Oracle® Spares Management

Implementation Guide

Release 11*i*

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Oracle Spares Management Implementation Guide, Release 11*i*

Part No. A95415-02

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Oracle Spares Management Implementation Guide, Release 11*i*

Part No. A95415-02

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

Preface

Audience for This Guide

Welcome to Release 11*i* of the Oracle Spares Management Implementation Guide.

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

- The principles and customary practices of your business area.
- Spares Management

  If you have never used Spares Management, Oracle suggests you attend one or more of the Spares Management 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 Spares Management.

- Chapter 1, Oracle Spares Management: An Overview, is a general summary of the application. It includes descriptions of the logistics features and planning features.

- Chapter 2, Overview of Implementing Spares Management, gives an overview of how Spares Management integrates with other Oracle product. It also describes all the steps you must follow to implement Spares Management.
- Chapter 3, Setting Up Oracle Spares Management, shows you how to set up the application, including Oracle Inventory, Order Management, Bills of Material and Purchasing. It also tells you hw to define forecast rules, calculation rules, parts loops, and so on.

Typographic Conventions

Convention	Meaning
. . .	Vertical ellipsis points in an example mean that information not directly related to the example has been omitted.
. . .	Horizontal ellipsis points in statements or commands mean that parts of the statement or command not directly related to the example have been omitted
boldface text	Boldface type in text indicates a term defined in the text, the glossary, or in both locations.
< >	Angle brackets enclose user-supplied names.
[ ]	Brackets enclose optional clauses from which you can choose one or none.

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.

Accessibility of Links to External Web Sites in Documentation

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

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 Spares Management.

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

Spares Management 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 Spares Management.

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 Spares Management (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

Installation and System Administration

Oracle Order Management User's Guide

This document tells you how to set up order management, including orders, pricing, processes, and standard reports.

Oracle Shipping Execution User's Guide

This guide contains the information you need to understand and use Oracle Shipping Execution. It includes descriptions of how to set up shipping parameters, perform shipping transactions, create trips and assign freight costs, create and manage pack deliveries, and calculate shipping costs.

Oracle Purchasing User's Guide

This guide tells you how to set up and use purchase orders, use requisitions, use supply base management, control goods received, make inquiries, and set up reports and processes.

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

Oracle Spares Management Concepts and Procedures

This document gives you the background you need to understand how Spares Management works. It also describes all the procedures necessary to successfully use Spares Management.

Multiple Organizations in Oracle Applications

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

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 Spares Management 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 Spares Management 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

Oracle Spares Management: An Overview

This chapter provides an overview of Oracle Spares Management and its components, explanations of key concepts, features, and business flows, as well as the application's relationships to other Oracle applications.

Topics covered are:

- Spares Management Overview
- Logistics Features
- Planning Features

1.1 Spares Management Overview

Spares Management is designed to manage the spares parts inventory of a field service organization. The product covers essential functionality in both logistics and planning activities. Spares Management uses core foundation functionality from Oracle Inventory and adds the special features and functionality required for spares management in a field service organization.

1.1.1 Logistics

Spares Management logistics supports the spares replenishment process for both subinventory replenishment and field engineering orders. Replenishment for warehouse and field engineer subinventories can be either automated or manual depending on user requirements. If a field engineer needs a part for a specific service request and task, the part order is linked to the task and can be shipped to wherever the field engineer needs the part.

Spares Management logistics also provides the ability to minimize inventory excesses by managing the return of excess parts. Business rules can be defined which focus on the excess parts with the highest cost impact.

1.1.2 Planning

Oracle Spares Management supports planning at both the aggregate and location level. Aggregate or multi-location planning in Spares Management is called Parts Loop Planning.

At the aggregate level, individual subinventories are organized into parts loops so that the total inventory can be controlled within the loop. The parts loop becomes the primary planning entity that is used to coordinate planning and execution activities across multiple locations. A Master Stock List (MSL) is set up to define the stocking plan for the planning loop. Notifications to the planners are generated when the inventory levels are greater than or less than those defined in the MSL.

Planning at the location level is primarily determined by parts cost and usage activity. Spares Management can automatically generate a recommended Authorized Stock List (ASL) to define the stocking plan for each warehouse or engineer. The ASL defines the parts and quantities required at each location.

1.1.3 Integration with Field Service

Spares Management is closely integrated with the Oracle Field Service suite of products. Field engineers and dispatchers can order parts and view the status of parts orders from Field Service windows. The integration with Scheduler considers parts availability when automatically scheduling tasks.

1.1.4 Integration with Other Oracle Applications

Oracle Inventory provides the essential functionality and structure for Spares Management parts, subinventories, and inventory organizations. Spares Management parts orders can cross inventory organizations. They use the functionality provided by Oracle Order Management internal orders and Oracle Purchasing internal requisitions.

These sections provide additional detail in the following areas:

- Logistics Features
- Planning Features

Integration features are discussed in the next chapter.

1.2 Logistics Features

Spares Management logistics supports warehouse and field engineer replenishment and the processing of the field engineer's task related orders. The product also provides management of excess parts.

Key logistics features include:

- Visibility of inventory across multiple locations
- Ability to track both usable and defective parts using subinventory controls
- Order processing for both automated replenishment and service task orders
- Drop shipment to special ship to addresses
- Ability to track parts in transit between subinventories
- Ability to track parts throughout the entire logistics process, including defective returns
- Ability to define and return excess parts

1.2.1 Visibility of inventory across multiple locations

You can define reporting hierarchies across multiple geographic locations, using logical nodes for your warehouses and subinventories. A reporting hierarchy can include more than one organization. When you search for a part, you can use point and click functionality to drill down to the location with the part.

1.2.2 Ability to track both usable and defective parts using subinventory controls

Each subinventory is defined for either usable or defective inventory. When a recovered part is reported by the field engineer in the Field Service Report, the defective part is automatically transacted into the field engineer's designated defective subinventory. When parts usage is reported, the transaction to reduce the designated usable subinventory is automatically created and processed.

1.2.3 Order processing for automated replenishment and service task move orders

Automated replenishment is accomplished using Min-Max planning to automatically create move orders. Orders for parts required by the field engineer for a service task can also be created manually.

1.2.4 Drop shipment to special ship to addresses

When a move order or parts order is created, a special ship to address can be entered. The special ship to address can be assigned to the field engineer for future shipments.

1.2.5 Ability to track parts that are in transit between subinventories

Parts in transit from one subinventory to another are tracked as part of the total view of inventory. The in-transit transaction is created when the shipment is confirmed.

1.2.6 Ability to track parts throughout the entire logistics process

You can view the detailed status of Move Orders and Parts Orders at any time during the processing of the order. Related documents are included in the view of the order status, such as pick lists and packing lists.

1.2.7 Ability to define and return excess parts

You can track excess parts and decide how excess parts will be returned to a warehouse or designated drop off location. You can also define business rules to enable the field engineer or dispatcher to focus on the few excess items that have the highest impact.

1.3 Planning Features

Spares Management supports planning at the location level and the loop level. The Planner's Desktop provides an easy to use point and click user interface for organizing planning and forecasting.

Key planning features include:

- Ability to define multiple loops
- Use of a Master Stock List
- Automated planner notifications
- Use of an Authorized Stock List
- Automated Authorized Stock List recommendations
- Designation of a replenishment location

- Planner's Desktop
- Ability to forecast parts requirements based on historical usage

1.3.1 Ability to define multiple loops

Spares Management has the flexibility to configure multiple, non-overlapping parts loops within a single service organization. The number of unique loops can be tailored to meet the specific needs of the organization. The loops can include subinventories from more than one organization.

1.3.2 Use of a Master Stock List

Spares Management uses a Master Stock List (MSL) to define the stocking plan for the planning loop. The MSL defines the parts and total quantities to be stocked in the loop. The MSL also provides for a minimum usable quantity to make sure that the loop maintains a reasonable balance of usable parts.

1.3.3 Automated planner notifications

Notifications are generated automatically when the total available quantity is above or below plan as defined in the MSL. Notifications are also generated when the level of usable parts has dropped below the minimum on-hand level as designated in the MSL.

1.3.4 Use of an Authorized Stock List

Spares Management uses an Authorized Stock List (ASL) to define the stocking plan for each location. Using the min-max approach, the ASL defines the parts and quantities required for stocking at each location, including the field engineer's truck stock.

1.3.5 Automated Authorized Stock List recommendations

Spares Management provides a program to calculate recommendations for the ASL. After the recommendation is calculated, planners can review, make changes and approve the recommendations.

1.3.6 Designation of replenishment location

In the ASL, a replenishment location is designated for each part. While most items are typically replenished from the same location, this feature provides for the

exceptions that are often needed. Strategies that call for replenishment directly from suppliers would use this planning method.

1.3.7 Planner's Desktop

The Planner's Desktop provides for an organized presentation of the functionality used for planning and execution at the location and loop levels. Included on the desktop are parts loops, reporting hierarchies, notifications and the ASL planning tools.

1.3.8 Ability to forecast parts requirements based on historical usage

Forecasting information can be produced using four different methods, all of which are based on historical parts usage. The usage and forecast information can be viewed in a graphical format.

2

Overview of Implementing Oracle Spares Management

This chapter presents an overview of the implementation steps that you need to perform to set up Oracle Spares Management. This chapter covers the following topics:

- Integration Overview
- Overview of Implementation Steps
- Information Sources

2.1 Integration Overview

As part of the Oracle Service suite of products, Spares Management is classified as an installable module provided with the Field Service solution. Oracle Inventory and Oracle Order Management are the only prerequisite products specifically required for a Spares Management implementation.

Integration with Oracle Field Service provides the key operational functionality associated with creating and viewing the move orders, viewing inventories and processing parts transactions from the field service engineer. Integration with Oracle Order Management provides the ability to move parts among multiple inventory organizations and includes several sophisticated warehouse management features.

Oracle Spares Management supports the business processes involved in the management of spares parts in a field service organization. It is seamlessly integrated with a number of Oracle's ERP and CRM applications. This integration provides extensive functionality to manage the business activities involved in the spares management process.

Integration with Oracle Field Service provides the key operational functionality associated with creating and viewing the move orders, viewing inventories and processing parts transactions from the field service engineer. Integration with Oracle Order Management provides the ability to move parts among multiple inventory organizations and includes several sophisticated warehouse management features.

Integration features and considerations are discussed for the following Oracle Applications:

- Oracle Field Service
- Oracle Scheduler
- Oracle Inventory
- Oracle Order Management
- Oracle Purchasing
- Oracle HRMS
- Oracle Bills of Material
- Oracle Work in Process

2.1.1 Oracle Field Service

Spares Management is closely integrated with the Oracle Field Service group of products. Orders for parts, status of orders, and location of parts inventories are issues of special interest to the field service organization.

Key integration features with Field Service include:

- Detailed view of Move Order status from Field Service
- Ability to create Move Orders from the Field Service Report
- Parts reporting parts usage and recovery transactions
- Hierarchal view of inventory balances

There is no setup required in Field Service for Spares Management.

2.1.2 Oracle Scheduler

The scheduling and management of field service tasks need to consider the location and availability of parts along with other resource related criteria. The dispatch and arrival of both the field service engineer and the parts must be closely monitored

and managed in the fast cycle service environment. The integration of Spares Management with Scheduler incorporates parts availability into the task assignment and scheduling process.

Key integration features with Oracle Scheduler include:

- Ability to consider the location and availability of parts when scheduling field service tasks
- Ability to define relationships between products and tasks
- Tracking of actual number of times a task is completed for a product
- Tracking of actual number of time a parts is used for a product - tasks relationship
- Ability to allow a customer or a field engineer to define parts for a specific task
- Utilization of sourcing and available-to-promise (ATP) rules

Refer to *Setting Up Scheduler for Spares Management*.

2.1.3 Oracle Inventory

Oracle Inventory provides the essential foundation functionality for the Item Master or part number, inventory organizations, subinventories, parts inventory balance tracking, cycle counting, and so forth. Spares Management uses inventory organizations as a structure for subinventories that contain spare parts. Spares Management uses subinventories for tracking usable and defective spare parts.

Key integration features with Oracle Inventory include:

- Ability to track serial numbers, lots, revisions, and locators
- Usage of the inventory organization and subinventory structure
- Min-Max Planning for automated replenishment

Refer to *Setting Up Inventory for Spares Management*.

2.1.4 Oracle Order Management

Oracle Order Management provides the functionality for the processing of an internal order to deliver parts to a field engineer for a specific task. An internal order is initiated in Spares Management in the Parts Requirement window. Within Order Management, the internal order is processed almost exactly like an order that is to be shipped to an external customer. This processing includes the picking, packing, shipping, and receiving of the order.

Key integration features with Oracle Order Management include:

- Ability to create Internal Orders to transfer parts across inventory organizations
- Ability to use mobile applications in the warehouse
- Ability to use barcode and scanning functionality
- Ability to use pick, pack and ship functionality

Refer to *Setting Up Order Management for Spares Management*.

2.1.5 Oracle Purchasing

When a parts order is created in the Spares Management Parts Requirement window, a purchase requisition is created in Oracle Purchasing and an internal order is created in Oracle Order Management. In Oracle Purchasing, the auto-create process is used to create a purchase order from the items ordered on the purchase requisition. When the parts are received, they are received against the purchase order.

There is no setup required in Purchasing for using internal requisitions in Spares Management. If you do not have Oracle HRMS installed, employees are defined in Oracle Purchasing.

2.1.6 Oracle HRMS

Spares Management requires that planners be assigned to parts loops. Employees must be defined before planners are defined. Employees are defined in Oracle HRMS, if installed. Otherwise, minimal employee setup is done in Oracle Purchasing.

2.1.7 Oracle Bills of Material

Oracle Bills of Material (BOM) functionality is used along with Oracle Work In Process (WIP) in Spares Management to create and manage repair orders. The repair order is a key piece of the total Loop Quantity. Without BOM / WIP or equivalent functionality, the Spares Management planning process is not complete.

2.1.8 Oracle Work In Process

Oracle Work in Process (WIP) functionality is used along with Oracle Bills of Material (BOM) in Spares Management to create and manage repair orders. The

repair order is a key piece of the total Loop Quantity. Without BOM / WIP or equivalent functionality, the Spares Management planning process is not complete.

2.2 Overview of Implementation Steps

Following is a list of prerequisite setup steps that must be completed in related Oracle Applications before implementing Oracle Spares Management. All steps are mandatory unless otherwise indicated.

1. Define users in System Administration
2. Define Key Flexfields
3. Define an accounting calendar, currency and set of books
4. Define operating units
5. Define inventory organizations in Oracle Inventory
6. Define subinventories in Oracle Inventory
7. Define spares parts as items in Oracle Inventory
8. Define Planners in Oracle Inventory
9. Confirm the setup of Oracle Inventory
10. Confirm the setup of Oracle Bill of Materials if you are using this application.
11. Confirm the setup of Oracle Work in Process if you are using this application.
12. Confirm the setup of Oracle Purchasing if you are using this application.
13. Confirm the setup of Oracle Order Management if you are using this application.

2.3 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 Spares Management. If this guide refers you to other Oracle Applications documentation, use only the Release 11*i* versions of those guides unless we specify otherwise.

2.3.1 Online Documentation

All Oracle Applications documentation is available online (HTML and PDF). Further, technical reference manuals may also be available in an electronic format. Note that the HTML documentation is translated into more than 20 languages.

The HTML version of this guide is optimized for onscreen reading, and you can use it to follow hypertext links for easy access to other HTML guides in the library. You can use the Search feature to search by words or phrases. You can use the expandable menu to search for topics in the menu structure we provide. The Library option on the menu expands to show all Oracle Applications HTML documentation.

You can view HTML help in the following ways:

- From an application window, use the help icon or the help menu to open a new Web browser and display help about that window.
- Use the documentation CD.
- Use a URL provided by your system administrator.

2.3.2 User Guides Related to All Products

Oracle Spares Management shares business and setup information with other Oracle Applications products. Therefore, you may want to refer to other user guides when you set up and use Oracle Spares Management.

2.3.2.1 Oracle Applications User Guide

This guide explains how to navigate the system, enter data, and query information. It also introduces other basic features of the GUI available with this release of Oracle Spares Management.

You can also access this user guide online by choosing “Getting Started and Using Oracle Applications” from the Oracle Applications help system.

2.3.2.2 Oracle Applications Implementation Wizard User Guide

If you are implementing more than one Oracle product, you can use the Oracle Applications Implementation Wizard to coordinate your setup activities. This guide describes how to use the wizard.

2.3.2.3 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 Standard*s. It also provides information to help you build your custom Oracle Developer forms so that they integrate with Oracle Applications.

2.3.2.4 Oracle Applications User Interface Standards

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.

2.3.3 User Guides Related to Spares Management

2.3.3.1 Oracle Field Service Concepts and Procedures

This guide describes how to use the features of Field Service.

2.3.3.2 Oracle Field Service Implementation Guide

This guide explains how to define and setup Field Service.

2.3.3.3 Oracle Bills of Material User's Guide

This guide describes how to create various bills of materials to create and manage repair orders.

2.3.3.4 Oracle Work in Process User's Guide

WIP functionality is used along with Oracle Bills of Materials in Spares Management to create and manage repair orders.

2.3.3.5 Oracle Order Management User's Guide

This guide describes how to process internal orders that Spares Management uses when parts are ordered among inventory organizations.

2.3.3.6 Oracle Shipping Execution User's Guide

This guide describes the shipping process for internal orders.

2.3.3.7 Oracle Inventory User's Guide

This guide describes includes information on how to set up inventory organizations, subinventories, items, and categories.

2.3.3.8 Oracle Purchasing User's Guide

This guide describes how to process internal requisitions.

2.3.4 Installation and System Administration Guides

2.3.4.1 Oracle Applications Concepts

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

2.3.4.2 Installing Oracle Applications

This guide provides instructions for managing the installation of Oracle Applications products. In Release 11i, much of the installation process is handled using Oracle One–Hour Install, which minimizes the time it takes to install Oracle Applications and the Oracle 8i Server technology stack by automating many of the required steps. This guide contains instructions for using Oracle One–Hour Install and lists the tasks you need to perform to finish your installation. You should use this guide in conjunction with individual product user guides and implementation guides.

2.3.4.3 Upgrading Oracle Applications

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

2.3.4.4 Using the AD Utilities

Use this guide to help you run the various AD utilities, such as AutoInstall, AutoPatch, AD Administration, AD Controller, Relink, and others. It contains how–to steps, screenshots, and other information that you need to run the AD utilities.

2.3.4.5 Oracle Applications Product Update Notes

Use this guide as a reference if you are responsible for upgrading an installation of Oracle Applications. It provides a history of the changes to individual Oracle Applications products between Release 11.0 and Release 11*i*. It includes new features and enhancements and changes made to database objects, profile options, and seed data for this interval.

2.3.4.6 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 processing. You can order a technical reference guide for any product you have licensed. Technical reference guides are available in paper format only.

3

Setting Up Oracle Spares Management

This chapter provides the detailed procedures for setting up Oracle Spares Management. Specifically, this chapter describes the following setup steps:

- Defining an Oracle Application User
- Oracle Inventory Setup
  - Setting Up Inventory Organizations
  - Defining Subinventories
  - Additional Setup Required for Intransit Subinventory
  - Defining Items
  - Defining Planners
  - Defining Shipment Methods
  - Defining Freight Carriers
- Oracle Order Management Setup
- Oracle HRMS Setup
- Oracle Bills of Material Setup
- Oracle Work in Process Setup
- Oracle Purchasing Setup
- Defining Forecast Rules
- Defining Calculation Rules
- Defining Parts Loops
- Defining Master Stock Lists

3.1 Defining an Oracle Application User

You will need to create an Oracle Applications user with the appropriate responsibilities for performing implementation procedures. The user name you assign to the user can be used to log on to Oracle Spares Management.

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

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

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

Use the Users window to define the Oracle Spares Management user. This user will need to be uniquely identified by an application user name. For detailed information on creating application users, please refer to the *Oracle Applications System Administrator's Guide.*

3.2 Oracle Inventory Setup

Spares Management requires setup in Oracle Inventory for the following core functionality:

- Inventory organizations are used to define warehouses and groups of field engineers.
- Subinventories are used to define parts inventory locations for defective and usable parts.
- The Inventory Item Master is used to define spare parts. The additional features of serial number, lot, locator and revision control can optionally be implemented in Spares Management.
- Items, or spare parts, are assigned to subinventory locations.
- Inventory balance tracking is viewable in Spares Management.
- Inventory accounting is used when a short receiving line is closed for parts.
- The Inventory Min - Max Planning concurrent program is used to automatically replenish spares parts inventories.

The setup required for the integration with Oracle Inventory is described in the following sections.

3.2.1 Setting Up Inventory Organizations

Spares Management uses inventory organizations as a structure for subinventories that contain spare parts. Inventory organizations represent warehouses and groups of field engineers.

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

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

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

Suggestions for setting up organizations in Oracle Inventory for Spares Management

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

parts within a single inventory organization and across multiple inventory organizations.

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

3.2.2 Defining Subinventories

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

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

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

Steps

1. Navigate to the Subinventory setup form from a Spares Management responsibility.

   (N) Inventory > Setup > Organization > Subinventories

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

3.2.3 Additional Setup Required for Intransit Subinventory

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

The following parameters should be checked:

- Qty Tracked
- Asset subinventory

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

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

Suggestion for setting up subinventories in Oracle Inventory for Spares Management

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

3.2.4 Setting Up Account Aliases

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

Steps

1. Using a Field Service Manager responsibility, navigate to the Subinventory setup form from a Spares Management responsibility.

   (N) Field Service Dispatcher > Spares Management > Standard Inventory > Setup > Account Aliases

2. Enter the name of the alias in the Alias field: CSP_RECEIPT.
3. Enter a description: Account for Spares Management over and under receipt.
4. Select the account to be used.

5. Enter the date on which this alias account is to be effective.

3.2.5 Defining Items

Standard setup in Oracle Inventory is required for Items. Spares Management uses Items as Part Numbers. For detailed information relating to setting up Items refer to the *Oracle Inventory User's Guide.*

When setting up items for Spares Management, a standard setup is required for each Item. In addition to the standard item setup, the specific requirements needed for items to be used by Spares Management are as follows:

- **Inventory Item** must be checked in the Inventory tab.
- A selection must be made in the Recovered Part Disposition field in the Service tab. The Recovered Part Disposition field defines items as spares parts that will be active in Spares Management. If this field is not populated, the item will not be available in Spares Management.

  The Recovered Part Disposition field has three choices:

  - No Return. Indicates to the service representative that return of the recovered part is not required.
  - Fast return. An RMA is created and the recovered part is returned to Depot Repair.
  - Slow Return. The part is transacted into the service representative's designated defective subinventory.
- The Billing Type is used for field service invoices. The choices in the list of values are Material, Expense and Labor.
- Two attributes must be set to allow the item to be shipped on an internal order in Order Management. In the Master Item window, open the Order Management tab and check the following check boxes:
  - Internal Ordered
  - Internal Orders enabled

3.2.6 Defining Planners

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

Prerequisite

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

Steps

1. Navigate to the Planners setup form.

   (N) Inventory > Setup > Planners

2. Enter the name of the planner in the Name field.
3. Enter the user role in the Description field.
4. Select the employee name from the Employee list of values.
5. Save your work.

3.2.7 Defining Shipment Methods

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

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

1. From an Inventory responsibility, navigate to the Ship Method QuickCodes window from the menu.
2. Enter a unique alphanumeric code describing the shipping method.
3. Enter the meaning of the shipping method code.
4. Optionally, enter from and to effective dates.
5. Indicate whether the shipping method is enabled.
6. Save your work.

3.2.8 Defining Freight Carriers

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

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

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

1. Using an Inventory responsiblity, navigate to the Freight Carriers window.

   Setup > Freight Carriers

2. Enter a unique name for the freight carrier.
3. Choose the general ledger distribution account that collects the costs associated with using this carrier.
4. Save your work.

3.3 Oracle Order Management Setup

Spares Management is dependent on Oracle Order Management for the following functionality:

- Internal orders are used for ordering parts that move across inventory organizations
- Pick, pack, and shipping processes are used for internal orders

There are two Inventory Item Attributes that Order Management uses for internal orders. The attribute names are Internal Ordered Item and Internal Orders Enabled. The steps for setting these attributes are described in the Defining Items section under Oracle Inventory above.

A description of the attributes follows.

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

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

3.4 Oracle HRMS Setup

Spares Management requires that planners be defined for planning loops. Before planners can be set up, you must define employees. Oracle HRMS is used to enter

and maintain employees. If you do not have Oracle HRMS installed, you can use the Enter Employee form in Oracle Purchasing to define employees. Please refer to *Managing People Using Oracle HRMS* or the *Oracle Purchasing User's Guide* for additional information about employee setup.

3.5 Oracle Bills of Material Setup

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

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

This is an optional step, which is required only if you have Oracle Work in Process installed.

3.6 Oracle Work In Process Setup

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

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

3.7 Oracle Purchasing Setup

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

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

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

Purchasing functionality in Spares Management is used to create and manage New-buy orders. The repair order is a key piece of the total Loop Quantity. Without

Purchasing or equivalent functionality, the Spares Management planning process would not be complete.

3.8 Defining Forecast Rules

Forecast rules are used to determine how forecast information is calculated. A forecast rule is a dependency for defining parts loops.

The following topics relating to forecast rules are described:

- Forecast Methods
- Forecast Rule Parameters
- Procedure to Define Forecast Methods
- Examples of Forecast Methods

3.8.1 Forecast Methods

Several forecast methods are provided in Spares Management:

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

3.8.2 Forecast Rules Parameters

Listed below are the parameters that are defined for forecast rules:

- The Rule Name is the name of the forecast rule.
- The Description field contains a description of the forecast rule.
- The Period Type can be Weekly or Periodic. Periodic refers to your accounting periods.

- The Forecast Periods field indicates the number of periods in the future for which you want to see a forecast.
- The History Periods field indicates the number of periods in the past that you want to include in the usage calculation.
- The Alpha field is used in the Exponential Smoothing and Trend Enhanced methods.
- The Beta field is used in the Trend Enhanced method.
- The Weighted Average Period Index fields are used to specify weights for individual periods. For example, you can assign higher weights to more recent periods, if that is desired. The total of the period values must equal 1 and each value must be greater than zero and less than one.

3.8.3 Procedure to Define Forecast Rules

Prerequisites

None

Steps

1. Navigate to the Forecast Rules window.

   Setup > Forecast Rules

2. Enter a rule name in the Name field.
3. Optionally enter a description in the Description field.
4. Select a forecast method from the Forecast Method list of values. The choices are Simple Average, Weighted Average, Exponential Smoothing and Trend Enhanced.
5. In the Period Type field, select Weekly or Periodic. Periodic refers to accounting periods.
6. Depending on which forecast method you chose, the remaining fields in the window vary.

3.8.4 Examples of Forecast Rules

3.8.4.1 Simple Average method

If you want to forecast parts usage for the next six weeks, based on the simple average of the historical usage during the last twelve weeks, you would use the Simple Average method, the Period Type would be Weekly, the Forecast Periods would be 6, and the History Periods would be 12.

3.8.4.2 Weighted Average method

If you want to forecast parts usage for the next six month, based on a weighted average of the last six months, giving more weight to the most recent three months, you would use the following parameters:

- Select Weighted Average in the Forecast Method field.
- Select Periodic for the Period Type.
- Enter a value of 6 in the Forecast Periods field.
- Enter a value of 6 in the History Periods field.
- Enter the following values in the Weighted Average Period Index fields:

  0.3, 0.2, 0.2, 0.1, 0.1, 0.1

3.8.4.3 Exponential Smoothing method

If you want to forecast parts usage using the Exponential Smoothing method.

- Select Exponential Smoothing in the Forecast Method field.
- Select Weekly for the Period Type.
- Enter a value of 6 in the Forecast Periods field.
- Enter any value in the History Periods field.
- Enter a value between 0.1 and 0.9 in the Alpha field.

3.8.4.4 Trend Enhanced method

If you want to forecast parts usage using the Trend Enhanced method.

- Select Trend Enhanced in the Forecast Method field.
- Select Weekly for the Period Type.
- Enter a value of 6 in the Forecast Periods field.

- Enter any value in the History Periods field.
- Enter a value between 0.1 and 0.9 in the Alpha field.
- Enter a value between 0.1 and 0.9 in the Beta field.

3.9 Defining Calculation Rules

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

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

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

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

The following topics relating to calculation rules are described:

- Availability Elements
- Procedure for Defining Calculation Rules
- Example of a Calculation Rule

3.9.1 Availability Elements

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

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

- Inter Org transfers
- In-transit Move Orders

3.9.2 Procedure to Define Calculation Rules

Prerequisites

None

Steps

1. Navigate to the Calculation Rules window.

   Setup > Calculation Rules

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

3.9.3 Example of a Calculation Rule

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

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

- The Time Fence is 20.

3.10 Defining 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:

- Create the parts loop.
- Assign subinventory locations to the parts loop.
- Create a master stock list for the parts loop.

> **Note:** f the Planning section of Spares Management is not going to be used, you still need to set up either one loop or one reporting hierarchy. This loop or hierarchy is used to defined the additional attributues for the destination subinventories used in Spares Logistics

3.10.1 Creating a Parts Loop

Prerequisites

- Define calculation rules.
- Define planners.
- Define forecast rules.

Steps

1. Navigate to the Parts Loop on the Planner's Desktop.

   (N) Planners Desktop > (T) Parts Loop (top icon on the left)
2. Highlight the Parts Loop folder in the navigator tree.
3. Right click the Parts Loop folder to open a pop-up menu.
4. Select Create Parts Loop in the menu to open the Loop Details tab.
5. Enter a parts loop name in the Loop Details tab.

6. Optionally enter a description for the parts loop.
7. Select a planner from the Planner list of values.
8. Select a calculation rule from the Calculation Rule list of values.
9. Select a forecast rule from the Forecase Rule list of values
10. Save your work. Your new parts loop appears in the navigator tree.

3.10.2 Assigning 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 Autoreceipt feature for this subinventory. With Autoreceipt enabled, shipments are received automatically at the source subinventory during the ship confirm process.

Prerequisites

Define the parts loop.

Steps

1. Navigate to the Parts Loop on the Planner's Desktop.

   (N) Planners Desktop (T) Parts Loop (the top left icon)
2. Click the + sign next to the Parts Loop folder in the navigator tree.
3. Right click the parts loop to which you want to add subinventories.
4. Select Add Subinventory from the pop-up menu. The Location Details tab opens.
5. Select an organization name from the Organization list of values.
6. Select a subinventory from the Subinventory list of values.
7. Select a condition type of Usable or Defective from the Condition Type list of values.
8. Optionally select the Autoreceipt check box. If you select this feature, parts shipments are received automatically during Ship Confirm at the destination subinventory.
9. Select the Spares Location check box. The Spares Location check box has no functionality at this time.
10. Save your work.

3.11 Defining a 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.

Steps

1. Navigate to the parts loop.

   (N) Spares Planning > Planner's Desktop > (T) Parts Loops (first icon on the left)

2. Highlight the appropriate parts loop in the Navigator tree.
3. Open the Master Stock List tab.
4. 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.
5. Select the revision from the list of values, if applicable.
6. Select a planner from the Planner list of values.
7. Enter the desired loop quantity for this item.
8. Optionally enter the minimum usable quantity for this item in the Minimum Good field.
9. The Plan Type field defaults based on the item definition.
10. Save your work.

3.12 Defining Planning Parameters

The planning parameters are used to control and manage the planning process for both the field engineers and the warehouses. Each warehouse is represented by an

inventory organization and each field engineer is represented by a subinventory. Field engineers are grouped together into inventory organizations.

The planning parameters include an optional calculation for safety stock. Safety stock is the quantity of parts inventory that serves as a buffer to protect your organization from shortages that may result from unanticipated high levels of usage. The safety stock is calculated by multiplying the service level percentage that you enter, multiplied by the standard deviation based on usage over a specified period of time.

An Economic Delivery Quantity (EDQ) is also used to determine operating inventory above and beyond safety stock.

You can define the parameters for calculating the recommended min-max levels for the authorized stock lists in the Planning tab of the Planner's Desktop.

Prerequisites

1. Forecast rules must be defined.
2. Calculation rules must be defined.
3. Excess parts rules must be defined.
4. Planners must be defined.

Steps to define planning parameters at the planning node level

1. Use the following navigation path to administer planning parameters.

   (N) Planners Desktop > (T) Planning (the bottom icon on left)
2. Highlight the Planning node in the navigator. The planning parameters set at this top level are required and serve as default values for the underlying inventory organizations and subinventories.
3. The Organization Type field is protected from update at this level.
4. Select a forecast rule from the Forecast Rule list of values.
5. Select a calculation rule from the Calculation Rule list of values.
6. Optionally select an excess parts rule from the Excess Parts rule list of values.
7. Enter a value in the Service Level field to represent a percentage to be used to determine safety stock quantity. This value must be between 1 and 100.
8. Enter a value in the EDQ field to be used in the Economic Delivery Quantity calculation to determine EDQ quantity. This value must be between 1 and 100.

9. Select Yes or No to enable this plan for Authorized Stock Lists.
10. Select Yes or No to use Safety Stock for this plan.
11. The Condition Type and Planner fields are not enabled at this level.
12. Save your work.

Steps to define planning parameters at the inventory organization level

1. Use the following navigation path to administer planning parameters.

   (N) Planners Desktop > (T) Planning (the bottom icon on the left)
2. Click the + sign next to the Planning node to display the list of inventory organizations.
3. Highlight the inventory organization for which you want to set the planning parameters. The Planning Parameters tab for the inventory organization opens.
4. For Organization Type, you can select Warehouse or Field Engineer for this inventory organization.
5. All other parameters set at the planning level are displayed by default. You can override these default values as needed.
6. You can select a planner for this inventory organization.
7. Save your work.

Steps to define planning parameters at the subinventory level

1. Use the following navigation path to administer planning parameters.

   (N) Planners Desktop > (T) Planning (the second icon on the left)
2. Click the + sign next to the Planning node to display the list of inventory organizations.
3. Click the + sign next to the inventory organization that contains the subinventory you want to update.
4. Highlight the subinventory you want to update.
5. You can select the Condition Type at the subinventory planning level. The choices are Usable and Defective.
6. All other parameters except Organization Type that were set at either the planning level or the inventory organization level are displayed by default. You can override these defaults as needed.

7. If you do not want a subinventory to be included in the ASL calculation, you can set the ASL flag to No.

3.13 Defining Authorized Stock Lists

An Authorized Stock List is set up at the subinventory level and defines the minimum and maximum quantities of parts to be stocked in the subinventory.

Authorized stock lists are used to plan inventory at the specific subinventory location. The authorized stock list defines the parts and the minimum and maximum quantities that are to be stocked at each location.

To create the original Authorized Stock List, you can either run the Create Recommended ASL, or you can set it up manually.

Prerequisites

None

Steps

1. Navigate to the Parts Loop on the Planner's Desktop.

   (N) Planner's Desktop > (T) Parts Loop (the top icon on the left)

2. Click on the parts loop that contains the subinventory for which you want to create an Authorized Stock List.
3. Highlight the subinventory in the parts loop.
4. Open the Authorized Stock List tab.
5. Select an item from the list of values.
6. Select the Min-Max Planning check box.
7. Select the source type from these options:
   - Subinventory indicates another subinventory in the same organization
   - Inventory indicates another subinventory not in the same organization
   - Vendor indicates an external supplier
8. Enter a value in the Organization field if you selected Inventory as the source type.
9. Optionally, enter a value in the Subinventory field if you selected either Subinventory or Inventory as the source type.

10. Enter minimum and maximum quantities.
11. Optionally, enter minimum and maximum order quantities.
12. Save your work.

3.14 Defining Reporting Hierarchies

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.

Note: Setting up 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.

3.14.1 Creating Reporting Hierarchy Nodes

Prerequisites

- Subinventories must be defined so you can add subinventories to your reporting hierarchy.
- Hierarchy nodes must be created from top to bottom.

Steps

1. Navigate to the Reporting Hierarchy setup.

   (N) Planners Desktop > (T) Reporting Hierarchy (second icon on the left)

2. Click the + sign next to the Reporting Hierarchy folder to open it.

3. Right click the Reporting Hierarchy folder to open a pop-up menu.
4. Select Create Reporting Hierarchy to open the Hierarchy Details tab.
5. Enter a node name.
6. Save your work. Your new node appears in the navigator.
7. To add a node to your new node, right click your new node and follow steps 4 through 6.

3.14.2 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 hierachy nodes.

Steps

1. Navigate to the Reporting Hierarchy setup.

   (N) Planners Desktop > (T) Reporting Hierarchy (second icon on the left)
2. Click the + sign next to the Reporting Hierarchy folder to open it.
3. Click the + signs in your reporting hierarchies nodes until you reach the node to which you want to assign a subinventory.
4. Right click the node to which you want to assign a subinventory to open a pop-up menu.
5. Select Add Subinventory to open the Location Details tab.
6. Select an inventory organization from the Organization list of values or accept the default value.
7. Select a subinventory from the Subinventory list of values.
8. Enter a Location Name. A location field is populated from the address or location assigned to a subinventory in Oracle inventory application.
9. The location address and country are entered automatically from default values.

10. Select a condition type of Usable or Defective from the list of values.
11. Optionally select the Autoreceipt check box if you want to use the autoreceipt feature for this subinventory.
12. Select the Spares Location check box. The Spares Location check box has no functionality at this time.

3.15 Defining Task Parts

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

Tasks Parts are defined for combinations of products and task templates in the Define Task Parts window. Parts can be defined automatically by running the Create Task Parts History concurrent program, which collects usage information from the debrief process in Field Service, or you can manually define parts in this window.

The Manual region of the window allows for the manual entry of items associated with the product and task template.

The Rollup region summarizes the usage information for replacement parts, if applicable.

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

Prerequisites

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

Steps to Create a Manual Task Parts Definition

1. Navigate to the Define Task Parts window.

   (N) Setup > Task Parts

2. Enter a part number for the product in the Product field. The product description is displayed on the right.
3. The Task Template list of values displays task templates that have been defined for the product you selected. Enter a valid task template name or select one from the list of values.
4. The Auto or Manual field will default to Manual when you save your work.
5. Skip the Times Used field. It will be populated with the number of times this task template has been used for this product, after running the Create Task Parts History concurrent program.
6. Skip the Task % field. It will be populated with a number representing the percentage of times this task template was used for this product.
7. Enter the first part number in the Item field that you want to associate with this task parts definition.
8. The Unit of Measure defaults in the UOM field depending on the item you selected.
9. Enter a revision number, if applicable for this part.
10. Enter the quantity of parts required for this task.
11. Enter a value in the % field to represent how often this part is expected to be used in this task template product combination. This percentage value is used to calculate the Priority.
12. Optionally, enter the Start Date or End Date to enable or disable this parts task definition on a specific day.
13. Continue entering parts for this product task template as needed.
14. Save your work.

3.16 Defining Excess Rules

You can define Excess Rules to filter out excess parts that do not have a significant impact on excess value. This allows the field engineer and planner to focus on the few items that have a high impact. If you do not use excess rules, all quantities that are greater than the maximum level in the ASL are considered to be excess and would then appear in the Excess List window for return.

Prerequisite

None

Steps to Create an Excess Rule

1. Navigate to the Define Excess Rules window using this navigation path.

   (N) Setup > Excess Rules

2. Enter a unique name for the excess rule.

3. Enter a description for the excess rule.

4. Enter a value in the Total Max Excess field to represent a maximum allowable percentage of the total excess value. For example, if you enter a 10 in this field, then excess parts are considered for return only if their value is greater than 10% of the total onhand value. If this field is left blank, a zero is assumed and all excesses are considered.

5. Enter a value in the Line Max Excess field to represent a maximum allowable percentage of the total excess quantity for a line. For example, suppose you enter a 10 in this field. If the maximum quantity is 20 and the onhand quantity is 21, this part would not appear on the excess list because the onhand quantity is less than 10% over the maximum quantity. If this field is left blank, a zero is assumed and all excesses are considered.

6. Enter a value in the Days Since Receipt field to represent the number of days you want to exclude when calculating the excess quantity. This allows you to exclude recently received parts from the excess list. For example, if you enter a 10 in this field, then all of the parts received within the last ten days are ignored. If this field is left blank, a zero is assumed and all receipts are included in the excess calculation.

7. You can enter a value in either the Total Excess Value field OR the Top Excess Lines field. Enter a value in the Total Excess Value to represent the percentage of total excess value that you want to see on the excess list. For example, if you enter a 10 in this field, the excess list will show the excess lines that comprise the top 10% of the total excess value.

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

8. You can enter or select a value for Category Set if you want to exclude an item category from return, such as supplies. A category set is a feature in Inventory where yau can define your own group of categories.

9. If you enter a value for Category Set, the Category field is enabled. A category is a code used in Inventory to group items with similar characteristics.
10. Save your work.

3.17 Defining Delivery Times

Spares Management provides a method for specifying the delivery times for shipment methods that are defined in Oracle Inventory. For example, if your carrier can guarantee overnight delivery by a specific time of day, this information allows Oracle Scheduler to schedule your field engineer to be on site for a high priority task soon after the part arrives.

Prerequisites

Shipment methods must be defined in Oracle Inventory.

Freight Carriers must be defined in Oracle Inventory.

Steps

1. Navigate to the Define Delivery Time form by using this navigation path.

   (N) Spares Planning > Delivery Time
2. Execute a query for the organization you want to update. The window displays the shipping methods and freight codes that have been defined in Oracle Inventory for each inventory organization.
3. Enter a value in the Lead Time field the number of time units this freight carrier commits to make a delivery. For example, for an overnight delivery, enter a 1 in this field and Day in the UOM field.
4. In the UOM field, enter the unit of time that corresponds to the previous field, Lead Time.
5. Enter the carrier's expected delivery time in the Delivery Time field.
6. Enter any time value between 0100 and 2400 in the Cutoff Time field. The Cutoff Time is the time by which you must have the parts ready for pick up.
7. The Comfort Zone is the time you want to allow between the expected delivery time of the part and the scheduled arrival time for the field engineer. Enter a number in the Comfort Zone in hours.

3.18 Defining Resource Addresses and Subinventories

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

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

Prerequisites

1. Field engineers must be defined as employees.
2. Subinventories must be defined.

Steps to Add a New Resource Address or Subinventory

1. Navigate to the Resource Addresses and Subinventories window by following the navigation path.

   (N) Setup > Resource Addresses and Subinventories
2. Select the appropriate resource type from the Resource Type list of values.
3. Select a field engineer name from the Resource Name list of values. The list of values only displays the field engineers who have been assigned to the Resource Type you selected.
4. The Phone, Email, Start Date and End Data information for the field engineer is displayed if these fields have been populated in Oracle HRMS.
5. The Addresses tab opens by default.
6. Select an address style for the appropriate country from the Address Style list of values.
7. Tab to the Address field to open the Location Address flexfield. Enter the details for the ship to address.

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

21. Note that the address of the resource subinventory is not picked up from the resource address. You must enter this manually.

22. Save your work.

3.19 Setting Up System Profile Options in Other Applications

You must set up the Available to Promise profile options in the Advanced Planning and Purchasing applications. Refer to the documentation for those products for more information.

3.20 Setting Up Oracle Spares Management Profile Options

System profile settings help you control how Oracle Spares Management looks, feels, and behaves. Profiles can be set at user, responsibility, application, and site levels.

Site level profile settings apply to all users at an installation site. Application level profile settings apply to all the users of the specified application. Profile settings at application level override those set at site level. Responsibility level profile settings apply to all users who use the responsibility to sign on to the application. Responsibility level profile options override those set at site and application level. User level profile options apply to individual users identified by their application user names. User level profile options override all other profile options.

The following Oracle Spares Management system profile options must be set up. You must use the System Administrator responsibility to set up profile values. For a detailed explanation of system profile options and the procedures for setting them up, please refer to *Oracle Applications System Administrator's Guide*.

- CSP: Move Order Intransit Subinventory
- CSP: Order Type
- CSP: PROD_TASK_HIST_RULE
- CSP: Ship Complete

3.20.1 CSP: Move Order Intransit Subinventory

This profile option is used for assigning the name of the subinventory to be used for instransit shipments of move orders. You must define a subinventory to be used for intransit shipments in each inventory organization before you define this profile option.

This profile option is used to identify the subinventory location in Spares Management that is used for tracking in-transit parts shipments. The subinventory name that is used in this profile option must be defined in every inventory organization.

Name: CSP: Move Order Intransit Subinventory

Valid Values: Subinventory defined for use with intransit shipments in Oracle Inventory.

Recommended Profile Value: Intransit

Recommended Profile Setting: Site

3.20.2 CSP: Excess Parts Order Type

This profile option is used to define the type of internal order to use when the excess returns order is automatically created.

Name: CSP: Excess Parts Order Type

Valid Values: Any valid order type

Recommended Profile Value:

Recommended Profile Setting:

3.20.3 CSP: Order Type

This profile option is used to provide a default value for order type when creating internal orders in the Parts Requirement window.

Name: CSP: Order Type

Valid Value: Any valid order type

Recommended Profile Value: Internal Order

Recommended Profile Setting: Site

3.20.4 CSP: PROD_TASK_HIST_RULE

This profile option is used for comparing task times used with the profile option to make a decision whether or not to populate parts in Parts Requirement.

Name: CSP: PROD_TASK_HIST_RULE

Valid Value: any numeric value

Recommended Profile Value:

Recommended Profile Setting:

3.20.5 CSP: Ship Complete

This profile option is used to specify whether parts orders should be shipped complete.

Name: CSP: Ship Complete

Valid Values: Yes or No.

If you set this profile option to Yes, all ordered parts will be shipped together. If you set it to No, the Ship Complete flag on required parts will be used.

Recommended Profile Value:

Recommended Profile Setting: Site