Trips Management. You can also reschedule tasks for multiple technicians and multiple task for a specified period of time.

Use the following procedure to reschedule tasks.

Prerequisites

At least one task must be assigned to a technician.

Responsibility

Field Service Manager

Navigation

Use the following navigation paths to access the Trips Management UI:

Field Service Dispatcher > Dispatch Center > Navigate > Trips Management

Field Service Dispatcher > Dispatch Center > Plan Board tab or Gantt tab > Right-click Resource Name > Trips Management

Note: If you navigate to the Trips Management UI from the Plan Board or the Gantt, only the resource you selected will be displayed.

Steps

1. From the Trips Management UI, select the technicians that you want to reschedule tasks for by choosing the Selected checkbox next to the resource name.

   You can select as many technicians as you like to reschedule tasks for. If you want to reschedule tasks for all technicians, click the Select All check box.

2. In the Trips section, choose the Start and End dates and times for the tasks you want to reschedule.

   The entirety of the task must fall within the start and end dates and times that you choose.

3. In the Actions section of the UI, choose Unplan in the Tasks field.

4. Click OK.

   A popup window displays a message confirming that you are unplanning one or more tasks.

5. If you are sure you want to unplan the tasks, click OK on the popup message.

   A second message confirms the number of tasks you unplanned.

6. Click OK to close this window.

   The tasks are unplanned.

Note: You can block trips and reschedule tasks during the same specified period at one time by choose Block and reschedule in the respective Actions fields.

2.15.4 Unblock Technician Trips

Using Trips Management functionality, you can unblock trips for technicians that have previously been blocked. You can unblock at the trip or technician level and you can also unblock trips for a specified date range, for multiple technicians, or both.

Use the following procedure to unblock technician trips.

Prerequisites

None.

Responsibility

Field Service Manager

Navigation

Use the following navigation paths to access the Trips Management UI:

Field Service Dispatcher > Dispatch Center > Navigate > Trips Management

Field Service Dispatcher > Dispatch Center > Plan Board tab or Gantt tab > Right-click Resource Name > Trips Management

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Note: If you navigate to the Trips Management UI from the Plan Board or the Gantt, only the resource you selected will be displayed.

Steps

1. From the Trips Management UI, select the technicians that you want to unblock trips for by choosing the Selected checkbox next to the resource name.

   You can select as many technicians as you like to unblock trips for. If you want to unblock trips for all technicians, click the Select All check box.

2. In the Trips section, choose the Start and End dates and times for the trips you want to unblock.

   The entire block of time within the start and end date and time will be blocked.

3. In the Actions section of the UI, choose Unblock in the Trips field.

4. Click OK.

   The trips for the date range you specified are unblocked and reflected in the Plan Board and the Gantt. Once unblocked, the technicians that were previously blocked become automatically available for task and trip assignments, including automatic scheduling by Scheduler.

2.16 Committing the Schedule

You have to commit the schedule so it gets communicated to the service representatives. Also at commitment, any parts reservations created by Advanced Scheduler at task assignment are ordered when the schedule is committed. Committing the schedule can be done manually as well as automatically. For

automatic commitment a concurrent program runs in the background. This is setup at implementation.

Use this procedure to change task status for all tasks for a selected date manually.

Prerequisites

None.

Responsibility

Field Service Manager

Navigation

Any of the three following navigation paths will open the Commit Schedule window:

Field Service Dispatcher > Dispatch Center > Navigate > Commit Schedule

Field Service Dispatcher > Commit Schedule (main menu)

Field Service Dispatcher > Dispatch Center > Plan Board tab > Right-click resource name > Commit Schedule

Steps

1. From the Commit Schedule window, select the Schedule tab.
2. Indicate the date to the commit schedule for at Time Frame.

   This could be for schedules created in the past hour, but also for one or more days.

   When the function has been started by right-clicking a resource name in the plan board, the 'From' date field contains the active date of the plan board. In the other cases, the 'From' date contains the current date. In all cases, the default 'To' date is the 'From' date + 1.

   When this area is left blank, all schedules found for the selected task status are committed.
3. At Resource define a specific resource or a resource group to commit the schedule for.

   When starting the function by right-clicking a resource name in the plan board, the resource name is filled in already. When this area is left blank, all schedules for the selected task status are committed.

4. Select the Options tab.
5. Make a selection from the list of values at From and To to define the tasks status transition at commitment.
6. Click OK.

   The schedule is committed. The Task Status is changed to the status defined at To in the previous step.

2.17 Reporting on Tasks

In Debrief you can report on labor time, parts used, expenses made, and record counter readings.

Use this procedure to start or open a Debrief for a task from the Dispatch Center.

Prerequisites

None.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Dispatch Center

Steps.

1. From the Dispatch Center, select the Plan Board tab.
2. Select the task you want to report on and right-click it.

   The popup menu appears.
3. Click Debrief.

   The Debrief window is opened with the task information populated.

   For more information, see Chapter 3, "Using Debrief".

2.18 Viewing Service History

Use this procedure to view the service history for a customer site or a product.

Prerequisites

None.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Service History

(Alternatively) Field Service Dispatcher > Dispatch Center > Navigate > Service History

Steps.

1. Open the Service History window through the above navigation options.
2. To view service history by customer address make a selection from the Site list of values.
3. To view service history for a specific product make a selection from the Unit list of values.

   You can also create a combined query.
4. Refine your query by entering values at Ordering Date Period and choose a Problem description from the list of values.
5. Click Search.

2.19 Viewing the Service Request Details

When the task originates from a service request, the Service Request form can be accessed to view all details. Learn from this procedure how to access the Service Request form.

Use this procedure to access the Service Request form.

Prerequisites

None.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Dispatch Center

Steps

1. Navigate to **(R) Field Service Dispatcher > Dispatch Center > Right-click on a Task in the Tasks list > Show Service Request.**

   The Service Request form is shown.

3

Using Debrief

The Debrief module allows field service representatives to access, view, update and report on their individual task assignments. They also can report on materials used at the customer site to resolve the issue, labor time spent, and incurred expenses. The data gathered in the service debrief is used for generating an invoice for the customer, updating the customer's installed base and maintaining the field service representative's trunk stock.

This module also gives service managers the capability to capture, access, and update the debrief information on behalf of their representatives. This topic group provides process-oriented, task-based procedures for using Debrief.

Topics covered are:

3.1 Accessing a Debrief

You can open a debrief either as a Field Service Representative, in which case you can view and update your own tasks, or as a Field Service Manager, where you have access to the tasks of all your resources.

Use this procedure to create or open a Debrief for a task.

Responsibility

Field Service Representative

Field Service Manager

Field Service Dispatcher

Navigation

Field Service Representative > My Tasks

Field Service Manager > Field Service Dispatcher > Debrief

Field Service Dispatcher > Debrief

Prerequisites

A service request and task to report on.

Steps

1. As a Field Service Representative, if you navigate to My Tasks, the Debrief window opens with the list of all the tasks assigned to the service representative with scheduled start dates less than or equal to the system date.
2. As a Field Service Manager, if you navigate to Debrief from Field Service Dispatcher > Debrief, the Find Tasks window is opened.
3. To use the Find function, place your cursor in any of the fields and select the desired search criteria from the list of values, or enter it.

   To search for an Assignee, first choose "Employee" as Assignee Type from the Assignee Type list of values.
4. Click Find.

   A spread table with the list of tasks assigned to the specified resource appears in debrief header region. The Debrief number column shows if a debrief has already been created or not.

5. Depending on the record selected in the debrief header, the debrief detail is populated automatically.

3.2 Viewing and Creating Notes

At any time during the process of scheduling service requests, assigning tasks and debriefing, a field service representative or call center agent can add a note to a task. In the Debrief window, a field service representative can not only add a Note to a task, but can also view notes that have been associated with a service request task. This feature allows a consolidated view of a task and all the related notes added during the lifecycle of the task. The user also has an option to search on additional notes by clicking the Find icon on the menu and specify the search criteria. (For example, to search on Installed base notes, enter the source as "installed base" and click enter.)

Use the following procedure to view and create notes in Debrief.

For complete details on creating Notes, see the *Oracle CRM Foundation Concepts and Procedures* guide.

Prerequisites

Notes button on the debrief window is enabled only if the debrief number is generated.

Responsibility

Field Service Manager

Field Service Representative

Field Service Dispatcher

Navigation

Field Service Manager: Field Service Dispatcher > Debrief > Find Tasks > Debrief

Field Service Representative: My Tasks

Field Service Dispatcher: Debrief > Find Tasks > Debrief

Steps

1. Navigate to the Debrief window.
2. Click Notes.

The Notes window is opened.

> **Note:** The Notes button on the Debrief UI is enabled only after the Debrief number is generated.

When a note was created for this task, you can view it here. In the left panel of the window under the Notes tabs, all notes are listed, including the date the note was entered, who entered the note, the source of the note (task, debrief, etc.), the status, and a brief summary of the note.

3. To view details of a particular note, select the note and it's details appear in the right panel.
4. To create a new note for the task, click New.

   The Notes window refreshes. Debrief defaults in the Source Field and the date and Number also are populated.
5. Enter your note in the Text box.
6. Optionally, choose a Type for the note from the list of values.
7. Choose a Status for the Note.
8. Optionally, choose what the note is Related To from the list of values.
9. Select a context value in the Value field from the list of values.
10. To add more details to your note, click More and enter the text in the Detailed Note box.
11. Save your work.

3.3 Accessing your Calendar

At any time you can access your Calendar from Debrief. The Calender is a scheduling tool used to define and view available and non-available time for a resource or group of resources.

Prerequisites

None.

Responsibility

Field Service Manager

Field Service Representative

Field Service Dispatcher

Navigation

Field Service Manager: Field Service Dispatcher > Debrief > Find Tasks > Debrief

Field Service Representative: My Tasks

Field Service Dispatcher > Debrief > Find Tasks > Debrief

Steps

Use this procedure to open your calendar:

1. Navigate to the Debrief window.
2. Click Calendar.

   The Calendar window is opened.

Guidelines

You can edit existing tasks and Todo lists or add new ones to the calendar. For detailed instructions, see the *Oracle CRM Foundation Concepts and Procedures* guide.

3.4 Entering Material

When working out in the field, a field service representative needs to report on the materials used. This information is necessary to maintain an adequate supply of materials, maintain the customers installed base, and to be able to invoice the customer for the materials used. You enter materials information at the line level and update inventory, installed base, and charges for a specific line.

Use the following procedure to report on material transactions for a task.

Prerequisites

A service request and task to report on. The setup for service activity code should be complete. The item setup should be complete and the items should have the "Service Billable Flag" set to material. The resources should have sub inventories assigned to them. In the case of trackable items, instance number should be generated. The items also need to have a price list associated with it.

Responsibility

Field Service Manager

Field Service Representative

Field Service Dispatcher

Navigation

Field Service Manager: Field Service Dispatcher > Debrief > Find Tasks > Debrief

Field Service Representative: My Tasks

Field Service Dispatcher: Debrief > Find Tasks > Debrief

Steps

1. From the Debrief window, select the Materials tab.
2. Choose a Service Activity Code from the list of values.

   This is the activity you are going to perform for the material you are reporting on. Based on this selection, fields need to be populated further down the material line. Fields that are white are optional and fields that are yellow are mandatory.
3. The item LOV is filtered based on the service activity code. In case the Update IB flag is checked for a service activity code, the items LOV will display both trackable and non-trackable items else it will display only non-trackable items.
4. The UOM is defaulted, but you can select a different UOM from the list of values, if necessary.
5. Enter the amount of the material used at the Qty field.

   In the case of serialized items, Qty is 1.
6. The LOV for Subinventory is dependent on the line category code defined in the service activity code setup form.

   In case the line category code is defined as "Order" the sub inventory gets populated with the default usable sub inventory. The LOV will then display only usable subinventories. In the case where the line category code is "return" the sub inventory gets populated with the default defective sub inventory. However, the LOV for sub inventory will display both usable and defective sub inventories.
7. Enter the Serial Number, Lot, Locator, Revision, and Instance Number details depending on the item attributes.

The LOV for these fields are validated based upon the Item and Subinventory combination.

8. Choose a Service Date from the date list of values.

   The system date is defaulted.

9. Optionally, choose a Reason for the material transaction from the list of values.

10. The Disposition field is defaulted once the Item is selected.

11. In case an item is Installed base trackable and the line category code on the service activity code setup form is "Order," the parent product and the recovered product field is enabled.

    The parent product LOV displays the list of all the instances installed at the customer location. In case of line category code "Return" the recovered product field is enabled.

12. Optionally, the user can update the parts status on the debrief line.

13. Enter the return reason for the recovered transaction.

14. Click Save.

    The material line is saved.

Guidelines

For more details, refer to Section 3.11, "Updating the Task Assignment Status".

You can create multiple material transaction lines before saving and updating. For replacements you always need at least two material transaction lines, one for the part taken out/removed, and one for the part put back in/installed.

When you have performed an update you can't modify the transaction lines that have been successfully updated. You can however still add new material transaction lines and update them.

3.5 Entering Expenses

You can use the Expenses tab to report any expenses accrued during a customer visit. Expenses may include a meal, driving costs, etc.

Use the following procedure to enter expenses.

Prerequisites

A task with a status to report on.

Responsibility

Field Service Manager

Field Service Representative

Field Service Dispatcher

Navigation

Field Service Manager: Field Service Report > Find Tasks > Debrief

Field Service Representative: My Tasks

Field Service Dispatcher > Debrief > Find Tasks > Debrief

Steps

1. From the Debrief window, select the Expenses tab.
2. Choose a Service Activity Code from the list of values.

   This is the activity you are going to perform for the expense you are reporting on.
3. Select the Item you are going to create an expense line for.

   The Item Description field is populated with an extended description for the item. The UOM is defaulted after selection.
4. You can either enter the UOM and Quantity, or the Amount and Currency.

   Quantity and Amount are mutually exclusive.
5. Choose a Service Date from the date list of values.

   The system date is defaulted.
6. Optionally, choose a Justification for the expense from the list of values.
7. The Channel Code field is populated automatically.

   It shows whether the resource that created the debrief is a connected user or a disconnected user. A disconnected user created the debrief from a mobile device.
8. Click Save.

The expense line is saved.

Guidelines

Please refer to Section 3.11, "Updating the Task Assignment Status" for more details.

You can create multiple expense lines before saving and updating. When you have performed an update you can't modify the expense lines that have been successfully updated. You can however still add new expense transaction lines and update them.

3.6 Entering Labor Time

When at work out in the field you need to record the hours spend on a task.Use this procedure to enter detailed labor information.

Prerequisites

A service request and task to report on.

Responsibility

Field Service Manager

Field Service Representative

Field Service Dispatcher

Navigation

Field Service Manager: Field Service Report > Find Tasks > Debrief

Field Service Representative: My Tasks

Field Service Dispatcher > Debrief > Find Tasks > Debrief

Steps

1. From the Debrief window, select the Labor tab.
2. Choose a Service Activity Code from the list of values.

   This is the activity you are going to perform for the labor you are reporting on.
3. Select the Item you are going to create a labor line for.

   The Item Description field is populated with an extended description for the item.

4. The UOM is defaulted but you can choose to select a different UOM from the list of values.
5. Enter the Start and End time for the labor.
6. The duration is populated based upon the start and end time.

   Optionally, you can enter any two values and the third value will be displayed automatically.
7. Choose a Service Date from the date list of values.

   The system date is defaulted.
8. Optionally choose a Reason for recording the labor line from the list of values.
9. The Channel Code field is populated automatically. It shows whether the resource that created the debrief is a connected user or a disconnected user. A disconnected user created the debrief from a mobile device.
10. Click Save.

    The labor line is saved.

Guidelines

Please refer to Section 3.11, "Updating the Task Assignment Status" for more details.

You can create multiple labor lines before saving and updating. When you have performed an update you can't modify the labor lines that have been successfully updated. You can however still add new labor transaction lines and update them.

3.7 Recording Counter Readings

Optionally, you can record counter readings. Counter readings can only be recorded for customer products defined in the installed base which have an counter assigned to them. When the button is greyed out, no counter readings are associated with the product. Use this procedure to capture counter readings.

Prerequisites

The Installed base item against which a service request has been created must have a counter group setup and counters associated with it.

Responsibility

Field Service Manager

Field Service Representative

Field Service Dispatcher

Navigation

Field Service Manager: Field Service Dispatcher > Debrief > Find Tasks > Debrief

Field Service Representative: My Tasks

Field Service Dispatcher > Debrief > Find Tasks > Debrief

Steps

1. From the Debrief window, click Counters.

   The Counters window is opened.

2. Select the counter within the counter group of your choice and double-click it. The Capture Counter Reading window opens.

3. Enter a value for the counter reading.

4. Click **OK**.

   The value is saved.

3.8 Viewing Onhand Quantity

You can view the on-hand quantity for items within a selected inventory organization.

Prerequisites

Oracle Inventory is implemented.

Responsibility

Field Service Manager

Field Service Representative

Field Service Dispatcher

Navigation

Field Service Manager: Field Service Dispatcher > Debrief > Find Tasks > Debrief

Field Service Representative: My Tasks

Field Service Dispatcher > Debrief > Find Tasks > Debrief

Steps

1. From the Tools menu in the Debrief window, click View Onhand Quantity.
2. Pick the organization from the LOV for which you want to view onhand quantity.

   The Find On-hand Quantities window is opened.
3. Enter the criteria that you want to use to limit the results of your search and click Find.

   The Item On-hand Quantities window is opened and a list of items that match your search criteria with on-hand quantity is displayed.
4. Click on the Sub Inventories button on the onhand quantity form to view sub inventories for the specified organization.

3.9 Viewing Parts Requirement

Use this procedure to view and create parts requirement for a specified task.

Prerequisites

You must first create a task.

Steps

1. From the Tools menu in the Debrief window, click Parts Requirement**.**

   The Parts Requirement window opens with the service request, task and the resource information populated in the header region.
2. The details region is populated in case there are any parts associated with the task.
3. Optionally the user can also create new Parts Requirement from this window. For more information, see Section 4.1, "Create Parts Requirement".

3.10 Viewing Service Request

Use this procedure to view service request details for a specified task.

Prerequisites

None.

Responsibility

Field Service Manager

Field Service Representative

Field Service Dispatcher

Navigation

Field Service Manager: Field Service Dispatcher > Debrief > Find Tasks > Debrief

Field Service Representative: My Tasks

Field Service Dispatcher > Debrief > Find Tasks > Debrief

Steps

1. From the Tools menu in the Debrief window, click Service Request.

   The Service Request window is opened with the service request and task details populated.

2. You have the ability to create an additional task from the service request window.

3. Optionally, you can also navigate to charges to submit the charges for debrief.

3.11 Updating the Task Assignment Status

Use this procedure to update the assignment status and push information to inventory, installed base and charges.

Prerequisites

A service request and task to report on. Status transition engine must be setup for tasks.

Responsibility

Field Service Manager

Field Service Representative

Field Service Dispatcher

Navigation

Field Service Manager: Field Service Dispatcher > Debrief > Find Tasks > Debrief

Field Service Representative: My Tasks

Field Service Dispatcher > Debrief > Find Tasks > Debrief

Steps

1. From the Debrief window, in the Assignment Status field, select the new task status from the list of values.
2. Click Save.

   A concurrent program "CSF: Update Debrief Lines" is enabled. The concurrent program will push information to inventory, installed base and charges only if the task status has one of the following flags enabled in the tasks status setup form:

   - Completed
   - Closed
   - Cancelled
   - On Hold
   - Rejected
3. Optionally, you can run this program manually by specifying the debrief number.
4. Depending on the status of the concurrent program, the debrief status on the debrief window is populated.

   The debrief status can have the following values:

   - Complete - indicates the debrief lines have been pushed to inventory, installed base and charges successfully.
   - Running - indicates the concurrent program is still running
   - Pending - indicates the concurrent program is still running
   - Completed with errors - the concurrent program completed with error. The details error information can be viewed in the error column on debrief lines
5. Verify by logging into inventory, installed base and charges to view the processed information.

Guidelines

If there are multiple task assignments related to a task, then all task assignments must be closed in order for the task to be closed. This occurs when multiple field service representatives are assigned to the same task.

3.12 Viewing a Pro Forma Invoice

Prior to sending an invoice to a customer after a debrief is completed, you can review a summarized view of the invoice by using the Field Service Pro Forma Invoice feature.

This report details the charges for the service performed at the customer site and includes such information as customer name, address, contract number, service request number, item, quantity, amount, and currency.

Use the following procedure to view a Pro Forma Invoice.

Prerequisites

A task must be completed.

Responsibility

Field Service Manager

Field Service Representative

Field Service Dispatcher

Navigation

Field Service Manager: Field Service Dispatcher > Debrief > Find Tasks > Debrief

Field Service Representative: My Tasks

Field Service Dispatcher > Debrief > Find Tasks > Debrief

Steps

1. From the Tools menu in the Debrief window, select Pro Forma Invoice.

   The Pro Forma Invoice window opens.

2. View the details of your invoice, which includes the service activity, item and contract numbers, unit price, list price, quantity and charge amount.

3. After review, if you are satisfied with the invoice close the form and return to the Debrief window.

Part II

Spares Management

Part 1 of the *Oracle Field Service User Guide* contains the following chapters:

- Chapter 4, "Using Spares Logistics"
- Chapter 5, "Using the Planner's Desktop"
- Chapter 6, "Loop Planning, Notifications and Reporting Hierarchy"

4

Using Spares Logistics

Sections in this chapter include:

4.1 Create Parts Requirement

Required

A dispatcher or field service manager creates a parts requirement to define specific parts needed by a field technician. If you are using Scheduler functionality of Oracle Field Service, the Parts Requirement is used to automate the process of assigning and scheduling tasks to a technician, based on both parts and technician availability.

You can create the parts requirement manually. For example, a field technician might be assigned a task to fix a broken copy machine. Once he arrived at the customer site, however, he found that he didn't have some of the required parts in stock. The technician can call into the Dispatch Center and request the needed parts. The dispatcher or field manager then creates a parts requirement and, subsequently, may use the Parts Requirement to create an Internal Order. See Section 4.2, "Create an Internal Order" for details.

The Parts Requirement can also be created automatically when the service request and task are created as long as the parts required for a task template and product have been predefined in Spares Management.

You can also access the Parts Search Hierarchy UI directly from the Parts Requirement UI by clicking the Parts Search button. This functionality enables the dispatcher to quickly locate parts in a scenario when ATP functionality is not finding availability in the normal supply chain.

There are two methods to create a Parts Requirement outlined in this section:

- Section 4.1.1, "Create Parts Requirement Manually"
- Section 4.1.2, "Create Parts Requirement Automatically"

4.1.1 Create Parts Requirement Manually

You can create a Parts Requirement manually. In cases where you have not set up a task template and associated it with a product and a list of required parts, you can still create the Parts Requirement, by accessing the UI directly and entering the appropriate information. The Parts Requirement UI is divided into four parts:

- Header Information (Service Request number, resource name, requirement number, etc.)
- Ship To Address: This block can be populated with one of the field technician's ship to addresses, one of the customer addresses, or a special address, which is entered at the time the Parts Requirement is created.
- Items to be added to the Parts Requirement: There can be multiple items associated to a particular Parts Requirement.
- If you do not know the Item number, you can enter a "dummy" part number (which needs to be set up in Oracle Inventory), and then enter an item description in the Item Scratchpad field. This information can be used to research the item to find the item number in the Item Master. Once you find it, substitute the actual item number for the place holder number.

Prerequisites

Parts must be defined for the task.

ATP must be setup.

Addresses and subinventories must be defined for the resource.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Spares Management > Spares Logistics > Parts Requirement

Steps

Follow these steps to **manually** create a Parts Requirement:

1. Open the View Parts Order Status form.

   To search for existing Part Requirements, use this form as a Find function. If you have to modify an existing Parts Requirement, you can search for it here.

2. To create a new Parts Requirement, click the New button.

   The Parts Requirement window opens.

3. If you are creating the Parts Requirement for a specific service request or task, enter the service request number. (If you know the Task number, enter it and the Service Request number attached to the Task is automatically entered.)

   Resource type and name will automatically be entered if a resource has been assigned to the task. The destination organization, subinventory and address will automatically be entered if they have been set up for the resource.

4. If not already populated, enter the Resource Type and Resource Name that you want to associate with the Parts Requirement.

   You can leave these fields blank if you are using the Scheduler integration functionality. This will be done automatically through scheduler.

   Note: If a service request is already associated with the Parts Requirement, you cannot add a resource type and name from this UI if one does not already exist.

5. Select an organization from the Destination Organization list of values.

   This is the organization that contains the location to which the item will be shipped. If the Resource Name (i.e. the field engineer) is associated with a subinventory, this field will be populated with the organization associated with the subinventory. The Destination Subinventory field is also populated.

6. Enter a date in the Need By date field.
7. The Order Type field can be selected from the list of values, although it defaults to the order type defined in a profile option.
8. In the Ship To block, select the radio button of the address you want to ship the parts to, either Engineer, Customer, or Special.

   The default selection is Engineer and the engineer's default address is displayed. If you want to change addresses, click the Addresses button and choose the address where you want to ship the parts.

   If you choose the Special radio button, enter the address and click Save. This address will be added to the engineer's list of addresses.
9. In the Required Item field of the Resource tab, choose the part item number of the part you want to assign to this Parts Requirement from the list of values.

   Once you select the item, the UI will display the on hand and available quantity for the resource.
10. In the Required Quantity field, enter the quantity needed to fill the Parts Requirement.
11. Repeat steps 9-10 for each item you want to add to the Parts Requirement.
12. Click Save to create a Parts Requirement.

    This will create a Requirement Number, which you can use to access the Parts Requirement at a later time if you need to view or modify it.

Guidelines.

To set up a Parts Requirement, the minimum required is a Destination Organization and an item. If you are creating a Parts Requirement for scheduler integration, you do not need to enter a Resource Type or Resource Name. These values are assigned by scheduler at a later time, based upon parts and technician availability.

4.1.2 Create Parts Requirement Automatically

In many field service operations, field technicians have certain routine maintenance tasks that they repeatedly undertake. A company that services personal computers, for example, may replace monitors, or add memory, on a regular basis. Rather than fill out a manual Parts Requirement for each of these instances, Spares Management allows you to set up an automated process to handle these regular occurrences.

You can create a Parts Requirement automatically when you create a service request for a product using a Task Template that has pre-defined parts. See the Task Template and Task Parts setup sections in the *Oracle Field Service Implementation Guide* for details.

Prerequisites

Task Parts definition must be created. Sub-inventories must be defined and assigned to specific organizations.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Service Request > Service Requests > Create Service Request

Guidelines

When you create a service request, you must associate a task to it using the task template functionality. After you have created a basic service request, navigate to the Task tab, and click the Use Template button to create a task based on a template.

In the Create Tasks from Template Group window, choose the Template Group that corresponds to the task template you want to use. You define task templates and associate products and items to a task template during Spares Management implementation.

For more information on creating a service request and creating tasks from a task template, see the *Oracle Support User Guide*.

4.2 Create an Internal Order

Once you create a Parts Requirement, you can manually create an internal order, which will utilize both Oracle's Available to Promise (ATP) and Order Management functionality.

An internal order to fill a parts requirement allows you to ship the necessary parts to a field engineer at the specified "ship to" address. You can check for part availability within the supply chain and, if the part is not available, you can also check if there are any alternate parts. These include both substitute and supersession parts.

Internal orders are tracked, using the Internal Order Number, which is created for each item of the Parts Requirement that is part of the order. Internal Orders allow you to ship parts between two organizations.

Although often times you will create an internal order at the same time that you create the Parts Requirement, this is not required. You can create an internal order at any time after a Parts Requirement has been created. For details on creating a Parts Requirement, see Section 4.1, "Create Parts Requirement".

Prerequisites

None.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Spares Management > Spares Logistics > Parts Requirement

Steps

The following steps will guide you through the creation of an internal order:

1. From the Parts Requirement page, query the Parts Requirement that you want to create an internal order for.

   If you know the Requirement Number, query using that number, which will populate the Parts Requirement window with the relevant information. Otherwise, use the View Parts Order Status Find function to search for a requirement. If a Parts Requirement does not already exist, you can create it at the same time as you create the Internal Order.

2. Enter the Ordered Quantity, which cannot exceed the Required Quantity.

3. If there are multiple items that you want to ship together on the same internal order, enter the identical number for each item in the Ship Set field.

   For example, if you have two items entered and you want both items to ship together enter "1" for the Ship Set. If you have four items and you want items one and two to ship together and items three and four to ship together, enter ship set of "1" for items one and two and a Ship Set of "2" for items three and four.

4. Click on the Availability button and, if the quantity ordered for the part is available for shipping (or a suitable substitute or superseded part), the following fields will automatically populate using ATP functionality:
   - Source From field will either be Inventory or Vendor.
   - If the Source From field is inventory, then the Source Organization, Arrival Date, Order By Date and Shipping Method will be automatically entered.
   - Optionally, you can manually enter values in each of the above fields. The exceptions are the Arrival Date and Shipping Method, which can only be entered through the Availability check.
   - Optionally, if there is not sufficient availability for the part you want to ship, check if substitutes or supersessions exist.

     All alternate parts and the availability of the parts, as defined by the sourcing rule used by ATP, will be displayed.
5. Optionally, you can enter or select the name of the Source Subinventory from the list of values.
6. The default value for the Order Status field is Open.

   The order can be canceled by changing the status to canceled.
7. To create an internal order for the part(s), click the Create Order/Reservation button.

   When an order is successfully created, the order status is set to "Booked," and the Document Number field will be populated with the internal order number used in Order Management.

4.3 Use Parts Search Hierarchy

Optional

Spares Management uses the Parts Search Hierarchy to locate parts for field technicians. This functionality can be used for parts search beyond the normal supply chain when the Availability button in Parts Requirement, which uses ATP, does not find a source.

Parts Search Hierarchy also uses a sophisticated Find functionality, whereby you can not only find all the organizations (and subinventories) that have the parts you need, but you can also narrow the search to display only those organizations and subinventories that have the necessary quantity on hand that you need to complete

the task. By using the "expression" and "condition" functionality, you can narrow your search to only those subinventories that meet your specified criteria.

For example, say you needed to fill a parts requirement for a particular item and you needed a quantity of 15. In the Find function, you can include the part number and an expression with an expression of "usable on hand" and a condition of "more than" and an expression of "14." With this expression, your search results will display only those organizations and/or subinventories with at least 15 of your required part on hand.

With any search, the Parts Search Hierarchy's tree structure collapses to display only those organizations and subinventories that meet your search requirement. You can also search by location to see all parts that are in the requested location. You can view parts information at the organization, subinventory, or the node level. With the Display Alternate Items feature in the Find Items window, you can include substitutes and supersessions in the results.

Prerequisites

The tree functionality must be set up in the Planner's Desktop and the concurrent program to create part availability data must be run. The tree can only be updated in the Planner's Desktop.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Spares Management > Spares Logistics > Part Search Hierarchy

Steps

Follow these steps to search for a location that contains a sufficient quantity of a part so that you can process an internal order or a move order for the part:

1. Click the hierarchy node, organization, or subinventory from which you want to search for the part.
2. To search for a specific part from the top level of the hierarchy, click the flashlight in the tool bar.

   The Find Items window opens.
3. Enter a part number in the Item field.

You can select the Display Alternate Items check box include substitutes and supersessions in the results. You can also use a conditional expression to narrow the search results.

4. Click Find.

   The Parts Status tab displays the nodes that contain the part you searched for.

5. Click node names to see the subinventories or organizations that contain the part you searched for.

6. Click a subinventory, warehouse, or node name to see the on hand and order status for this part.

   On the spread table, the On hand column shows the quantity as of the last time the Create Part Availability Data program was run. The updated values are displayed at the bottom of the window. The On Hand quantity includes reserved quantities. The Available quantity does not include reserved quantities.

7. If you want to create an Internal Order from this window, click Order Part.

   The Order Part button is enabled only when you are in a subinventory or a warehouse.

   Click the Order Part button to bring up the Parts Requirement window.

Note: You can navigate to a specific node or subinventory first before you search for a part.

Guidelines

You can display selected nodes and subinventories in the navigator tree. A red X in front of a subinventory indicates a defective subinventory. A green checkmark in front of a subinventory indicates a usable subinventory.

When using the Find function, you can display all available parts, including alternates, by selecting the Display Alternate Items checkbox when you conduct your search.

You can access the Parts Search Hierarchy UI directly from the Parts Requirement UI by clicking the Parts Search button. This functionality enables the dispatcher to quickly locate parts in a scenario when ATP functionality is not finding availability in the normal supply chain.

4.4 Order Parts Using Move Orders

Simple move orders for parts within a single inventory organization can be processed using the Move Order process that is located under Move Orders in the Navigator. Field service representatives, as well as dispatchers and managers, can process Move Orders.

This section on Move Orders includes the following topics:

4.4.1 Create Move Orders

Move Orders are used to transfer parts between subinventories within the same inventory organization. The following features are available when creating a move order:

- You can ship parts on a Move Order to a one-time address, if needed.
- You can override the automatic receipt setting at the Move Order level. Automatic receipt is typically set at the subinventory level.
- You can change the source subinventory after the Move Order is approved.
- You can reference a service request and task number.

Prerequisites

A move order can move parts only between subinventories within one inventory organization.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Spares Management > Spares Logistics > Spares Move Order > Create Move Orders

Steps

1. If the Select Organizations window appears, select an inventory organization that you want to access.

   This opens up the Move Orders window for the specified inventory organization.

2. Optionally, enter the Source Subinventory and Destination Subinventory in the Default section of the Move Order window if you want this information to default to your move order lines.

   This default feature is useful when you are entering multiple lines with the same source and destination subinventories.

3. Enter the part number in the Item field.

   Note: If you entered the Move Order window from Parts Search Hierarchy, the part number defaults into the Item field.

   When you choose an item, the Unit of Measure (UOM) field and the Date Required fields automatically populate with default values.

4. You can change the Date Required value by using the list of values or by entering a new date.

5. Enter the move order quantity in the Quantity field.

6. Click on the Source tab and enter or select a source subinventory from the list of values.

   If you entered the Move Order window from Parts Search Hierarchy, the Source Subinventory defaults.

7. Optionally, enter Locator, Lot Number, Serial From and Serial To, if your part is using these features from Oracle Inventory.

8. In the Destination tab, select a destination subinventory from the list of values.

Note: The Project and Task tab and the Control tab are not used for Spares Management.

9. In the Service Controls tab, optionally select the Service Request and Task numbers from the list of values.
10. Optionally, enter the Customer PO and Comments.
11. If you want to override the automatic receipt setting for this move order, click the Special Ship To button. Check or uncheck the Auto Receipt check box. The default value comes from the destination subinventory. The automatic receipt feature is used when the shipment needs to be automatically transacted into the destination subinventory at the Confirm Ship step. Automatic receipt is often used along with a special ship to address when a drop shipment is required.
12. If you want to ship the parts to a one time address, click the Special Ship To button.

    The Special Ship to address is used when the Move Order needs to ship to an address other than the standard address assigned to the destination subinventory. You can enter a special address or click the Address button and select from a list of addresses previously entered for customers or locations.
13. Optionally, select the Shipment Method and Carrier from the list of values.
14. Click OK to close the window.
15. Save your work.

    The Move Order number is displayed.
16. Click Approve to change the status of the Move Order to Approved.

    The Move Order must be in an Approved status for further processing to continue. If you click Approve before saving your move order, the save and the approval both occur.

Guidelines

You can update existing move orders by navigating to the Create Move Orders window and querying the move order number you want to update. You can also find your move order on the View Move Order Status window.

If your move order is not approved, you can update any field in the move order. If your move order is approved, you can update any field except Quantity and Destination Subinventory. Once you complete your changes, save your work.

4.4.2 Create Reservations

Optional

Allocations are used to reserve parts in a specific subinventory location for a move order. The allocation is the link between the Move Order and inventory. This functionality is typically used to ensure that the Move Order which has been generated to support a service request task will be shipped as a priority if inventories are limited.

This process is optional because the Create Picklists process allocates the inventory automatically. When creating manual allocations, you can:

- View On-hand and Available quantities.
- Allocate the inventory with two mouse clicks if you do not need to view the quantities.

Prerequisite

The Move Order must be in an Approved status to create an allocation.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Spares Management > Spares Logistics > Spares Move Order > Reservations

Steps

Follow these steps to view inventory quantities and then create a manual allocation for a move order.

1. Navigate to the Create Allocations window.
2. If the Select Organizations window appears, select an inventory organization.

   The Find Move Order Lines window opens.
3. Enter the Move Order number in the Number field of the Headers tab.
4. Click Find to open the Create Allocations window for the inventory organization that you choose in step 2.
5. Mark the Select checkbox to the left of the Move Order Line.

6. Click Allocations.
7. Click View/Update Allocations to open the Transact Move Order Line Allocations window.
8. Scroll right and enter a quantity in the Quantity field.
9. Click Update.

> **Note:** Steps 7-9 are only required when you need to change the quantity of an allocation.

10. Optionally, click View/Update Details again to verify the allocated quantity.

    The allocation was created successfully if the Allocated Quantity field displays the allocated quantity.

4.4.3 Print Picklists

Optional

Picklists are used to produce a report that specifies the parts to be picked from their location in the warehouses and shipped. Printing the picklist changes the Move Order status to Printed.

Furthermore, if an allocation was not previously created, printing the Picklist creates the allocation automatically. You can print a picklist for an individual move order or you can print a picklist for a batch of move orders.

Prerequisites

The Move Order must be in an Approved status. The quantity on hand must be greater than or equal to the quantity ordered on the Move Order.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Spares Management > Spares Logistics > Spares Move Order > Print Picklists

Steps

Use this procedure to print picklists:

1. If the Select Organizations window appears, select an inventory organization.

   The Submit Requests window opens.

2. To print a picklist for an individual Move Order, enter a Move Order number and click OK.

3. To print picklists for a batch of Move Orders, enter appropriate values in one or more of these parameters: Source Subinventory, Destination Subinventory, Date Required and Requestor. Click OK.

4. Click Submit to run the concurrent program that creates the picklist.

5. Click No in the Decision window if you are finished printing picklists.

6. Optionally, verify that the picklist was created by navigating to the Move Order Status window.

7. Enter your move order number in the Find window and click Find. The line status should indicate Printed and the Picklist number should be assigned to the Move Order and the picked quantity should display the correct quantity.

4.4.4 Confirm Picklists

You must confirm Picklists so that the correct quantity actually picked is verified before packing and shipping the parts. You must confirm the Picklist so that the Picklist will be available for inclusion on the Packlist. Confirming the Picklist changes the Move Order line status to Confirmed.

With this feature, you can change the picked quantity during the confirmation step if it is different than the picklist. You also can split picklist lines into multiple lines for shipping.

Prerequisites

The Picklist must be in Printed status before it can be confirmed.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Spares Management > Spares Logistics > Spares Move Order > Confirm Picklists

Steps

Follow this procedure to confirm a picklist:

1. If the Select Organizations window appears, select an inventory organization

   The Find Picklists window opens.

2. Enter a picklist number or select from the list of values and click Find.

   The Confirm Picklist window opens and is populated with data from the selected picklist.

3. Optionally, enter the Quantity Picked if it is different from the original picklist quantity.

4. Optionally, click Split Line to split your shipment into more than one line.

   A new line is added and you can enter a quantity for the next line.

5. Click Confirm Pick to confirm the Picklist.

6. You can optionally verify that the picklist was confirmed by navigating to the View Move Order Status window.

7. Enter your move order number or your picklist number in the Find window and click Find.

   The line status should indicate Confirmed and the picked quantity should display the correct quantity.

4.4.5 Create Packlists

Optional

A packlist is used to define the contents of a box and to execute the physical shipment. Picklists are assigned to boxes and packlists are created for each box. Packlists must be printed and then confirmed.

The confirmation process transacts inventory out of the source subinventory, relieves the allocated quantity and transacts inventory into the destination subinventory if the auto receipt feature is enabled. If auto receipt is disabled, the shipment is transacted into the in-transit subinventory. With this functionality you can:

- Find consolidation opportunities by viewing all pick lines destined for the same ship to address.
- Assign multiple pick lines to one box.
- Split pick lines into multiple boxes.
- The ship to address from the Picklist is automatically assigned to the packlist header.
- You can print the packlist and confirm the shipment from the same window.

Prerequisite

The Picklist must be in a Confirmed status to be available for selection in a packlist.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Spares Management > Spares Logistics > Spares Move Order > Packlists

Steps

Follow this procedure to confirm a packlist:

1. If the Select Organizations window appears, select an inventory organization.

   The Packing Lists navigator tree appears.

2. Click the "+" sign in front of Packing Lists node. The Packing Lists folder expands to display the Open, Received and Shipped status folders.
3. Click the "+" sign in front of the Open folder to display open packing lists.
4. Click the Open folder and then right-click it.

   A pop-up menu appears.

5. Select Create Packing List.

   The Create Packlist window appears with the Packlist Details tab displayed.

6. Optionally, enter shipping information including Carrier, Shipment Method, Waybill, Comments, Ship to Subinventory and Location Address.

Note: You can also enter this information later when you are finalizing your packlist.

7. Save your work to create the Packlist.

   Your packlist appears under the Open folder.

8. Click the "+" sign in front of your packlist to display Box 001.

9. Click Box 001 to open the Box Details tab.

   You can enter the weight here.

10. Open the Picked Items tab.

    The Find Picklists window opens.

11. Enter the picklist number and click Find, or leave the picklist number blank and click Find to execute a blind query for all picklists that have not been previously assigned to a packlist.

12. Select from the spreadtable the picklist item to be added to the box.

    You can select multiple items, if required.

13. Click Add to assign the selected lines to the box.

    The selected pick line disappears from the Picked Items tab and is transferred to the selected box. All other pick lines that are assigned to a ship to address that differs from the pick line just selected, disappear from the Picked Items tab.

14. To add more pick lines to the same box, repeat steps 10 through 13.

15. To add a second box to your packlist, click your packlist folder and then right-click it.

    A pop-up menu appears.

16. Select Create Box, optionally enter the weight in the Box Details tab and click Save.

    Your new box number appears under your packlist.

17. To split the quantity on a pick line into more than one box, click the quantity value of a pick line in the Picked Items tab.

    The Split Quantity window opens.

18. Enter the quantity to be assigned to the first box and click OK.

19. To add the remaining quantity to another box, click on the other box number.
20. Click the picklist number containing the remaining quantity and click Add.
21. To finalize the packlist, click the packlist number.
22. Enter values for carrier, shipment method, waybill and comments in the Pack List Header tab if you did not previously enter these values.
23. Save your work
24. Enter the box weight in the Box Details tab if you did previously do so.
25. Save your work to create the packlist.
26. Click Print in the Pack List Header tab to the print the Packlist.

    The Submit Request window opens.
27. Click Submit to print the Packlist and click No in the Decision window.
28. Click Ship Confirm in the Pack List Header tab to confirm the shipment.

4.4.6 Receive Shipments

Optional

Receiving parts is executed automatically if the auto receipt flag is enabled. If the auto receipt flag is disabled, use the Receive Parts window to receive parts manually. Receiving is performed at the packing list level. The receipt transaction relieves the in-transit subinventory and increments the destination subinventory.

With this process, you can:

- Correct the quantity received if it differs from the quantity shipped.
- Or, if the quantity received is correct, you can receive the entire shipment with one mouse click.
- Close the receipt with a short quantity, in the case of lost parts, for example.

Prerequisite

The Packlist must be in a Shipped status for receiving.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Spares Management > Spares Logistics > Spares Move Order > Receive Shipments

Steps

Follow this procedure to manually record a receipt of parts:

1. Navigate to the Receive Shipments window. The Find Packlists pop-up window opens.
2. Enter a Packlist and click Find or leave the Packlist field blank and click Find to execute a blind query.

   The Receive Parts window opens with a list of shipments that match your search criteria.
3. If the quantity shipped is the same as the quantity received, select all the lines and click Receive.
4. If the quantity shipped is different from the quantity received, click the quantity value under the This Receipt column.
5. Enter the actual quantity received and click Receive.
6. Optionally, close the partially received line by selecting the line and clicking Close Line. To activate the Close Line button, you must set up an inventory account alias, named CSP_RECEIPT, in the relevant organization.

   For information about setting up the account alias, refer to the *Oracle Spares Management Implementation Guide* section on setting up inventory organizations.

4.4.7 View the Status of Move Orders

The View Move Order Status window allows you to view the move order status and details at every step in the logistics process.

This window also allows you to:

- Track Move Order quantities throughout the logistics process.
- View the date and time of each step of the logistics process.
- View details such as picklist number, packlist number, carrier and waybill number.
- Navigate directly to the Move Order window by clicking on the move order number.

- View multiple move orders by using combinations of the parameters in the Find window, including Move Order number, Source Subinventory, Destination Subinventory, Picklist number, Packlist number, Waybill number and Line Status.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Spares Management > Spares Logistics > Spares Move Order > Move Order Status

Steps

Follow this procedure to view the status of one or more move orders:

1. Navigate to the View Move Order Status window.

   The Find window opens.

2. Enter the criteria that you want to use to limit the results of your search in the Find window and click Find.

   A list of move orders that match your search criteria is displayed.

3. Scroll to the right to view all details for move orders.

4. Optionally, click on a move order number to navigate to the Move Order window.

4.5 View Parts Order Status

The View Parts Order Status window allows the viewing of parts requirements and internal order details at every step in the logistics process.

This window enables you to:

- Track Internal Order quantities throughout the logistics process.
- View the date and time of each step of the logistics process.
- View key logistic details such as carrier and waybill number.
- Navigate directly to the Parts Requirement window by clicking on the Requirement number hyperlink.

- View multiple internal orders by using combinations of the parameters in the Find window, including Order number, Source Organization, Status, Item Number, Order By Date, Promise Date, Service Request, Need by Date, Resource, Task, Requirement, Waybill number and Line Status.
- Check whether or not an internal order has been created for the Parts Requirement.
- View whether or not a service request and task have been assigned to the Parts Requirement.

Prerequisites

You must have created a Parts Requirement and/or an Internal Order.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Spares Management > Spares Logistics > Parts Order Status

Steps

Follow this procedure to view the status of one or more Parts Requirements and/or internal orders:

1. Once you navigate to Parts Order Status, the View Parts Order Status window opens.
2. Enter the criteria that you want to use to limit the results of your search in the Find window and click Find.

   A list of parts requirements that match your search criteria is displayed.
3. Scroll to the right to view all details of the Parts Requirement.
4. To view a specific Parts Requirement, either select the Parts Requirement and click OK, or click the Requirement Number hyperlink.

   The Parts Requirement window opens. See Section 4.1, "Create Parts Requirement" for details.

4.6 Execute Routine Replenishment

Technicians and field service warehouses need to be periodically replenished with parts used by the technician or shipped by the warehouse. Replenishment for field technicians and warehouses is accomplished by running the Oracle Inventory Min - Max Planning Report concurrent program.

The program can be run in two modes: automated or manual. The automated mode will automatically create the internal order, move order, or purchase requisition, depending upon the sourcing used. The manual mode provides a report that can be reviewed by the planner before the orders or requisitions are created.

Parts replenishment is done at either the organization or subinventory level.

> **Note:** You can launch this report from the Planning tree by territory or field service manager or any other logical grouping that is defined by a node in the tree by right-clicking on the desired node and selecting the Create Min/Max Planning Report concurrent program.

Prerequisites

Authorized Stock Lists must be defined.

Responsibility

Inventory

Navigation

Dispatch Center > Spares Management > Spares Logistics > Reports and Programs > Create Min-Max Report

(Alternatively) Planner's Desktop > Right-click node or subinventory you want to replenish

Steps

1. When you select the Min/Max Planning Report concurrent program, the Parameters window opens.
2. Select Subinventory or Organization in the Planning Level field.
3. If you chose Subinventory, select the Subinventory in the Subinventory field from the list of values.

4. Select Yes in the Restock field if you want to run in the automated mode. Select No if you want to run in manual mode.
5. Review other parameters and change from the default values as required.

   For more information regarding these fields, see the *Oracle Inventory User's Guide*.
6. Click OK in the Parameters window.
7. Click Submit in the Min-Max Planning window to submit the request.
8. When you are asked if you want to submit another request, click No in the Decision window to close the main Min/Max Planning concurrent program window and return to the Tools menu.
9. To check the status of your concurrent request, select View from the Tools menu and select Requests.
10. Click Find to view all of your concurrent requests.
11. To view the output of the Min - Max Planning Report, select this request and click View.

4.7 Return Excess Parts

Spares Management provides a process for managing the return of excess parts from either field technicians or warehouses.

You can define business rules so you can focus only on the excess parts that have the highest cost impact. Excess parts are defined as those parts whose available inventory balance is greater than the maximum level defined in the ASL. If the maximum level is null, a zero quantity is assumed. Internal orders, or inter-organization transfers for excess parts, are created when the return of excess parts is approved.

There are three steps to the process of returning excess parts, two of which are required and one is optional. These are:

- Run the Create Excess List Concurrent Program (Required)
- Run the Print Excess List Concurrent Program (Optional)
- Return Excess Parts (Required)

Run the Create Excess List Concurrent Program (Required)

You can create excess lists for both usable and defective parts. Run the Create Excess List concurrent program to identify the excess parts and to apply your excess rules to filter for high impact excess parts.

> **Note:** You should run the Create Excess List Concurrent Program just prior to initiating the return excess parts process to ensure that the latest updates are included in the excess parts data.

You can create excess part lists at either the organization or subinventory level, depending upon whether you are managing lists for field technicians or warehouses. You make these choices when creating excess lists through the manipulation of the planning level parameter.

The planning level is based on the organization type that is defined in Spares planning. If the organization type is field engineer, the planning level populates with subinventory. If the organization type is a warehouse, the planning level is organization. If you select Subinventory for the Planning Level, you can optionally select a specific subinventory for the creation of the excess list.

Excess lists rely on Excess Rules, which you define during implementation. Excess rules allow you to create lists based upon "real world" considerations. For example, you may not want to return excess parts if the on-hand stock maximum is set at 50 and the field technician has 51 on hand. You define excess rules to handle this type of situation. See the *Oracle Field Service Implementation Guide* for more information.

Run the Print Excess List Concurrent Program (Optional)

You can also run a concurrent program to print excess lists, which can be used by the field technician to review the excess list before execution.

Return Excess Parts (Required)

You can use the Return Excess window to view and approve excess parts for return.

You can search for Excess Lists by specific Organization, field technician, subinventory, or item. Once you retrieve an excess list, after reviewing it, Spares Management allows you to move it to Return Lists table where you can then create an inter-org transfer or internal order to return the parts.

You can return all of the excess parts, or only part of the excess by manually entering the Current Return Quantity number before ordering the parts return. This will move the excess parts into the Return Lists box.

The bottom region of the window is called Return Lists and displays excess lines that have been approved for return.

Prerequisites

You have to run the Create Excess List concurrent program (steps below).

Excess Rules are recommended, but not required.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Spares Management >Reports and Programs (Use this path to run the concurrent programs)

Field Service Dispatcher > Spares Management > Spares Logistics > Excess Returns

Steps

1. Run the Create Excess Lists concurrent program.
2. Select an inventory organization for which you want to create an excess list.
3. Select either Organization or Subinventory for the Planning Level.
4. If you select Subinventory for the Planning Level, you can optionally select a specific subinventory for the creation of the excess list.
5. Select Usable or Defective in the Condition Type field.
6. For all other parameters, review and change from default as required.
7. Click OK to save your entries and close the Parameters window.
8. Click Submit to submit the request for this concurrent program.
9. Optionally, run the Print Excess List concurrent program.

   Use the same navigation path as above, and choose the Print Excess Lists concurrent program.
10. Choose the Organization ID for the Excess List you want to print from the list of values.
11. Choose the Subinventory for the Excess List from the list of values.
12. Click OK to close the Parameters window and return to the Submit Request window.

13. Click Submit to run the concurrent program.
14. Initiate the Excess Return process by navigating to the Excess Lists window.
15. From the Excess Lists window, use the Find function to display the excess lists you want to access.

    You can search for excess lists by entering values in any of the following fields: Resource Type, Resource Name, Organization, Subinventory, or Item.
16. If you want to include Defective or Usable parts in the search, select the appropriate checkbox.

    To search for all excess lists, select both checkboxes for Defective and Usable parts.
17. Click Find.

    The excess lists that fit your search criteria are displayed in the Excess Lists box. Each excess list displays identifying information such as, Item Number, Current Excess Quantity, Organization Name, Subinventory Code, Condition Type, etc. The excess quantity number is the quantity that is in excess of the maximum quantity as defined in the ASL after applying the excess rules. The number in the current excess quantity is a hyperlink, which you can use to alter the number of items you want to return.
18. To change the return quantity, click the hyperlinked Current Excess Quantity number.

    The Return Quantity window appears with the value of the Current Excess Quantity displayed in the Return Quantity field.
19. Change the value in the Return Quantity field to the number you want to return.
20. Click OK.

    The Excess List is automatically moved to the Return Lists box and the value you just entered is displayed in the Current Return Quantity field.
21. Alternatively, if you do not want to change the Current Excess Quantity number, you can move the excess list to the Return Lists box by selecting it and clicking the Add button.

    When you approve an excess line and move it to the Excess Return box, the Status field changes to Modified.
22. To reject an excess list, select the list and click the Reject button.

This changes the Excess Status to Rejected.

23. If you want to move a list from the Return Lists box, back into the Excess Lists box, highlight the list and click the Remove button.
24. Once you have approved an Excess List for return, highlight the list and click the Return button.

    The Return Item window opens. This window displays the Source Organization and Source Resource information for this excess list.
25. For a resource, the Return Organization and Return Subinventory fields contain default values if the resource has a Return To organization and subinventory defined. Otherwise, for a warehouse, select an organization from the Return Organization and Return Subinventory lists of values.
26. For a resource, the Transfer Type field can be either Direct or In transit. Direct is used when the resource delivers the excess directly to the Return To location.
27. Optionally, choose a Carrier and Waybill for the return from the list of values.
28. Enter a Shipment Number for the return.
29. Click OK.

    For a resource (a field technician), an Inter-Organization transfer order is created. For a warehouse, an internal order is created.

5

Using the Planner's Desktop

The Spares Management Planner's Desktop allows field service operations to maintain and monitor the status of their field technician and warehouse inventories to ensure that each is properly stocked with the parts necessary to service customers in a given territory. It also provides a mechanism to create automated min-max recommendations for field technicians and warehouses.

The Planner's Desktop uses point-and-click functionality, which combined with the Spares Planning Tree setup, allows you to set up your operation to fit business needs, a nd to streamline the setup and maintenance of an automated field service operation.

Recommendations for min-max levels can be made based on the personal usage of a specific technician, the "norm" for the territory, the "product norm," which uses calculated failure rates for the product in a given territory, or a combination of personal usage and territory norm or product norm.

The Planner's Desktop UI consists of a combination of two windows: A Navigator window, which is where the Planner's Tree is located, and the Planning window, which provides a few of the details of the node, warehouse, subinventory you are viewing. Point-and-click functionality connects the two windows in such a way that the Planning window always reflects the selected element on the Planning Tree.

The Planning window view differs between nodes, on the one hand, and warehouses and subinventories on the other.

When a node is selected, and this includes the top-level Spares Planning node, the Planning window displays three tabs: Planning Parameters, Parts Status, and Failure Rates.

When a subinventory selected, the Planning Window displays a Stock List and a Recommendation tab along with the above three tabs. When a Warehouse is

selected, you see all five tabs displayed with the subinventory, along with an additional Notifications tab.

Sections in this chapter include:

- Section 5.1, "Create and Maintain the Planning Tree"
- Section 5.2, "Create and Make Planning Recommendations"
- Section 5.3, "Create Warehouse Notifications"
- Section 5.4, "View Parts Status on the Planner's Desktop UI"

5.1 Create and Maintain the Planning Tree

Required

Spares Management's planning functionality begins with the creation of a tree structure that consists of any combination of nodes, warehouses, and field technicians that make up your field service operation. Planners should construct the tree with appropriate business needs of their field service operation in mind.

The Spares Management module of the Oracle Field Service application comes "out of box" with a default Spares Planning node, which serves as the top level of the tree. From this node, you can create "sub-nodes," which you can populate with those organizations and subinventories (typically associated with field technicians) used in your operation.

Creating a planning tree in accordance to your business design allows you to better leverage Spares Management's recommendation functionality because you can set planning parameters at the node level, and the values set there will default down through the tree. You can also set parameters at the subinventory or organization level, which will override any parameters set higher in the tree.

Note: You can set planning parameters at the top-level Spares Planning node, and they will filter down throughout the tree, unless they are overridden at a subsequent level.

From the Spares Planning node, you can create sub-nodes only. But once you create a node, you can create other nodes, organizations, or sub-inventories below that node. Once a tree is created, you can use Spares Management's point-and-click functionality to plan and track your inventories for the organization, or subinventory.

When you set up your planning tree, each node, organization or subinventory you create will require some information be input in the Planning Parameters tab of the desktop UI.

Spares Management allows you to create subinventories that handle both usable and defective parts. Typically, a field technician will have at least one of each of these subinventories assigned to him. For example, technician A, servicing a a particular territory, could have "subinventory1" assigned to him, which records his usable parts, and "subinventory2," which is where he record the defective parts that he collects at a customer's sight.

You can launch the following concurrent programs from the Planning tree by right-clicking on the node you want to identify in the report and selecting the appropriate concurrent program:

- Create Min/Max Planning Report

  For details on running this concurrent program see Section 4.6, "Execute Routine Replenishment"

- Create Excess Lists

  For details on running this concurrent program see Section 4.7, "Return Excess Parts"

- Create Part Availability Data

  For details on running this concurrent program see Section 6.2.1, "Create Part Availability Data"

Prerequisites-

Organizations and subinventories must be defined in Oracle Inventory.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Spares Management > Planner's Desktop

Steps

Follow these steps to create your Spares Planning Tree:

1. To set planning parameters at the top level for your planning tree, select the Spares Planning top node.

2. Within the Planning Parameters tab, you can enter parameters that you want to default down through the planning tree.

   The parameters include:

   Forecast rules, service level, excess rules, choosing whether or not the node is authorized for ASL, the recommended method, etc.

   Note: Parameters entered at any node will default down the tree, but can be overridden at any node.

3. To create your first node, from the Navigator, select the Spares Planning node and right-click with your mouse.
4. From the drop-down list, select Add Planning Node.

   The Planning Parameters tab refreshes and you can enter information here.
5. In the Planning Node field, enter the name of the Planning Node that you are creating.

   Use a naming convention for your nodes that will make it easy for you to distinguish from one node to the next. Note, that in the Recommendation Parameters area, default values appear (if any) and the node where they are "defaulted from" is displayed.
6. Click Save.

   The new node appears under the Spares Planning node in the navigator tree.
7. To add subinventories or organizations to the node, right-click the node you created.
8. To add a subinventory, select Add Subinventory from the drop-down list.
9. Choose the Organization that the subinventory you want to add belongs to from the list of values.
10. Choose the Subinventory you want to add to the node from the list of values.
11. In the Recommendation Parameters section, choose the Condition Type for this subinventory.

    A subinventory can either be for "usable" parts or "defective" parts. This is a required field. To create a subinventory for defective parts, you must choose Defective in the Condition Type field. On the planning tree, Usable Parts subinventories will be distinguished by a green checkmark next to the

subinventory name. Defective subinventories will have a red X next to the subinventory name.

Note: Other Recommendation Parameters are defaulted down from either the Spares Planning node, or the node you just created. You can override these parameters at the subinventory level, if necessary.

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12. Click Save to save this subinventory to your Planning Tree.
13. To add a warehouse to a node, right-click the node and select Add Warehouse from the drop-down list.
14. Choose the Organization you want to add to the node from the list of values.

    Typically, this would be the warehouse that you set up as an organization in Oracle Inventory.
15. Enter the Notification Parameters for the warehouse, if necessary.

    For more information on warehouse notifications, see Section 5.3, "Create Warehouse Notifications".
16. Click Save to save this warehouse to your Planning Tree.
17. You can create as many subinventories and warehouses as necessary to meet your business needs under each node. You can also create new nodes beneath a node on your tree.

    For example, you might create a node called "North American Ops" with sub-nodes called West Region, Midwest Region, South Region, and so on. Each sub-node can contain subinventories, warehouses, or a combination of both.

Guidelines

Remember that it's best to create a tree structure that allows you to set planning parameters at the highest level possible. This allows you to manage a large field service operation without needing to set up every parameter for every field technician and warehouse in your operation.

You can search the Planning tree by using the Find function. The following parameters are available for search criteria: Resource type, Resource name, region and Node name. The tree will automatically expand to display the appropriate node, resource, or region when it is located.

5.2 Create and Make Planning Recommendations

To automate the inventory planning of your field service operation you can produce min/max recommendations that will effectively address the needs of your field technicians and warehouses. Often times, customer service agreements require that parts inventories are deployed in numerous locations, close to the point-of-use. Spares Management planning defines what parts to be stocked, where, and in what quantities, for both technicians and warehouses.

In a large field service operation that includes many technicians and warehouses, a robust automated planning functionality is necessary to ensure a streamline, cost-effective operation. Planner's Desktop functionality also is designed to handle the more complex planning scenarios, typical in a field service environment.

A typical field service operation, with regional warehouses and a staff of field technicians, must have the flexibility to create parts planning schemes that are appropriate for all of its technicians. A seasoned field technician working in a stable situation of a particular territory, for example, would have a well-defined profile of usage history that could be used for planning. Another scenario might involve a new technician who would not have any usage history, or a transferred technician who would be carrying usage history that is not appropriate to the new territory.

In the above scenario, it might be appropriate to make parts recommendations for the first technician based on what he normally needs to carry with him to do his job. In this case, Spares provides a method to account for a technician's personal usage, and to figure that usage into appropriate min/max recommendations. But for new or transferred technician this method wouldn't work because the technician hadn't built up enough history in the territory to make effective min/max recommendations.

In these cases, Spares provides two other methods to make recommendations: using the "normal" usage figures of parts for all technicians in the territory, or by figuring out "failure rates" of particular products in a given territory. In very complex technician scenario, a blended, combination of these recommendation methods may be necessary.

This planning process is driven by the concept of an Authorized Stock List (ASL), which can be updated automatically through Spares Management's recommendation functionality.

The ASL functionality includes automated ASL recommendations for technicians and warehouses, and flexible planning parameters, which can be defaulted from higher level nodes. You can also handle complex planning scenarios that involve a combination of planning methods with Spares.

The three basic planning methods covered in this section are as follows:

- Section 5.2.1, "Set Up Personal Usage Recommendation Method"
- Section 5.2.2, "Set Up Territory Norm Recommendation Method"
- Section 5.2.3, "Set Up Product Norm Recommendation Method"
- Section 5.2.4, "Generate Stock List Recommendations"
- Section 5.3.1, "Replenish Parts Based on Notifications"

For more information on planning in Spares Management, XXXXXXXXXXXX

Supersession Parts

The supersession represents a manufacturer driven business situation where one part has been replaced by another. The supersession can have a major impact on min-max planning for the field technicians and warehouses. Spares Management incorporates supersessions in both its Authorized Stock List (ASL) recommendation functionality and warehouse notification functionality.

Supersessions are configured as part of Oracle Inventory's Item Relationship functionality and are explained in detail in the *Oracle Field Service Implementation Guide*.

If a part has been superseded and there is no longer onhand available in the supply chain, then the Min/Max levels will be set to zero in the Recommended ASL. If there is onhand available in the supply chain for the superseded item, then the Min/Max levels will stay on the superseded item.

This strategy positions the min-max levels at the lower level part when inventory is still available in the supply chain, which will drive the parts out to the "point of use" where usage can happen and inventories can be depleted. When inventory in the supply chain is used up the Min/Max levels migrate up the supersession chain.

Note: If the Disposition of the part being superseded is set to "scrap," then the Min/Max levels of Part A are set to 0 regardless of whether or not the onhand parts is greater than or less than the ROP.

5.2.1 Set Up Personal Usage Recommendation Method

Optional

Personal Usage is a recommendation method that uses the specific usage transactions associated with a technician or warehouse for planning. This method is used in the scenario where the technician is in a reasonably stable working situation where the usage history for the technician is likely to represent what will occur in the future.

The key drivers with this method are the forecast rule that you choose, combined with the Service Level and the EDQ factor. The forecast rule defines four key factors relating to a personal usage recommendation:

- Forecast Method: Determines how you want to calculate the forecast. Choosing "simple average," for example, means that you'll make recommendations based on averaging the part usage for the usage history of the part.
- Period Size: This determines the length in days of the period used for a forecast. For example, 7 would mean that each period translates into a week.
- Forecast Periods: This determines how many periods you want project out.
- History Periods: Represents how many periods of history you want to use for your calculations.

You can set up the recommendation method at any level in your tree. All lower nodes will use this method as the default unless you manually override it with a new recommendation method.

Prerequisites

Organizations and subinventories must be defined in Oracle Inventory.

A forecast rule must be set up. Usage transactions must be created either in the debrief process, or by using the transaction type "Field Service Usage" in Oracle Inventory.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Spares Management > Planner's Desktop

Steps

Follow these steps to set up a personal usage recommendation method:

1. Expand the Planner's Tree and select the node, warehouse or technician for which you want to set the recommendation.

2. In the Planning Parameters tab of the main Planning Parameters tab, choose the Forecast Rule from the list of values.
3. Enter a Service Level for the recommendation.

   The service level represents the percent of time you want the technician or warehouse to have the parts on hand when needed. This is used to determine the Safety Stock levels.
4. Enter the Economic Delivery Quantity (EDQ) Factor.

   This is a combination of carrying cost and ordering cost in the classical lot sizing formula.

   Note: Typically, an EDQ Factor in the range of 15-25 will produce the desired results
5. To create a stock list for the technician or warehouse, select Yes in the Authorized ASL field.
6. If you want to include Safety Stock in your recommendation calculations, choose Yes in the Use Safety Stock field.

   Generally, the use of Safety Stock is suggested for the warehouse recommendations. For the technician, it's dependent on user preference.
7. Optionally, you can choose the name of the Planner responsible for the node.
8. If you want to exclude a particular category set from being considered in recommendation parameters, choose the set from the list of values at the Exclude Category Set field.
9. In the Recommendation Method field, choose Personal Usage from the list of values.
10. Save your work.

Guidelines

The right column of the Planning Parameters tab (labeled Defaulted From) lists the node where the existing values have defaulted from. If you want to allow lower level nodes to override any of these parameters, the Override checkbox must be selected next to this parameter. By default, the Override checkbox is selected for all fields.

5.2.2 Set Up Territory Norm Recommendation Method

Optional

Territory Norm calculates usage that is average or typical for the planning tree node the technician is assigned to. This method is used in the scenario that involves a new technician or a transferred technician from another territory.

New or transferred technicians will have no relevant usage in the territory they are coming into making it difficult to stock the technician with appropriate parts. By calculating the normal usage of all the technicians in a given territory over a set period of time, you can define min/max recommendations that represent what is typical or average for a technician in the territory.

Note: This method is not used for planning a warehouse.

A simple example of the territory norm approach is illustrated in the following scenario:

Say there are 100 technicians currently in the territory and that Part A has usage equal to 2000, summarized for all technicians in the territory for the current 10-week period. The territory norm for Part A would be 2.0 per tech per week or (2000 units / 100 techs / 10 weeks).

Using the territory norm method, Part A would have recommended min-max levels based on usage equal to 2.0 per week for the new technician assigned to the territory.

The assumption for this example is that all technicians had been in the territory for the entire 10-week period. If this were not the case, technician weeks would be accumulated based on the actual number of weeks each technician had been resident in the territory during the defined period.

Recommendation methods can be altered at any time. Once a new technician has worked long enough to create a personal usage history, for example, you might want to switch to that method at a later time.

Prerequisites

Organizations and subinventories must be defined in Oracle Inventory.

A forecast rule must be set up. Usage transactions must be created either in the debrief process, or by using the transaction type "Field Service Usage" in Oracle Inventory.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Spares Management > Planner's Desktop

Steps

Follow these steps to set up a territory norm recommendation method:

1. Expand the Planner's Tree and select the node, or technician for which you want to set the recommendation.

   This method is not used for a warehouse recommendation method.

2. In the Recommendation Parameters section of the Planning Parameters tab, choose the Forecast Rule from the list of values.

   The History Periods from the Forecast rule is used to determine how much usage history to use.

3. The Service Level field is not used in the recommendations when Territory Norm is used. Leave the field null.

4. Enter the Economic Delivery Quantity (EDQ) Factor.

   This is a combination of carrying cost and ordering cost in the classical lot sizing formula.

5. To make this available for your authorized stock list recommendations, select Yes in the Authorized for ASL field.

6. Safety Stock, which is derived from Service Level, is not used in the Territory Norm Method. Choose No in the Use Safety Stock field.

7. Optionally, you can choose the name of the Planner responsible for the node.

8. If you want to exclude a particular category set from being considered in recommendation parameters, choose the set from the list of values at the Exclude Category Set field.

9. In the Recommendation Method field, choose Territory Norm from the list of values.

10. Save your work.

5.2.3 Set Up Product Norm Recommendation Method

Optional

Product Norm is a recommendation method that uses product populations and failure rates to plan the min-max levels for the warehouse or technician. The product norm typically is used in the scenario where a new product is being introduced or the population of an old product is being increased, decreased or extended into a new area.

When using the product norm, failure rates are typically defined at a higher level node such as a territory, region or theater and used on a lower level node such as a warehouse or technician. This is because failure rates are calculated from product population and usage transactions collected from the field service debrief process where the service request has the defined product being serviced. In order to maximize the population of parts for which you are generating failure rates, which will increase the accuracy of the formula, you should include as many warehouses and technicians as possible.

Failure rates in Spares Management are expressed in terms of *usage per product per week*. Failure rates can be entered manually as in the case of a totally new product or calculated for an existing product where usage experience is available and population is known.

The failure rates are used along with the anticipated product population to determine expected usage for the technician or warehouse. The population can either be expressed as a new population or as a change to an existing product population, either up or down.

Prerequisites

Organizations and subinventories must be defined in Oracle Inventory.

A forecast rule must be set up. Usage transactions must be created either in the debrief process, or by using the transaction type "Field Service Usage" in Oracle Inventory.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Spares Management > Planner's Desktop

Steps

Follow these steps to set up a product norm recommendation method:

1. Expand the Planner's Tree and select the node, or technician for which you want to set the recommendation.

   This method can be applied to any level on the planning tree, but as a best practice, you should calculate Failure Rates at the highest feasible level.

2. In the Recommendation Parameters section of the Planning Parameters tab, choose the Forecast Rule from the list of values.

   The History Periods from the Forecast rule is used to determine how much usage history to use.

3. The Service Level field is not used in the recommendations when Product Norm method is used. Leave the field null.

4. Enter the Economic Delivery Quantity (EDQ) Factor.

   This is a combination of carrying cost and ordering cost in the classical lot sizing formula.

5. To create a stock list, select Yes in the Authorized for ASL field.

6. Safety Stock, which is derived from Service Level, is not used in the Territory Norm Method. Choose No in the Use Safety Stock field.

7. Optionally, you can choose the name of the Planner responsible for the node.

8. If you want to exclude a particular category set from being considered in recommendation parameters, choose the set from the list of values at the Exclude Category Set field.

9. In the Recommendation Method field, choose Product Norm from the list of values.

10. Save your work.

11. To calculate Failure Rates, click the Node in the Planning Tree where you want to calculate the failure rates and select the Calculate Failure Rates checkbox.

12. Click the Failure Rates tab and, in the Product field, choose the product for which you want to create failure rates from the list of values.

13. Enter the Current Population of the product that you are creating failure rates for.

14. Save your work.

At this point, you've entered parameters in order to calculate failure rates, which will be used to set your min/max recommendations.

15. To calculate failure rates, select the node on the planning tree where you entered your failure rate product and population information and right-click.
16. From the drop-down list, select the Calculate Failure Rates concurrent program.

    A concurrent request ID number will appear in a popup box. This concurrent request will update the failure rates for your product and parts. To check if the concurrent program ran successfully, go to View > Requests and look up the request ID number of the request you want to view.

    You can override the calculated failure rates, by entering a value manually. You might want to use this feature if the manufacturer of a part has published failure rates, for example.

5.2.3.1 Use Blended Method for Recommendations

Spares Management functionality enables you to set up "blended" methods for determining stock list recommendations. This method, which combines personal usage method with either territory norm or product norm, allows you to combine two methods and assign weight to each on a percentage basis.

You might want to use the blended method, for example, if you find that a technician's recommendations based on personal usage aren't adequate because the technician has been performing tasks that aren't part of his normal routine.

Depending upon the usage during a given period of time, Spares Management uses the appropriate factor to determine how to weight the two methods.

Steps

To set up a blended recommendation method, follow the Personal Usage method steps (see above) with the following changes:

1. From within the Planning Parameters tab, at the Recommendation Method field, choose either:
   - Personal Usage and Product Norm
   - Personal Usage and Territory Norm
2. Enter a percentage, using a decimal point, in the Personal Usage > Norm field.

   This is the weighted percentage that you want for personal usage.
3. Enter a percentage, using a decimal point, in the Personal Usage < Norm field.

4. Enter a percentage, using a decimal point, in the Personal Usage = Zero field.
5. Enter a percentage, using a decimal point, in the Norm = Zero field.

   Steps 2-5 are mutually exclusive. Depending upon the usage during a given period, Spares Management functionality will use one of the four parameters to determine the Stock List recommendations.
6. Save your work.

5.2.4 Generate Stock List Recommendations

Once you have set up planning parameter methodology for your field service operation, you can create recommendations by running a concurrent program. The recommendation can be reviewed and accepted, rejected, or modified.

If you accept a min/max recommendation, it will move into the Stock List tab where it will become the current min/max levels used when you are replenishing parts for a warehouse or technician.

When you review the recommendations in the Recommendations tab, the following values are displayed in the spreadtable:

- Delta Cost between current max and recommended max
- Actual cost of current max
- Actual cost of recommended max
- Delta min between current min and recommended min
- Delta max between current max and recommended max
- Usage history and forecast can be viewed in the lower tabs

Note: The spreadtable in the Recommendations tab can be sorted by any of the columns displayed. This is useful as you review the recommendations because you can prioritize by relevant criteria such as Actual Cost, Cost Recommended, Delta Cost, Delta Minimum, Delta Maximum, etc.

Prerequisites

Planning Parameters must be entered.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Spares Management > Planner's Desktop

Steps

Follow these steps to make min/max recommendations:

1. In the Spares Planning Tree, right-click on the node, warehouse, or subinventory for which you want to make ASL recommendations.
2. If there has been a usage change, run the Create Usage For Recommendations and the Create ASL Recommendations concurrent programs.

   A popup window displays the concurrent request ID number.

   If the tree structure has changed, also run the Create Usage Rollup concurrent program. If you need to consider additional supersession activity, also run the Process Superseded Items concurrent program.
3. View the requests (View > Requests) and make sure the concurrent program has run successfully.
4. Right-click the same node, warehouse and subinventory and select the Generate ASL Recommendations concurrent program from the drop-down list.

   A popup window displays the concurrent request ID number.
5. Click the Recommendation tab and review the recommendation values displayed in the spreadtable.

   Note: When you run the Generate ASL Recommendation concurrent program, you will see a recommendation if there is a change from the existing min/max recommendations in the Stock List tab.
6. If you want to accept a Recommendation in the ASL, select the recommendation and click the Accept button.

The recommendation is removed from the spreadtable and placed into the Stock List tab spreadtable. Accepted recommendations automatically update the Oracle Inventory table for min/max values.

7. If you want to reject a recommendation, select the recommendation and click the Reject button.

   The recommendation is removed from the spreadtable.

8. If you want to manually override the a stock list recommendation, select the recommendation and click the Stock List tab.
9. Enter the values you want to recommend for the stock list in the Min Qty and Max Qty fields.
10. Click Accept to save your new values.

Guidelines

You can also accept or reject multiple ASL Recommendations by selecting all the lines of recommendations you want to accept (Shift key + down arrow, or Ctrl + mouse click) and clicking the Accept or Reject button.

5.2.5 Add or Modify Authorized Stock List

Within the Stock List tab, the existing stock list is displayed in the spreadtable. You can modify, copy, or to this stock list.

> **Note:** The spreadtable in the Stock List tab can be sorted by any of the columns displayed. This is useful if you want to view the stock list using different sorting parameters such as Item, Minimum Quantity, Maximum Quantity, and so on.

Prerequisites

Planning Parameters must be entered.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Spares Management > Planner's Desktop

Steps

Follow these steps to modify or add to the existing stock list:

1. Navigate to the Stock List tab and select the line you want to modify.
2. In the lower portion of the window, select the Stock List tab.

   This displays the existing stock list.
3. Enter the new values you want to add.

   The fields you can modify include Min Quantity, Min Order, Max Quantity, Max Order, Source Type, Organization, and Subinventory.
4. Save your work.
5. To add a part to the stock list, click the Add button in the upper Stock List tab.

   The lower Stock List tab is refreshed and the fields are blank.
6. In the Item field, select the Part you want to add from the list of values.

   The Unit of Measure and Cost values default in.
7. Enter the values you want to set for the part being added.

   Optionally, you can select a Source Type. If you select a Source Type of Inventory, you must select the Organization.

   If the stock list was manually created, you can enter a reason for the manual override. This reason is displayed in the Reason Code field.
8. Optionally, you can enter a value in the Fixed Lot Multiple field.

   If there is a specific number of parts that are typically shipped in a package (i.e. 12 parts per box), you can enter that number here. Replenishment orders will be rounded to the closest multiple of your Fixed Lot Multiple figure.
9. Save your work.

Guidelines

You can delete a min/max recommendation from the Stock List tab by selecting the recommendation and clicking the Delete button.

From the Stock List tab, you can also view details about the part through the Usage, Forecast, and Parts Status tabs.

You can also copy a stock list from one subinventory to another by selecting the line in the stock list, clicking Copy, and then selecting the subinventory you want to copy the stock list line to.

5.3 Create Warehouse Notifications

When replenishing stock for a field technician or a regional warehouse, the min/max replenishment based on existing Inventory functionality, will suffice. In this scenario, the technician or field warehouse is being replenished from a central warehouse.

But when the central warehouse is being replenished, there are several factors to take into account. It may be more cost effective, for example, if a central warehouse's stock replenishment uses existing excess parts (that are in other sub-warehouses) or repair defective parts before purchasing new parts from an outside supplier.

Spares Management enables a planner to utilize all the available stock on hand through its warehouse notification functionality. Enhanced notifications are designed for the more complex planning environment encountered at the central warehouse where excess utilization, repair, and new-buy recommendations need to be incorporated into an integrated planning package.

The enhanced notifications process allows the planner to use a sequence of utilization approach where unfilled need at the central warehouse would be satisfied first by excess utilization, repair of defectives, and then new-buy.

To use notifications that incorporate excess and/or defective stock at a central warehouse, you must have an ASL for the warehouse (either by manually creating it, or using one of the recommendation methods to create it), and associate an assignment set for both usable and defective parts to the warehouse. The assignment set uses sourcing rules from Oracle Purchasing to associate those warehouses and field technicians you want to consider for excess and defective parts to the central warehouse.

Once configured, you create warehouse notification results by running a concurrent program that identifies parts replenishment needs in the central warehouse, searches the supply chain for existing excess parts and defective parts, and returns results that a planner can review and execute a replenishment strategy that best fits the business needs.

Once updated notifications are returned, the planner has the option to fill the replenishment order by using existing excess stock, waiting to use repaired parts from the defective parts, by ordering new parts from a supplier, or by a combination of the three. The planner creates an internal order and/or a requisition for a purchase order once a replenishment strategy is chosen.

Note: Notifications can only be used for warehouses and not for field technicians.

Also covered in this section:

- Section 5.3.1, "Replenish Parts Based on Notifications"

Prerequisites

An Authorized Stock List must exist for the warehouse. Also, if you are considering excess and defective parts, assignment sets must be set up.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Spares Management > Planner's Desktop

Steps

Use the following procedure to set up and create central warehouse notifications:

1. Expand the planning navigation tree and select the warehouse that you want to set up for notifications.
2. In the Usable field of the Assignment Set region, choose the assignment set to define excess in the notification from the list of values.

   Assignment Sets are set up during implementation and contain those warehouses in the supply chain that you want the notification to use when looking for excess parts. See the *Oracle Purchasing Implementation Guide* for details on setting up assignment sets.
3. In the Defective field, choose the assignment set that you want to use to define defective inventories available for repair for notifications.
4. Optionally, in the Notifications region, enter an EDQ Multiple.

   The Economic Delivery Quantity (EDQ) is used to define order quantities. The EDQ multiples are used to define excess on order.
5. Optionally, enter a Min Value figure.

This is a minimum value for the excess on-order notification. A Min Value of 100, for example, would mean that a notification is kicked off only if the total cost of the excess on-order notifications exceeds $100.

6. Save your work.

   At this point, you have configured your central warehouse to allow notification functionality.

   To generate a notification, continue with the following:

7. Run the Warehouse Notifications concurrent program.

   You must return to the main navigation tree and open Reports and Programs to access this concurrent program.

5.3.1 Replenish Parts Based on Notifications

Notifications are used for warehouse replenishment and provide additional information on excess parts and defectives that can be repaired.

When you open the Notifications tab, you will see a spreadtable that displays the notifications for those parts where the on-hand available and on-order has dropped below the established Min level for the part. The excess parts as defined by the usable assignment set is displayed in the Total Excess column. The number of defective parts in the supply chain is displayed in the Total Repair column.

The Notification Quantity column displays the quantity needed to replenish the warehouse. When you select one of the notifications, the lower panel of the Notifications tab displays the breakdown of what's available to fill the replenishment notification. For example, if there are excess parts and defective parts available, there will be three lines displayed in the table:

- The total available in excess
- The total available in repair
- The overall total needed to fulfill the parts order.

The planner can review this information and create a replenishment order based on what works for his business needs.

Note: There is no action available for defective parts. A planner can view the available defective parts and make a decision to delay some or all of a replenishment order until such time that the defective parts have been repaired.

A planner can replenish a part from this UI by either creating an internal order (if excess stock is used), or by creating a requisition for a purchase order, if a new buy order is needed.

Prerequisites

An Authorized Stock List must exist for the warehouse. Also, if you are considering excess and defective parts, assignment sets must be set up.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Spares Management > Planner's Desktop

Steps

To replenish parts using excess and new parts, follow these steps:

1. In the Notification tab, select the Notification of the part you want to review.

   A brief description of the part is displayed in the Description field.

   In the lower panel of the Notifications tab, the breakdown of parts available for replenishment is displayed.

2. To use excess parts, navigate to source type "Excess" in the lower Notifications tab and enter the Quantity of parts you want to use from the excess parts available in the Order Quantity field.

   This figure must be less than or equal to the Available Quantity.

3. To create a purchase requisition, navigate to source type "Purchase Order" and enter the requisition quantity in the Order Quantity field.

4. Click the Order button to submit your request.

   You will create an Internal Order for the excess stock that you plan to use and you will create a requisition for a purchase order for those parts you plan to buy from a supplier to fill the request.

Guidelines

If a part is being superseded by another part, all notification recommendations are rolled up into the top part (i.e. the part that is replacing the old part). Furthermore, if the lower part in a supersession chain has defectives, those are rolled into the total

defectives for the higher part. In other words, if Part A is being replaced by Part B, and there are eight defective Part As and 10 defective Part Bs in the supply chain, then the Part B notification will display a defective amount of 18 parts.

5.4 View Parts Status on the Planner's Desktop UI

The Parts Status tab displays information for the parts on hand at the warehouse or subinventory selected. A spread table displays such information as part number, usable on-hand, defective on-hand, parts in transit, requisitions, purchase orders, and so on. You can update the information on the Parts Status tab by right-clicking on the warehouse or subinventory and running the Parts Availability Data concurrent program.

You can order parts from this tab by selecting the part you want to order and clicking the Order button. This action brings up the Parts Requirement page, where you can create a parts requirement and an order.

On the bottom panel of the Parts Status tab, there are four sub-tabs:

- Usage
- Forecast
- Parts Status
- Stock List

Each of these tabs displays information pertaining to the selected item in the Parts Status tab. The Parts Status and Stock List sub-tab correspond with the same tabs on the top panel of the Parts Status tab.

6

Loop Planning, Notifications and Reporting Hierarchy

Spares Management also supports the alternative planning approach where individual sub-inventories can be grouped into Planning Loops for control of the total inventory across all sub-inventories in the loop. This is sometimes referred to as aggregate planning where the planning loop is used to coordinate planning and execution activities across multiple locations.

Spares Management has the flexibility to configure multiple planning loops within a single service operation. The planning loop can include sub-inventories from different inventory organizations. The loop can al so include both usable and defective sub-inventories.

Spares Management uses a Master Stock List to define the plan for the Loop. The MSL defines the parts and total quantities to be stocked in the loop. In addition, the MSL provides for a minimum usable quantity to insure that the loop maintains a reasonable balance of usable parts.

Notifications can be generated by running a concurrent program when the total available is above or below plan conditions as defined in the Master Stock List. Notifications will also be generated when the level of usable parts has dropped below the minimum usable on-hand level as designated in the Master Stock List.

The Planner's Desktop provides for an organized presentation of the functionality used for planning and execution at the location and loop levels, by including icons that you can point-and-click to change the UI. Although the view defaults to the Planner’s Desktop UI, navigation icons included on the desktop are the loops, reporting hierarchies and notifications icons.

In the Reporting Hierarchy area of the Planner’s Desktop, you can create hierarchies that can be used to summarize inventory balances, view on-order quantities, and

view usage and forecast information. Reporting hierarchies also provide a tool for parts searches.

Reporting hierarchies consist of a group of virtual nodes, designed around your organizational or geographical reporting structure. Each node can contain other nodes or subinventories. Each subinventory can belong to only one reporting hierarchy.

The following sections are covered in this chapter:

- Section 6.1, "Define Parts Loops"
- Section 6.2, "Create and Use Loop Notifications"
- Section 6.3, "Create Reporting Hierarchy Nodes"

6.1 Define Parts Loops

The parts loops is a group of subinventories that is planned together as a single entity. A parts loop can cross more than one inventory organization and more than one operating unit. At least one parts loop must be set up if the planning functionality of Spares Management is used.

These are the steps required to set up parts loops:

- Section 6.1.1, "Create a Parts Loop"
- Section 6.1.2, "Assign Subinventories to a Parts Loop"
- Section 6.1.3, "Define Master Stock List"

6.1.1 Create a Parts Loop

Prerequisites

Define calculation rules. Define planners. Define forecast rules.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Spares Management > Planner's Desktop> Parts Loop (icon)

Steps

1. Highlight the Parts Loop folder in the navigator tree.
2. Right click the Parts Loop folder to open a pop-up menu.
3. Select Create Parts Loop in the menu to open the Loop Details tab.
4. Enter a parts loop name in the Loop Details tab.
5. Optionally enter a description for the parts loop.
6. Select a planner from the Planner list of values.
7. Select a calculation rule from the Calculation Rule list of values.
8. Select a forecast rule from the Forecast Rule list of values
9. Save your work.

   Your new parts loop appears in the navigator tree.

6.1.2 Assign Subinventories to a Parts Loop

When you assign subinventories to a parts loop, you must specify whether the subinventory is for tracking usable or defective parts. You can also choose to use the Auto-receipt feature for this subinventory. With Auto-receipt enabled, shipments are received automatically at the source subinventory during the ship confirm process.

Prerequisites

Define the parts loop.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Spares Management > Planner's Desktop> Parts Loop (icon)

Steps

1. Click the + sign next to the Parts Loop folder in the navigator tree.
2. Right-click the parts loop to which you want to add subinventories.

3. Select Add Subinventory from the pop-up menu. The Location Details tab opens.
4. Select an organization name from the Organization list of values.
5. Select a subinventory from the Subinventory list of values.
6. Select a condition type of Usable or Defective from the Condition Type list of values.
7. Optionally select the Auto-receipt check box.

   If you select this feature, parts shipments are received automatically during Ship Confirm at the destination subinventory.
8. Select the Spares Location check box.

   The Spares Location check box has no functionality at this time.
9. Save your work.

6.1.3 Define Master Stock List

A Master Stock List is the component of a parts loop that defines the allowable quantity of usable and defective parts.

The Master Stock List (MSL) defines the part numbers and corresponding quantities that are stocked in the parts loop. The MSL is required if parts are stocked on a planned basis in a parts loop.

The Loop Quantity represents the total quantity that is required in the loop and includes the availability elements as defined in the calculation rule. The Minimum Usable quantity represents the Usable On-hand quantity that is required in the loop. Notifications to the planner are generated when either of these quantity criteria are not met.

Prerequisites

You must define a parts loop before you can create a master stock list.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Spares Management > Planner's Desktop> Parts Loop (icon)

Steps

1. Highlight the appropriate parts loop in the Navigator tree.
2. Open the Master Stock List tab.
3. Enter an item number or select an item from the list of values that you want to add to the Master Stock List. The Item field is case sensitive.
4. Select the revision from the list of values, if applicable.
5. Select a planner from the Planner list of values.
6. Enter the desired loop quantity for this item.
7. Optionally enter the minimum usable quantity for this item in the Minimum Good field.
8. The Plan Type field defaults based on the item definition.
9. Save your work.

6.2 Create and Use Loop Notifications

Planning at the loop level involves the comparison of actual loop quantities to the Master Stock List quantities. When the available quantities of parts are greater than or less than the inventory levels defined for the parts loop, a notification is created for review and processing by the planner.

In the Parts Loop area of the Planner's Desktop, you can administer the Master Stock List for the loop. You can define and maintain the loop parameters such as selecting the calculation and forecast rule. You can also view part availability for the loop. Finally, you can assign, update and view the usable and defective subinventories that are included in the parts loop.

Prerequisites

Define a Parts Loop.

Steps

The following steps for using parts loops are described in more detail:

- Section 6.2.1, "Create Part Availability Data"
- Section 6.2.2, "Create Usage History"
- Section 6.2.3, "View Usage and Forecast Data"

- Section 6.2.4, "Create Notifications"
- Section 6.2.5, "Process Notifications"

6.2.1 Create Part Availability Data

The Create Part Availability Data concurrent program compiles part availability data for the loop. This availability data is used to update summary quantities that are displayed in planning loops and hierarchies. The summary data that appears at the node levels in the Planner's Desktop are updated only by this concurrent program. The availability data is also used to determine whether notifications should be generated.

Prerequisite

Parts loops must be defined.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Spares Management > Reports and Programs > Create Part Availability Data

Steps

1. Open the Create Parts Availability Data concurrent program.
2. Click Submit.
3. Click No in the Decision window.
4. To see the status of your concurrent request, click View from the menu and click Requests.
5. Click Find to view the status of all your requests.

6.2.2 Create Usage History

Usage activity is a component of planned inventory levels and is also used for forecasting future usage activity. The Create Usage History concurrent program gathers usage statistics, which can be viewed in the Planner's Desktop.

The procedures for running the Create Usage History concurrent program follows.

Prerequisites

None

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Spares Management > Reports and Programs > Create Usage History

Steps

1. Open the Create Usage History concurrent program.
2. There are no parameters for this program, so click Submit.
3. Click No in the Decision window.
4. To see the status of your concurrent request, click View from the menu and click Requests.
5. Click Find to view the status of all your requests.

6.2.3 View Usage and Forecast Data

A forecasting tool is available on the Planner's Desktop to aid the planner in the planning process. Multiple forecasting techniques are provided and the forecast for the part is viewable by location, loop, and reporting hierarchy.

Prerequisites

Run the Create Usage History concurrent program to gather usage statistics.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Spares Management > Planner's Desktop > Parts Loop (icon)

Steps

Use this procedure to update the usage history information and view the forecast and usage information.

6. Click the + sign next to Parts Loop.
7. Click on the parts loop for which you want to view forecasting information.
8. Open the Parts Status tab.
9. Click Find in the Find Items window to execute a blind query for all parts.
10. Click on an Item number and view the Usage/Forecast information in the bottom of the window.
11. Open the Graph tab to view the usage data, represented by a red line, and the forecast data, represented by a green line.

6.2.4 Create Notifications

The Create Notifications concurrent program compares the Available quantities that are calculated by the Create Part Availability Data concurrent program to the desired quantities that were defined by the MSL in the parts loop. Notifications to the planner are created when one of the following conditions occurs:

- The Available quantity for this part is above the total loop quantity by more than the allowable percentage
- The Available quantity for this part is below the total loop quantity by more than the allowable percentage.
- The usable quantity for this part is below the minimum usable quantity

Prerequisite

Run the Create Part Availability concurrent program first, so the notifications are based on the most recent quantities.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Spares Management > Reports and Programs > Create Notifications

Steps

1. Select the Create Notifications concurrent program.
2. Click Submit.
3. Click No in the Decision window.
4. To see the status of your concurrent request, click View from the Tools menu and click Requests.
5. Click Find to view the status of all your requests.

6.2.5 Process Notifications

Notifications are used for advising the planner that the parts inventory is above or below quantities defined in the Master Stock List. You can view and take action on open notifications in the Planner's Desktop. Notifications have a status of either Open, Pending or Closed.

Prerequisite

Run the Create Notifications concurrent program.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Spares Management > Planner's Desktop > Notifications (icon)

Steps

1. Click the + sign in front of Notifications.
2. Click the + sign in front of the parts loop name to open the loop folder.
3. The notification categories are Above, Below and Not Enough Usable Parts. Click the + sign in front of the notification category you want to view. Within each notification category, you can choose Open, Closed, or Pending.
4. Click on the Item number in the Open folder to view the notification.
5. Open the Master Stock List tab to view the Master Stock List parameters for the Item in the notification.

6. Open the Parts Status tab to view the details of the part's status. The detailed view of the status includes the availability elements for the part.
7. There are five actions you can take on an open notification:
   - You can change the quantity on the Master Stock List.
   - You can create a move order to transfer parts to the location that needs them.
   - You can create an external requisition to purchase an additional quantity of parts.
   - You can create a WIP order to have the parts repaired internally.
   - You can create an external requisition to have the parts repaired externally.
8. After taking the appropriate action regarding the notification, you can update the status of the notification to Pending or Closed.

6.3 Create Reporting Hierarchy Nodes

Creating reporting hierarchies is an optional step because reporting hierarchies are not required for either the logistics or planning processes. However, even if you are not going to use Spares Management Loop Planning, you must set up either one parts loop or one reporting hierarchy. This loop or hierarchy is required to define the additional attributes for the destination subinventories used in Spares Logistics.

The following required steps for setting up reporting hierarchies are described:

- Create the nodes and relationships of the reporting hierarchy.
- Assign subinventory locations to the nodes.

Prerequisites

Subinventories must be defined so you can add subinventories to your reporting hierarchy. Hierarchy nodes must be created from top to bottom.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Spares Management > Planner's Desktop > Reporting Hierarchy (icon)

Steps

To create reporting hierarchy nodes:

1. Click the + sign next to the Reporting Hierarchy folder to open it.
2. Right-click the Reporting Hierarchy folder to open a pop-up menu.
3. Select Create Reporting Hierarchy to open the Hierarchy Details tab.
4. Enter a node name.
5. Save your work. Your new node appears in the navigator.
6. To add a node to your new node, right click your new node and follow steps 4 through 6.

6.3.1 Assigning Subinventories to Nodes

When you assign subinventories to a reporting hierarchy node, you must specify whether the subinventory is for tracking usable or defective parts. You can also choose to use the Autoreceipt feature for this subinventory. With Autoreceipt enabled, shipments are received automatically at the source subinventory during the ship confirm process.

Prerequisites

Create reporting hierarchy nodes.

Responsibility

Field Service Manager

Navigation

Field Service Dispatcher > Spares Management > Planner's Desktop > Reporting Hierarchy (icon)

Steps

1. Click the + sign next to the Reporting Hierarchy folder to open it.
2. Click the + signs in your reporting hierarchies nodes until you reach the node to which you want to assign a subinventory.
3. Right click the node to which you want to assign a subinventory to open a pop-up menu.
4. Select Add Subinventory to open the Location Details tab.

5. Select an inventory organization from the Organization list of values or accept the default value.
6. Select a subinventory from the Subinventory list of values.
7. Enter a Location Name. A location field is populated from the address or location assigned to a subinventory in Oracle inventory application.
8. The location address and country are entered automatically from default values.
9. Select a condition type of Usable or Defective from the list of values.
10. Optionally select the Autoreceipt check box if you want to use the auto-receipt feature for this subinventory.
11. Select the Spares Location check box. The Spares Location check box has no functionality at this time.