Oracle® Spares Management

Implementation Guide

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Implementing Oracle Spares Management

This document provides descriptions of the setup and configuration tasks required to implement the application successfully.

Topics covered are:

- Implementation Overview
    - Implementing Checklist
- Implementing Steps

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Implementation Overview

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

- Oracle Inventory

- Oracle Purchasing

For information regarding the installation and implementation of these applications, see the appropriate documentation.

The implementation tasks described here are tasks that are necessary to use the additional functionality included with Spares Management.

This implementation guide will cover those setup topics in Oracle Inventory that require a special setup action unique for Spares Management. Where a unique setup action is not required, the generic setup would be used and the Implementing Guide for Oracle Inventory would apply.

This guide will also include suggestions or recommendations for the Inventory setup which will tailor the application to the Spares Management solution.

Implementing Checklist

Complete the following steps in sequential order.

Step	Required	Step Title	Product
1.	Yes	System Administration	
2.	Yes	Define Key Flexfields	
3.	Yes	Define Calendar, Currency and Set of Books	
4.	Yes	Setup Organizations	Oracle Inventory
5.	Yes	Setup Sub-inventories	Oracle Inventory
6.	Yes	Setup Items	Oracle Inventory
7.	Yes	Setup Employees	Oracle Purchasing
8.	Yes	Confirm setup of Oracle Inventory	Oracle Inventory
9.	Optional	Confirm setup of Oracle BOM	Oracle BOM
10.	Optional	Confirm setup of Oracle WIP	Oracle WIP
11.	Optional	Confirm setup of Oracle Purchasing	Oracle Purchasing
12.	Yes	Setup Forecast Rules	Spares Management
13.	Yes	Setup Calculation Rules in	Spares Management
14.	Yes	Setup Loop(s)	Spares Management
15.	Yes	Setup Master Stock List(s)	Spares Management
16.	Yes	Setup Authorized Stock List(s)	Spares Management
17.	Optional	Setup Hierarchies	Spares Management
18.	Optional	Setup Usage History schedule	Spares Management
19.	Optional	Setup Part Avail Data schedule	Spares Management
20.	Optional	Setup Notifications schedule	Spares Management
21.	Yes	Setup Spares Management Profile Options	Spares Management

Implementing Steps

Perform the following implementation steps in sequential order:

Step 1: Set Up System Administrator

Required Step

This step involves the following tasks:

- Define responsibilities. For more information, see: *Oracle Applications System Administrator's Guide*.

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

Step 2: Set Up Key Flexfields

Required Step

If you are, or will be, fully installing other applications, such as Oracle Human Resource Management or Oracle Inventory, be sure to coordinate with those products' flexfield setup before defining the key flexfields here, as it is not recommended to change flexfields frequently. For more information, see: *Oracle Applications Flexfields Guide*.

Step 3: Set Up Calendars, Currencies, and Set of Books

Required Step

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

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

This step involves the following tasks:

- Set up calendars:

- Define period types. For more information, see: Defining Period Types, *Oracle General Ledger User's Guide*.

- Define accounting calendar. For more information, see: Defining Calendars, *Oracle General Ledger User's Guide*.

- Define transaction calendar. For more information, see: Defining Transaction Calendars, *Oracle General Ledger User's Guide*. (**Optional**)

- Define workday calendar. For more information, see: Overview of Workday Calendar, *Oracle Bills of Material User's Guide*. (**Optional**)

- Define exception templates. See: Creating a Workday Exception Template, *Oracle Bills of Material User's Guide*. (**Optional**)

- Define currencies. For more information, see: Defining Currencies, *Oracle General Ledger User's Guide*.

- Define conversion rate types. For more information, see: Defining Conversion Rate Types, *Oracle General Ledger User's Guide*.

- Assign your set of books to a responsibility. For more information, see: *Oracle General Ledger User's Guide*.

- Set up currency rates.

- Set up accounting code combinations. For more information, see: *Oracle General Ledger User's Guide*.

- Open and close accounting periods. For more information, see: Opening and Closing Accounting Periods, *Oracle General Ledger User's Guide*.

Step 4: Set Up Inventory Organizations in Oracle Inventory

Required Step

For the tasks relating to setting up Inventory Organizations refer to the *Oracle Inventory User's Guide.* A standard setup is required for each organization.

In the Organization Classifications section each Spares Management organization needs to include *Inventory Organization* as a classification. Otherwise the setup is standard.

Suggestion for setting up Organizations in Oracle Inventory for Spares Management: The individual organizations should be as broad geographically as possible. A single global organization covering the entire Spares Management operation would be ideal. Otherwise, keep the number of organizations at a minimum.   This will simplify the Spares Management logistics. The Move Order, which is key to the Spares Management logistics process, can only be used within an organization.

The Inter Organization Transfer would be used for shipments between sub-inventories which are not in the same organization.

Suggestion for setting up Organizations in Oracle Inventory for Spares Management: 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, a separate organization(s) should be created for the defective sub-inventories.

Step 5: Define Sub-inventories in Oracle Inventory

Required Step

For the tasks relating to setting up Sub-inventories refer to the *Oracle Inventory User's Guide.* A standard setup is required for each sub-inventory.

The setup of a sub-inventory in Oracle Inventory is a partial setup. The balance of the setup will occur in Spares Management where additional parameters for the sub-inventory will be defined in either Loops or Hierarchies.

Intransit Sub-inventory   A special sub-inventory is required to track intransit between sub-inventories for each organization.   This sub-inventory can be named for example: INTRANSUB with a description of **Intransit Sub-inventory**.

The following parameters should be checked:

- Qty Tracked

- Asset Sub-inventory

The Locator Control field must be set to **NONE.** The Intransit Sub-inventory does not use locators.

The Lead Times, Sourcing and Items/Sub-inventories 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 Sub-inventories in Oracle Inventory for Spares Management: Spares Management provides for the management of both usable and defective inventories. Sub-inventories for defective items should be setup along with the sub-inventories for usable items. The distinction between usable and defective sub-inventories will be made in the Spares Management setup form.

Step 6: Define Items in Oracle Inventory

For the tasks relating to setting up Items refer to the *Oracle Inventory User's Guide.* A standard setup is required for each Item.

When setting up the individual Items for Spares Management:

- **Inventory Item** should be checked in the Inventory tab

- Selection must be made in the **Recovered Part Disposition** field in the Service tab

The Recovered Part Disposition field, if populated, defines those Items that will be active in Spares Management.

The Recovered Part Disposition field has three options

- 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 sub-inventory.

Step 7: Define your Employees

Required Step

If you do not install Oracle Human Resource Management Systems, use the Enter Employee form to define and maintain employees in Oracle Purchasing. Otherwise, the forms in Oracle Human Resource Management Systems are used to enter and maintain employees.

Step 8: Confirm setup of Oracle Inventory

Required Step

Make sure you set up Inventory as described in Overview of Setting Up, *Oracle Inventory User's Guide*.

Step 9: Confirm setup of Oracle BOM

Optional Step

Make sure you set up Bills of Material as described in Overview of Setting Up, *Oracle Bills of Material User's Guide*. Ensure that all the following steps have been reviewed and completed as necessary:

BOM functionality is used along with 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 would not be complete.

Step 10: Confirm setup of Oracle WIP

Optional Step

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

WIP functionality is used 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 would not be complete.

Step 11   Confirm setup of Oracle Purchasing

Optional Step

Make sure you 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.

Step 12: Setup of Forecast Rules in Spares Management

Required Step.

Navigate to **Spares Navigator > Define Forecast Rules.**

The Forecast rule is used to determine how the forecast will be produced. The forecast is used by the planner as a tool in setting up the Master Stock List for the Loop and the Authorized Stock List for the Sub-inventory.

At least one Forecast Rule must be setup if the Planning section of Spares Management is to be used. The Forecast Rule is a dependency for setting up a Loop in Spares Management.

Suggestion for getting started with Forecast Rules: Setup one Forecast Rule for each method.   Use the following parameters:

- Period Type would be weekly for each rule
- Forecast Periods would be 6 for each rule
- History periods would be 6 for each rule
- Set Alpha equal to 0.2 for the Exponential Smoothing method
- Set both Alpha and Beta equal to 0.2 for Trend Enhanced
- Set Period Index starting with period 1 equal to 0.3, 0.2, 0.2, 0.1, 0.1, 0.1

Spares Management comes seeded with four basic methods for forecasting:

- Simple Average. Based on number of history periods selected
- Weighted Average.   Period weights can be specified
- Exponential Smoothing. Another version of weighted averages

- Trend enhanced version. Produces a trended forecast.

This will get the application started with some basic forecasting which can be changed or enhanced in the future.

Step 13: Setup of Calculation Rules in Spares Management

Required step

Navigate to **Spares Navigator** > **Define Calculation Rule**.

The Calculation Rule is used to determine which elements of the Part Availability Data will be included in the total for purposes of producing Notifications for the planner.

At least one Calculation Rule must be setup if the Planning section of Spares Management is to be used. The Calculation Rule is a dependency for setting up a Loop in Spares Management.

Suggestion for the setup of Calculation Rules: Include all components of Part Availability Data. This will give the best possible definition of part availability for planning purposes.

Suggestion for the setup of Calculation Rules: If Oracle Purchasing or equivalent system customized to interface with Spares Management is not installed then the following components would not be checked:

- Purchase Orders
- Open Requisitions

Suggestion for the setup of Calculation Rules: If Oracle WIP or equivalent system customized to interface with Spares Management is not installed then the following component would not be checked:

- Open WIP Orders

Step 14: Setup Planning Loops in Spares Management

Required Step

Navigate to **Spares Navigator** > **Planner's Desktop** > **Parts Loops.**

At least one Planning Loop must be setup if the Planning section of Spares Management is going to be used. The Loop is used to group multiple sub-inventories into a single planning entity, but a Loop could consist of just a single sub-inventory.

> **Note:** If the Planning section of Spares Management is not going to be used it is still necessary to setup either one Loop or Hierarchy. This Loop or Hierarchy is used to define the additional attributes for the destination sub-inventories used in Spares Logistics.

The entry of Loop Details requires:

- Parts Loop Name
- Planner
- Calculation Rule as described in Step 12
- Forecast Rule as described in Step 13

Sub-inventories for both Usable and Defective stocking locations are assigned to the Loop   When a sub-inventory is attached to the Loop, the Condition Type parameter designated as either Usable or Defective will apply. Each sub-inventory is specifically designated as operating with either, but not both, Usable or Defective inventory.

The entry of Sub-inventory Details requires:

- Location Name
- Location address
- Condition Type
- Auto Receipt parameter
- Spares Location parameter

Step 15: Setup of Master Stock Lists in Spares Management

Required Step

Navigate to **Spares Navigator** > **Planner's Desktop** > **Parts Loops.**

The Master Stock List or MSL defines the Items and quantities that are authorized for stocking in the Loop. The MSL is required if Items are going to be stocked on a planned basis in the Loop.

The Master Stock List along with Availability Data is used to create Notifications for the planner.

The entry of an Item into the Master Stock List requires:

- Item
- Planner
- Total Loop Quantity

- Minimum Usable

The Loop Quantity is the total quantity for all categories of availability that the planner designates as required for the Loop. The Minimum Usable Quantity is the total on-hand for usable categories that the planner designates as minimum for the item in the Loop.

Step 16: Setup of Authorized Stock List in Spares Management

Required Step

Navigate to **Spares Navigator > Planner's Desktop** > **Parts Loops**

The Authorized Stock List or ASL defines the Items and quantities that are authorized for stocking in a specific Sub-inventory. The ASL is required if Items are going to be stocked on a planned basis in the sub-inventory.

The ASL along with Availability Data is used to automatically replenish the sub-inventory.

The entry of an Item into the Authorized stock List requires:

- Item
- Minimum Quantity
- Maximum Quantity

If the Source Type is designated as Sub-inventory, a specific sub-inventory is designated as the replenishment location for the sub-inventory.

Step 17: Setup of Reporting Hierarchies in Spares Management

Optional Step

Navigate to **Spares Navigator** > **Planner's Desktop** > **Hierarchies.**

Reporting Hierarchies are not required for either the Logistics or Planning processes. Hierarchies, however, can provide a useful tool for Item searches or management reporting. Multiple hierarchies can be setup.

> **Note:** If the Planning section of Spares Management is not going to be used it is still necessary to setup either one Loop or Hierarchy. This Loop or Hierarchy is used to define the additional attributes for the destination sub-inventories used in Spares Logistics.

Hierarchies consist of Virtual Nodes with sub-inventories attached to the appropriate node. Attached to the Node can be another Node or a sub-inventory.

If a sub-inventory is attached to a hierarchy that had not been previously attached to a Loop, the entry of Sub-inventory Details would be required:

- Location Name
- Location address
- Condition Type
- Auto Receipt parameter
- Spares Location parameter

Step 18: Setup of Usage History Schedule in Spares Management

Optional Step

Navigate to **Spares Navigator** > **Planner's Desktop** > **Create Usage History.**

This is an optional step, but since the Usage History and Forecasting concurrent program would be run frequently, a regular schedule could be used. The Usage History and Forecasting concurrent program can be setup to run on a regular schedule using Submit Request with Schedule functionality.

Typically this would be setup to run daily or possibly weekly depending on how frequently the planning cycles are executed.

Step 19: Setup of Part Availability Data schedule in Spares Management

Optional Step

Navigate to **Spares Navigator** > **Planner's Desktop** > **Create Part Availability Data.**

This is an optional step, but since the Part Availability Data concurrent program would be run frequently, a regular schedule could be used. The Part Availability Data concurrent program can be setup to run on a regular schedule using Submit Request with Schedule functionality.

Typically this would be setup to run daily or possibly weekly depending on how frequently the planning cycles are executed.

Step 20: Setup of Create Notifications schedule in Spares Management

Optional Step

Navigate to **Spares Navigator** > **Planner's Desktop** > **Create Notifications.**

This is an optional step, but since the Notifications concurrent program would be run frequently, a regular schedule could be used. The

Notifications concurrent program can be setup to run on a regular schedule using Submit Request with Schedule functionality.

Typically this would be setup to run daily or possibly weekly depending on how frequently the planning cycles are executed.

Step 21: Setup Spares Management Profiles

The following section describes the specific Spares Management profiles and related CRM Service profiles necessary to execute Spares Management transactions.

Profile Options

The profile options are unique to Spares Management.

You can set these options in any sequence.

Option	Possible Values	User	Resp	aPP	Site	Description
CSP: Move Order Intransit Sub-inventory	Yes/No/Null				X	Allows user to modify name for the intransit sub-inventory