Oracle® Pedigree and Serialization Manager

Process Guide

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Oracle Pedigree and Serialization Manager Process Guide, Release 1.2

Part No. E36379-01

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Contents

Send Us Your Comments

Preface

Part 1 Understanding Oracle Pedigree and Serialization Manager and the EPCIS Repository

1 Understanding Oracle Pedigree and Serialization Manager

Oracle Pedigree and Serialization Manager Overview 1-1
Product Code Types Supported 1-7

2 Understanding the EPCIS Repository

EPCIS Repository Overview 2-1

3 Understanding Common Functionality Used within the Application

Using Common Table Functionality 3-1
Using Saved Search Functionality 3-14
Using Job Instances Functionality 3-19

Part 2 Setting Up Oracle Pedigree and Serialization Manager and EPCIS Repository

4 Setting Up Oracle Pedigree and Serialization Manager

Understanding the Oracle Pedigree and Serialization Manager Setup Process 4-1

Understanding the Product Definition Process 4-2
Maintaining Lookup Types and Codes 4-4
Maintaining System Parameters 4-23
Maintaining Locations 4-42
Maintaining Location Groups 4-66
Maintaining Products 4-78
Defining Product and Item Cross Reference Information from Integrated Transactional Systems 4-109
Synchronizing Products (Products Interface Table) 4-141
Maintaining Serial Type Groups and Serial Types 4-159
Maintaining Serial Ranges 4-176
Maintaining Serial Destinations and Destination Rules 4-191
Viewing Serial Destination Rules 4-206
Defining Synchronization and Work Order Serialization Scenarios 4-216

5 Setting Up the EPCIS Repository

Understanding the EPCIS Repository Setup Process 5-1
Maintaining EPCIS Preferences 5-2
Maintaining Policies 5-5
Maintaining Users 5-18

Part 3 Managing Lots and Serials

6 Maintaining Lots

Understanding the Lot Definition Process 6-1
Searching for Lots 6-3
Viewing Lot Detail Information 6-13
Creating Lots 6-14
Editing Lots 6-18
Deleting Lots 6-20
Synchronizing Lots (Lot Interface Table) 6-21
Merging Lots Using JMS Queue 6-36

7 Managing Serials

Understanding Serial Generation 7-1
Searching for Serial Generation Requests 7-5
Viewing Serial Generation Request Messages 7-13
Creating Serial Generation Requests 7-15
Submitting Serial Generation Requests 7-23

Deleting Serial Generation Requests 7-25
Performing Work Order Serialization from an External System 7-26
Searching for Serials 7-47
Viewing Serial Detail Information 7-60
Editing Serials 7-68
Commissioning Serials 7-75
Decommissioning Serials 7-98

Part 4 Managing Packaging Hierarchy and Packages

8 Maintaining Packages

Understanding Packages 8-1
Searching for Packages 8-1
Viewing Package Detail Information 8-5
Creating Packages 8-6
Editing Packages 8-11
Deleting a Complete Package 8-13
Deleting an Alternate Identifier from a Package 8-14
Deleting an Alternate Identifier from a Package (Alternate Method) 8-15

9 Managing Packaging Hierarchy

Searching for Packaging Hierarchies 9-1
Searching for Packages Using the Maintain Packaging Hierarchy Page 9-5
Viewing Packaging Hierarchies 9-8
Creating Packaging Hierarchies 9-12
Removing (Unpacking) Packages from a Packaging Hierarchy 9-21
Maintaining Packaging Hierarchies 9-24
Editing Status and Usage of Serialized Items 9-25
Creating Packages Using the Maintain Packaging Hierarchy Page 9-29

Part 5 Managing Transactions

10 Managing Transactions

Understanding Transactions 10-1
Searching for Transactions 10-10
Searching for Transactions from Integrated Transactional Systems 10-30
Viewing Transaction Detail Information 10-32
Viewing Transaction Exception Information 10-39

Viewing Initiating Transaction Detail Information 10-41
Processing Transactions 10-43
Disregarding Transactions 10-44
Adding Containers and/or Product Serials to a Transaction 10-45
Viewing Containers and/or Product Serials for a Transaction 10-61
Deleting Containers and/or Product Serials from a Transaction 10-64
Updating Containers and/or Product Serials for a Transaction 10-66
Transmitting Serials 10-67
Creating Transactions Using JMS Queue 10-69

11 Managing Pedigrees

Understanding Pedigree 11-1
Creating a Pedigree 11-6
Digitally Signing a Pedigree Using the Maintain Transactions Page 11-9
Searching for Signed or Unsigned Pedigree Documents Using the Digital Signature Worklist Page 11-12
Digitally Signing a Pedigree Using the Digital Signature Worklist Page 11-18
Printing a Pedigree Using the Maintain Transactions Page 11-21
Printing a Pedigree Using the Digital Signature Worklist Page 11-23
Viewing Transaction Detail Information Using the Digital Signature Worklist Page 11-25
Viewing a Pedigree Using the Maintain Transactions Page 11-26
Viewing a Pedigree Using the Digital Signature Worklist Page 11-27

Part 6 Using the Operations Dashboard

12 Using the Operations Dashboard

Using the Location Details Component 12-2
Using the Transaction Exceptions Component 12-7
Using the Counterfeit Serials Analysis Component 12-11
Using the Serial Range Management Component 12-17
Adding Custom URLs to the Operations Dashboard 12-21
Refreshing the Information that Displays on the Operations Dashboard 12-22

Part 7 Auditing Serial Data

13 Auditing Serial Data

Understanding Auditing 13-1
Setting Up the Audit Trail 13-15
Viewing the Audit Trail Setup 13-21

Updating the Audit Trail Setup 13-23
Exporting Audit Trail Setup Information to Excel 13-25
Synchronizing Audit Trail Setup Information 13-26
Searching for Audit Trail History 13-26
Viewing the Audit Trail History 13-34
Exporting the Audit Trail History to Excel 13-38

Part 8 Understanding Web Services

14 Understanding Web Services

Web Services Overview 14-1
Web Services Detail 14-3
CaptureService (Inbound) 14-3
JobInstanceServiceAMService (Inbound) 14-25
LotsServiceAMService (Inbound) 14-28
PackagingServiceAMService (Inbound) 14-38
ProductServiceAMService (Inbound) 14-46
SerialGenRequestServiceAMService (Inbound) 14-57
SerialsServiceAMService (Inbound) 14-79
TransactionsServiceAMService (Inbound) 14-107
QueryService (Inbound) 14-135
Web Service Exceptions 14-143
Web Service E-Mail Notifications 14-143
Web Service E-mail Notifications Process Flow 14-145

A Pages and Navigation Paths

Overview of Oracle Pedigree and Serialization Manager Pages and Navigation Paths A-1
Pages and Navigation Paths A-2

B Lookup Types and Codes

Lookup Types and Codes B-1

C Web Service WSDLs

Web Service WSDLs C-1
CaptureService WSDL C-2
EPCGlobalEPCISService WSDL C-3
JobInstanceServiceAMService WSDL C-8
LotsServiceAMService WSDL C-11
PackagingServiceAMService WSDL C-14

ProductServiceAMService WSDL..... C-19
SerialGenRequestServiceAMService WSDL..... C-22
SerialsServiceAMService WSDL..... C-27
TransactionsServiceAMService WSDL..... C-34

D Version and Build Information

Viewing Version and Build Information..... D-1

Index

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Oracle Pedigree and Serialization Manager Process Guide, Release 1.2

Part No. E36379-01

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Preface

Intended Audience

Welcome to Release 1.2 of the *Oracle Pedigree and Serialization Manager Process Guide.*

See Related Information Sources on page xii for more Oracle Applications product information.

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc.

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Structure

1 Understanding Oracle Pedigree and Serialization Manager
2 Understanding the EPCIS Repository
3 Understanding Common Functionality Used within the Application

There are several common functions that are used throughout the Oracle Pedigree and Serialization Manager (OPSM) application. Several pages within the application use these common functions. These common functions work basically the same for each page within the application. These common functions are documented here to provide ease of understanding and to prevent repetition in the documentation.

4 Setting Up Oracle Pedigree and Serialization Manager
5 Setting Up the EPCIS Repository

6 Maintaining Lots
7 Managing Serials
8 Maintaining Packages
9 Managing Packaging Hierarchy
10 Managing Transactions
11 Managing Pedigrees
12 Using the Operations Dashboard

The Operations Dashboard in Oracle Pedigree and Serialization Manager (OPSM) provides you with information to support your day-to-day activities that occur in OPSM. The Operations Dashboard contains four different components. These components are:

- Location Details

  Displays a summary view of how many serials have been imported, generated, shipped, and returned by location for a given date range.

- Transaction Exceptions

  Displays a summary view of transaction exceptions by location and transaction type for a given date range.

- Counterfeit Serials Analysis

  Displays a summary view of the total number of suspect counterfeit, verified not counterfeit, or counterfeit serials by either product or location for a given date range.

- Serial Range Management

  Displays a summary view of serial ranges with a count showing how many ranges by location are within their critical or at-risk thresholds. These serial ranges also include ranges nearing exhaustion, as well as, ranges that are nearing their effective end date expiration.

13 Auditing Serial Data
14 Understanding Web Services
A Pages and Navigation Paths
B Lookup Types and Codes
C Web Service WSDLs
D Version and Build Information

Related Information Sources

- *Oracle Pedigree and Serialization Manager Installation Guide*
- *Oracle Pedigree and Serialization Manager Security Guide*
- *Oracle Serialization and Tracking Integration Pack for Oracle Pedigree and Serialization Manager and Oracle E-Business Suite 3.1 - Implementation Guide*

Do Not Use Database Tools to Modify Oracle Applications Data

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

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

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

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

Part 1

Understanding Oracle Pedigree and Serialization Manager and the EPCIS Repository

1

Understanding Oracle Pedigree and Serialization Manager

This chapter covers the following topics:

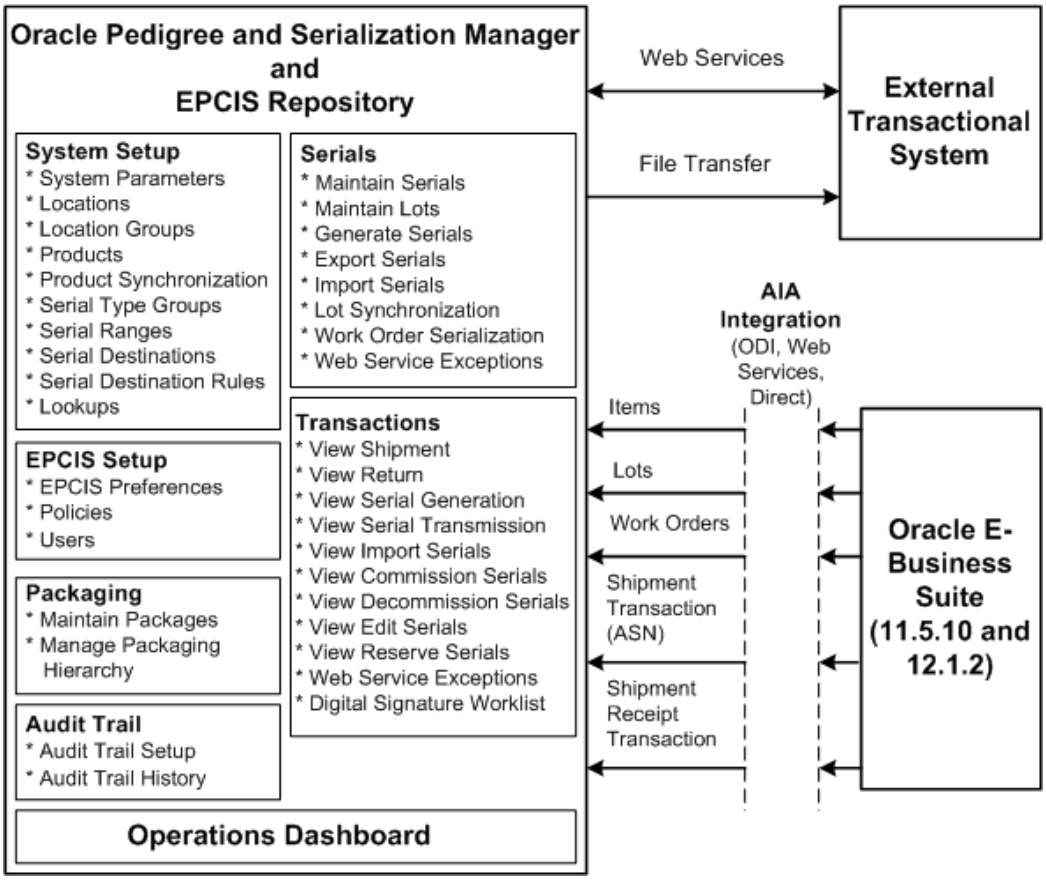
- Oracle Pedigree and Serialization Manager Overview
- Product Code Types Supported

Oracle Pedigree and Serialization Manager Overview

Oracle Pedigree and Serialization Manager (OPSM) is an application that enables companies to manage serialization of products and share serialized product data across the supply chain. OPSM can integrate with your existing manufacturing, shipping, and receiving transactional systems, Oracle E-Business Suite (EBS), or it can operate as a standalone application. OPSM can support multiple transactional or EBS systems integrated to a single instance of OPSM. The multiple transactional or EBS systems may be multiple instances managed within your company or systems managed by your manufacturing and logistics partners.

This diagram illustrates a high-level overview of OPSM:

OPSM High-Level Overview



The OPSM application is broken out by functional area. These functional areas are:

- System Setup
- EPCIS Setup
- Serials
- Packaging
- Transactions
- Audit Trail
- Dashboard

In the System Setup area you define all the setup information used by OPSM in its processing. This includes system parameters, lookups, locations, location groups, products, and other set up information used for maintaining serial numbers (serial type groups and serial ranges, serial destinations, and serial destination rules).

In the EPCIS Setup area you define all of the setup information used by the EPCIS web services during their processing. This includes EPCIS preferences, policies, and users. The EPCIS web services enable you to populate the EPCIS repository with transaction events and to query on those events.

For more information, see Understanding the EPCIS repository, page 2-1.

In the Serials area you can generate serial numbers within OPSM or perform Work Order Serialization to generate serials based on the work order manufacturing yield. After serials are created, you can use OPSM to maintain those serial numbers. You can maintain individual serial numbers and their association with lots. Finally, in the Serials area you can maintain lot information such as, the lot expiration date and other lot dates.

In the Packaging area you can maintain packages and multilevel packaging hierarchies for inference purposes. This area is used to create new packages and manage packaging configurations such as, the association of serialized units packed into cartons, which may then be stacked on pallets and placed into a container. Inference can be used to facilitate the reporting of unused or voided codes for damaged, quarantined, or otherwise unused product units.

As material transactions are executed in external systems or within EBS against tracked serials, OPSM records the transaction and updates the state of the serial numbers. In the Transactions area, OPSM provides pages where you can view shipment, return, serial generation, serial transmission, import serials, commission serials, decommission serials, edit serials, and reserve serials transaction details. You can also edit serials associated to Shipment and Return transactions that are in an exception status. Finally, in Transactions, you can create, digitally sign, and print pedigrees for shipment transactions. Transaction exceptions can also be viewed and issues can be resolved and the transactions can be processed again.

In the Audit Trail area, OPSM gives you the ability to set up an audit trail for all of the data in the OPSM application and to view the results from that audit trail. Recording and auditing of this serial data can assist you in being 21 CFR Part 11 compliant.

For more information, see Understanding Auditing, page 13-1.

OPSM also provides a dashboard that delivers tactical business analytics related to product serial management. Using the dashboard you can view a variety of serialization and transaction metrics that can be used for monitoring the serials and transactions.

OPSM can operate in an integrated mode with external transactional systems, and/or EBS, or it can operate as a standalone application. Through the use of web services and file transfer exchanges external third party systems can integrate with OPSM enabling them to streamline their business processes. OPSM hosts a set of inbound and outbound services. The web services provided include:

OPSM Web Services

- Create Serial Generation Request
- Edit Status and Usage by Label

- Edit Status and Usage by List
- Edit Status and Usage by Primary Document
- Merge Lot
- Merge Product
- Pack Package
- Unpack Package
- Create Transaction (Shipments, Returns, and Imports)

EPCIS Repository Web Services

- CaptureService
- QueryService

OPSM provides open interface tables for batch upload of information for the set up of the products and item cross reference, synchronization of lots, and work orders for generation of serials. The interface tables provided include:

- Product Interface table
- Lot Interface table
- Work Order Interface table

OPSM can also integrate with EBS using the Application Integration Architecture (AIA) Integrations (Web Services, Oracle Data Integrator (ODI), and direct page transfers). The integrations between OPSM and EBS address the synchronization of product and lot information, creation of serials, and recording and/or tracking of serialized item events. The integrations record and/or track the following events:

- Synchronizing item and product information.
- Synchronizing lot information.
- Reserving serials for discrete manufacturing jobs and process manufacturing batches.
- Commissioning serials to the designated product and lot.
- Decommissioning serials when jobs or batches are cancelled or terminated.
- Shipping serialized items.
- Receiving returned serialized items.

For more information on the integration between OPSM and EBS, see the *Oracle Serialization and Tracking Integration Pack for Oracle Pedigree and Serialization Manager and Oracle E-Business Suite 3.1 - Implementation Guide.*

Key Features

OPSM provides several features. A few of the key features are:

- Serialization and Lot Management
  - Generate serials
  - Import serials
  - Maintain serials
  - Track current serial state
  - Commission serials
  - Decommission serials
  - Flag serials as counterfeit
  - Export serials
  - Maintain serial ranges
  - Maintain serial destinations
  - Maintain lots
  - Lot synchronization
  - Work order serialization
- Packaging Hierarchy and Packages Management
  - Maintain package hierarchy (structure)
  - Associate serialized components to serialized assembly
  - Serial disposition through packaging hierarchy
  - Maintain packages
  - Define and view alternate packaging IDs

    - Pack packages
    - Unpack packages
    - Package level serial disposition
- Transaction Management
    - View shipment transactions
    - View return transactions
    - View import serials transactions
    - View serial generation transactions
    - View serial transmission transactions
    - View commission serials transactions
    - View decommission serials transactions
    - View reserve serials transactions
    - View edit serials transactions
    - View transaction exceptions
    - Process transactions
    - Edit serials associated with Shipment and Return transactions at exception status
    - Transmit and retransmit serials on transactions
    - Create, digitally sign, and print Pedigree for shipment transactions.
- Audit Management
    - Set up audit trail
    - View audit trail history
- Oracle Pedigree and Serialization Manager Operations Dashboard
    - Out of the box serial and transaction metrics
        - Serials by Location (imported, generated, shipped, returned, commissioned,

decommissioned, reserved, edited)

- Location Information
- Transaction Exceptions Metric (commissioned serials, decommissioned serials, reserved serials, edited serials, shipments, returns, imports, serial generations, and serial transmissions)
- Counterfeit and Suspect Counterfeit Serials by Product and Location
- Serial Range Management (remaining serials in range)

Product Code Types Supported

To process the serial number, certain product information must be available in Oracle Pedigree and Serialization Manager (OPSM). When defining products in OPSM, the Product Code, Product Code Type, and Product Code Variant are used to uniquely identify each product. This data will help determine the methodology and the data used in serial number creation.

The system will validate each product code as determined by the product code type to ensure that the product code complies with the type.

OPSM supports and delivers a few standard product code types (GTIN and NDC) but you can create additional product code types to meet your business requirements. OPSM delivers these predefined product code types:

- **GTIN:** The GTIN number identifies a particular class of objects, a product or SKU. The GTIN number by itself is not unique. All representations of a Serialized GTIN (SGTIN) support a full 14-digit GTIN format. The SGTIN number includes a GTIN number as one of the segments.
  - **GTIN-14 Structure (14 digits)**
    - **Indicator (1 digit) -** Optional element only used in the GTIN-14 data structure. It can be a value of 1-8 (9 is reserved for variable quantity items) and is used to indicate packaging levels.
    - **GTIN (12 digits) -** Contains either a GTIN-13 or GTIN-12. The GTIN itself can be unique or the indicator can be used to make the full GTIN-14 number unique.
      - **GS 1 Company Prefix -** Number allocated by the GS1 Member Organization. Comprised of 6-10 digits depending on the capacity needs of the company.
      - **Item Reference -** Number assigned by the owner of the GS1 Company

prefix to identify the product.

- **Check digit (1 digit) -** Calculated check digit number.

- Format Example
  - GTIN-14 - **1.000037.000209.1**

- **National Drug Code (NDC) -** Drug products in the United States are identified using a three-segment number, called the National Drug Code (NDC). It is a Universal Product Code identifier for human drugs. The FDA enters the full NDC number and the information submitted as part of the listing process into a database known as the Drug Registration and Listing system (DRLS). The segments of the NDC identify the manufacturer, the product, and the saleable unit package size.
  - NDC Structure
    - **Labeler (4-5 digits) -** Assigned to the firm by the FDA.
    - **Product Code (3-4 digits) -** Assigned by the firm to identify the product. The product code identifies the strength, dosage form, and formulation.
    - **Package Code (1-2 digits) -** Identifies the package size.
  - Format Examples
    - NDC442 - **0037-0209-01**
    - NDC532 - **00037-209-01**
    - NDC541 - **00037-0209-1**
    - NDC542 - **00037-0209-01**

2

Understanding the EPCIS Repository

This chapter covers the following topics:

- EPCIS Repository Overview

EPCIS Repository Overview

In this section, we will provide an overview of EPCIS (Electronic Product Code Information Services) and the EPCIS repository.

EPCIS Overview

Electronic Product Code Information Services (EPCIS) is the EPCglobal® standard for capturing and communicating the business events for tracking and tracing products within an enterprise and across the supply chain. EPCIS is a standard that defines interfaces for representation and exchange of data.

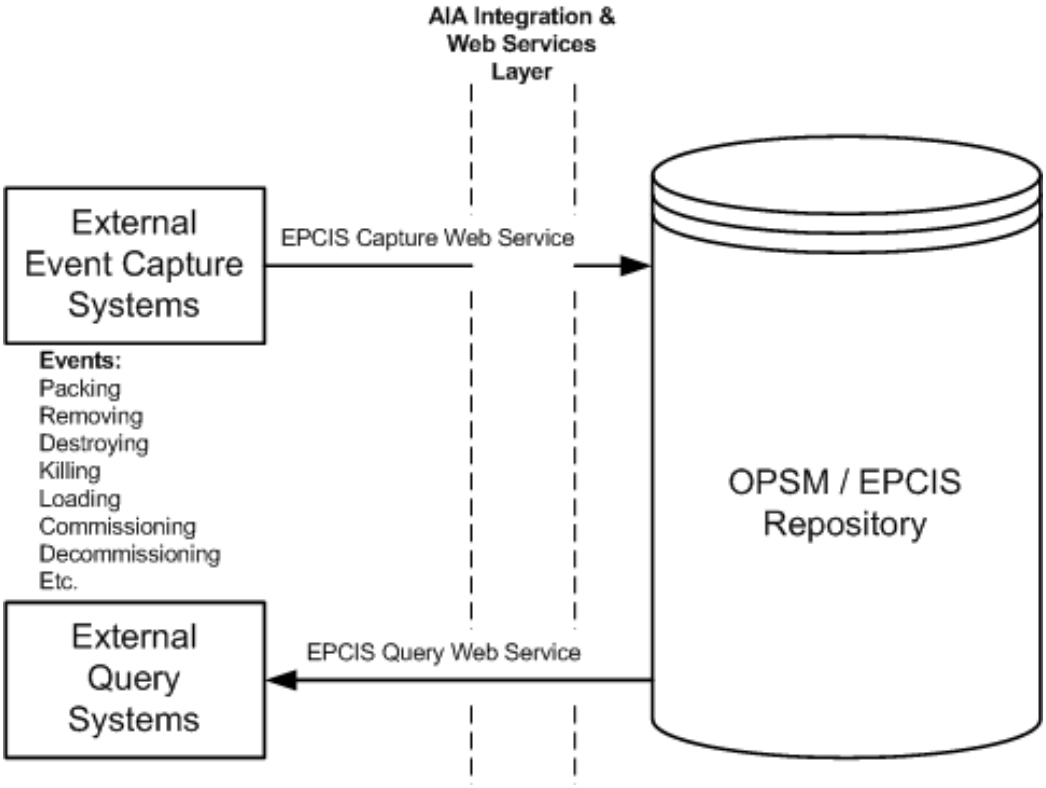
The EPCIS standard provides interface specifications built on top of widely used business and Internet standards. EPCIS facilitates internal data capture as well as secure external sharing of information about movement and status of goods in the physical world.

The EPCIS data model specifies a standard way to represent visibility information about physical objects, including descriptions of product movements in a supply chain. The main components of the data model include EPC, Event Time, Business Step, Disposition, Read Point, Business Location, and Business Transaction. The data model is designed to be extended by industries and end users without revising the specification itself.

Visibility information in EPCIS takes the form of "events" that describe specific occurrences in the supply chain. An example event would be that EPC 123 (product) was Received (business step) in Non Sellable condition (disposition) at Distribution Center X (location) yesterday at 2pm EDT (time). A quick way to summarize the components of an EPCIS event are what (product), when (time), where (location), and why (business step and disposition).

EPCIS Repository Overview

EPCIS Repository High-Level Overview



The EPCIS repository resides in the same database as the Oracle Pedigree and Serialization Manager (OPSM) application. The repository can store all of the EPCIS-level events for the products generated by one or more EPCIS external event capturing systems. These events include:

- Accepting
- Arriving
- Assembling
- Collecting
- Commissioning
- Decommissioning
- Departing

- Destroying
- Disassembling
- Encoding
- Entering_exiting
- Holding
- Inspecting
- Installing
- Killing
- Loading
- Other
- Packing
- Picking
- Receiving
- Removing
- Repackaging
- Repairing
- Replacing
- Reserving
- Retail_selling
- Shipping
- Staging_outbound
- Stocking
- Storing
- Transforming

Using the EPCIS Capture web service, events from external systems or trading partners

can be populated into the EPCIS repository. This can be achieved using HTTP Post and JMS Capture. For HTTP Post or JMS Capture, any errors will be visible to you in the Web Service Exceptions page using a the Web Service Name of captureEpcisDoc or HTTPPost. The EPCIS Capture web service uses the EPCIS setup information (preferences) that you define in OPSM to determine the data that can be captured.

Using the EPCIS Query web service, you can query on EPCIS data (business events) initiated internally, from external trading partners, or regulatory agencies. The result of this query is provided to the accessing application in XML format with a list of EPCIS Event instances. The EPCIS Query web service uses the EPCIS setup information (preferences, policies, and users) that you define in OPSM to determine the EPCIS events that can be accessed.

For more information, see:

- Understanding the EPCIS Repository Setup Process, page 5-1.
- Web Services Overview, page 14-1.

3

Understanding Common Functionality Used within the Application

There are several common functions that are used throughout the Oracle Pedigree and Serialization Manager (OPSM) application. Several pages within the application use these common functions. These common functions work basically the same for each page within the application. These common functions are documented here to provide ease of understanding and to prevent repetition in the documentation.

This chapter covers the following topics:

- Using Common Table Functionality
- Using Saved Search Functionality
- Using Job Instances Functionality

Using Common Table Functionality

Several pages in Oracle Pedigree and Serialization Manager (OPSM) display the results from a search in a table format. Using the common table functionality you can manipulate the table so that it fits your needs. The common table functionality includes:

- Detaching a table from the application page.
- Changing the columns that appear in a table.
- Reordering the columns that appear in a table.

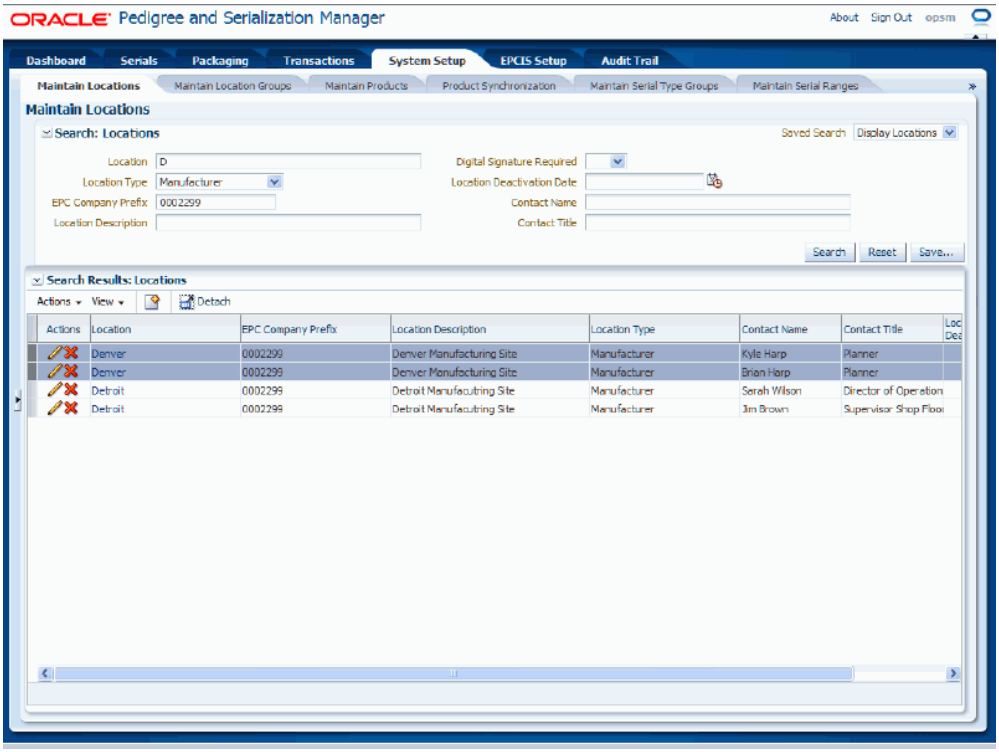
Use these procedures to detach a table, to change the columns that appear in a table, and to reorder the columns that appear in a table:

To Detach a Table:

1. Navigate to an Oracle and Pedigree and Serialization Manager page that displays the search results in a table format.

2. Enter search criteria for the page and click the Search button.

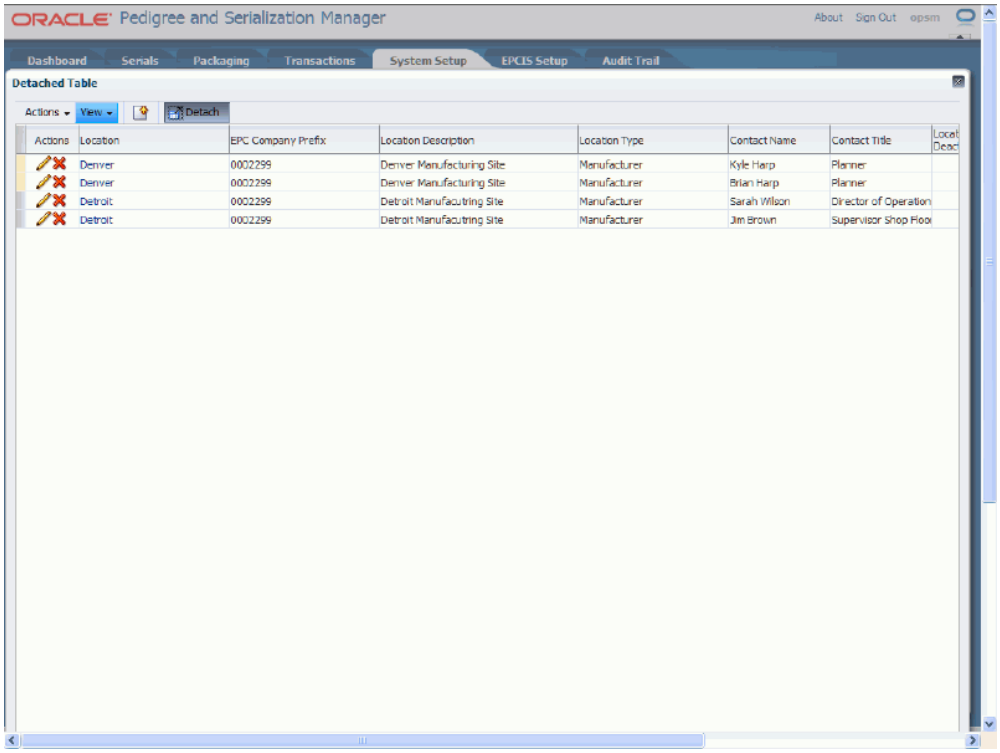
Example of the Maintain Locations Page Where the Search Results Display in a Table Format



All of the available data that matches the search criteria appears in a table format.

3. Select Detach from the View menu or click the Detach icon located at the top of the table.

Example of the Maintain Locations Table Detached From the Page



A new page appears with the table detached from the page. This functionality enables you to view more of the search result information in the table at one time.

4. Select Attach from the View menu or click the Detach Table icon located at the top of the table.

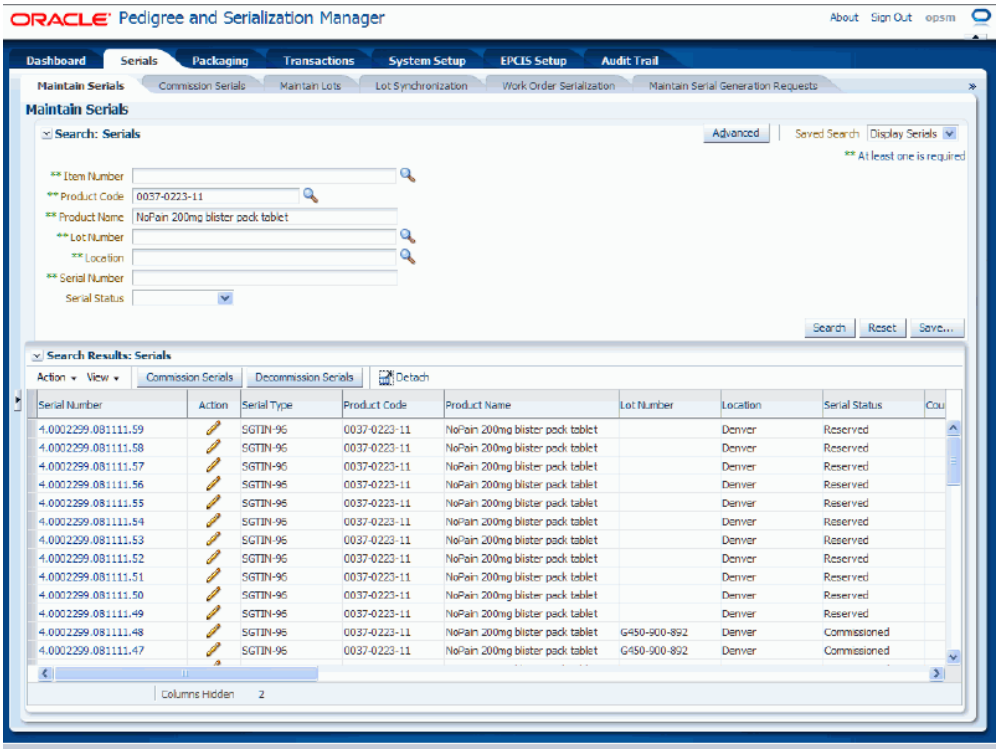
   The table is placed back within the page from which it originated.

To Change the Columns that Appear in a Table:

1. Navigate to an Oracle and Pedigree and Serialization Manager page that displays the search results in a table format.

2. Enter search criteria for the page and click the Search button.

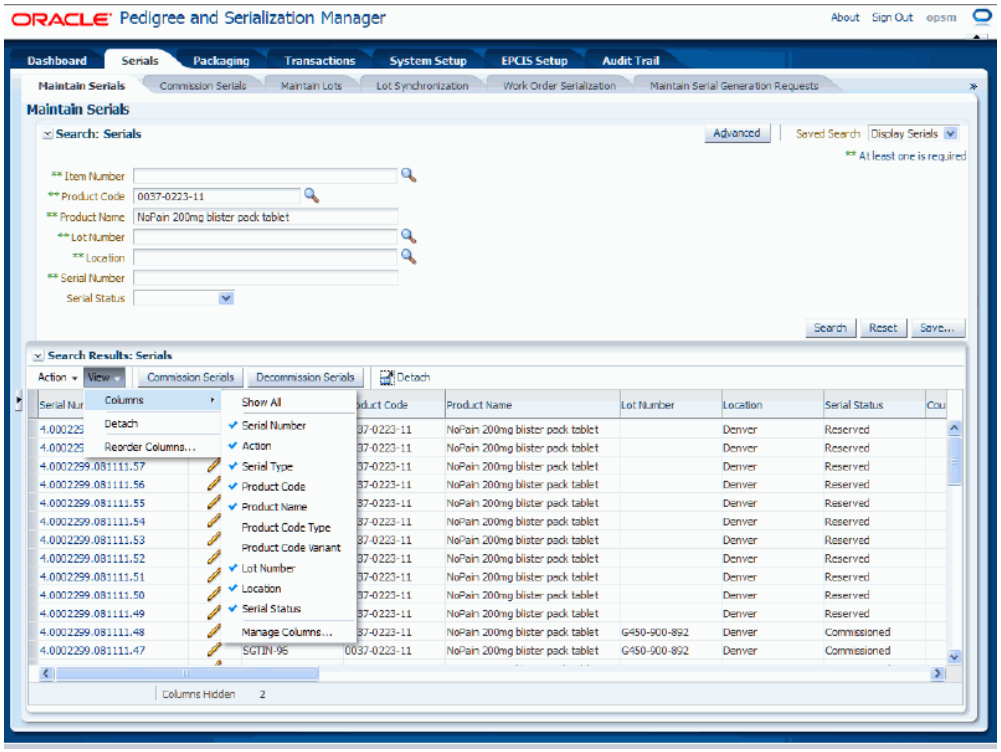
Example of the Maintain Serials Page Where the Search Results Display in a Table Format



All of the available data that matches the search criteria appears in a table format.

3. Select Columns from the View menu.

Example of Maintain Serials Page with View Menu Expanded



A dialog box appears displaying all of the available columns that can display for the table.

A blue check mark appears next to the columns that are currently selected for display in the table.

An available column name (black in color) with no check mark appears next to the columns that are available for display but have not been selected. Someone may have previously cleared that column for display.

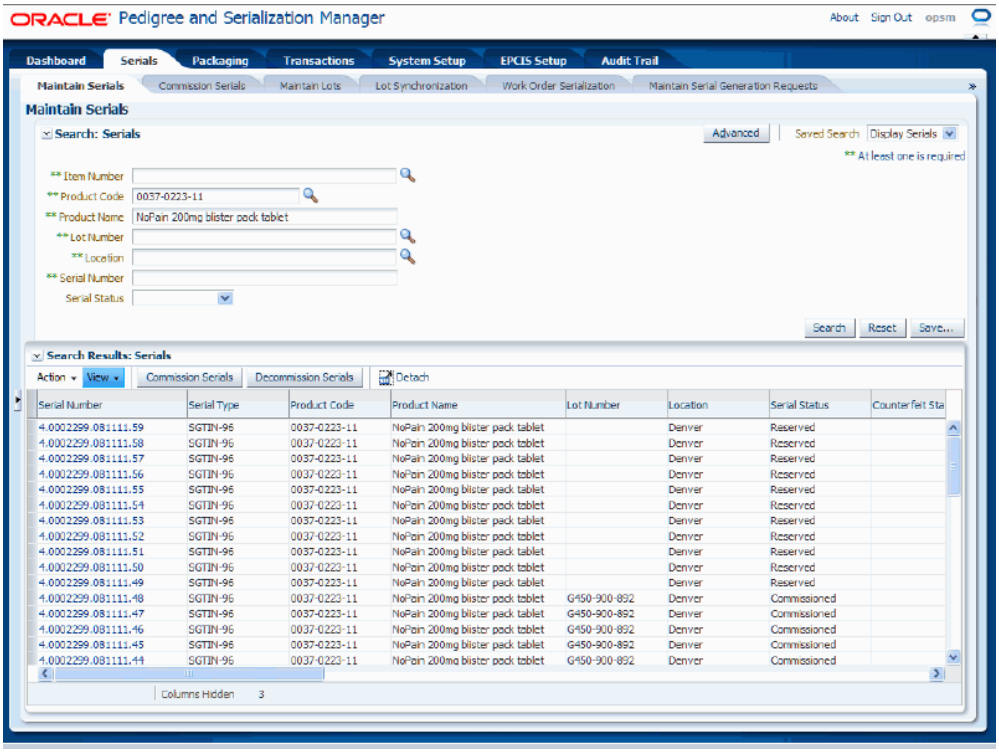
The Manage Columns option appears if the table has more available columns for selection. Select Manage Columns to view all the columns available for selection in the table.

For more information on the Manage Columns option, see Procedure: To Change and Reorder Columns that Appear in the Table at One Time, page 3-11.

> **Note:** If a column name is grey it is unavailable to be changed for the table.

4. Select the column (with a blue check mark) you would like to remove from the table or select the available column (without a check mark) you would like to add to the table.

Example of the Maintain Serials Page with the Action Field Removed From the Table



The column you removed is not displayed in the table or the column you added is displayed in the table.

5. Repeat Steps 3-4 until all of the columns you require display in the table.

6. (Optional) To show all columns, select Columns from the View menu and then select Show All.

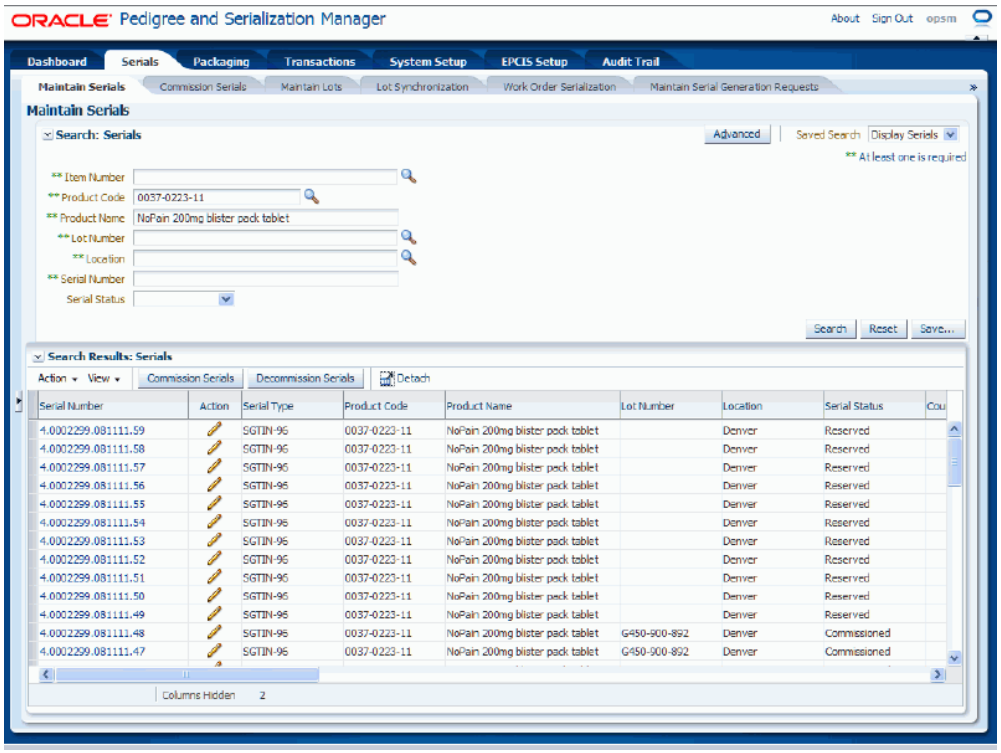
   The system displays all of the columns available for the table listed in the table.

To Reorder the Columns that Appear in a Table (Drag and Drop):

1. Navigate to an Oracle and Pedigree and Serialization Manager page that displays the search results in a table format.

2. Enter search criteria for the page and click the Search button.

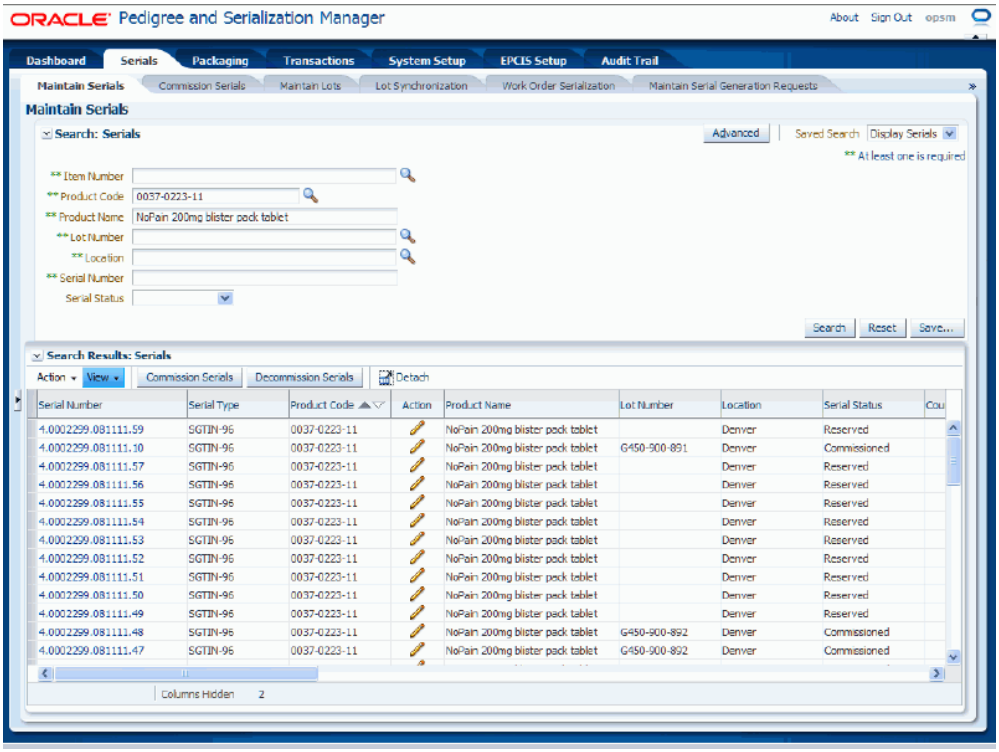
Example of the Maintain Serials Page Where the Search Results Display in a Table Format



All of the available data that matches the search criteria appears in a table format.

3. Select the column you want to move and drag and drop it the correct location in the table.

Example of the Maintain Serials Page Where the Serial Type and Product Code Fields Display Ahead of the Action Field



The table reappears displaying the columns in the order that you dropped them.

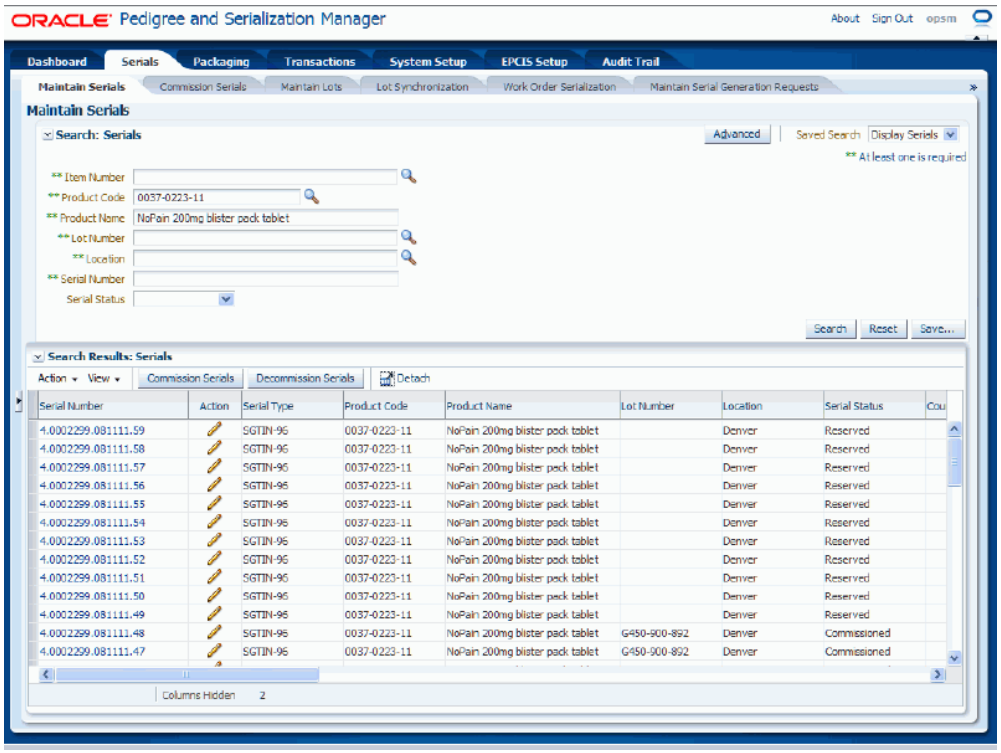
4. Repeat Step 3 until you have the columns in the order that you want.

To Reorder the Columns that Appear in a Table (View Menu):

1. Navigate to an Oracle and Pedigree and Serialization Manager page that displays the search results in a table format.

2. Enter search criteria for the page and click the Search button.

Example of the Maintain Serials Page Where the Search Results Display in a Table Format



All of the available data that matches the search criteria appears in a table format.

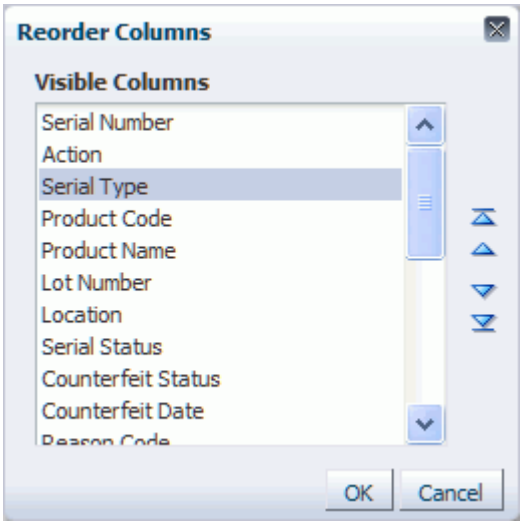
3. Select Reorder Columns from the View menu.

   The Reorder Columns dialog box appears displaying all of the available columns that can display for the table. They are listed in the order in which they currently display on the page.

4. Select the columns you want to move.

   Note: You can select one or more columns to move at one time.

Example of the Reorder Columns Dialog Box



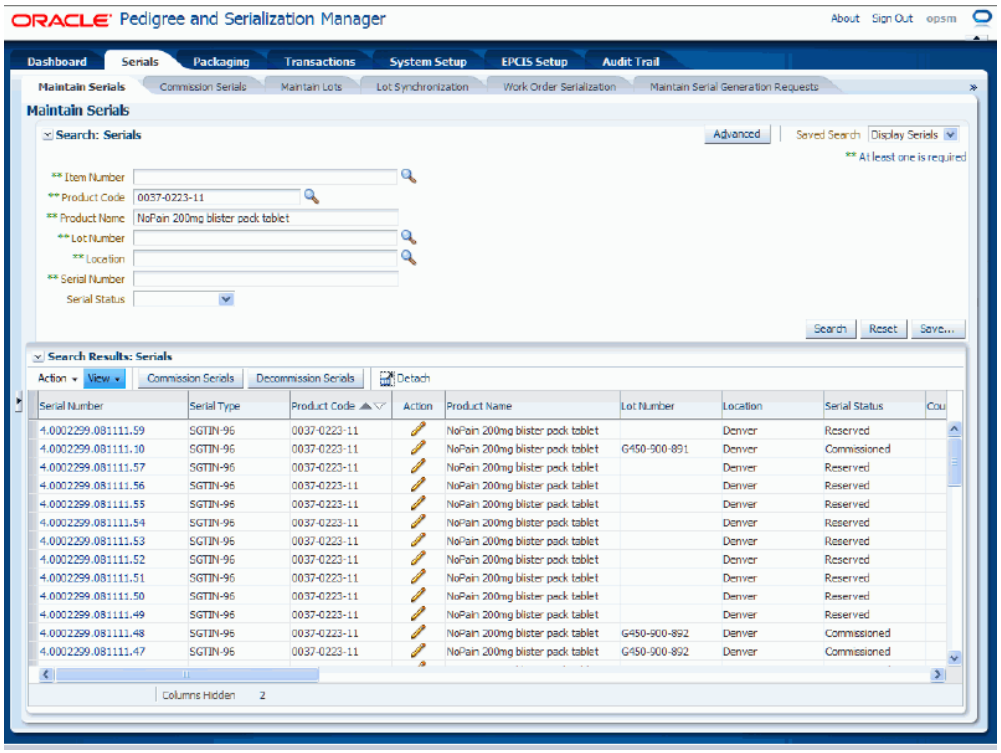
The Move Selected Item icons become available located on the right of the dialog box.

5. Move the columns to where you want them to display in the table. Perform one of these options:

   - Click the "Move selected item to top of list" icon to move the column or columns you selected to the top of the list.
   - Click the "Move selected items up one in list" icon to move the column or columns you selected up one place in the list.
   - Click the "Move selected items to bottom of list" icon to move the column or columns you selected to the bottom of the list.
   - Click the "Move selected items down one in list" icon to move the column or columns you selected down one place in the list.

6. Repeat Steps 4-5 until you have the columns in the order that you want.
7. Click the OK button.

Example of the Maintain Serials Page Where the Serial Type and Product Code Fields Display Ahead of the Action Field



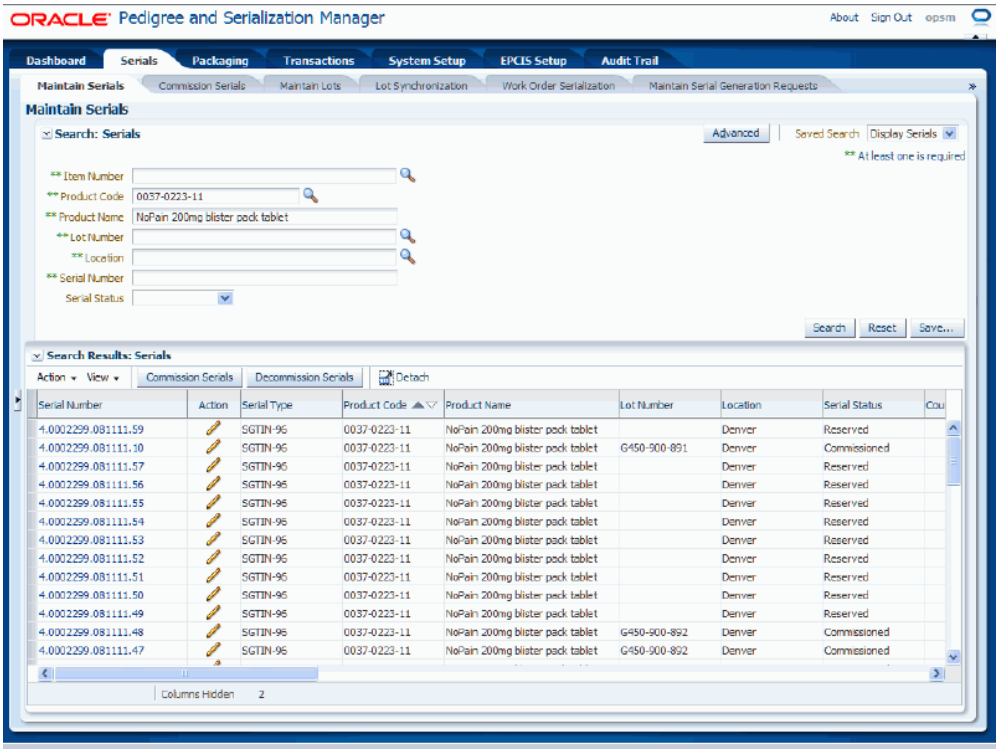
The table reappears displaying the columns in the order that you selected.

To Change and Reorder Columns that Appear in the Table at One Time:

1. Navigate to an Oracle and Pedigree and Serialization Manager page that displays the search results in a table format.

2. Enter search criteria for the page and click the Search button.

Example of Maintain Serials Page Where Search Results Display in a Table Format



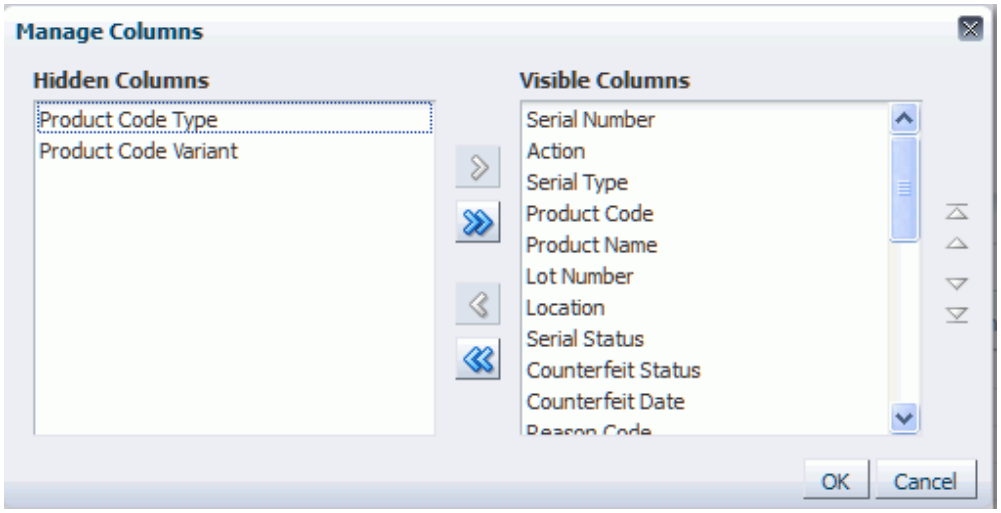
All of the available data that matches the search criteria appears in a table format.

3. Select Columns from the View menu.

4. Select Manage Columns from the Columns menu.

   Note: This option only appears if you have more than 10 columns available for selection.

Example of the Manage Columns Dialog Box



The Manage Columns dialog box appears.

5. Select the columns in the Hidden Columns region or the Visible Columns region that you want to make visible in the table or hide in the table.

   Note: If you want to move all columns at once to be either hidden or visible you do not have to select the columns.

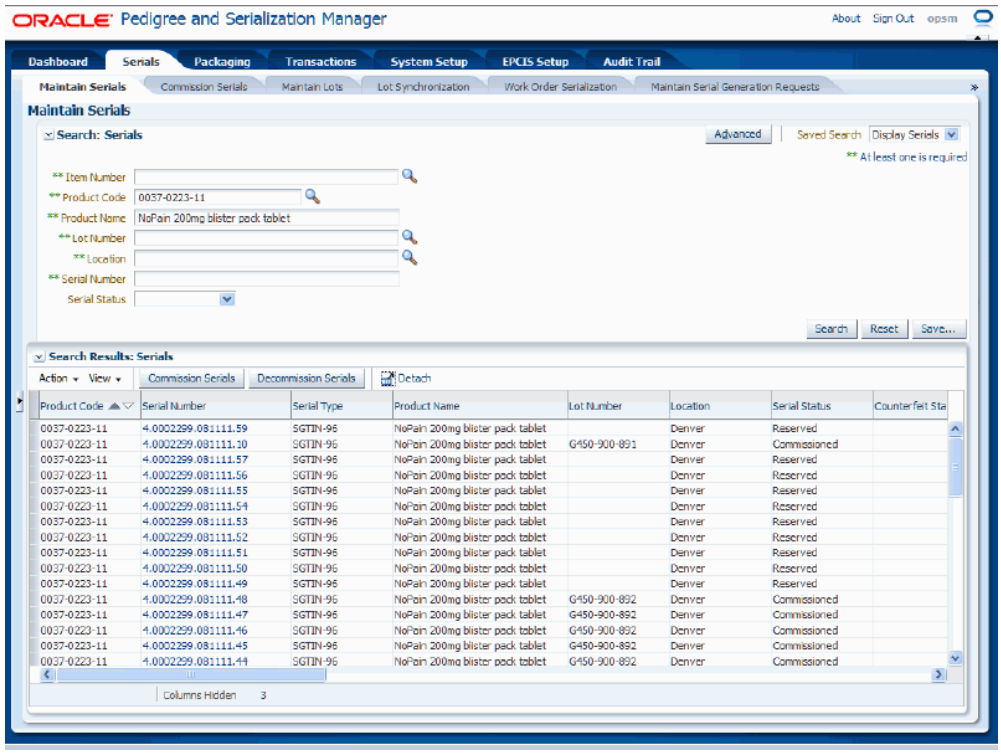
6. Restructure the table. Perform one of these options:

   - Click the "Move selected items to other list" icon to move the hidden column to the Visible Columns region.
   - Click the "Move all items to other list" icon to move all hidden columns to the Visible Columns region.
   - Click the "Remove selected item from list" icon to move the visible column to the Hidden Columns region.
   - Click the "Remove all item from list" icon to move all visible columns to the Hidden Columns region.
   - Click the "Move selected item to top of list" icon to move the visible column or columns you selected to the top of the list.
   - Click the "Move selected items up one in list" icon to move the visible column or columns you selected up one place in the list.

- Click the "Move selected items to bottom of list" icon to move the visible column or columns you selected to the bottom of the list.
- Click the "Move selected items down one in list" icon to move the visible column or columns you selected down one place in the list.

7. Repeat steps 5-6 until you have the columns that you want to display in the table and the order of the columns for the table.
8. Click the OK button.

Example of Maintain Serials Table with Action Field Removed and Product Code Field Moved to the Front of the Table (First Column)



The table reappears displaying the columns and the column order that you selected.

Using Saved Search Functionality

Several pages in Oracle Pedigree and Serialization Manager (OPSM) require you to enter search criteria before you can maintain that particular type of data using that page. OPSM enables you to save the search criteria that you entered for a page so that you don't have to continually enter it every time that you access the page.

Use these procedures to create a saved search, personalize a saved search, and delete a

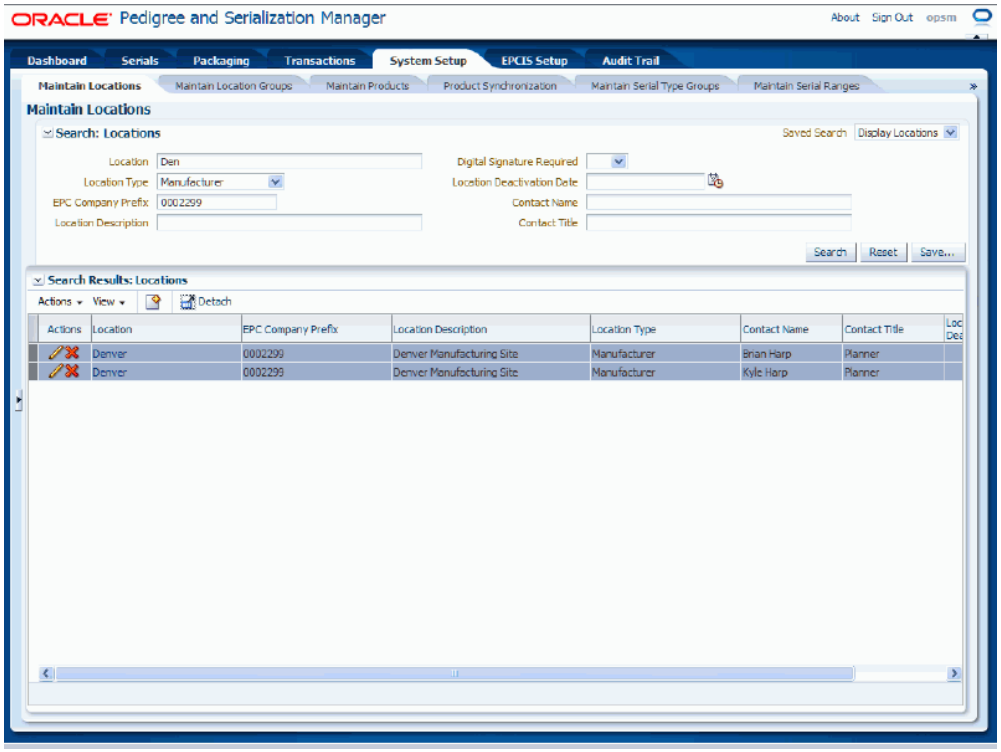
saved search:

To Create a Saved Search:

1. Navigate to an Oracle and Pedigree and Serialization Manager page that requires search criteria to be entered.

2. Enter search criteria for the page and click the Search button.

Example of the Maintain Locations Page with a Search Performed



All of the available data that matches the search criteria appears in a table format.

3. Click the Save button located in the search criteria region of the page.

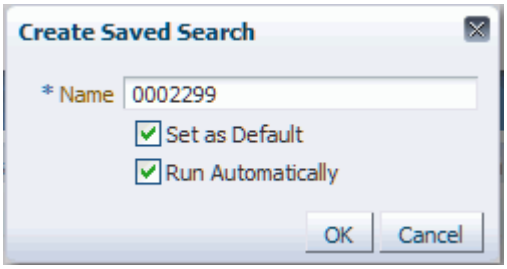
   The Create Saved Search dialog box appears.

4. Enter the following information in the dialog box:

Field Name	Description
Name	Enter the name for the saved search.

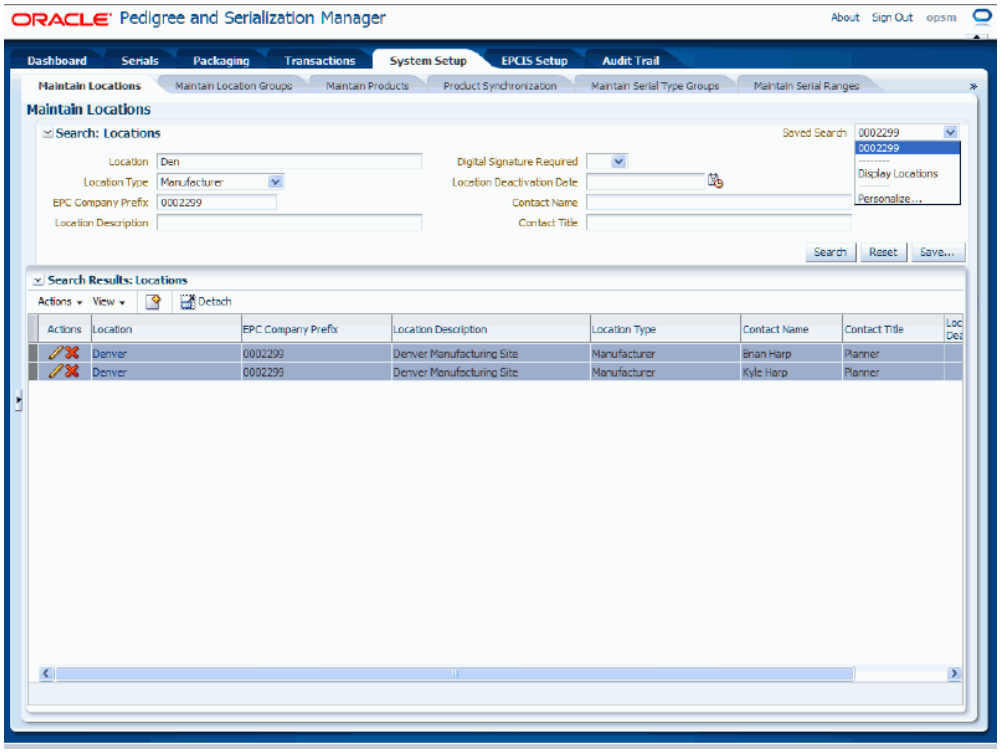
Field Name	Description
Set as Default check box	(Optional) Select this check box if you want this saved search to appear as the default saved search for the page. This check box appears selected by default.
Run Automatically check box	(Optional) Select this check box if you want this saved search to run automatically when you enter the page. This check box appears selected by default.

Example of Create Saved Search Dialog Box



5. Click the OK button.

Example of Maintain Locations Page Displaying the Saved Searches



The system saves the saved search and you will be able to select it or it will be the default for the Saved Search field depending on the creation options you selected when creating it.

To Personalize a Saved Search:

1. Navigate to an Oracle and Pedigree and Serialization Manager page where a Saved Search has been created.

2. Select the Saved Search you want to personalize using the drop down arrow next to the Saved Search field.

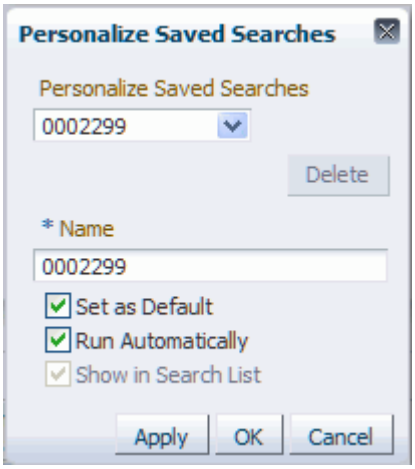
3. Select Personalize using the drop down arrow for the Saved Search field.

   The Personalize Saved Searches dialog box appears displaying the information for the saved search.

4. Modify these fields pertaining to the saved search:

Field Name	Description
Name	Modify the name for the saved search.
Set as Default check box	(Optional) Modify this check box selection. Select this check box if you want this saved search to appear as the default saved search for the page.
Run Automatically check box	(Optional) Modify this check box selection. Select this check box if you want this saved search to run automatically when you enter the page.

Example of Personalize Saved Searches Dialog Box



5. Click the OK button.

   The Saved Search is modified.

To Delete a Saved Search:

1. Navigate to an Oracle and Pedigree and Serialization Manager page where a Saved Search has been created.
2. Select the Saved Search you want to delete using the drop down arrow next to the Saved Search field.
3. Select Personalize using the drop down arrow for the Saved Search field.

The Personalize Saved Searches dialog box appears displaying the information for the saved search.

4. Click the Delete button.

   Note: You can only delete a saved search that is not the default.

   The system displays a message stating you are about to delete this saved search.

5. Click the Yes button.

   The Saved Search is removed from the system.

Using Job Instances Functionality

Several pages in Oracle Pedigree and Serialization Manager (OPSM) that initiate a background process use the job instances functionality. For example, the Product Synchronization, Lot Synchronization, Work Order Serialization, and Web Service Exceptions pages. The job instances functionality works basically the same for each page but the actual title of each page will vary depending on the process you can perform from that page.

The job instances functionality enables you to manage and maintain job instances. A job instance represents one individual instance of running a particular background process. When you initiate a process, the system assigns a job instance Id to that specific run of the process. Using the job instance Id you can verify if the process completed successfully or if there were errors or warnings during the execution of the process. Messages are included with the job instance to describe if the process completed successfully or if a process did not complete successfully (warnings and errors). Using the job instances functionality you can:

- Search for a job instance.
- View the job instance and its associated messages.
- Delete a job instance.

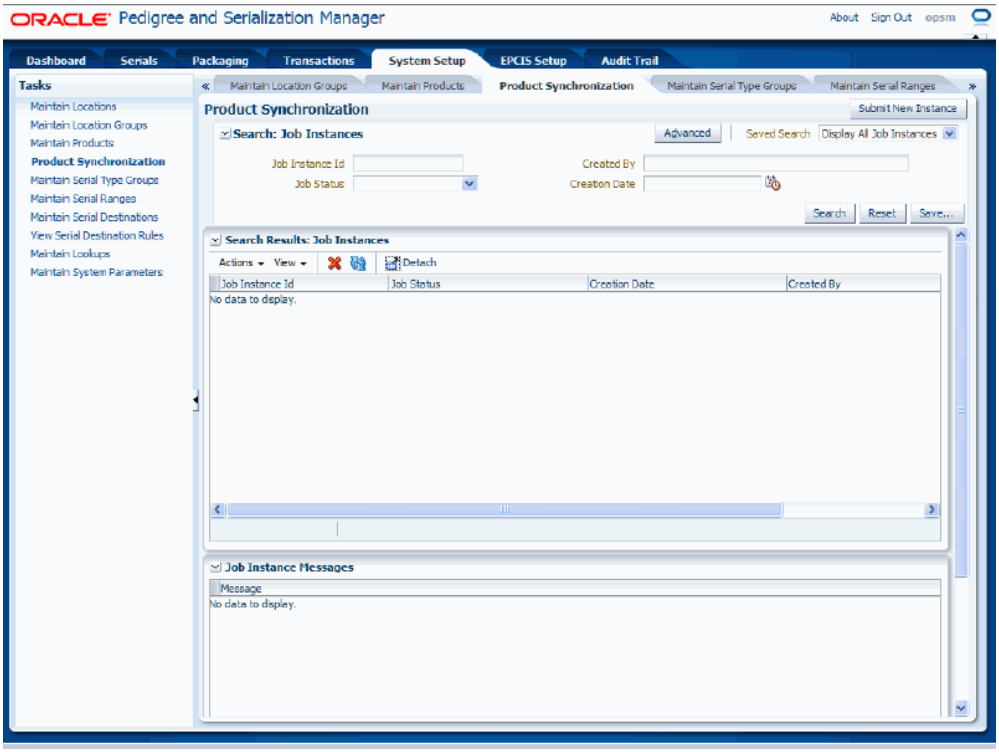
Use these procedures to search for (basic and advanced search), view, and delete job instances:

To Search for Job Instances (Basic Search):

1. Navigate to an Oracle Pedigree and Serialization Manager page that initiates a process.

   After you initiate a process, you can use the job instances functionality to monitor the background process and to view the results of the process.

Example of the Product Synchronization page that uses job instances functionality



2. In the Search: Job Instances region, enter the search criteria for the job instances using one or more of these fields:

Field Name	Description
Job Instance Id	(Optional) Enter a specific job instance Id.

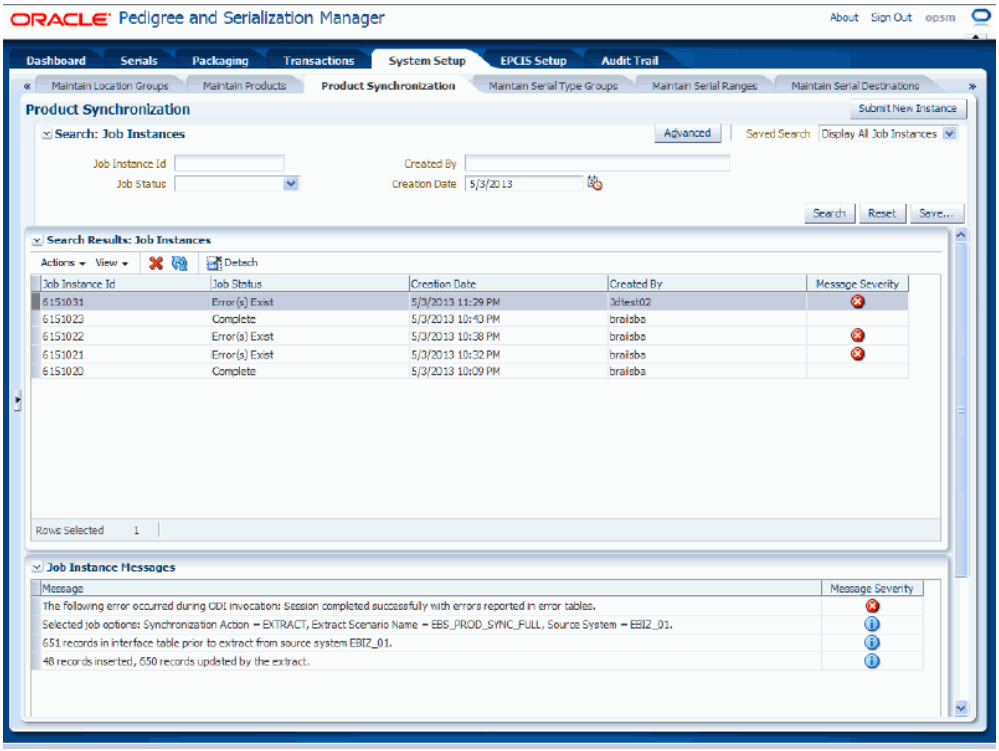
Field Name	Description
Job Status	(Optional) Select the job status for the job instances. Job Statuses are: • Complete • Error(s) Exist • In Progress • Submitted • Abnormal Termination • Warning(s) Exist Job statuses are defined using the system Lookup Type PAS_JOB_STATUS.
Web Service Name	This field is only available when using the job instances functionality on the Web Service Exceptions page. (Optional) Select the web service name. Web service names are: • captureEpcisDoc • createTransaction • Edit Serial by Primary Document Web Service • Edit Serial by Label Web Service • Edit Serial by List Web Service • HTTPPost • mergeLot
Created By	(Optional) Enter the individual that created the job instances (initiated the process).

Field Name	Description
Creation Date	(Optional) Select the date the job instances were created.

Otherwise, you can click the Search button without entering any search criteria and all available job instance Ids will appear.

3. Click the Search button.

Example of the Product Synchronization page (Basic Search)



All of the job instance Ids that match the search criteria appear in the Search Results: Job Instances region in a table format. The messages that are generated for each job instance Id appear in the Job Instance Messages region (bottom of page). The fields that appear for each job instance Id are:

Field Name	Description
Job Instance Id	Displays the job instance Id for a specific job instance.
Job Status	Displays the status of the job instance Id.
Web Service Name	This field is only available when using the job instances functionality on the Web Service Exceptions page. Displays the web service name. Web service names are: • captureEpcisDoc • createTransaction • Edit Serial by Primary Document Web Service • Edit Serial by Label Web Service • Edit Serial by List Web Service • HTTPPost • mergeLot
Creation Date	Displays the date the job instance Id was created.
Created By	Displays the individual that created the job instance Id.

Field Name	Description
Message Severity	Displays an icon to represent the severity of the messages that were generated for the job instance Id. A red circle with an X indicates the job instance Id was unsuccessful and contains error messages and may also contain warning messages. A yellow triangle with an exclamation point indicates the job instance Id was successful but it contains warning messages.

Below the Search Results: Job Instances region appears the Job Instance Messages region. If a row in the Search Results: Job Instances table contains a warning or error message severity for a job instance Id the messages for that condition display in this region. If no message severity exists, informational messages display in this region (blue circle with the letter "i'). Each text message associated with the job instance Id and the message severity icon (informational, warning, or error) for the message displays in this region.

4. Click the Advanced button to perform an advanced search for job instances.

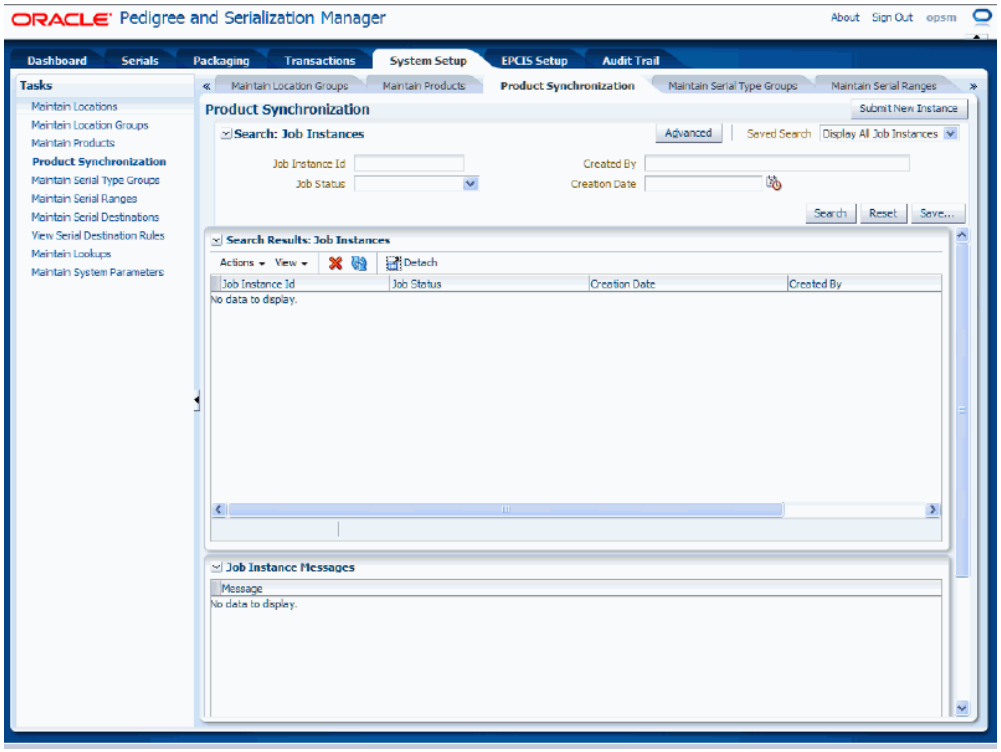
To Search for Job Instances (Advanced Search):

Use the Advanced Search functionality to perform a more detailed search for specific job instance Ids. Field operators associated with the search criteria fields can be used during an Advanced Search so that a range of job instances can be easily retrieved.

1. Navigate to an Oracle Pedigree and Serialization Manager page that initiates a background process.

   After you initiate a process, you can use the job instances functionality to monitor the process and to view the results of the process.

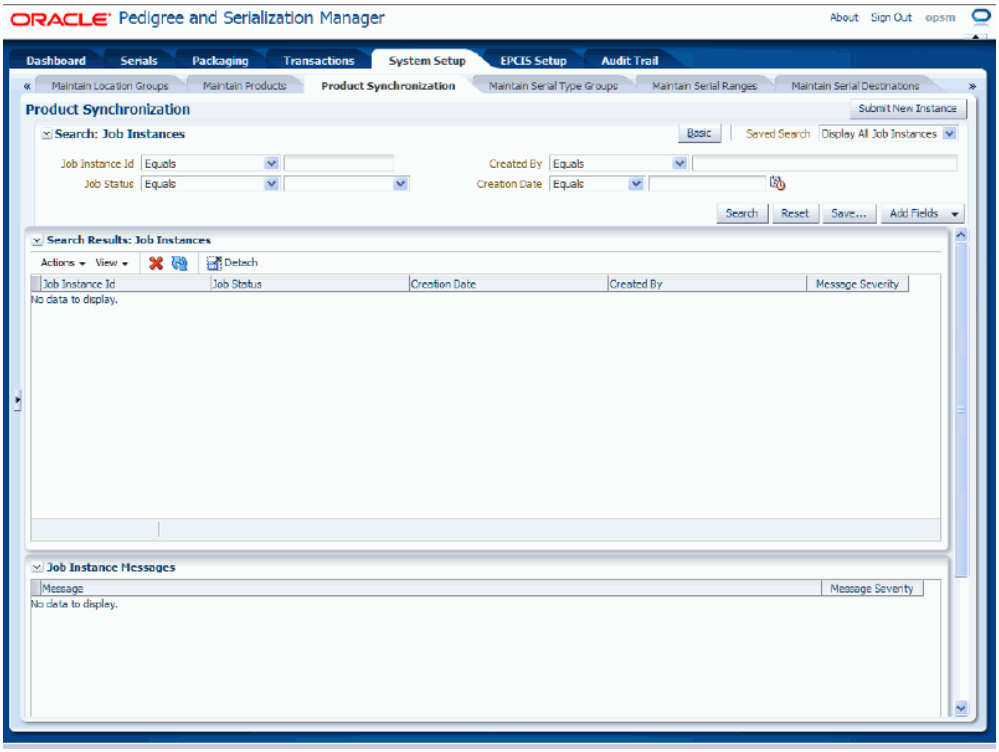
Example of the Product Synchronization page that uses job instances functionality



2. Click the Advanced button.

   Note: Clicking the Advanced or Basic button will keep the values in the base criteria fields.

Example of the Product Synchronization page displaying advanced search criteria



3. In the Search: Job Instances region, enter the search criteria for the job instances using one or more of these fields:

Field Name	Description
Job Instance Id	(Optional) Select the field operator and then enter the job instance Id. Operators are: • Equals • Does not equal • Less than • Less than or equal to • Greater than • Greater than or equal to • Between • Not Between • Is blank • Is not blank

Field Name	Description
Job Status	(Optional) Select the field operator and then select the job status for the job instances. Operators are: • Starts with • End with • Equals • Does not equal • Less than • Greater than • Less than or equal to • Greater than or equal to • Between • Not Between • Contains • Does not contain • Is blank • Is not blank Job Statuses are: • Complete • Error(s) Exist • In Progress • Submitted

Field Name	Description
	• Abnormal Termination • Warning(s) Exist Job statuses are defined using the system Lookup Type PAS_JOB_STATUS.
Web Service Name	This field is only available when using the job instances functionality on the Web Service Exceptions page. (Optional) Select the field operator and then select the web service name. The field operators are the same as that for the Job Status field. Web service names are: • captureEpcisDoc • createTransaction • Edit Serial by Primary Document Web Service • Edit Serial by Label Web Service • Edit Serial by List Web Service • HTTPPost • mergeLot
Created By	(Optional) Select the field operator and then enter the individual that created the job instances (initiated the process). The field operators are the same as that for the Job Status field.

Field Name	Description
Creation Date	(Optional) Select the field operator and then select the date the job instances were created. Operators are: • Equals • Does not equal • Before • After • On or before • On or after • Between • Not Between • Is blank • Is not blank

Otherwise, you can click the Search button without entering any search criteria and all available job instance Ids will appear.

4. (Optional) To enter additional search criteria fields, click the Add Fields button and select the field you would like to add to the search criteria.

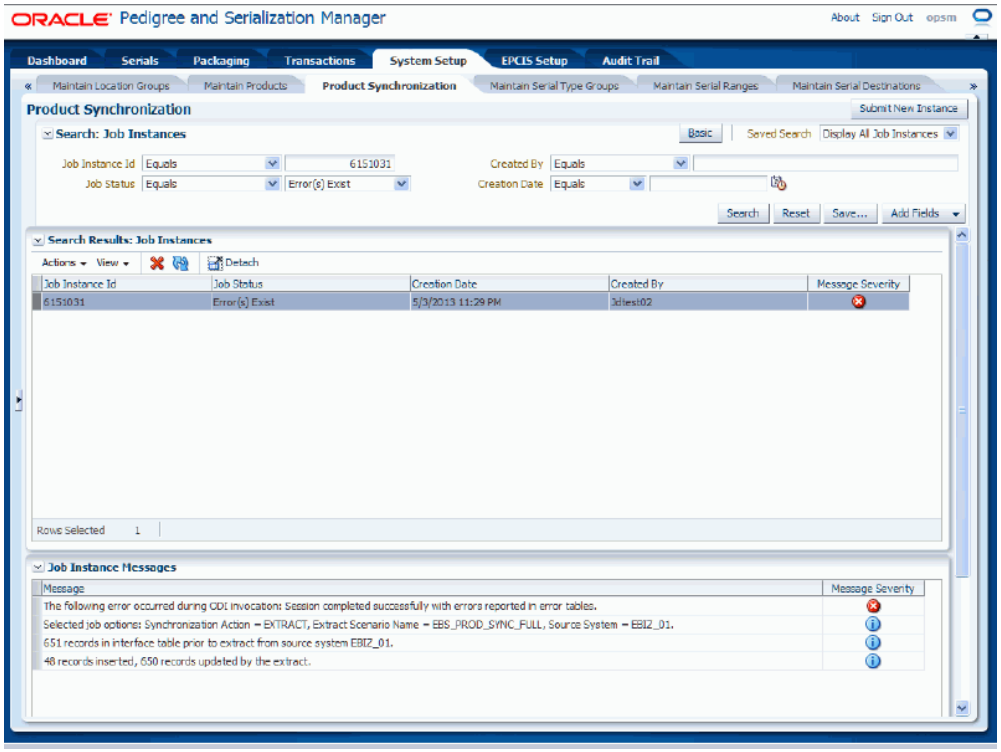
   The selected field appears as a search criteria field.

   > **Note:** To remove the additional field, click the Remove icon next to the field. The field will be removed from the search criteria.

5. (Optional) Enter search criteria for the additional fields.

6. Click the Search button.

Example of Product Synchronization page (Advanced Search)



All of the job instance Ids that match the search criteria appear in the Search Results: Job Instances region in a table format. The messages that are generated for each job instance Id appear in the Job Instance Messages region (bottom of page). The fields that appear for each job instance Id are:

Field Name	Description
Job Instance Id	Displays the job instance Id for a specific job instance.
Job Status	Displays the status of the job instance Id.

Field Name	Description
Web Service Name	This field is only available when using the job instances functionality on the Web Service Exceptions page. Displays the web service name. Web service names are: • captureEpcisDoc • createTransaction • Edit Serial by Primary Document Web Service • Edit Serial by Label Web Service • Edit Serial by List Web Service • HTTPPost • mergeLot
Creation Date	Displays the date the job instance Id was created.
Created By	Displays the individual that created the job instance Id.
Message Severity	Displays an icon to represent the severity of the messages that were generated for the job instance Id. A red circle with an X indicates the job instance Id was unsuccessful and contains error messages and may also contain warning messages. A yellow triangle with an exclamation point indicates the job instance Id was successful but it contains warning messages.

Below the Search Results: Job Instances region appears the Job Instance Messages region. If a row in the Search Results: Job Instances table contains a warning or error message severity for a job instance Id the messages for that condition display in this region. If no message severity exists, informational messages display in this

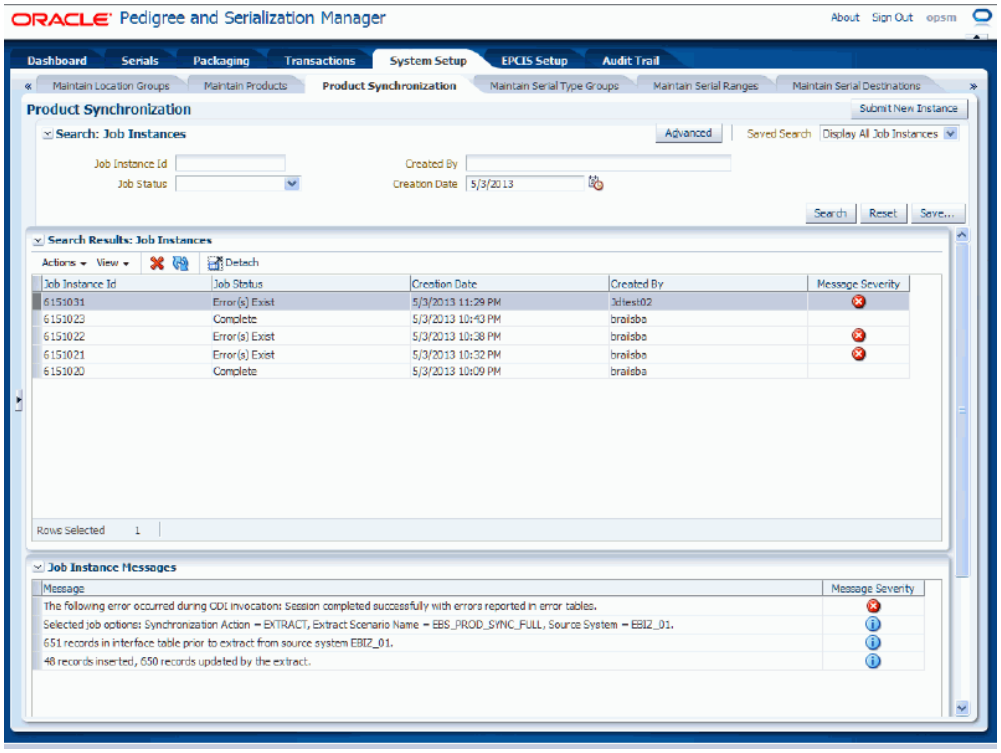
region (blue circle with the letter "i"). Each text message associated with the job instance Id and the message severity icon (informational, warning, or error) for the message displays in this region.

To View Job Instance Details:

1. Navigate to an Oracle Pedigree and Serialization Manager page that initiates a process.

2. Enter search criteria for the job instance Ids you want to view and click the Search button.

Example of the Product Synchronization page (Basic Search)



All of the job instance Ids that match the search criteria appear in the Search Results: Job Instances table.

3. Select a job instance Id in the Job Instances table.

4. Scroll to the Job Instance Messages region of the page.

   If a row in the Search Results: Job Instances table contains a warning or error message severity for a job instance Id the messages for that condition display in this region. If no message severity exists, informational messages display in this region (blue circle with the letter "i"). Each text message associated with the job instance Id

and the message severity icon (informational, warning, or error) for the message displays in this region.

To Delete Job Instances:

1. Navigate to an Oracle Pedigree and Serialization Manager page that initiates a process.

2. Enter search criteria for the job instance Ids you want to delete and click the Search button.

   All of the job instance Ids that match the search criteria appear in the Search Results: Job Instances table.

3. Select the job instance Id in the Job Instances table that you want to delete.

4. Select Delete from the Actions menu or click the Delete Job Instance icon located at the top of the Search Results: Job Instances region.

   The system displays a message asking if you are sure you want to delete this job instance.

5. Click the Yes button.

   The job instance Id and its associated messages are deleted from the system.

Part 2

Setting Up Oracle Pedigree and Serialization Manager and EPCIS Repository

4

Setting Up Oracle Pedigree and Serialization Manager

This chapter covers the following topics:

- Understanding the Oracle Pedigree and Serialization Manager Setup Process
- Understanding the Product Definition Process
- Maintaining Lookup Types and Codes
- Maintaining System Parameters
- Maintaining Locations
- Maintaining Location Groups
- Maintaining Products
- Defining Product and Item Cross Reference Information from Integrated Transactional Systems
- Synchronizing Products (Products Interface Table)
- Maintaining Serial Type Groups and Serial Types
- Maintaining Serial Ranges
- Maintaining Serial Destinations and Destination Rules
- Viewing Serial Destination Rules
- Defining Synchronization and Work Order Serialization Scenarios

Understanding the Oracle Pedigree and Serialization Manager Setup Process

Before you can use the Oracle Pedigree and Serialization Manager (OPSM) application you must first set up the application.

Setting Up Oracle Pedigree and Serialization Manager

Follow this high-level process flow to set up Oracle Pedigree and Serialization Manager:

1. Set up lookup types and codes.

   For more information, see Maintaining Lookup Types and Codes, page 4-4.

2. Set up OPSM system parameters.

   For more information, see Maintaining System Parameters, page 4-23.

3. Create locations.

   For more information, see Maintaining Locations, page 4-42.

4. Create location groups (optional).

   For more information, see Maintaining Location Groups, page 4-66.

5. Create Products and Item Cross Reference.

   For more information, see Understanding the Product Definition Process, page 4-2, Maintaining Products, page 4-78, Defining Product and Item Cross Reference Information from Integrated Transactional Systems, page 4-109, Synchronizing Products (Products Interface table), page 4-141, and

   Web Services Detail, page 14-3.

6. Create serial type groups and serial types.

   For more information, see Maintaining Serial Type Groups and Serial Types, page 4-159.

7. Create serial ranges (optional).

   For more information, see Maintaining Serial Ranges, page 4-176.

8. Create serial destinations and destination rules (optional).

   For more information, see Maintaining Serial Destinations and Destination Rules, page 4-191 and Viewing Serial Destination Rules, page 4-206.

9. Create Product Synchronization, Lot Synchronization, and Work Order Serialization scenarios (optional).

   For more information, see Defining Product Synchronization, Lot Synchronization, and Work Order Serialization Scenarios, page 4-216.

Understanding the Product Definition Process

New products can be created directly in the Oracle Pedigree and Serialization Manager

(OPSM) application with a cross reference to the item in one or more transactional systems. OPSM is the central repository for product definitions. OPSM stores the attributes used to identify the product along with the required regulatory product attributes required to generate a pedigree. OPSM also stores product packaging level information and attributes that control serialization of the product packaging unit. The serialization process control attributes determine the serial type, serial generation overage amounts, and serial range control. In addition, process control attributes for the product determine if serials are tracked for transactions with no change of ownership, the creation of a pedigree, whether serials can be created from the shipment transaction, and whether the serials are generated by OPSM or externally for the product. Process controls for the product can be overridden by location.

Products can be defined in OPSM in these ways:

- Using the Maintain Products page in OPSM. Product information can be created, modified, or deleted using the OPSM product pages.

  For more information on defining products in OPSM, see Maintaining Products, page 4-78.

- Using the Product Synchronization process. Product and item cross reference information can be merged from the Products Interface table.

  For more information see, Synchronizing Products (Products Interface Table), page 4-141.

- Using the Define Product and Item Cross Reference page in OPSM. From an external system, you can call the OPSM Define Product and Item Cross Reference page where you can define all of the different product attributes for the product in OPSM as it relates to the item from the transactional system. You can also specify the product overrides by location if necessary.

  For more information, see Defining Product and Item Cross Reference Information from Integrated Transactional Systems, page 4-109.

- Using the Product Service web service in OPSM. From an external system, product information can be created or updated using the Product Service web service.

  For more information, see Web Service Details, page 14-3.

OPSM Integration with Oracle E-Business Suite

The Oracle Serialization and Tracking Integration Pack for Oracle Pedigree and Serialization Manager and Oracle E-Business Suite 3.1 can be used to synchronize product and item cross reference information from Oracle E-Business Suite to OPSM using one of the following methods:

- Calling the OPSM Define Product and Item Cross Reference page from the Oracle E-Business Suite (Oracle Inventory) Master Item window or from the Organization

Item window.

The Source System Precedence setting in the OPSM system parameters controls whether product and product detail information can be updated from any source system or only from the owning source system. The owning source system is recorded on the product and product detail records.

For information on defining products using the Define Product and Item Cross Reference page, see Defining Product and Item Cross Reference Information from Integrated Transactional Systems, page 4-109.

For more information on maintaining system parameters, see Maintaining System Parameters, page 4-23.

- Using the batch product synchronization process between Oracle E-Business Suite and OPSM. Using the Product Synchronization page in OPSM you initiate the product synchronization process between these two applications.

  The Source System Precedence setting in the OPSM system parameters controls whether product and product detail information can be updated from any source system or only from the owning source system. The owning source system is recorded on the product and product detail records.

  For more information on synchronizing products, see Synchronizing Products (Products Interface Table), page 4-141.

  For more information on maintaining system parameters, see Maintaining System Parameters, page 4-23.

For more information on integrating Oracle E-Business Suite with OPSM, see the *Oracle Serialization and Tracking Integration Pack for Oracle Pedigree and Serialization Manager and Oracle E-Business Suite 3.1 - Implementation Guide.*

Maintaining Lookup Types and Codes

Use the Maintain Lookups pages in Oracle Pedigree and Serialization Manager (OPSM) to set values (codes) for lookup types. Lookup types determine how the OPSM application controls access to and processes data. Lookup types are associated to one of these access levels:

- System

  Seeded data (lookup codes) are provided for this lookup type. You can change the Meaning and Description fields for the lookup type and lookup codes. You cannot delete or add new lookup codes for the lookup type.

- User Defined

  No seeded data (lookup codes) are provided. You can change the Meaning and Description fields for the lookup type. You add all of the lookup codes for the lookup type and you can delete the lookup codes for the lookup type.

- Extensible

  Extensible is a mixture of system and user defined. Some seeded data (lookup codes) are provided. You can change the Meaning and Description fields for the lookup type and the seeded data lookup codes. You cannot delete the seeded data. You can add additional lookup codes and you can delete lookup codes that you have added.

Use the Maintain Lookups pages to define the codes for the User Defined lookup types and you may need to edit or add additional codes to the Extensible lookup types depending on your organizational needs.

These tables list the User Defined and Extensible lookup types and their associated meaning and lookup codes:

OPSM Lookup Types and Codes - User Defined Access Level

Lookup Type	Lookup Type Meaning	Lookup Type Description	Lookup Codes
PAS_CONTAINER_TYPE	Container Type	The type of container or package for the product. This is typically the lowest saleable unit packaging type (e.g. Bottle, Blister Pack, etc.).	None by default.
PAS_CUSTOM_LOOKUP_TYPE	Custom Lookup Type	Available for customer-defined use (such as a cross-reference within custom serial generation). This lookup type will not be referenced by OPSM during standard processing.	None by default.

Lookup Type	Lookup Type Meaning	Lookup Type Description	Lookup Codes
PAS_CUSTOM_SERIAL_METHOD	Custom Serial Method	A lookup available for customer-defined use within the custom serial generation algorithm which will indicate which custom serial algorithm to use. This lookup must be configured by the end user for use in custom serial generation.	None by default.
PAS_DESTINATION_GROUPS	Destination Groups	Identifies a destination group which is used to organize like serial destinations for management of destination rules.	• EPCIS, EPCIS Destinations, Destination Group containing one or more EPCIS destinations • NON_EPCIS, Non-EPCIS Destinations, Destination Group containing one or more Non-EPCIS destinations
PAS_DOCUMENT_TYPE	Document Type	The type of document (e.g. Invoice Number, Shipping Number, Work Order, etc.).	None by default.
PAS_DOSAGE_FORM	Dosage Form	The dosage form of the product is the physical form of the product that is packaged (e.g. Pill, Capsule, etc.).	None by default.

Lookup Type	Lookup Type Meaning	Lookup Type Description	Lookup Codes
PAS_LABEL_PRINT_FORMAT	Label Print Format	The format the label is printed in.	None by default.
PAS_LOCATION_TYPE	Location Type	The type of location.	None by default.
PAS_LOT_EXTRACT	Lot Extract	Identifies the Oracle Data Integrator (ODI) scenario that will be used for the lot information extract.	None by default. Oracle provides these lookup codes for the integration between Oracle E-Business Suite and OPSM: • EBS_LOT_SYNC_DISCRETE_FULL, EBS Discrete Full, EBS Discrete Full Load • EBS_LOT_SYNC_DISCRETE_INCR, EBS Discrete Incremental, EBS Discrete Incremental Load • EBS_LOT_SYNC_PROCESS_R11_FULL, EBS R11 Process Full, EBS R11 Process Full Load • EBS_LOT_SYNC_PROCESS_R11_INCR, EBS R11 Process Incremental, EBS R11 Process Incremental Load

Lookup Type	Lookup Type Meaning	Lookup Type Description	Lookup Codes
PAS_PACKAGE_UNIT	Package Unit Type	The type of packaging unit of the serialized product or cartonization packaging unit (e.g. Bottle, Blister Pack, Box. Case, Bundle, Pallet, Container, etc.).	None by default.
PAS_PRODUCT_CATEGORY	Product Category	The category of product.	None by default.
PAS_PRODUCT_EXTRACT	Product Extract	Identifies the Oracle Data Integrator (ODI) scenario that will be used for the product information extract.	None by default. Oracle provides these lookup codes for the integration between Oracle E-Business Suite and OPSM: • EBS_PROD_SYNC_FULL, EBS Full, EBS Product Full Load • EBS_PROD_SYNC_INCR, EBS Incremental, EBS Product Incremental Load

Lookup Type	Lookup Type Meaning	Lookup Type Description	Lookup Codes
PAS_PRODUCT_UOM	Product Unit of Measure	The Product UOM or Product Packaging Unit of the serialized product. This lookup will be a subset of the PAS_PACKAGE_UNIT lookup which contains packaging identification of serialized products and serialized levels of cartonization (e.g. Bottle, Blister Pack, Box, Case).	None by default. All lookup codes defined in PAS_PRODUCT_UOM must also be set up in PAS_PACKAGE_UNIT.
PAS_SERIAL_USAGE	Serial Usage	The current usage of the serialized item.	None by default.
PAS_SOURCE_SYSTEM	Source System	The identifier used to distinguish different transactional or Enterprise Resource Planning (ERP) systems.	None by default.

Lookup Type	Lookup Type Meaning	Lookup Type Description	Lookup Codes
PAS_WORK_ORDER_EXTRACT	Work Order Extract	Identifies the Oracle Data Integrator (ODI) scenario that will be used for the work order extract.	None by default. Oracle provides these lookup codes for the integration between Oracle E-Business Suite and OPSM: • EBS_WO_SERIAL_DISCRETE_FULL, EBS Discrete Full, EBS Discrete Full Load • EBS_WO_SERIAL_DISCRETE_INCR, EBS Discrete Incremental, EBS Discrete Incremental Load • EBS_WO_SERIAL_PROCESS_FULL, EBS Process Full, EBS Process Full Load • EBS_WO_SERIAL_PROCESS_INCR, EBS Process Incremental, EBS Process Incremental Load

OPSM Lookup Types and Codes - Extensible Access Level

Lookup Type	Lookup Type Meaning	Lookup Type Description	Lookup Code, Meaning, and Description
PAS_EPC_TYPE	EPC Number Type	Type of EPC Number	GTIN, GTIN-14, GTIN-14 EPC Number
PAS_LABEL_TYPE	Label Type	The type of package identifier (e.g. Container, LPN, Serial Number, etc.).	• SGTIN-198, SGTIN-198, SGTIN-198 • SGTIN-96, SGTIN-96, SGTIN-96 • USN-1, USN-1, USN-1

Lookup Type	Lookup Type Meaning	Lookup Type Description	Lookup Code, Meaning, and Description
PAS_PRODUCT_CODE_TYPE	Product Code Type	The type of product code (e.g. NDC, GTIN, DIN, etc.).	• GTIN, GTIN, Global Trade Identification Number • NDC442, NDC442, National Drug Code using the 4-4-2 configuration. • NDC532, NDC532, National Drug Code using the 5-3-2 configuration. • NDC541, NDC541, National Drug Code using the 5-4-1 configuration. • NDC542, NDC542, National Drug Code using the 5-4-2 configuration.
PAS_REASON_CODE	Reason Code	The reason code identifying why a serialized item has become inactive.	• VOIDED, Voided, Voided

Lookup Type	Lookup Type Meaning	Lookup Type Description	Lookup Code, Meaning, and Description
PAS_SERIAL_TYPE	Serial Type	The format of the serial number (e.g. SGTIN-96, etc.).	• SGTIN-198, SGTIN-198, SGTIN-198 • SGTIN-96, SGTIN-96, SGTIN-96 • USN-1, UNIQUE SERIAL NUMBER, UNIQUE SERIAL NUMBER All lookup codes defined in PAS_SERIAL_TYPE must also be added to PAS_LABEL_TYPE.
PAS_SERIAL_TYPE_GROUP	Serial Type Group	A group of like serial types.	• SGTIN, SGTIN, SGTIN • USN, USN, UNIQUE SERIAL NUMBER

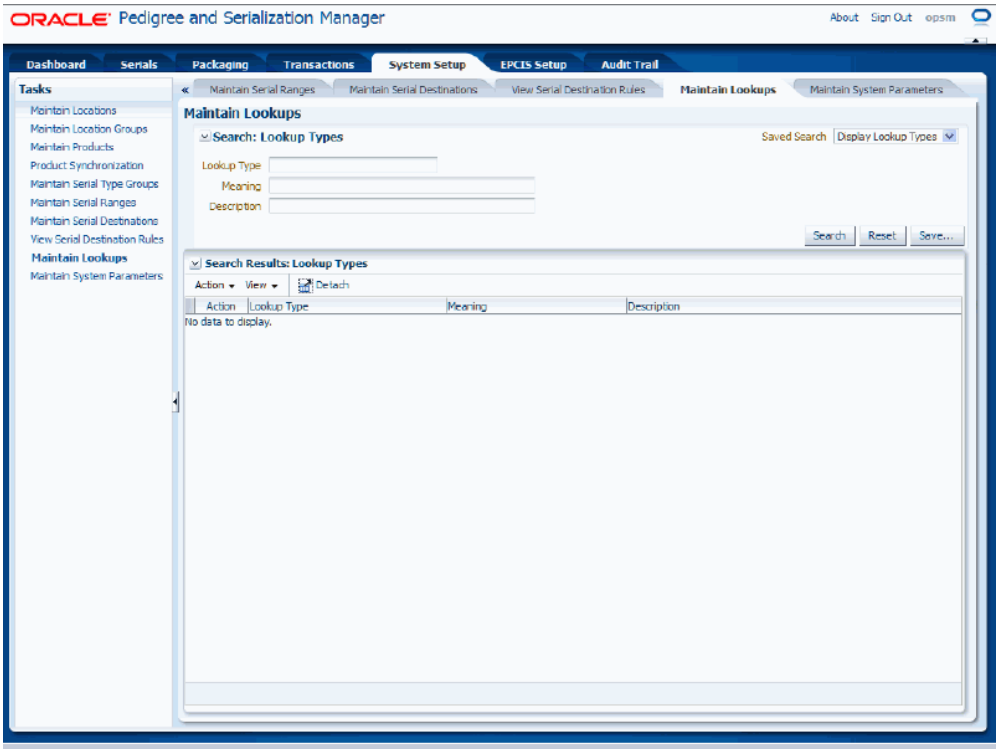
For a complete list of the lookup types and their associated lookup codes, see Appendix C Lookup Types and Codes, page B-1.

Use these procedures to search for, view, edit, delete, and translate lookup types and codes:

To Search for Lookup Types:

1. Navigate to the Maintain Lookups page, page A-2.

Maintain Lookups page



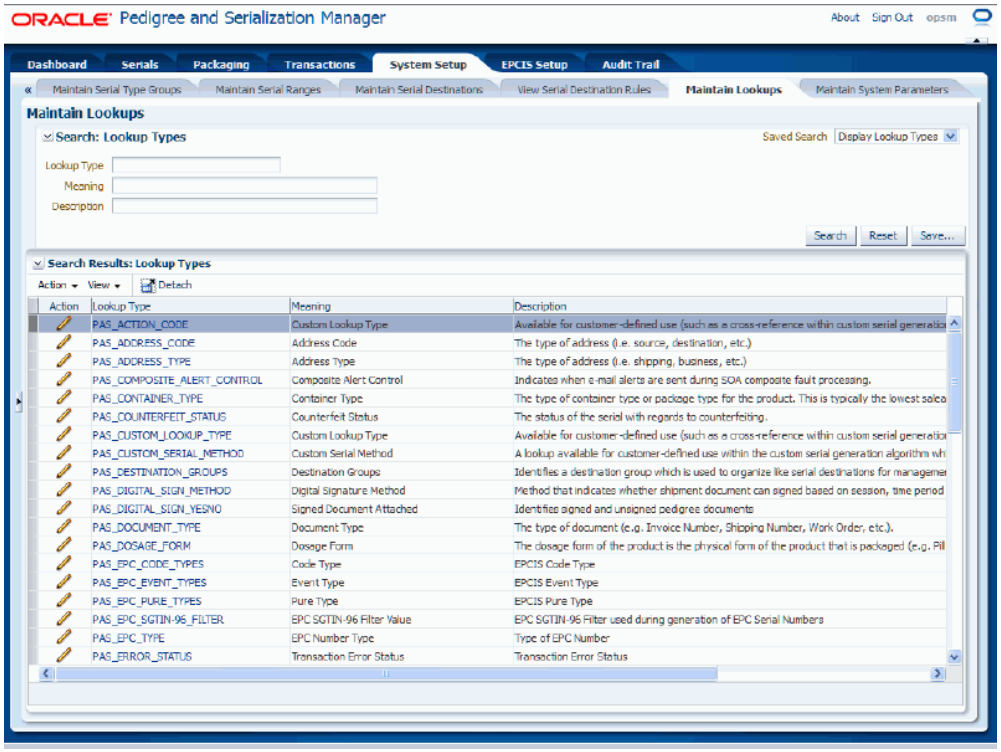
2. In the Search: Lookup Types region, enter the search criteria for the lookup types using one or more of these fields:

Field Name	Description
Lookup Type	(Optional) Enter the lookup type.
Meaning	(Optional) Enter the meaning for the lookup type.
Description	(Optional) Enter the description for the lookup type.

Otherwise, you can click the Search button without entering any search criteria and all available lookup types will appear.

3. Click the Search button.

Maintain Lookups page



All of the lookup types that match the search criteria appear in the Search Results: Lookup Types region in a table format.

To View Lookup Type Details:

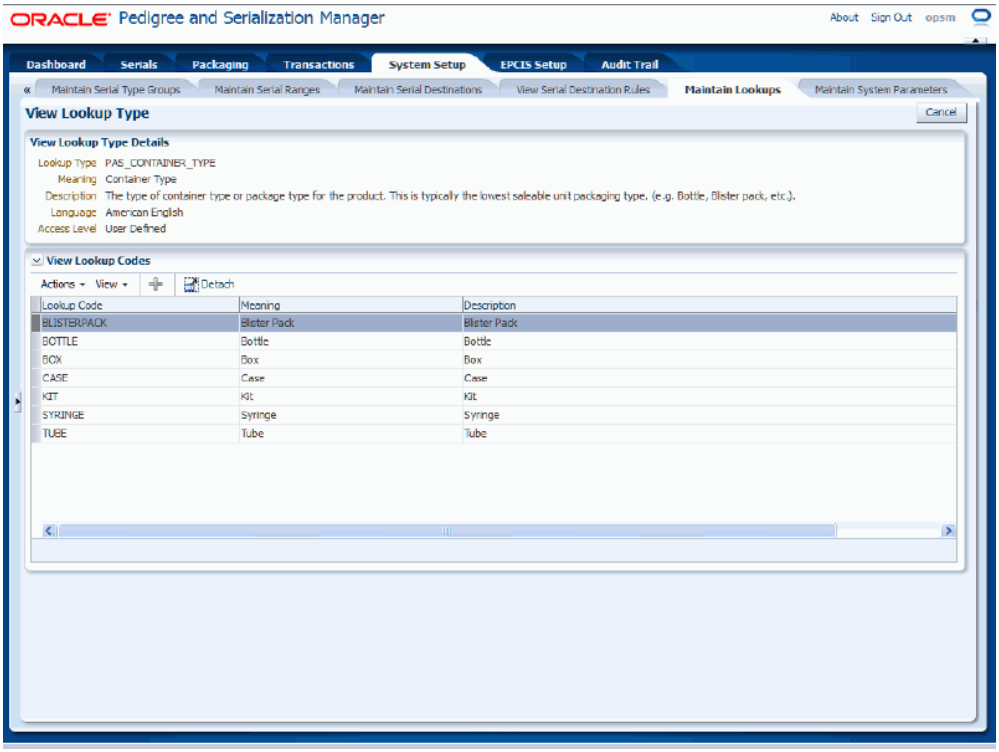
1. Navigate to the Maintain Lookups page, page A-2.

2. Enter search criteria for the lookup types you want to view and click the Search button.

   All of the lookup types that match the search criteria appear in the Search Results: Lookup Types table.

3. Click the Lookup Type link in the table for the lookup type that you want to view the details for.

View Lookup Type page



The View Lookup Type page appears displaying the details (Meaning, Description, Language, and Access Level) for the lookup type and all of its associated lookup codes with their meaning and description.

4. Click the Cancel button to return to the Maintain Lookups page.

To Edit Lookup Types and Codes:

1. Navigate to the Maintain Lookups page, page A-2.

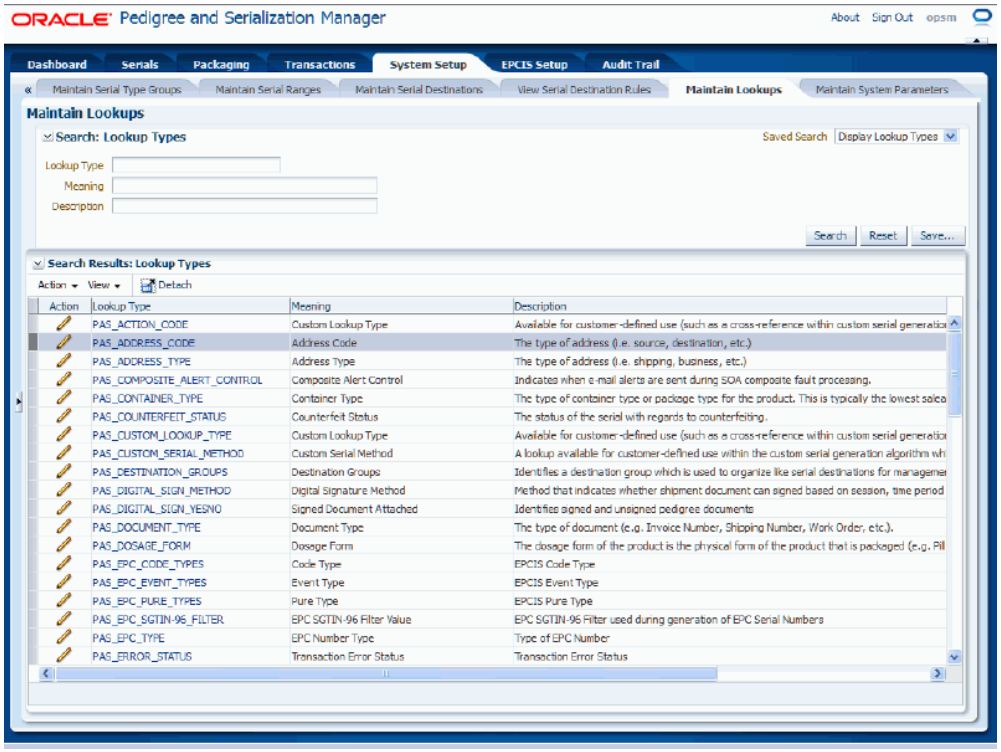
2. Enter search criteria for the lookup types you want to edit and click the Search button.

   All of the lookup types that match the search criteria appear in the Search Results: Lookup Types table.

3. Select the lookup type in the table that you want to edit the lookup type fields for or edit lookup codes for.

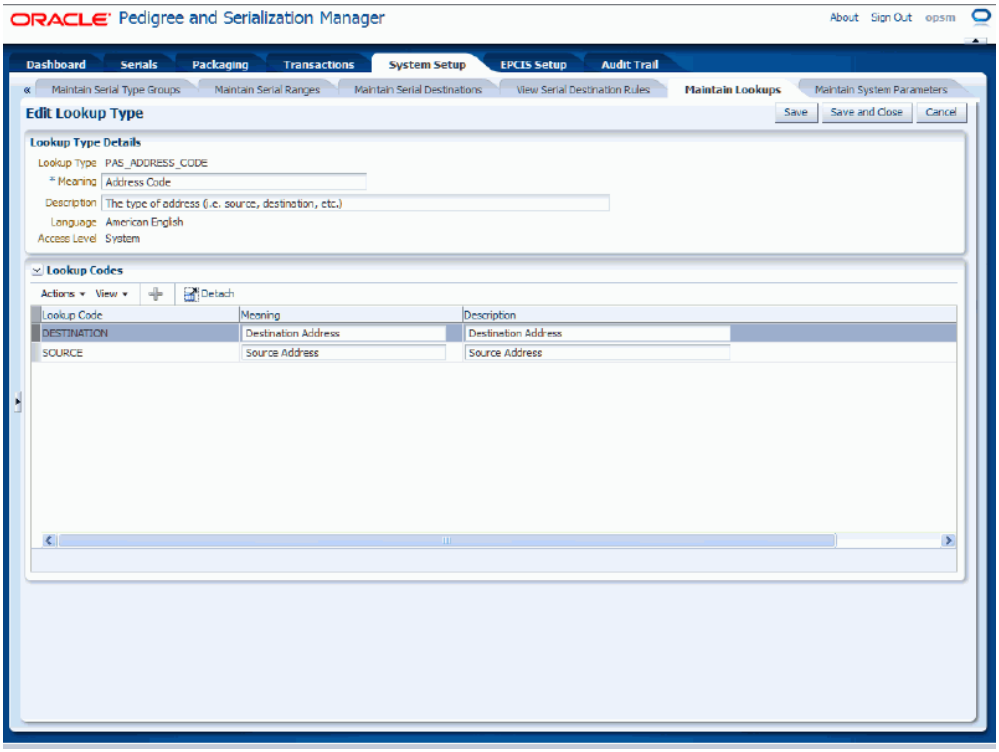
   For all Access Level (User Defined, Extensible, and System) lookup types you can edit the Meaning and Description fields for the lookup type and its associated lookup codes.

Maintain Lookups page



4. Select Edit in the Action menu or click the Edit Lookups icon associated with the lookup type in the Action column of the results table.

Edit Lookup Type page



The Edit Lookup Type page appears displaying the details (Meaning, Description, Language, and Access Level) for the lookup type and all of its associated lookup codes with their meaning and description.

5. Edit the lookup type fields by changing the Meaning and Description fields associated with the lookup type in the Lookup Type Details region of the page.

6. Edit the lookup code fields by changing the Meaning and Description fields for the lookup codes in the Lookup Codes region of the page.

7. Save your work. Choose one of these options:

   - Click the Save and Close button to save the information and return back to the Maintain Lookups page.

   - Click the Save button to save the information and to stay on this page so you can continue to edit the information.

To Add Lookup Codes to a Lookup Type:

1. Navigate to the Maintain Lookups page, page A-2.

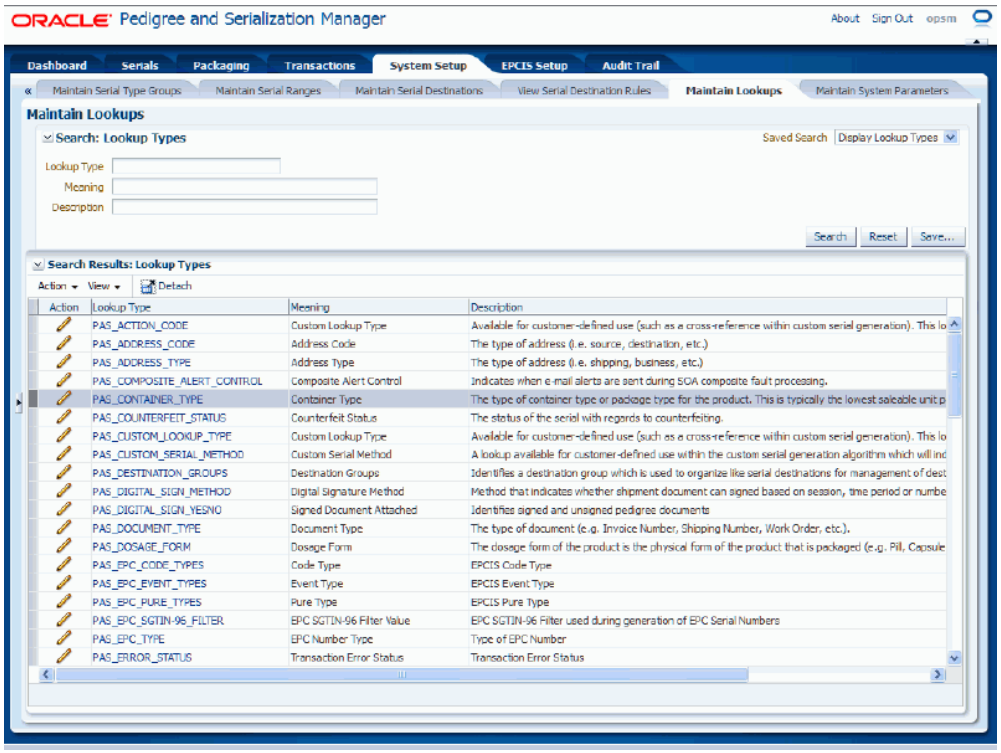
2. Enter search criteria for the lookup types you want to add lookup codes to and click the Search button.

   You can only add lookup codes to User Defined and Extensible lookup types.

   All of the lookup types that match the search criteria appear in the Search Results: Lookup Types table.

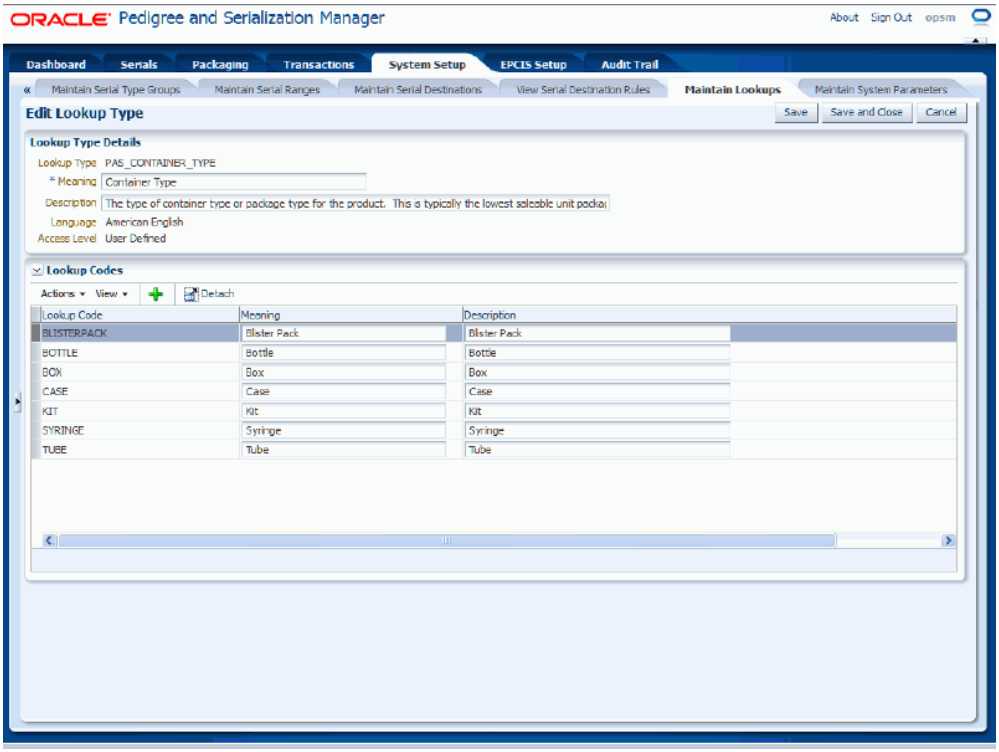
3. Select the lookup type in the table that you want to add lookup code fields for.

Maintain Lookups page



4. Select Edit in the Action menu or click the Edit Lookups icon associated with the lookup type in the Action column of the results table.

Edit Lookup Type page

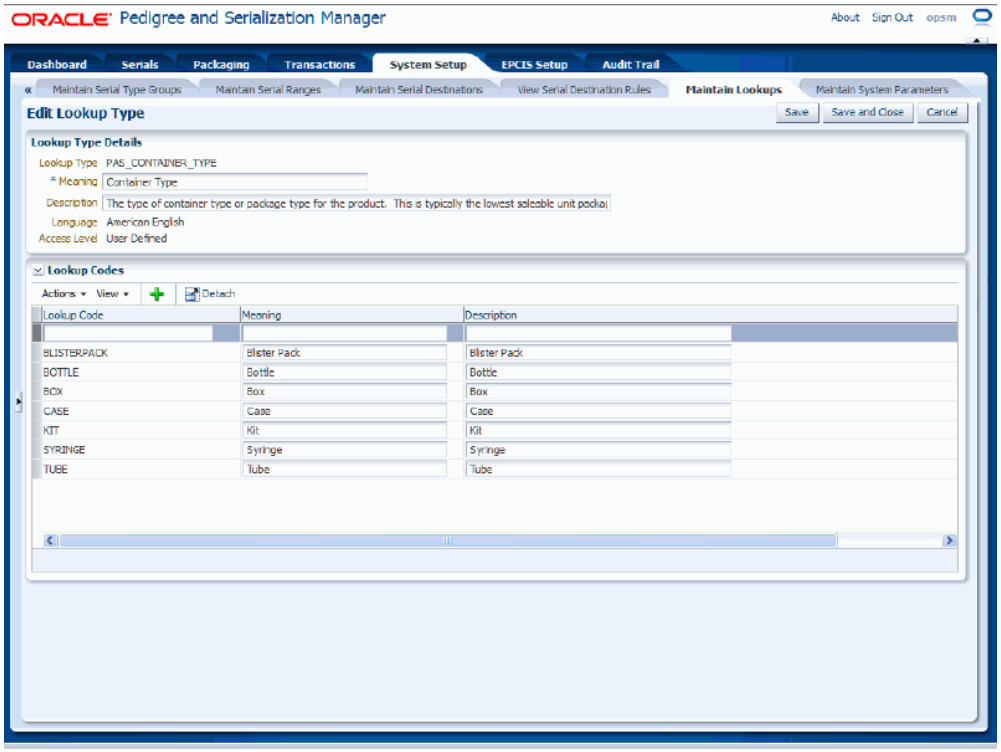


The Edit Lookup Type page appears displaying the details (Meaning, Description, Language, and Access Level) for the lookup type and all of its associated lookup codes with their meaning and description.

5. Select Add Lookup Code from the Actions menu or click the Add Lookup Code icon located at the top of the Lookup Codes table.

> **Note:** You can only add new lookup codes for User Defined and Extensible lookup types. The Add Lookup Code icon and menu option are not available for System lookup types.

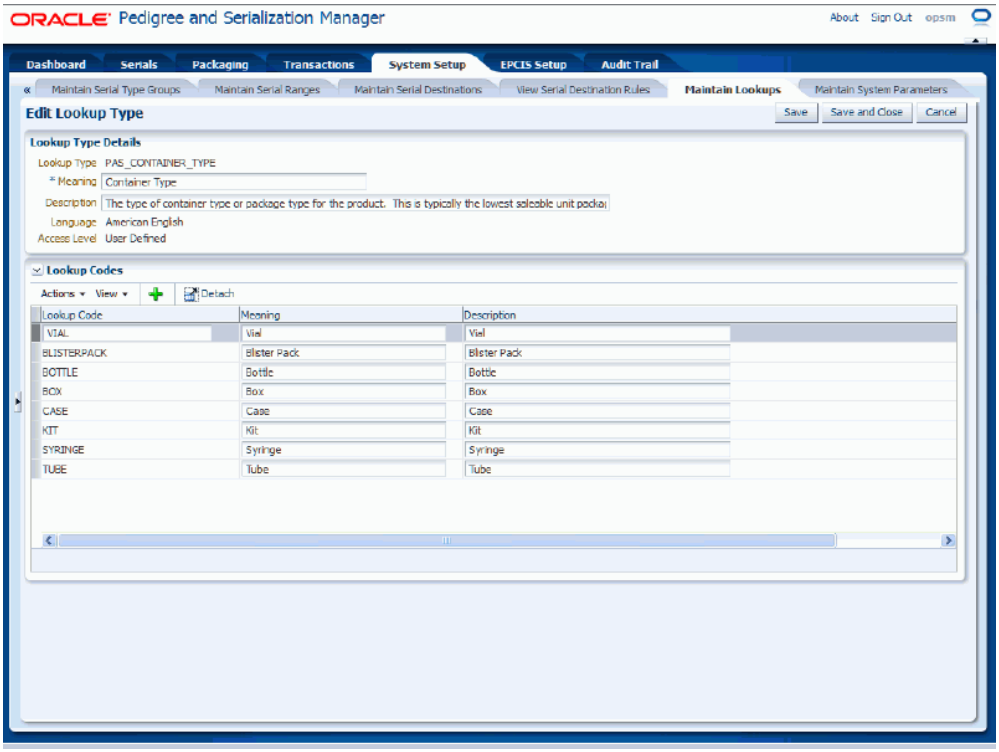
Edit Lookup Type page



A new row appears in the Lookup Codes table.

6. Enter the Lookup Code, Meaning, and Description for the lookup code.

Edit Lookup Type page



7. Save your work. Choose one of these options:

   - Click the Save and Close button to save the information and return back to the Maintain Lookups page.

   - Click the Save button to save the information and to stay on this page so you can continue to add information.

To Delete Lookup Codes Associated with a Lookup Type:

1. Navigate to the Maintain Lookups page, page A-2.

2. Enter search criteria for the lookup types you want to delete lookup codes from and click the Search button.

   You can only delete lookup codes for User Defined lookup types and user defined lookup codes for Extensible lookup types. Extensible lookup types also contain system defined lookup codes that cannot be deleted.

   All of the lookup types that match the search criteria appear in the Search Results: Lookup Types table.

3. Select the lookup type in the table that you want to delete lookup code fields for.

4. Select Edit in the Action menu or click the Edit Lookups icon associated with the lookup type in the Action column of the results table.

   The Edit Lookup Type page appears displaying the details (Meaning, Description, Language, and Access Level) for the lookup type and all of its associated lookup codes with their meaning and description.

5. Select the Lookup Code you want to delete in the Lookup Codes table.

6. Select Delete Lookup Code in the Actions menu or click the Delete icon associated with the lookup code in the Action column of the Lookup Codes table.

   The Delete Lookup Code menu option and Delete icon will be grayed and unavailable for lookup codes associated with System lookup types and for system defined lookup codes for Extensible lookup types.

   > **Note:** You can only delete lookup codes for User Defined lookup types and user defined lookup codes for Extensible lookup types.

   The system displays a message stating you are about to delete this lookup code from the system. If this code is currently being used anywhere in the system, deletion of the code will cause unpredictable results. If you have not yet used the code within the system, you can safely delete it. Are you sure you want to delete this lookup code?

7. Click the Yes button.

   The lookup code is deleted from the lookup type.

Maintaining System Parameters

Before you can begin to use Oracle Pedigree and Serialization Manager (OPSM) you must first set up system parameters. System parameters will define the owning source system default, source system precedence, serial type default, and use serial ranges default setting for product details. They will also define the default settings in OPSM for the different types of transactions used in OPSM, as well as, the Operation Dashboard URLs, the Pedigree BI Publisher server URL that will be used to print Pedigrees, Digital Signature Keystore information, and error notification setup information.

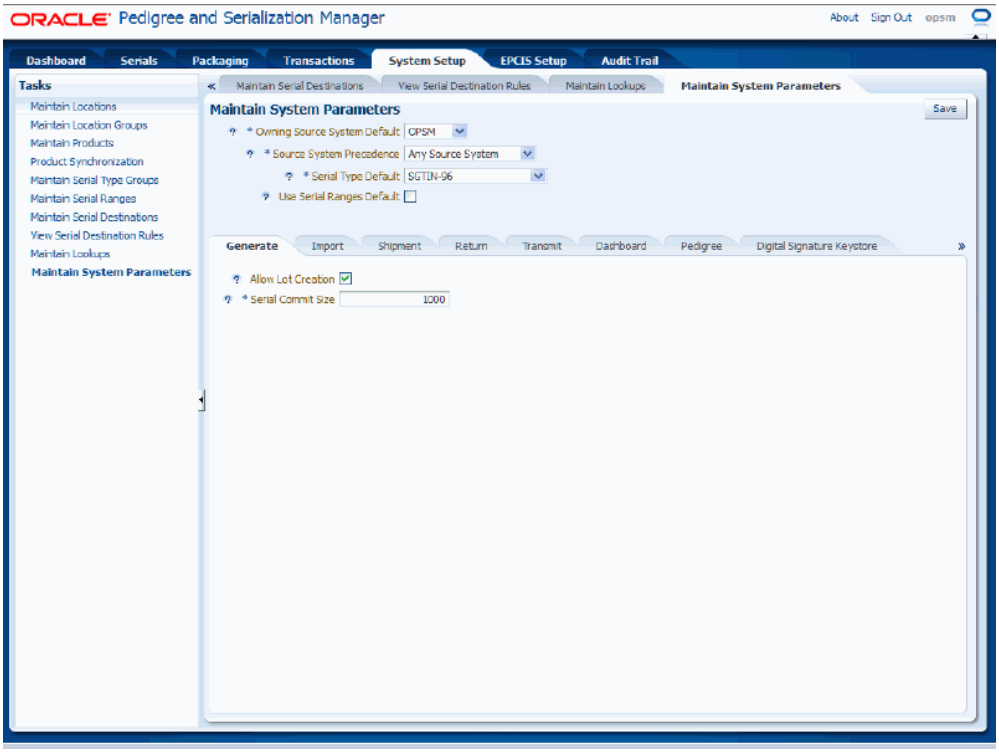
Use these procedures to view, set, and modify system parameters:

> **Note:** The system parameters record is seeded upon installation. You cannot create or delete a system parameter record.

To View System Parameters:

1. Navigate to the Maintain System Parameters page, page A-2.

Maintain System Parameters page



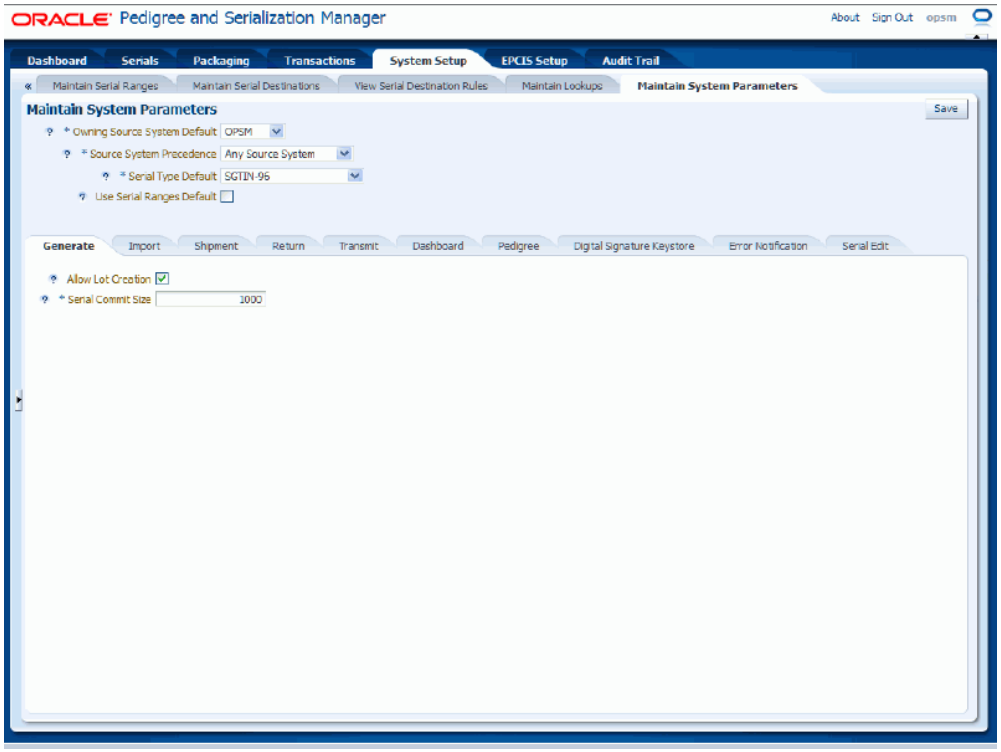
The Maintain System Parameters page appears displaying the current settings for the system parameters.

2. Select the different sub tabs (Generate, Import, Shipment, Return, Transmit, Dashboard, Pedigree, Digital Signature Keystore, Error Notification, and Serial Edit) to view the particular system parameters for that area.

To Set System Parameters:

1. Navigate to the Maintain System Parameters page, page A-2.

Maintain System Parameters page - Generate sub tab



2. Select the settings for the following parameters:

Field Name	Description
Owning Source System Default	Use this field to specify the default setting for the Owning Source System field on the Maintain Products page. This field value will default into the Product Regulatory Information when a new product is created. This field value indicates the transactional system from which this product originated. Owning Source Systems are user defined using Lookup Type PAS_SOURCE_SYSTEM. For more information on creating a product, see Procedure: To Create Products, page 4-87.

Field Name	Description
Source System Precedence	Select the source system precedence. This field value indicates whether product or product detail information can be changed by any source system or only the owning source system. Source System Precedences are: • Any Source System • Owning Source System This is used by Product Synchronization process and the Define Product and Item Cross Reference page. This is not enforced in the Maintain Products page.
Serial Type Default	Use this field to specify the default setting for Serial Type when creating product details for a product. The value you select will appear by default on the Create Product page (Serial Generation Details sub tab) when creating a product. SGTIN-96 appears by default in this field. Serial types are defined using extensible Lookup Type PAS_SERIAL_TYPE. OPSM provides several serial types. For more information on creating a product, see Procedure: To Create Products, page 4-87.
Use Serial Ranges Default check box	(Optional) If this check box is selected, then the Use Serial Ranges check box will default as selected on the Create Product page (Serial Generation Details sub tab), when creating a product. The Use Serial Ranges check box is clear by default. For more information on creating a product, see Procedure: To Create Products, page 4-87.

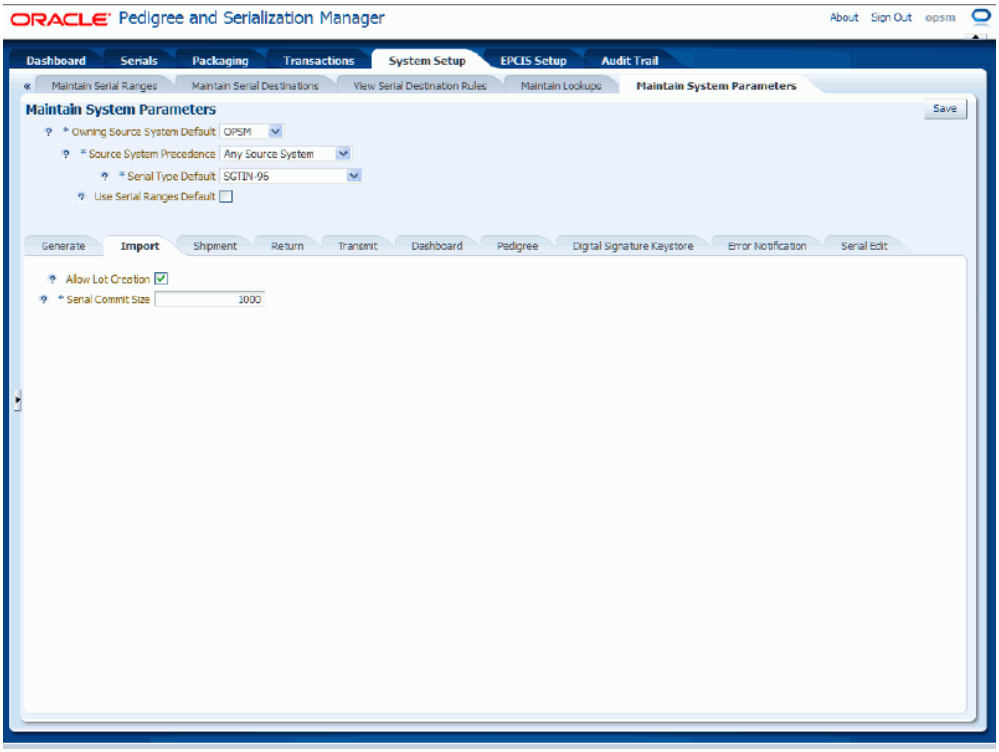
3. Select the Generate sub tab.

4. Select the settings for the following parameters:

Field Name	Description
Allow Lot Creation check box	(Optional) Select this check box to enable a lot to be added to OPSM at the time of serial generation if the lot doesn't already exist. If no lot exists in OPSM, and this parameter is not set, the system will issue an exception for the generate transaction.
Serial Commit Size	When performing a generate transaction, enter the number of serials that will be processed before the system commits the serials to the database.

5. Select the Import sub tab.

Maintain System Parameters page - Import sub tab

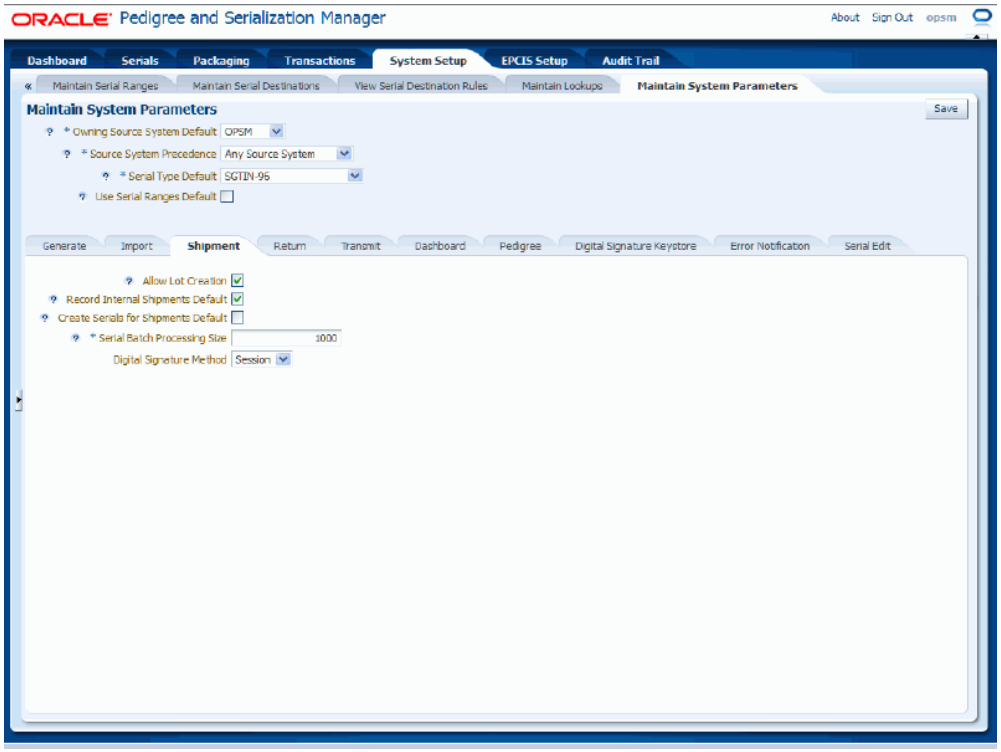


6. Select the settings for the following parameters:

Field Name	Description
Allow Lot Creation check box	(Optional) Select this check box to enable a lot to be added to OPSM at the time of serial import if the lot doesn't already exist. If no lot exists in OPSM, and this parameter is not set, the system will issue an exception for the import transaction.
Serial Commit Size	When performing an import transaction, enter the number of serials that will be processed before the system commits the serials to the database.

7. Select the Shipment sub tab.

Maintain System Parameters page - Shipment sub tab



8. Select the settings for the following parameters:

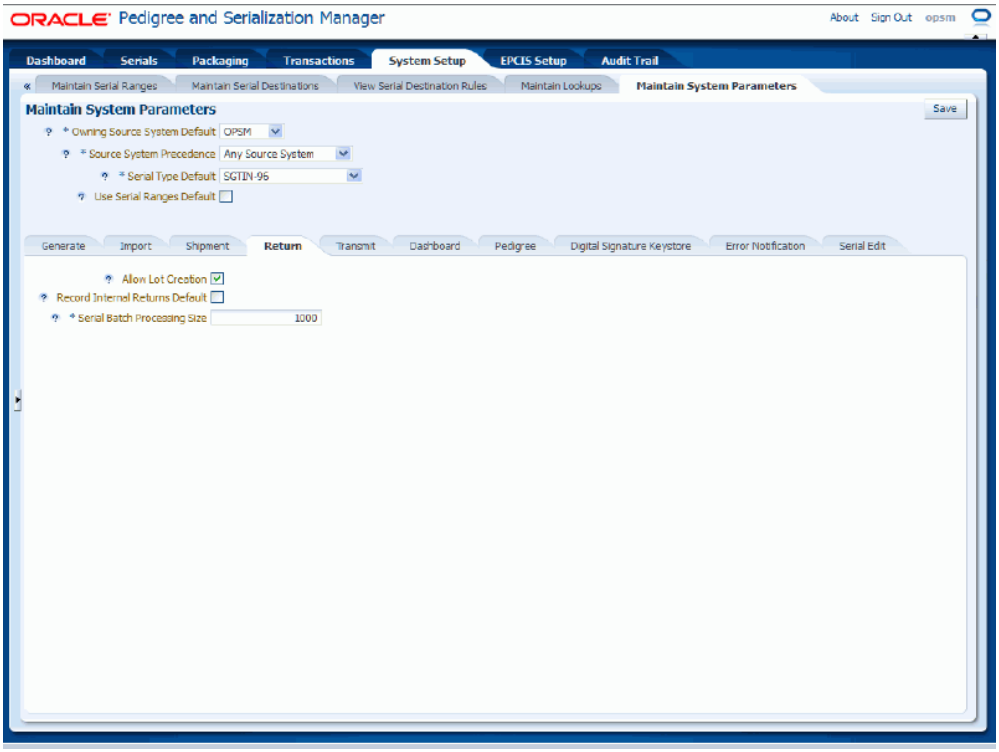
Field Name	Description
Allow Lot Creation check box	(Optional) Select this check box to enable a lot to be added to OPSM at the time of shipment if the lot doesn't already exist. If no lot exists in OPSM, and this parameter is not set, the system will issue an exception for the shipment transaction.

Field Name	Description
Record Internal Shipments Default check box	(Optional) If this check box is selected, then the Record Internal Shipment check box will default as selected on the Create Product page, when creating a new product. If selected on the Create Product page, then the system will record shipments to internal customers for that product. For more information on creating products, see Procedure: To Create Products, page 4-87.
Create Serials for Shipments Default check box	(Optional) If this check box is selected, then the Create Serials for Shipment check box will default as selected on the Create Product page when creating a new product. If selected on the Create Product page, then the serials for the shipment will be created for that product in OPSM at the time of shipment. If the serials already exist, the shipment transaction will be set to an exception status. For more information on creating a new product, see Procedure: To Create Products, page 4-87.
Serial Batch Processing Size	When processing a shipment transaction, enter the number of serials that will be processed by the system as a batch. Processing the serials in batches is a mechanism used to improve performance and scalability. 1000 appears by default for this field.

Field Name	Description
Digital Signature Method	(Optional) Select the method you would like to use when digitally signing Pedigree documents. Method values are: • Blank: Indicates no method (you are not digitally signing Pedigree documents) • Session: Indicates that Pedigree documents can be signed based on a session. A session begins once you enter the OPSM application and ends when you leave the OPSM application.

9. Select the Return sub tab.

Maintain System Parameters page - Return sub tab



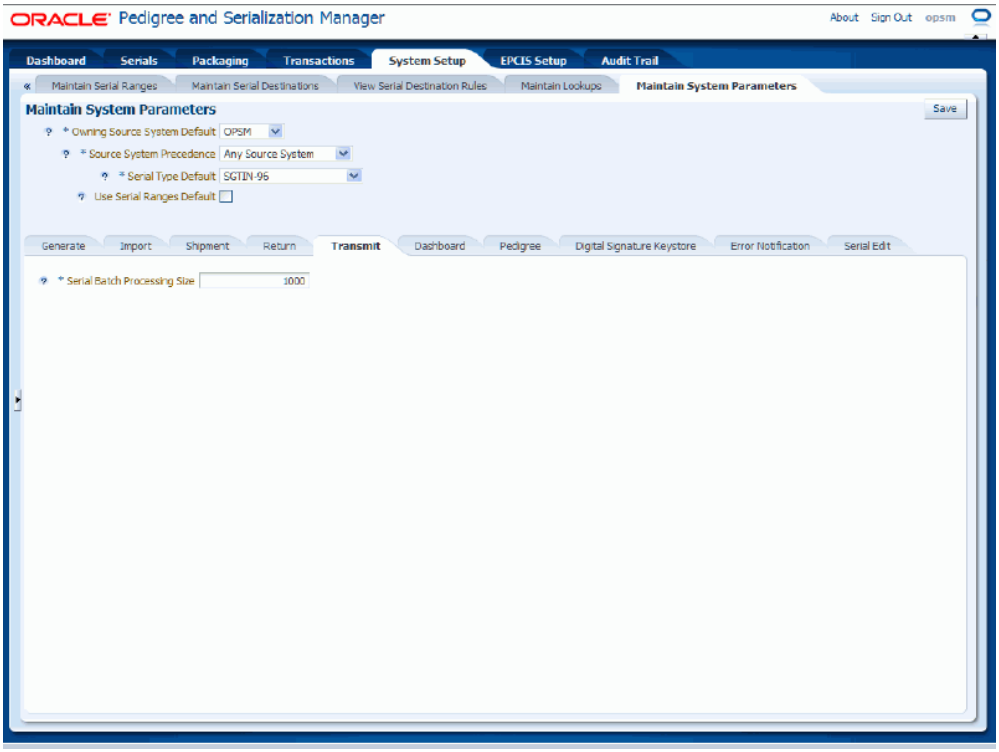
10. Select the settings for the following parameters:

Field Name	Description
Allow Lot Creation check box	(Optional) Select this check box to enable a lot to be added to OPSM at time of return if the lot doesn't already exist. If no lot exists in OPSM, and this parameter is not set, the system will issue an exception for the return transaction.

Field Name	Description
Record Internal Returns Default check box	(Optional) If this check box is selected, then the Record Internal Returns check box will default as selected on the Create Product page when creating a new product. If selected on the Create Product page, then the system will record product returns from internal customers for that product. For more information on creating products, see Procedure: To Create Products, page 4-87.
Serial Batch Processing Size	When processing a return transaction, enter the number of serials that will be processed by the system as a batch. Processing the serials in batches is a mechanism used to improve performance and scalability. 1000 appears by default for this field.

11. Select the Transmit sub tab.

Maintain System Parameters page - Transmit sub tab

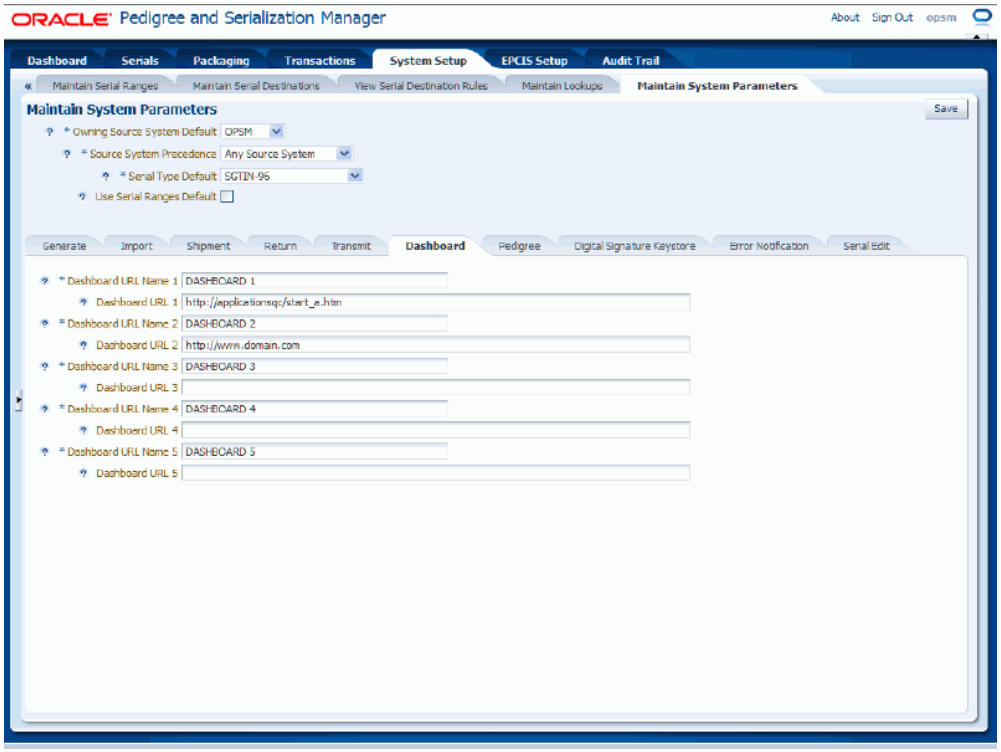


12. Select the setting for the following parameter:

Field Name	Description
Serial Batch Processing Size	When processing a transmit transaction, enter the number of serials that will be processed by the system as a batch. Processing the serials in batches is a mechanism used to improve performance and scalability.

13. Select the Dashboard sub tab.

Maintain System Parameters page - Dashboard sub tab

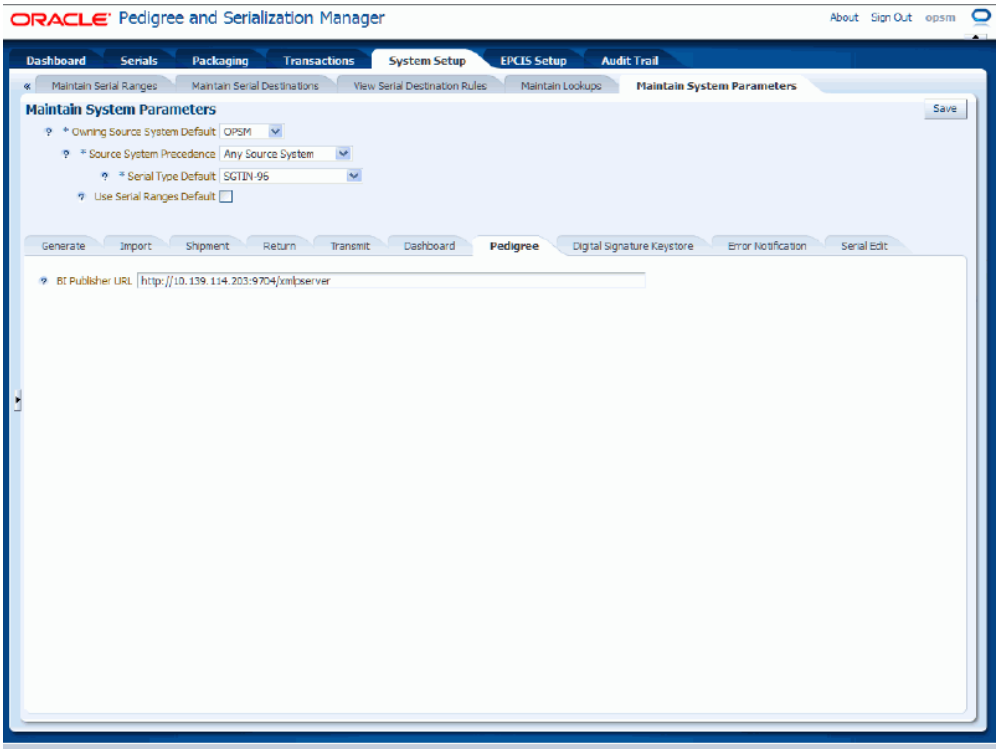


14. Select the settings for the following parameters:

Field Name	Description
Dashboard URL Name (1-5)	Enter the value that represents the task list name on the Operations Dashboard for the first through fifth custom URL's.
Dashboard URL (1-5)	Enter the value that represents the first through fifth custom URL's on the Operations Dashboard. Enter a fully qualified URL value (for example, http://www.domain.com). If no value is entered, the URL will not display on the Operations Dashboard. For more information, see Adding Custom URLs to the Operations Dashboard, page 12-21.

15. Select the Pedigree sub tab.

Maintain System Parameters page - Pedigree sub tab

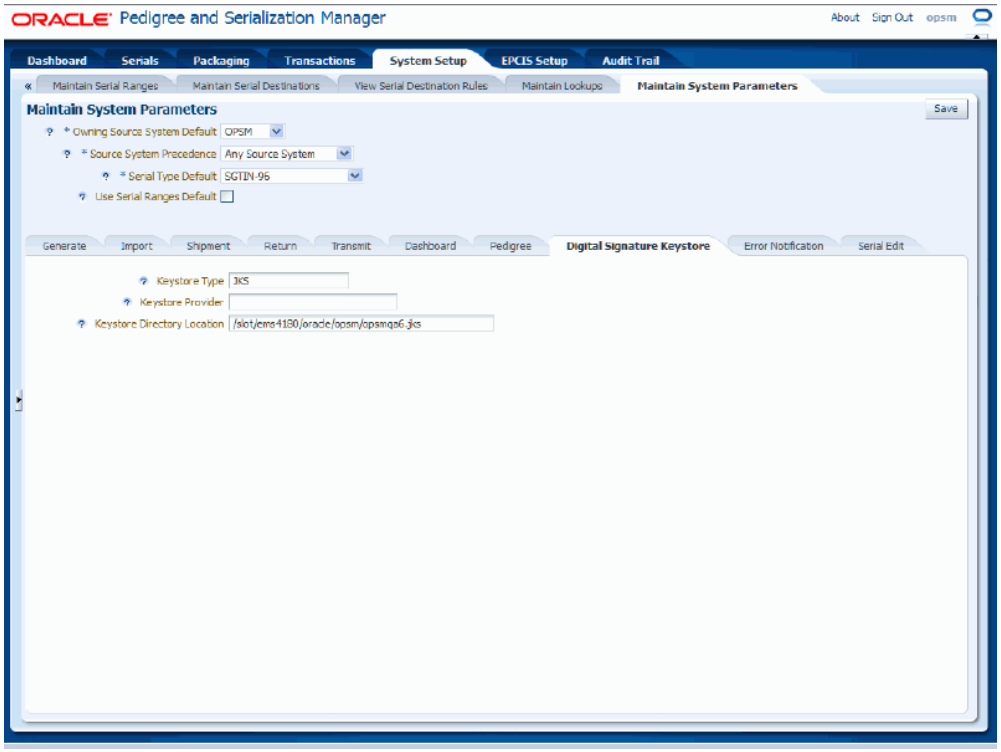


16. Enter the setting for the following parameter:

Field Name	Description
BI Publisher URL	Enter the BI Publisher server URL that will be used to print Pedigrees. Enter a fully qualified URL value (for example, http://hostname:port/xmlpserver).

17. Select the Digital Signature Keystore sub tab.

Maintain System Parameters page - Digital Signature Keystore sub tab



18. Enter the settings for the following parameters:

Field Name	Description
Keystore Type	Enter the type of keystore that will be used for the digital signature of Pedigree documents (for example, JKS, PKCS12, and so on).
Keystore Provider	Enter the package provider of the keystore that will be used for the digital signature of Pedigree documents.

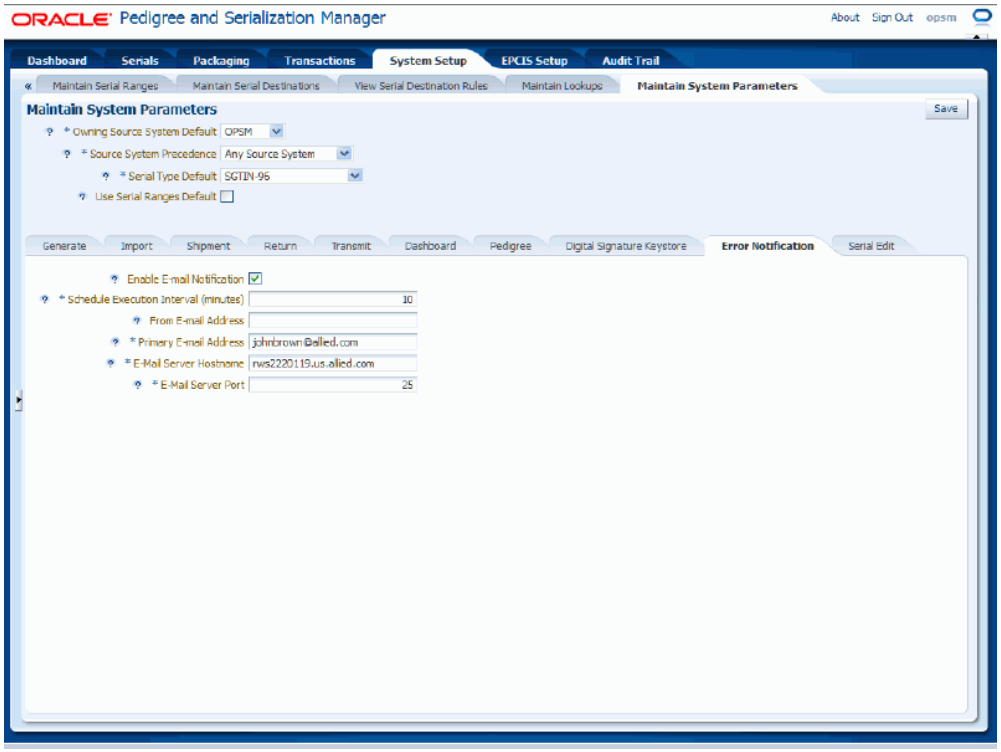
Field Name	Description
Keystore Directory Location	Enter the location of the keystore file including the full path and file name. For example: • Linux: /home/XXXX/pasKeystore/keystorefile.jks • Windows: d:HomepasKeystorekeystorefile.jks This file should be located on the same middle-tier as the WebLogic Server or should be accessible from it.

For more information on digitally signing a Pedigree, see:

- Digitally Signing a Pedigree Using the Maintain Transactions Page, page 11-9
- Digitally Signing a Pedigree Using the Digital Signature Worklist Page, page 11-18

19. Select the Error Notification sub tab.

Maintain System Parameters page - Error Notification sub tab



20. Enter the settings for the following parameters:

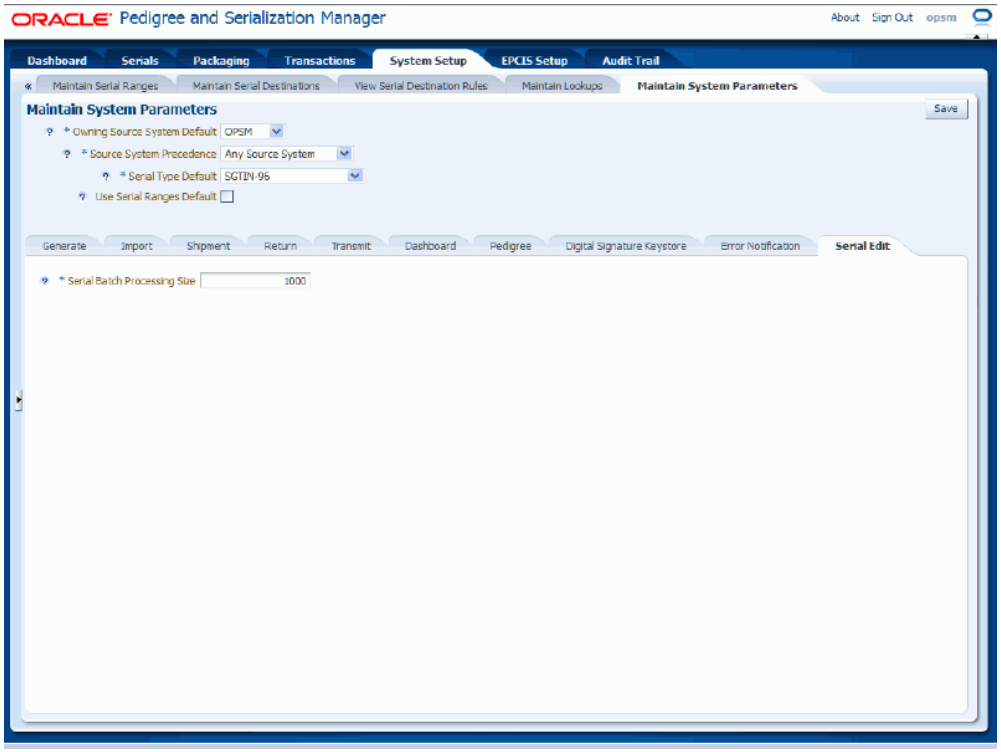
Field Name	Description
Enable E-mail Notification check box	Select this check box if you want the system to send notification e-mails if errors are detected on transactions or transactions that are locked as "In Progress" during the processing of the Transaction Service, Serial Service, and Product Service web services. If this check box is not selected, the system will not send any e-mail notifications of errors. **Note:** The Oracle Scheduler must also be configured on the database for error notifications to occur.

Field Name	Description
Schedule Execution Interval (minutes)	Enter the amount of time in minutes after which the system will check for errors. 60 minutes appears by default. This field is required if you enable e-mail notifications. **Note:** Oracle recommends that you do not set this interval to a very small number as it can effect overhead.
From E-mail Address	(Optional) Enter the e-mail address that will appear in the From line of the e-mail notification. If this information is not specified, the "To" e-mail address will appear by default in the notification.
Primary E-mail Address	Enter the primary e-mail address where messages will be sent if e-mail notifications are enabled. This e-mail address can be a distribution list. This field is required if you enable e-mail notifications.
E-mail Server Hostname	Enter the hostname of the e-mail server from which notifications will be sent. This field is required if you enable e-mail notifications.
E-mail Server Port	Enter the port of the e-mail server from which notifications will be sent. This field is required if you enable e-mail notifications.

For more information on the error notification process, see Web Services E-Mail Notification, page 14-143.

21. Select the Serial Edit sub tab.

Maintain System Parameters page - Serial Edit sub tab



22. Select the setting for the following parameter:

Field Name	Description
Serial Batch Processing Size	When processing Reserve, Commission, Decommission, or Edit Serials transactions using the SerialsServiceAMService web service, enter the number of serials that will be processed by the system as a batch. Processing the serials in batches is a mechanism used to improve performance and scalability. All operations within the SerialsServiceAMService web service use this parameter. 1000 appears by default for this field.

23. Click the Save button.

To Modify System Parameters:

1. Navigate to the Maintain System Parameters page, page A-2.
2. Modify any of the parameters settings.
3. Click the Save button.

Maintaining Locations

Use the Location pages in Oracle Pedigree and Serialization Manager (OPSM) to define and maintain locations associated with the management of serial numbers. You must define location information in the OPSM system. You can define a location for a company, a facility, a branch or plant, a production line, or a physical location where products are shipped or returned.

Transactional systems integrating to the OPSM system will need to identify the location when requesting serials or recording transactions against the serials. The location identifies the entity that has performed the transaction and defines the controls the system enforces on that entity.

Location setup provides the following:

- Identification of the location:
    - Location Description
    - Location Type
    - Electronic Product Code (EPC) Company Prefix
    - Global Location Number (GLN)
    - Source System
    - Longitude and Latitude
    - External Reference Identifier
    - Digital signature required indicator
- Licensing information:
    - State License Number
    - DEA Number
    - Licensing Agency

    - License State/Region

- Deactivation of the Location:
    - Location Deactivation Date

    If a location has been deactivated, the system will not generate new serials for the location. Previously generated serials for the location (when it was active) will be transacted as normal.

- Location contacts information:
    - Contact Name
    - Contact Title
    - Contact Email
    - Contact Telephone
    - Contact URL
    - Contact User Id
    - Primary contact indicator
    - Receive error notifications indicator

    The Pedigree, Digital Signature, and Error Notification functionality in OPSM use location contacts:

    - Contact User ID on the location contact should be the user ID that will be entered when the user is prompted for digital signature validation (it should be the user that is authorized to sign pedigrees).
    - Contact User ID is optional for contacts that will not be signing pedigrees.
    - Contact marked as the primary contact is the contact that will display and print on the Pedigree document.
    - Contact marked as the one to receive error notifications is the contact that will receive e-mail notifications if errors are detected on transactions, serial status updates, or transactions that are locked "In Progress" pertaining to this location during the Transaction Service and Serial Service web services processing.

      E-mail notifications are only sent if you have enabled e-mail notification on the Maintain System Parameters page - Error Notification sub tab.

- Location Group information:

    - Location Group
    - Location Group Description

    Defines the location groups associated with the location. You can use location groups to define a single serial range for multiple locations.

- Controls the logic used for the creation and transmission of serials:
    - Defines the serial type for non-product specific serial generation.
    - Defines the default label type for shipping containers sent in on new transactions.

- Controls warnings for available serials for the location.
    - Defines critical and at risk serial thresholds.

Locations are also used in the definition of products, lots, serial ranges, and serial destinations in these ways:

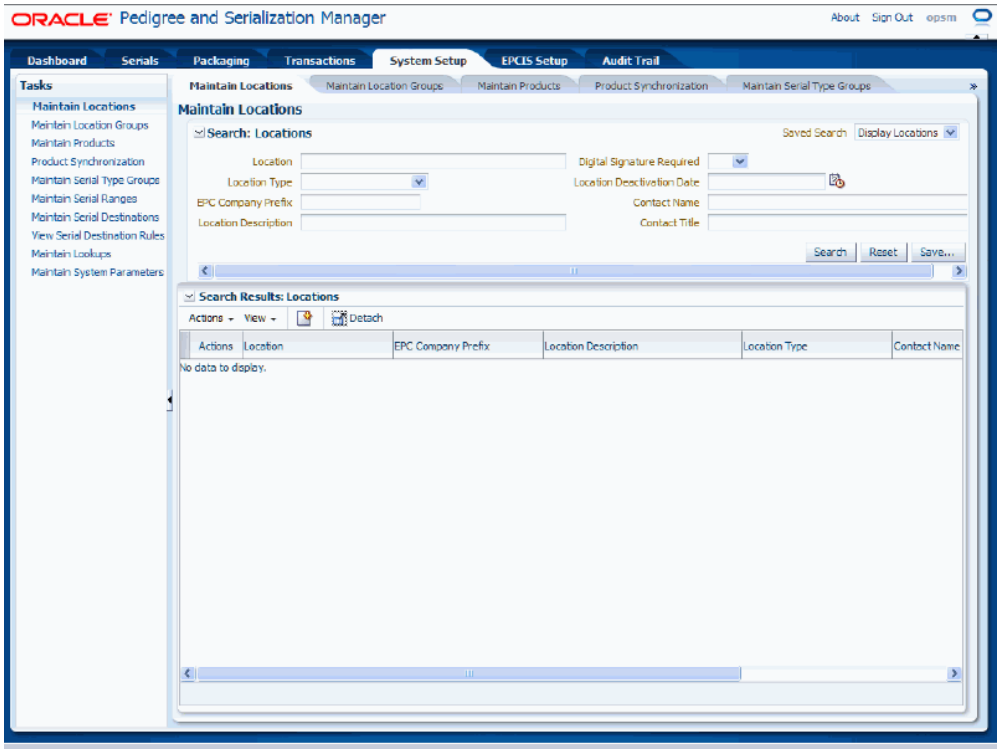
- Product Definition: Control attributes can be overridden specific to the Product and Location.
- Lot Definition: Location is included in the identification of the lot to support the creation of duplicate lot records.
- Serial Ranges: Ranges can be defined by two levels of granularity:
    - Serial Type Group and Location
    - Serial Type Group and Location Group
    - Serial Type Group, Location, and Product Unit Identifier
    - Serial Type Group, Location Group, and Product Unit Identifier
- Serial Destinations: Serial destinations can be defined at three levels of granularity:
    - Transaction Type
    - Transaction Type and Location
    - Transaction Type, Location, and Product

Use these procedures to search for, view, create, edit, deactivate, and delete locations:

To Search for Locations:

1. Navigate to the Maintain Locations page, page A-2.

Maintain Locations page



2. In the Search: Locations region, enter the search criteria for the locations using one or more of these fields:

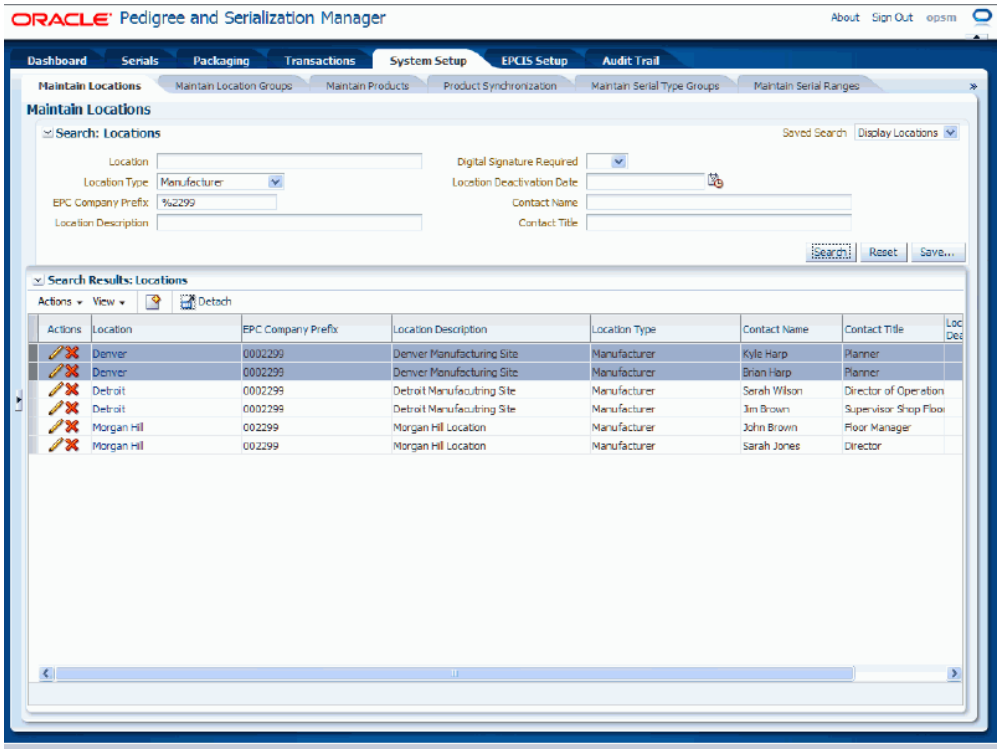
Field Name	Description
Location	(Optional) Enter the location.
Location Type	(Optional) Select the location type. Location Types are user-defined using Lookup Type PAS_LOCATION_TYPE.
EPC Company Prefix	(Optional) Enter the Electronic Product Code (EPC) company prefix.
Location Description	(Optional) Enter the description for the location.

Field Name	Description
Digital Signature Required	(Optional) Select whether you want to view locations where a digital signature is required for the Pedigrees. Values are: • Off • On • Blank
Location Deactivation Date	(Optional) Select the date the location was inactivated.
Contact Name	(Optional) Enter the contact name.
Contact Title	(Optional) Enter the contacts title.

Otherwise, you can click the Search button without entering any search criteria and all available locations will appear.

3. Click the Search button.

Maintain Locations page



All of the locations that match the search criteria appear in the Search Results: Locations region in a table format.

To View Location Detail Information:

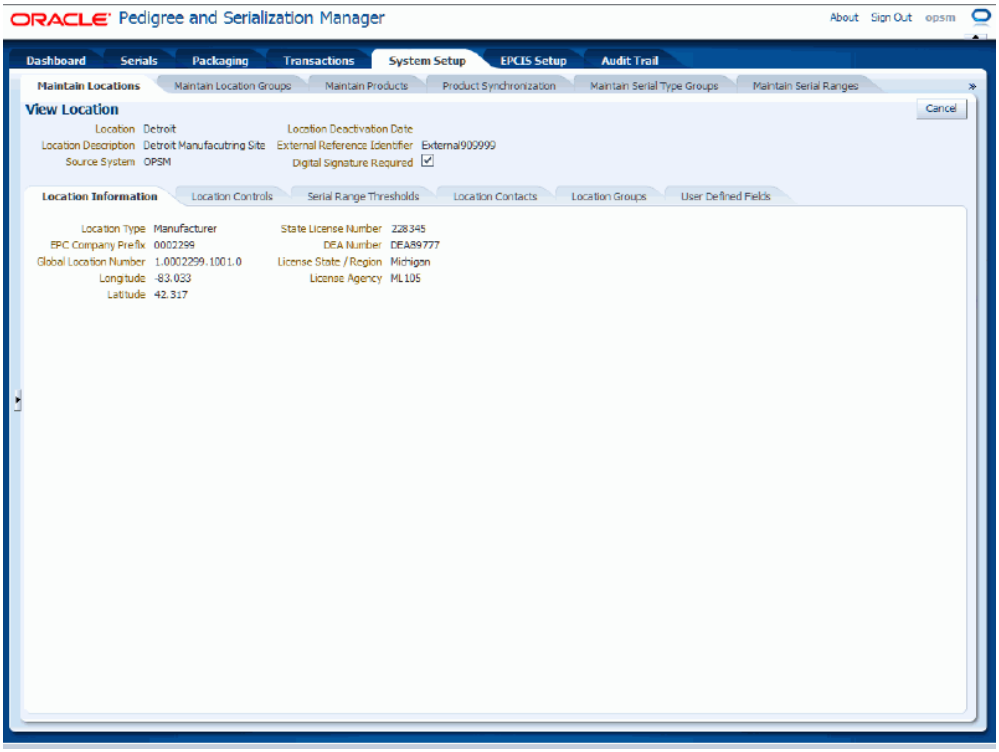
1. Navigate to the Maintain Locations page, page A-2.

2. Enter search criteria for the locations you want to view and click the Search button.

   All of the locations that match the search criteria appear in the Search Results: Locations table.

3. Click the Location link in the table that you want to view.

View Location page



The View Location page appears.

4. Select the different sub tabs (Location Information, Location Controls, Serial Range Thresholds, Location Contacts, Location Groups, and User Defined Fields) to view that particular type of information for the location

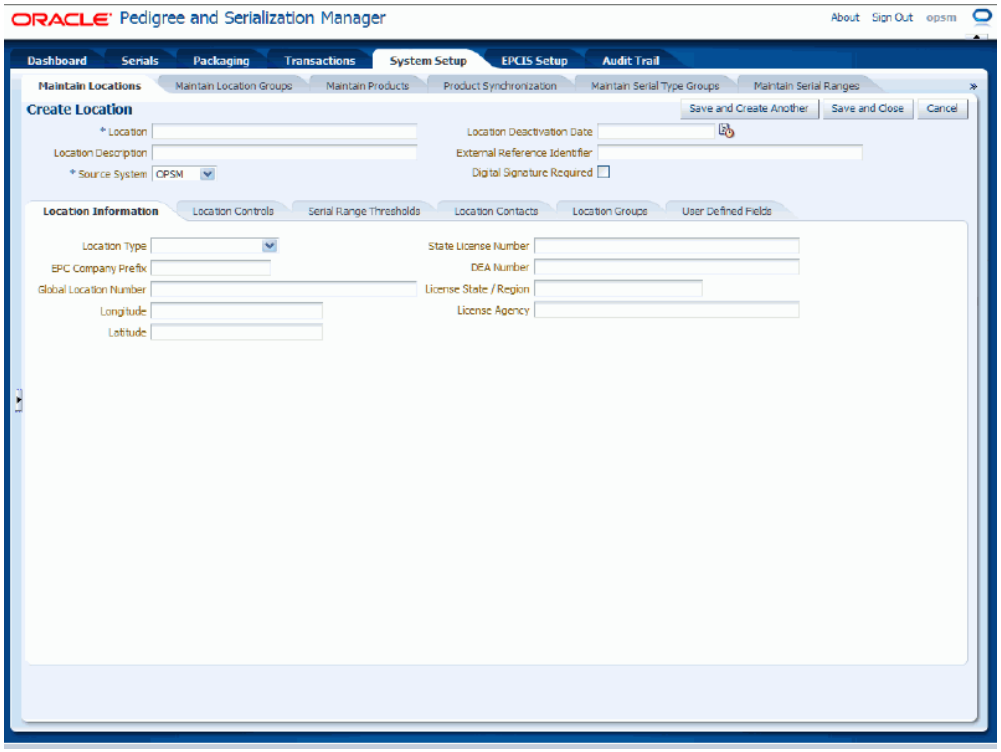
5. Click the Cancel button to return back to the Maintain Locations page.

To Create Locations:

1. Navigate to the Maintain Locations page, page A-2.

2. Select Create from the Actions menu or click the Create icon located at the top of the Search Results: Locations region.

Create Location page



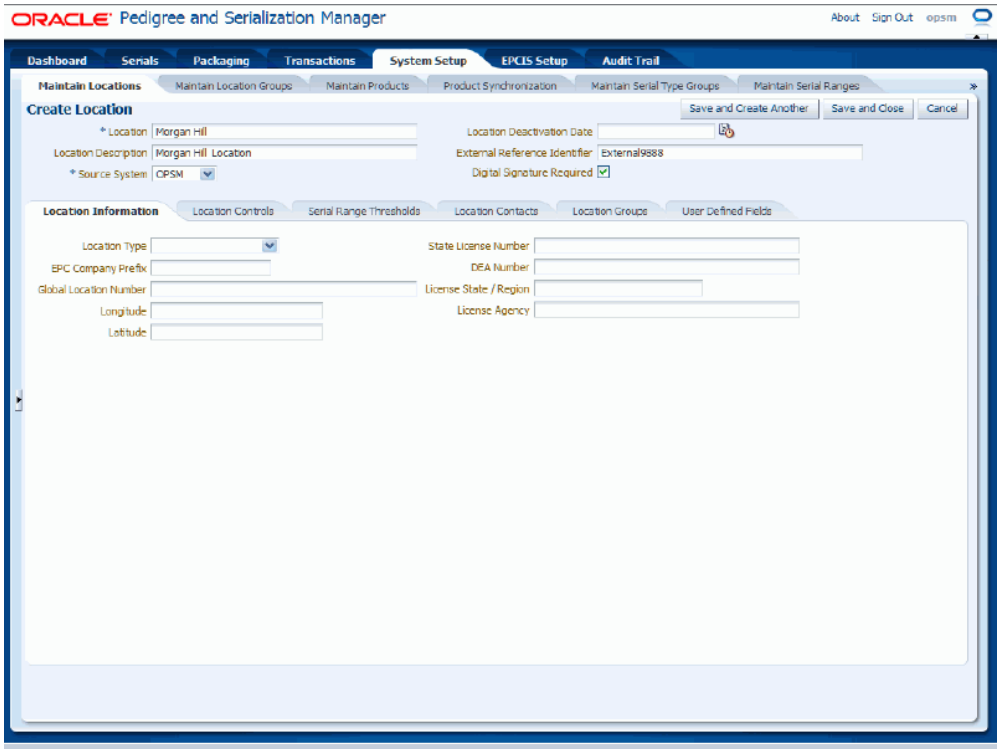
The Create Location page appears.

3. Enter the following information:

Field Name	Description
Location	Enter the location.
Location Description	(Optional) Enter the description for the location.
Source System	Select the Source System that this location is associated with. Source systems are user-defined using PAS_SOURCE_SYSTEM Lookup Type.

Field Name	Description
Location Deactivation Date	(Optional) Enter the date the location will be deactivated. If a location has been deactivated, the system will not generate new serials for the location. Previously generated serials for the location (when it was active) will be transacted as normal.
External Reference Identifier	(Optional) Enter an external reference identifier for the location. The external reference identifier is used to identify the entity from the external system that is identified as a location in OPSM. If using the page interface between Oracle E-Business Suite and OPSM, the External Reference Identifier is required.
Digital Signature Required check box	(Optional) Select this check box to indicate that a digital signature is required for Pedigrees at this location.

Create Location page



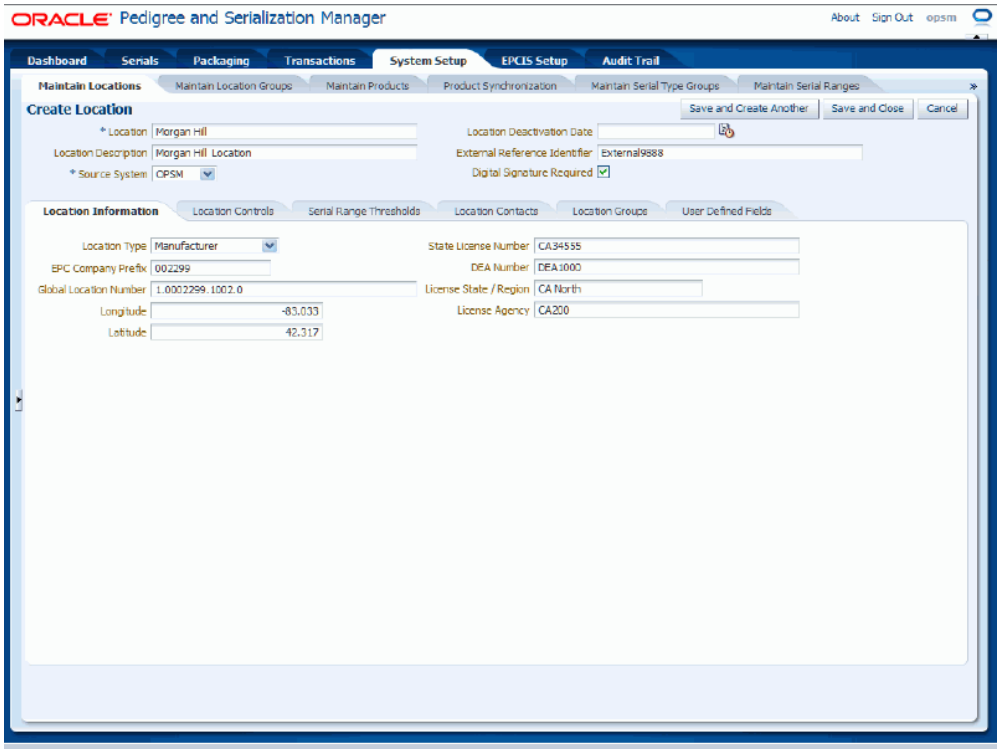
4. Select the Location Information sub tab.

5. Enter the following information:

Field Name	Description
Location Type	(Optional) Select the type of location. Use the type to clarify what this location is used for. Location Types are user-defined using Lookup Type PAS_LOCATION_TYPE.

Field Name	Description
EPC Company Prefix	(Optional) Enter the Electronic Product Code (EPC) Company Prefix for the location. The EPC Company Prefix must be between 6-12 characters in length and contain numeric values. The EPC Company Prefix is required for creation of SGTIN serial types in OPSM.
Global Location Number	(Optional) Enter either the Global Location Number (GLN) or the Serialized Global Location Number (SGLN) for the location.
Longitude	(Optional) Enter the longitude for the location. Entering longitude and latitude information will display the location on the Location Map located within the Operations Dashboard.
Latitude	(Optional) Enter the latitude for the location. Entering longitude and latitude information will display the location on the Location Map located within the Operations Dashboard.
State License Number	(Optional) Enter the State License Number for the location.
DEA Number	(Optional) Enter the Drug Enforcement Agency (DEA) Number for the location.
License State/Region	(Optional) Enter the state or region that the license is associated with. Pedigree uses this information.
License Agency	(Optional) Enter the agency that issued the license. Pedigree uses this information.

Create Location page - Location Information sub tab



6. Select the Location Controls sub tab.

7. Select one of the serial creation check boxes for this location:

   - Select the Require Product for Generation check box if this location requires product identification on non-product specific serial types when serials are generated or imported for this location.

     This check box appears selected by default.

   - Select the Non-Product Specific Serial Type the system will use when generating or importing serials for this location.

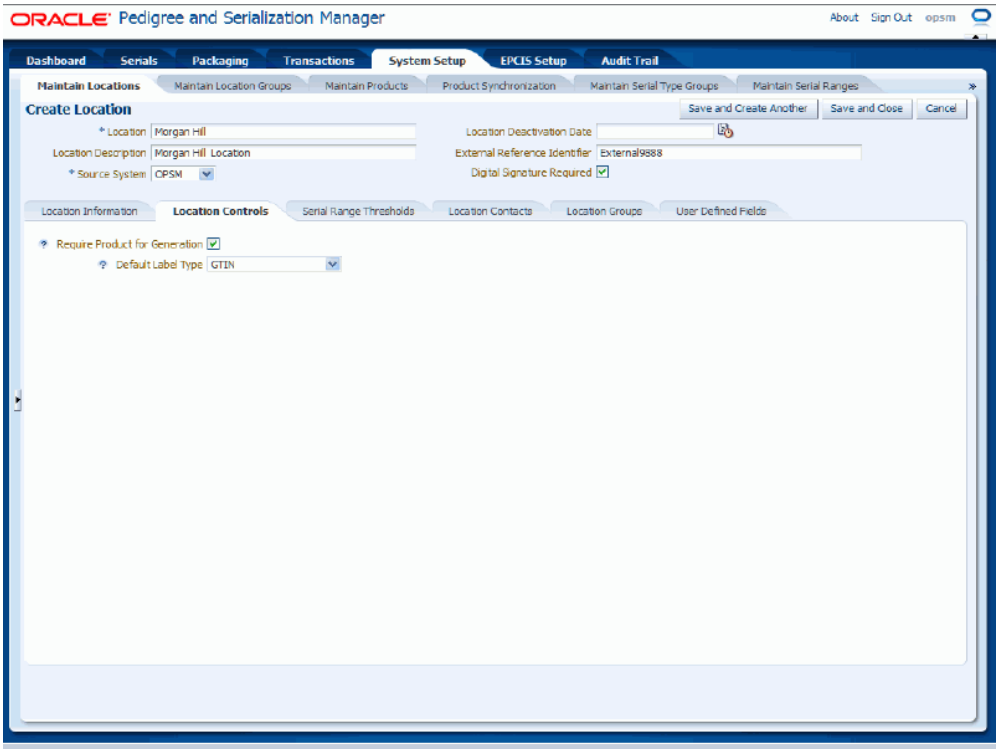
     Note: The Non-Product Specific Serial Type field will not appear until you clear the Require Product for Generation check box.

8. Select the Default Label Type for the location.

   The system uses this label type when a label type is not provided during the creation of label records for new transactions. The use of this default only occurs for labels that represent the shipping containers on the transactions. The system will

utilize the location provided on the transaction to retrieve this Default Label Type value.

Create Location page - Location Controls sub tab



9. Select the Serial Range Thresholds sub tab.

10. (Optional) Enter the Serial Range Critical Threshold value for the location. Zero appears by default.

    This is the default critical threshold value for this location's serial ranges. This value will appear by default on the serial range when a new range is created.

    If the remaining serials within a range are less than the Critical Threshold on the serial range, the range is included in the *Critical* count in the Serial Range Management component of the Operations Dashboard.

    For information on the Serial Range Management component, see Using the Serial Range Management Component, page 12-17.

11. (Optional) Enter the Serial Range At Risk Threshold value for the location. Zero appears by default.

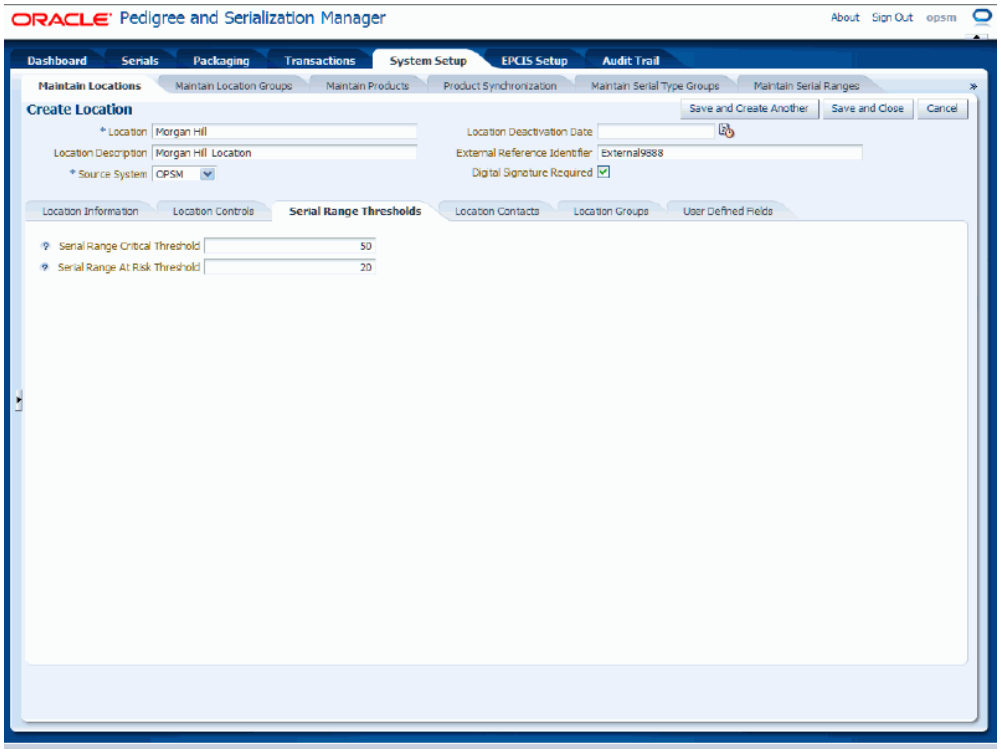
    This is the default at risk threshold value for this location's serial ranges. This value will appear by default on the serial range when a new serial range is created.

    If the remaining serials within a range are less than the At Risk Threshold and

greater than or equal to the critical threshold value, the range is included in the *At Risk* count in the Serial Range Management component of the Operations Dashboard.

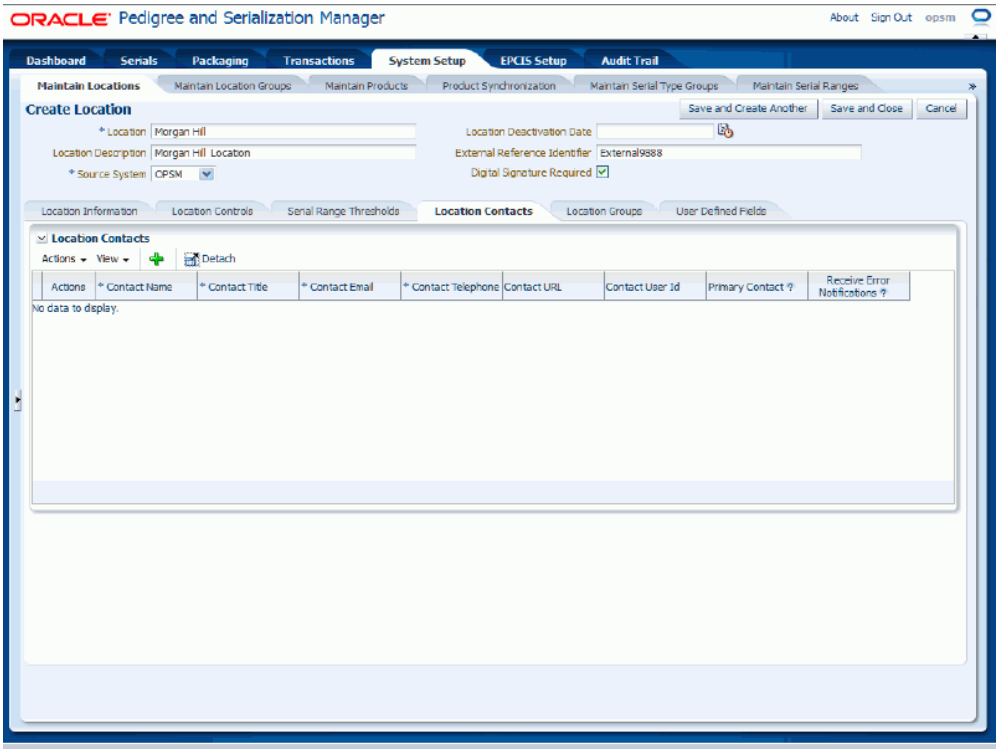
For information on the Serial Range Management component, see Using the Serial Range Management Component, page 12-17.

Create Location page - Serial Range Thresholds sub tab



12. Select the Location Contacts sub tab.

Create Location page - Location Contacts sub tab

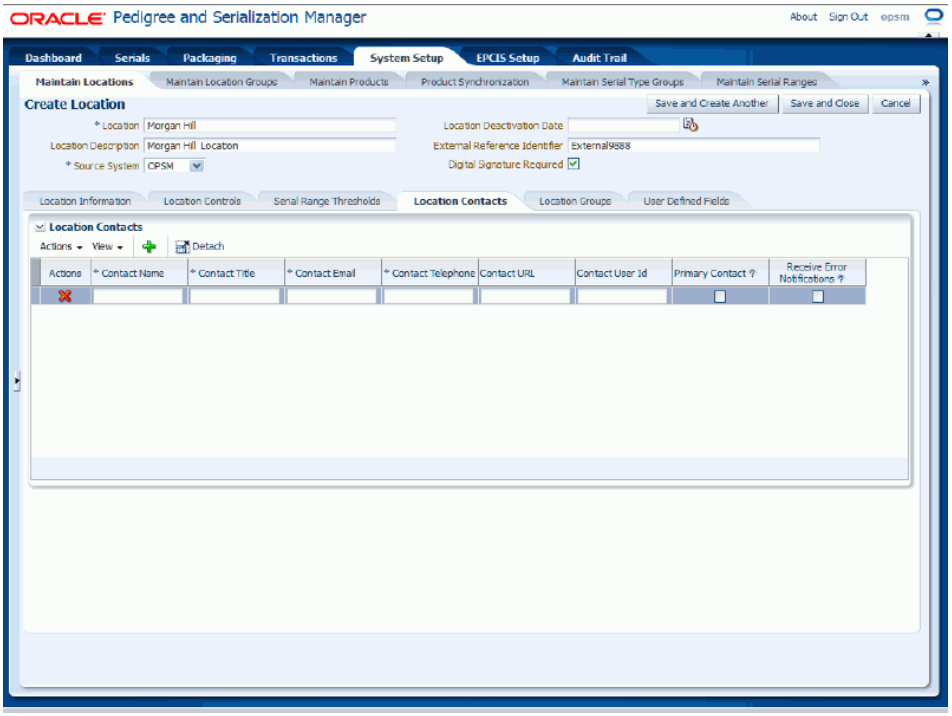


13. Maintain Location Contacts:

To Create Location Contacts

1. Select Create Location Contact from the Actions menu or click the Create icon located at the top of the Location Contacts table.

Create Location page - Location Contacts sub tab



A new row appears in the location contacts table.

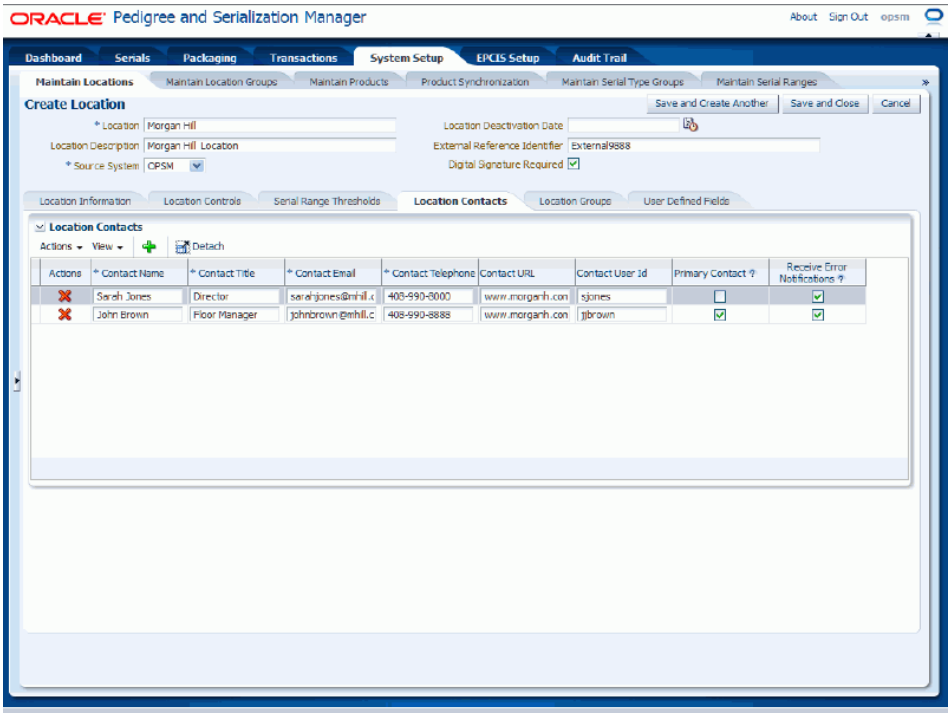
2. Enter the following information:

Field Name	Description
Contact Name	Enter the name for the location contact.
Contact Title	Enter the title for the location contact.
Contact Email	Enter the e-mail address for the location contact.
Contact Telephone	Enter the telephone number for the location contact.
Contact URL	(Optional) Enter the URL for the location contact.

Field Name	Description
Contact User Id	(Optional) Enter the contact user Id for the location contact. This user ID should be the same as the alias for the digital signature certificate that you defined. **Note:** Existing users that are upgrading to OPSM Release 1.2 need to add a valid contact user ID to every location contact that will be digitally signing pedigrees. This information should be entered before they actually digitally sign a pedigree document. Otherwise, they will receive an error message and will not be able to digitally sign a pedigree.
Primary Contact? check box	Select this check box next to the primary location contact for the location. At least one contact must be marked as the primary contact for the location. The contact marked as primary will be the one to display and print on the Pedigree document.
Receive Error Notifications? check box	Select this check box if the system will send notification e-mails for this location if errors are detected on transactions, serial status updates, or transactions that are locked "In Progress" during the Transaction Service and Serial Service web services processing. You can select more than one contact to receive error notifications. For more information on web service error notifications, see Web Service E-Mail Notifications, page 14-143.

3. Repeat steps 1-2 until all of the location contacts are defined.

Create Location page - Location Contacts sub tab



To Delete Location Contacts

1. Select the location contact in the table that you want to delete.

2. Select Delete Location Contact in the Actions menu or click the Delete icon in the Actions column of the contacts table.

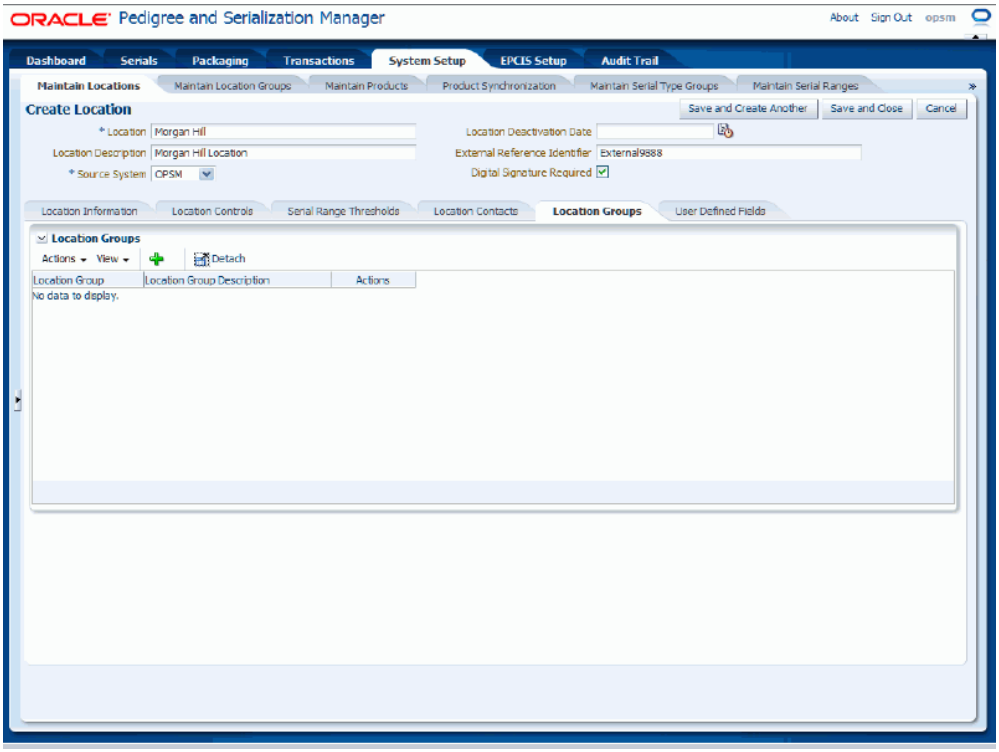
   The system displays a message asking if you are sure you want to delete the location contact.

3. Click the Yes button.

   The location contact is deleted from the system.

14. Select the Location Groups tab.

Create Location page - Location Groups sub tab

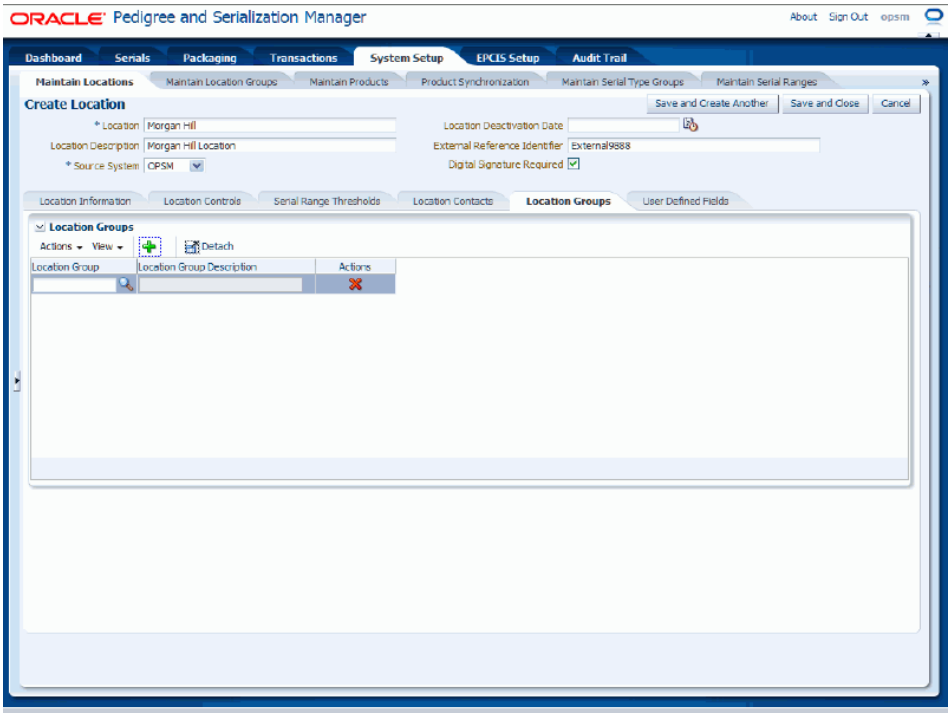


15. Maintain Location Groups:

To Add Location Groups to a Location

1. Select Add Location Group from the Actions menu or click the Add Location Group icon located at the top of the Location Groups table.

Create Location page - Location Groups sub tab



A new row appears in the location groups table.

2. Select a location group in the Location Groups field.

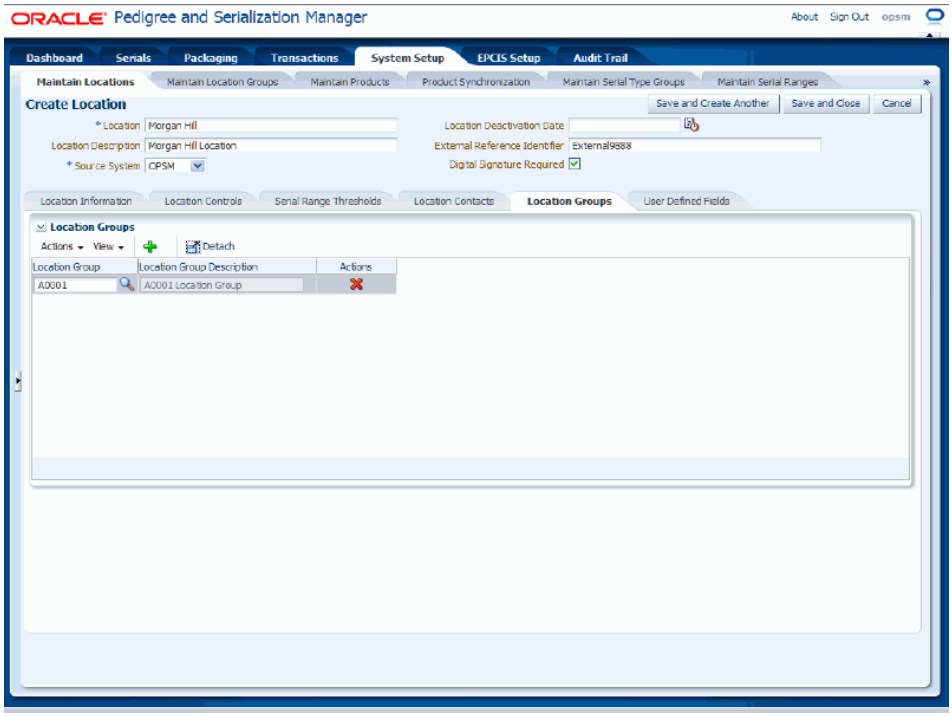
   The Location Group Description field appears after you select a location group.

   Note: Using the Location Groups tab, you are only creating an association between the location and location group.

   Note: Location Groups are defined using the Create Location Group page. For more information on creating location groups, see Maintaining Location Groups, page 4-66.

3. Repeat steps 1-2 until all of the location groups are added.

Create Location page - Location Groups sub tab



To Delete Location Groups from a Location

1. Select the location group in the table that you want to delete.

2. Select Delete Location Group in the Actions menu or click the Delete Location Group icon in the Actions column of the location groups table.

   The system displays a message asking if you are sure you want to delete this location group and location association.

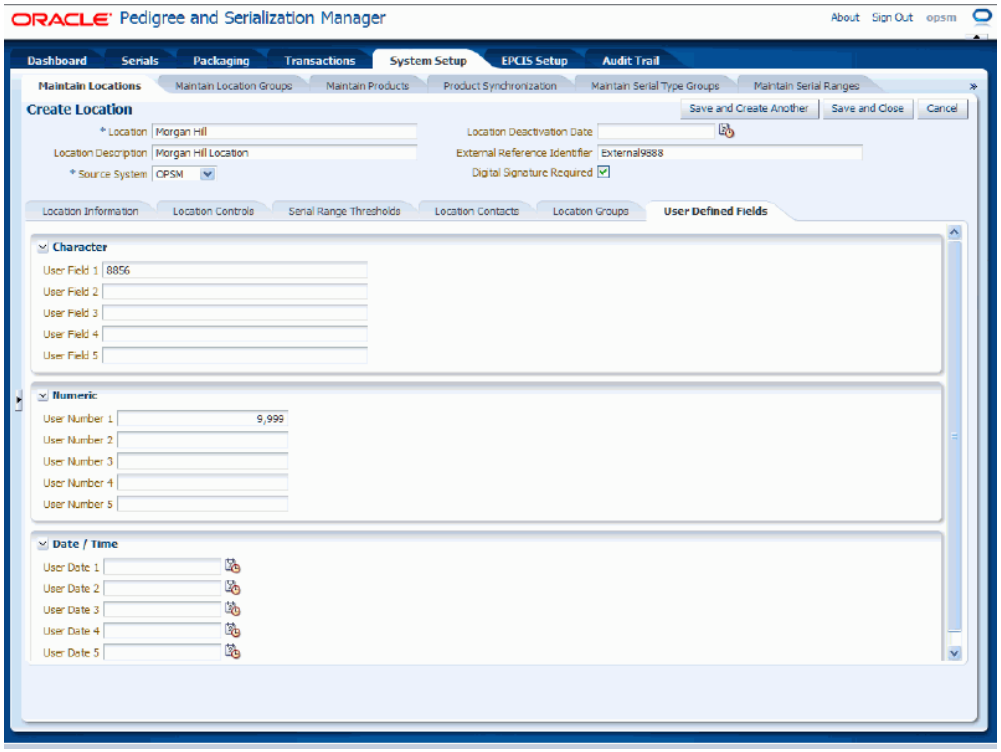
3. Click the Yes button.

   The location group association to the location is deleted from the system. The location group itself is not deleted.

16. Select the User Defined Fields sub tab.

17. Enter user-defined data using any of the fields in the Character, Numeric, and Date/Time regions of the page.

Create Location page - User Defined Fields sub tab



18. Save your work. Choose one of these options:

    - Click the Save and Close button to save this location and return back to the Maintain Locations page.

    - Click Save and Create Another button to save this location and to stay on this page so you can create another location. The system displays a message that the location was saved successfully and it clears all of the values in the fields.

To Edit Locations:

1. Navigate to the Maintain Locations page, page A-2.

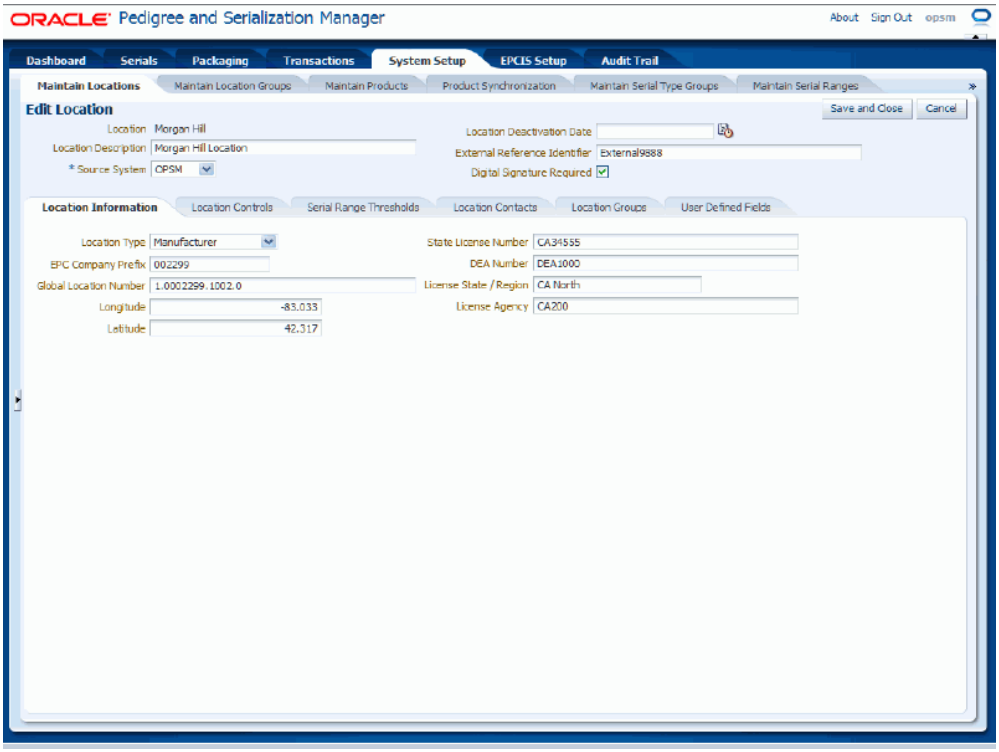
2. Enter search criteria for the locations you want to edit and click the Search button.

   All of the locations that match the search criteria appear in the Search Results: Locations table.

3. Select the location in the table that you want to edit.

4. Select Edit in the Actions menu or click the Edit Location icon associated with the location in the Actions column of the results table.

Edit Location page



The Edit Location page appears displaying all of the existing information for the location.

5. Edit any of the location fields. You can edit any of the fields pertaining to the location.

6. Click the Save and Close button to save the changes you made to the location information and to return back to the Maintain Locations page.

To Deactivate Locations:

1. Navigate to the Maintain Locations page, page A-2.

2. Enter search criteria for the locations you want to deactivate and click the Search button.

   All of the locations that match the search criteria appear in the Search Results: Locations table.

3. Select the location in the table that you want to deactivate.

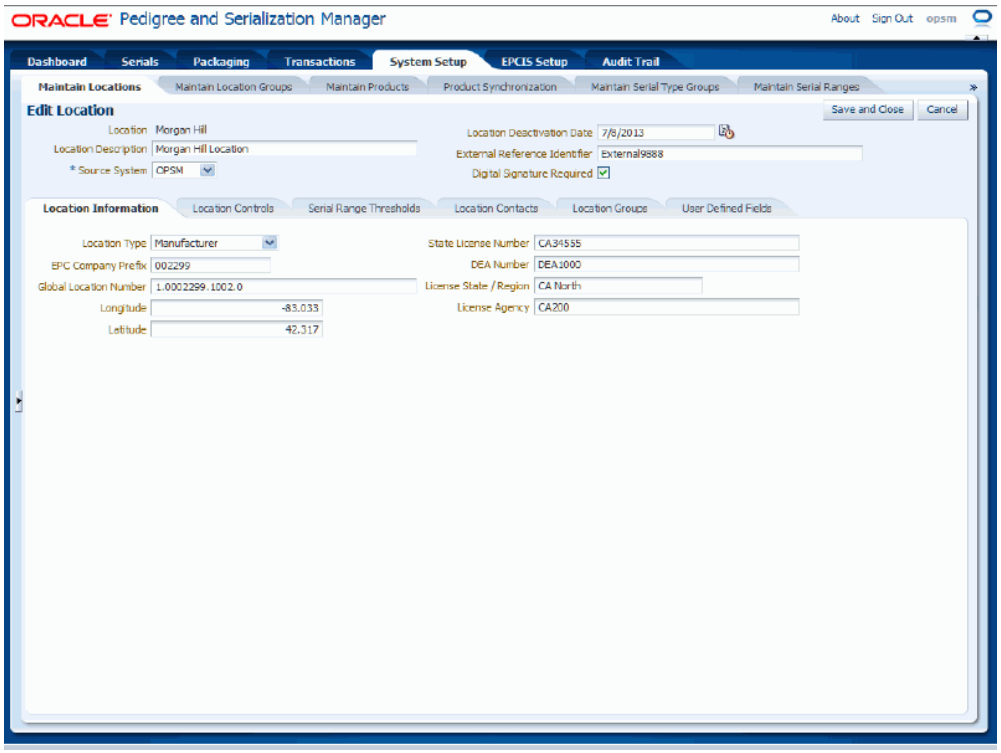
4. Select Edit in the Actions menu or click the Edit Location icon associated with the location in the Actions column of the results table.

The Edit Location page appears displaying all of the existing information for the location.

5. Enter the date the location will become inactive in the Location Deactivation Date field.

   Note: The Deactivation Date must be in the future. It cannot be the current date.

Edit Location page



6. Click the Save and Close button to save the changes you made to the location information and to return back to the Maintain Locations page.

   If a location has been deactivated, the system will not generate new serials for the location and you will not be able to associate deactivated locations to a location group. Previously generated serials for the location (when it was active) will be transacted as normal.

To Delete Locations:

1. Navigate to the Maintain Locations page, page A-2.

2. Enter search criteria for the locations you want to delete and click the Search button.

   All of the locations that match the search criteria appear in the Search Results: Locations table.

3. Select the location in the table that you want to delete.

4. Select Delete in the Actions menu or click the Delete Location icon in the Actions column of the results table.

   The system displays a message asking if you are sure you want to delete the location.

   > **Note:** If you try to delete a location that has associated transactions, serials, or lots the system will issue an error message. Use the Deactivation Date functionality to prevent additional serial creation for the location.

5. Click the Yes button.

   The location is deleted from the system and any location groups associations are also deleted.

Maintaining Location Groups

Use the Maintain Location Groups page in Oracle Pedigree and Serialization Manager (OPSM) to define and maintain location groups. You can associate one or more locations to a location group. Then when you go to define serial number ranges you can define them by location group versus by individual location. A location group enables you to define a single serial range for multiple locations.

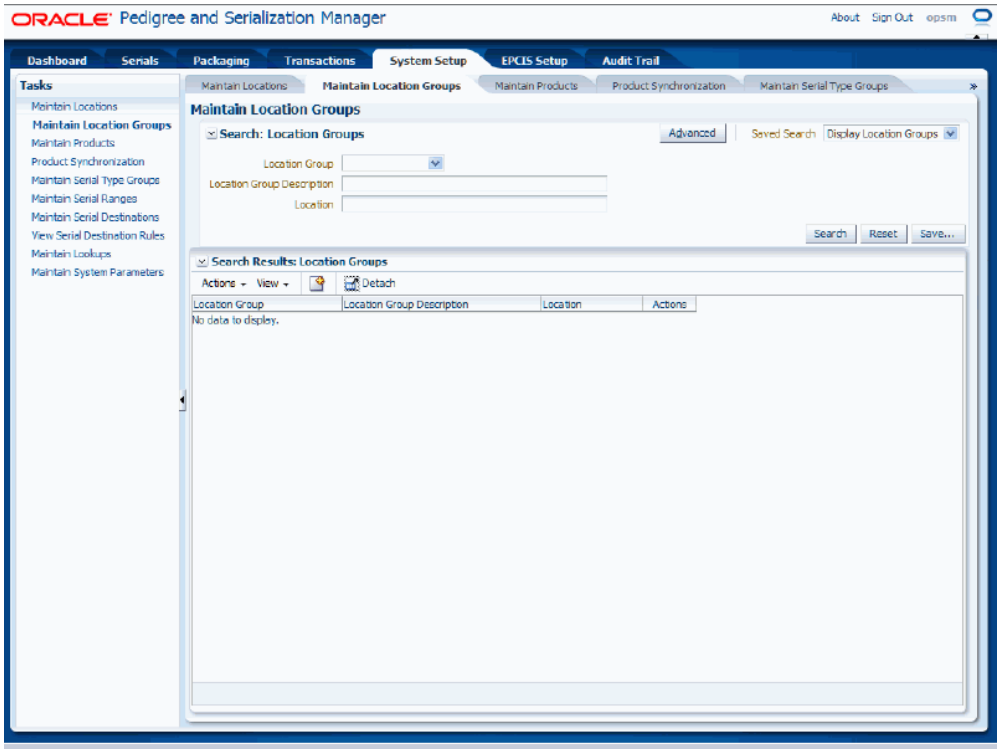
> **Note:** A location can belong to one or more location groups.

Use these procedures to search for, create, edit, and delete location groups:

To Search for Location Groups (Basic Search):

1. Navigate to the Maintain Location Groups page, page A-2.

Maintain Location Groups page (Basic Search)



The Maintain Location Groups page appears.

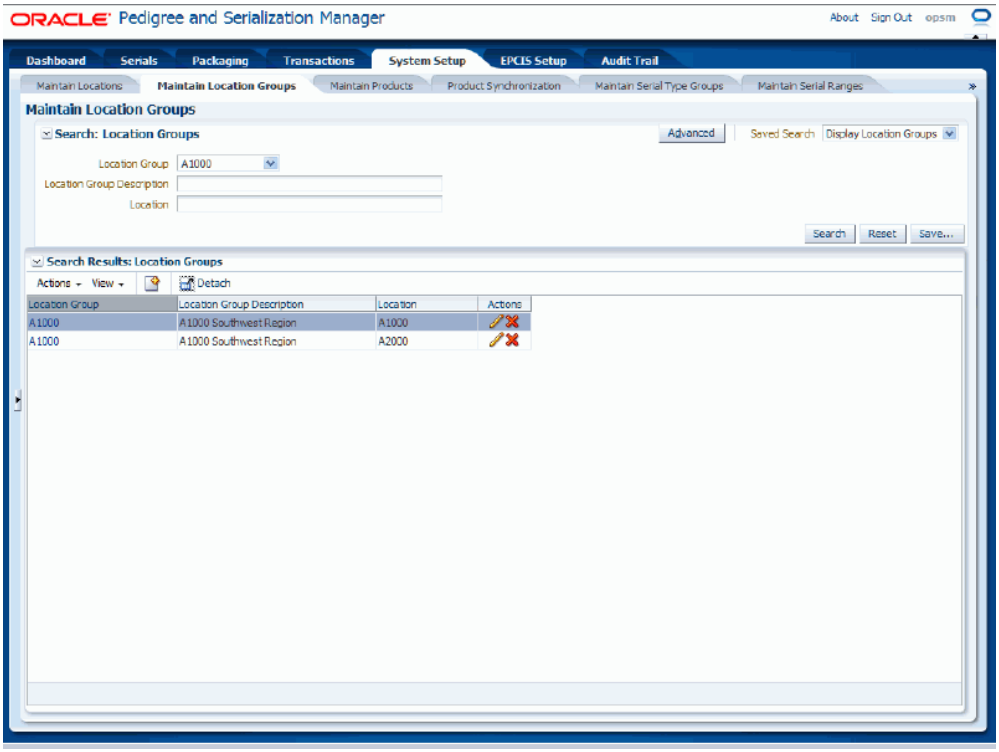
2. In the Search: Location Groups region, enter the search criteria for the location groups using one or more of these fields:

Field Name	Description
Location Group	(Optional) Select the location group.
Location Group Description	(Optional) Enter the description for the location group.
Location	(Optional) Enter a location associated with the location group.

Otherwise, you can click the Search button without entering any search criteria and all available location groups will appear.

3. Click the Search button.

Maintain Location Groups page (Basic Search)



All of the location groups that match the search criteria appear in the Search Results: Location Groups region in a table format.

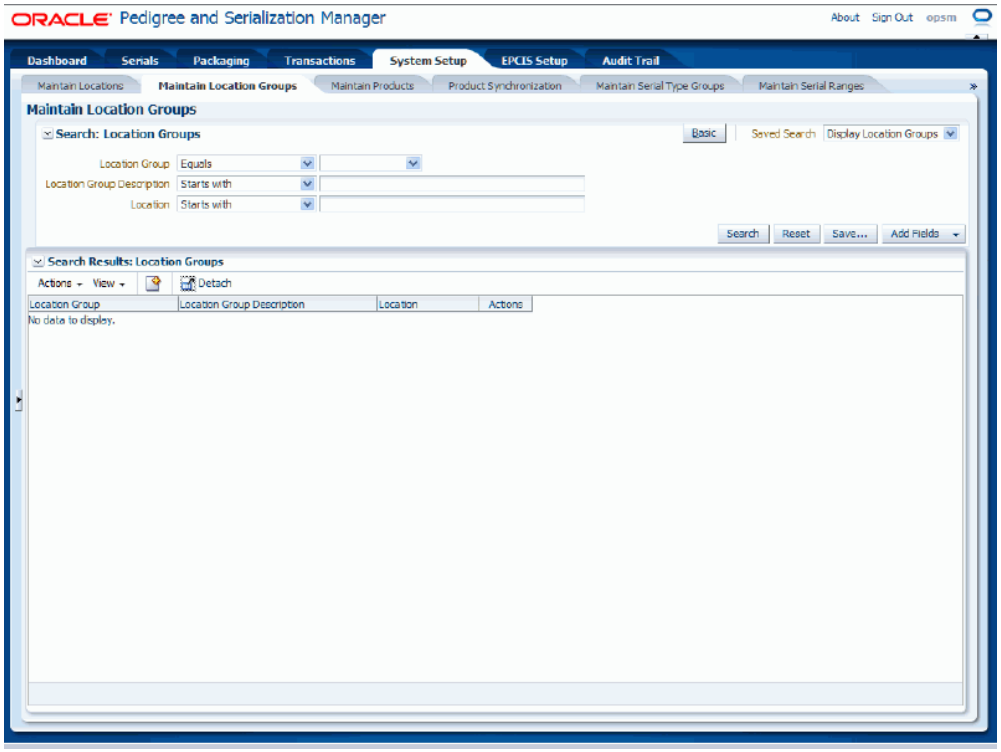
4. Click the Advanced button to perform an advanced search.

To Search for Location Groups (Advanced Search):

1. Navigate to the Maintain Location Groups page, page A-2.

2. Click the Advanced button.

Maintain Location Groups page (Advanced Search)



3. In the Search: Location Groups region, enter the search criteria for the location groups using one or more of these fields:

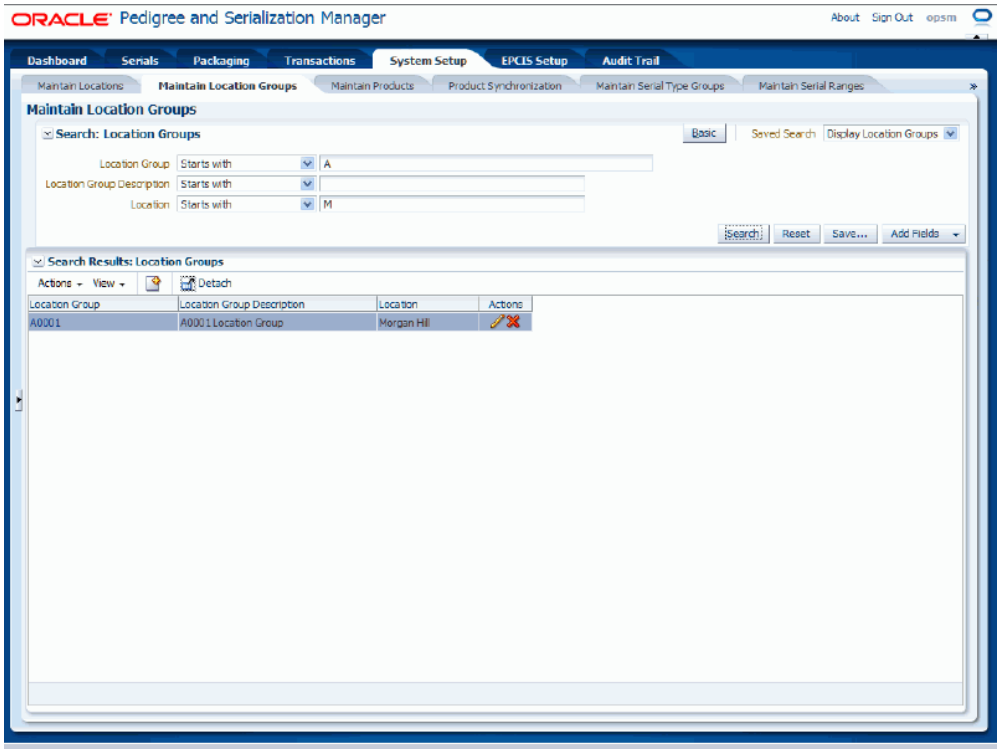
Field Name	Description
Location Group	(Optional) Select the field operator and then select the location group. Operators are: • Starts with • Ends with • Equals • Does not equal • Less than • Greater than • Less than or equal to • Greater than or equal to • Between • Not between • Contains • Does not contain • Is blank • Is not blank
Location Group Description	(Optional) Select the field operator and then enter the description for the location group. The field operators are the same as that for the Location Group field.

Field Name	Description
Location	(Optional) Select the field operator and then enter a location associated with the location group. The field operators are the same as that for the Location Group field.

Otherwise, you can click the Search button without entering any search criteria and all available location groups will appear.

4. Click the Search button.

Maintain Location Groups page (Advanced Search)



All of the location groups that match the search criteria appear in the Search Results: Location Groups region in a table format.

5. Click the Basic button to have the page hide the advanced search criteria fields and re-display the basic search criteria fields.

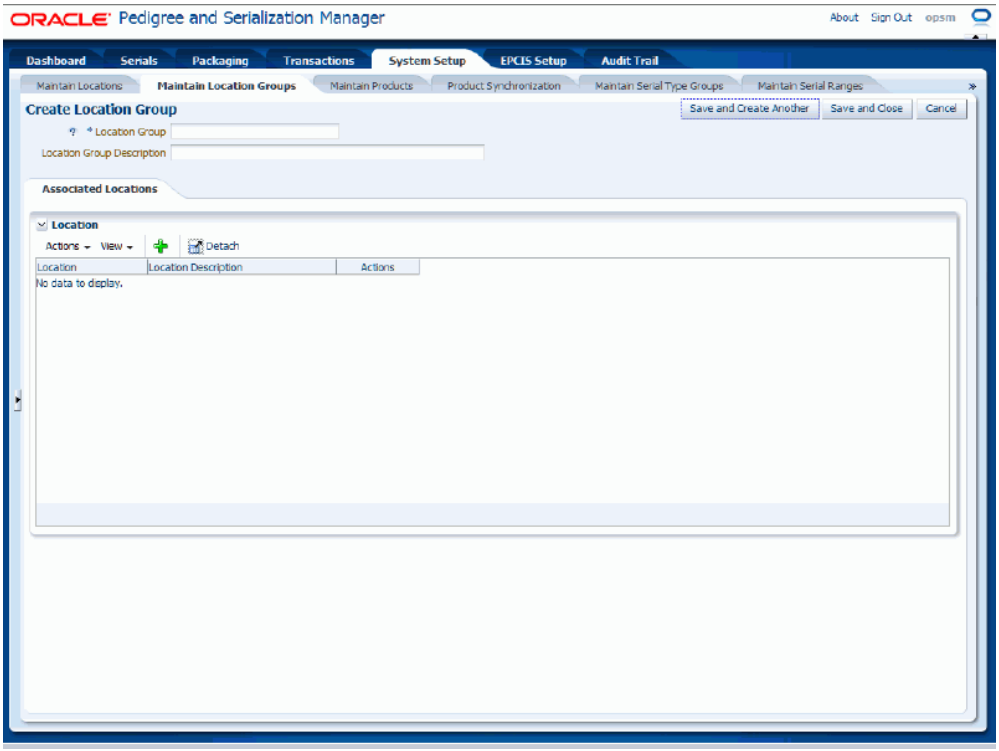
Note: Clicking the Reset button clears the values in all of the criteria fields.

To Create Location Groups:

1. Navigate to the Maintain Location Groups page, page A-2.

2. Select Create from the Actions menu or click the Create Location Group icon located at the top of the Search Results: Location Groups region.

Create Location Group page



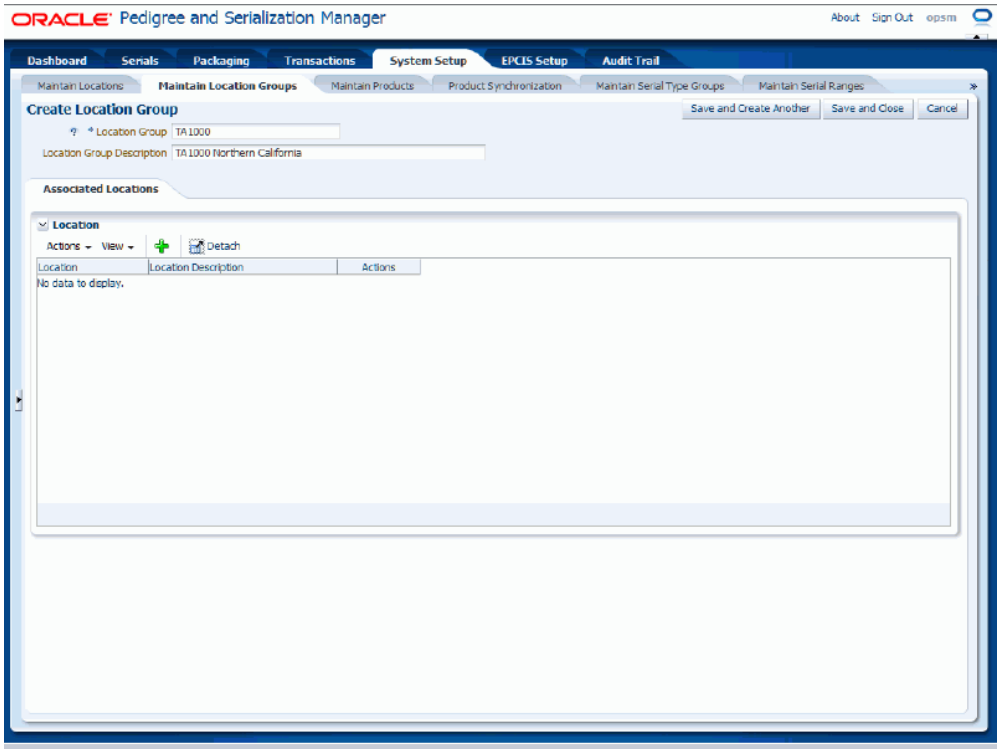
The Create Location Group page appears.

3. Enter the following information:

Field Name	Description
Location Group	Enter the location group.

Field Name	Description
Location Group Description	(Optional) Enter the description for the location group.

Create Location Group page

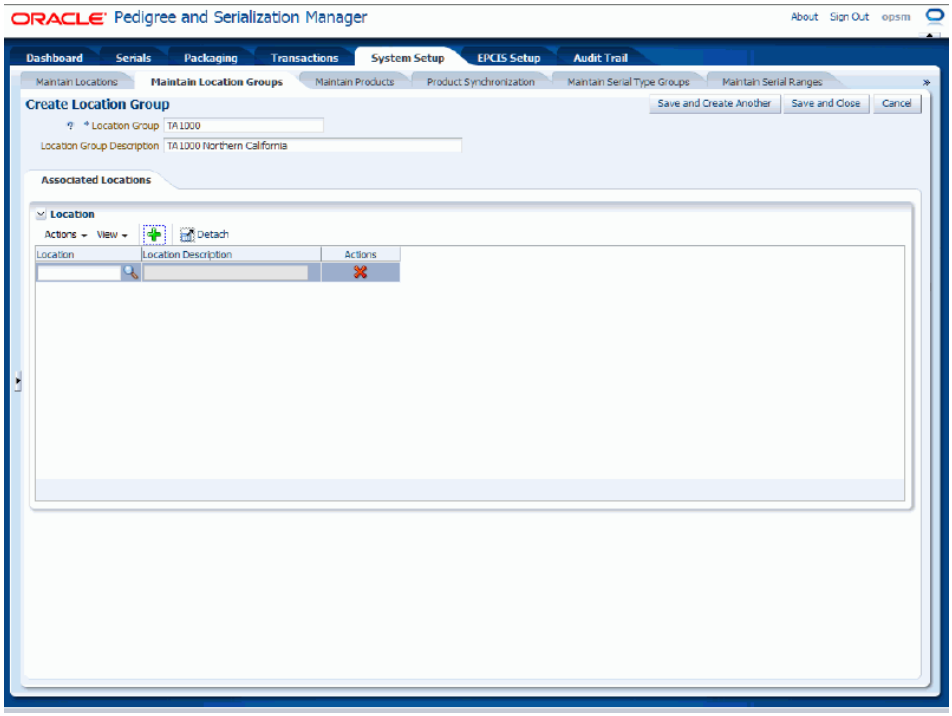


4. Maintain locations for the location group:

To Associate Locations to a Location Group

1. Select Add from the Actions menu or click the Add Location Association icon located at the top of the Locations region.

Create Location Group page



A new row appears in the locations table.

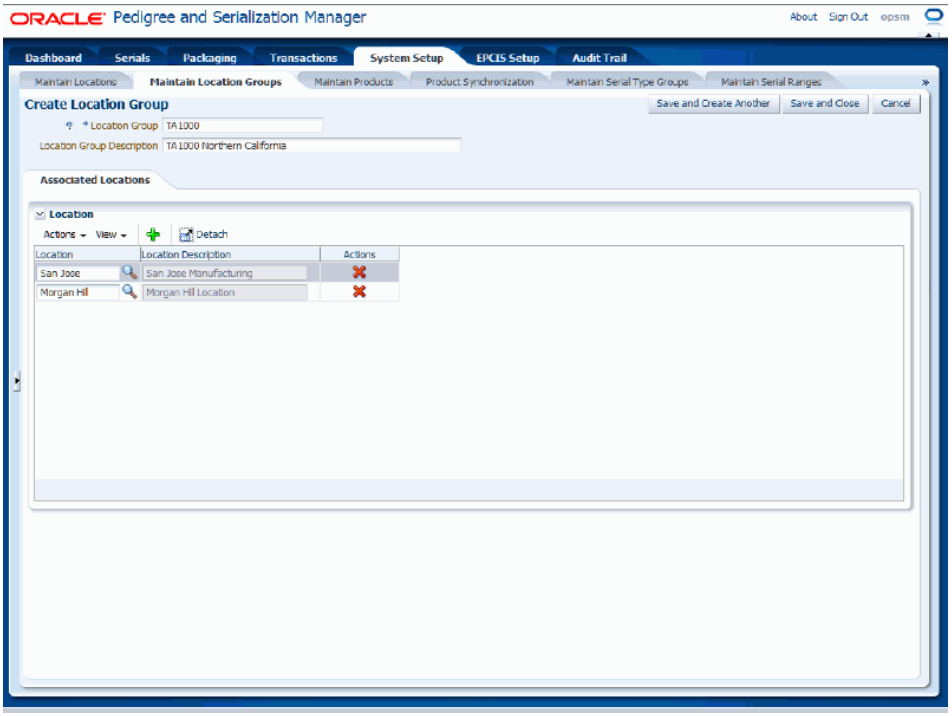
2. Enter the following information:

Field Name	Description
Location	Select a location. Deactivated locations will not appear in the list of available locations.
Location Description	The description of the location will automatically display after you select a location.

3. Repeat steps 1 through 2 until you have added all of the locations you want to the location group.

> **Note:** Only active locations will be available for selection. Any location whose deactivation date is on or prior to the date when you are trying to associate the location will not display.

Create Location Group page



To Delete Locations from a Location Group

1. Select the location in the table that you want to delete.

2. Select Delete from the Actions menu or click the Delete Location Association icon in the Actions column of the locations table.

   The location is deleted from the location group.

5. Save your work. Choose one of these options:

   - Click the Save and Close button to save this location group and return back to the Maintain Location Groups page.

   - Click Save and Create Another button to save this location group and to stay on this page so you can create another location group. The system displays a message that the location group was saved successfully and it clears all of the values in the fields.

To Edit Location Groups:

1. Navigate to the Maintain Location Groups page, page A-2.

2. Enter search criteria for the location groups you want to edit and click the Search

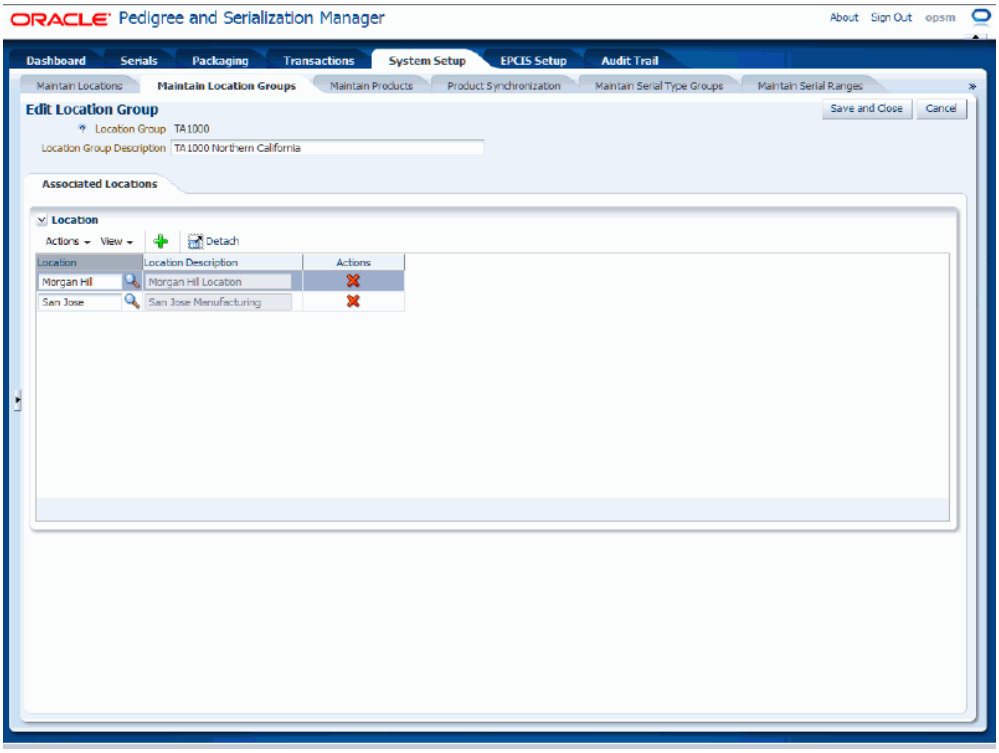
button.

All of the location groups that match the search criteria appear in the Search Results: Location Groups table.

3. Select the location group in the table that you want to edit.

4. Select Edit in the Actions menu or click the Edit Location Group icon associated with the location group in the Actions column of the results table.

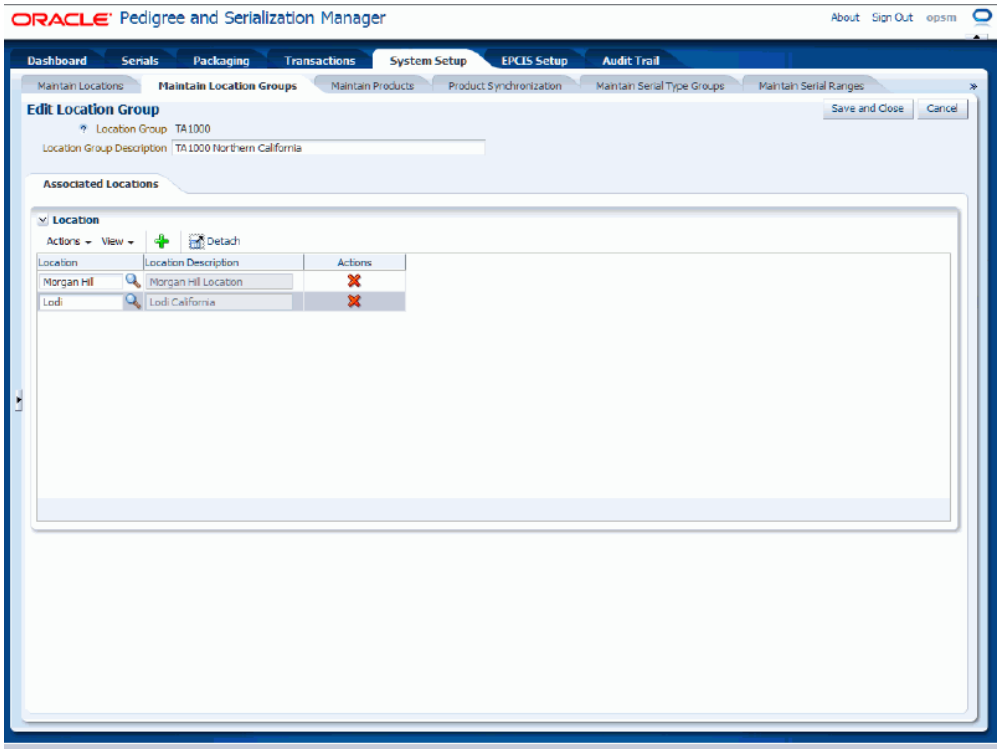
Edit Location Group page



The Edit Location Group page appears displaying all of the existing information for the location group.

5. (Optional) Edit the Location field if necessary.

Edit Location Group page (location field modified)



6. (Optional) Add additional locations or delete locations if necessary.

   Note: Only active locations will be available for selection. Any location whose deactivation date is on or prior to the date when you are trying to associate the location will not display.

7. Click the Save and Close button to save the changes you made to the location group and to return back to the Maintain Location Groups page.

To Delete Location Groups:

1. Navigate to the Maintain Location Groups page, page A-2.

2. Enter search criteria for the location groups you want to delete and click the Search button.

   All of the location groups that match the search criteria appear in the Search Results: Location Groups table.

3. Select the location group in the table that you want to delete.

4. Select Delete in the Actions menu or click the Delete Location Group icon in the Actions column of the results table.

   The system displays a message asking if you are sure you want to delete the location group and all of its associated locations.

   Note: You cannot delete a location group if it has a serial range associated to it.

5. Click the Yes button.

   The location group and all of its associated locations are deleted from the system.

Maintaining Products

Use the Maintain Product pages in Oracle Pedigree and Serialization Manager (OPSM) to maintain product information associated with the management of serial numbers.

To process serials, certain product information must be set up in OPSM. This information will enable OPSM to determine the standards to use when generating the serial number. Product information contains:

- General information about the product.
- Regulatory information for the product.
- Product details for the product.

  This information will enable OPSM to determine the standards to use when generating serial numbers.

- Item cross-references for the product.

  This information will enable you to set up cross-reference information from your transactional systems to products in OPSM.

- Location overrides for the product.

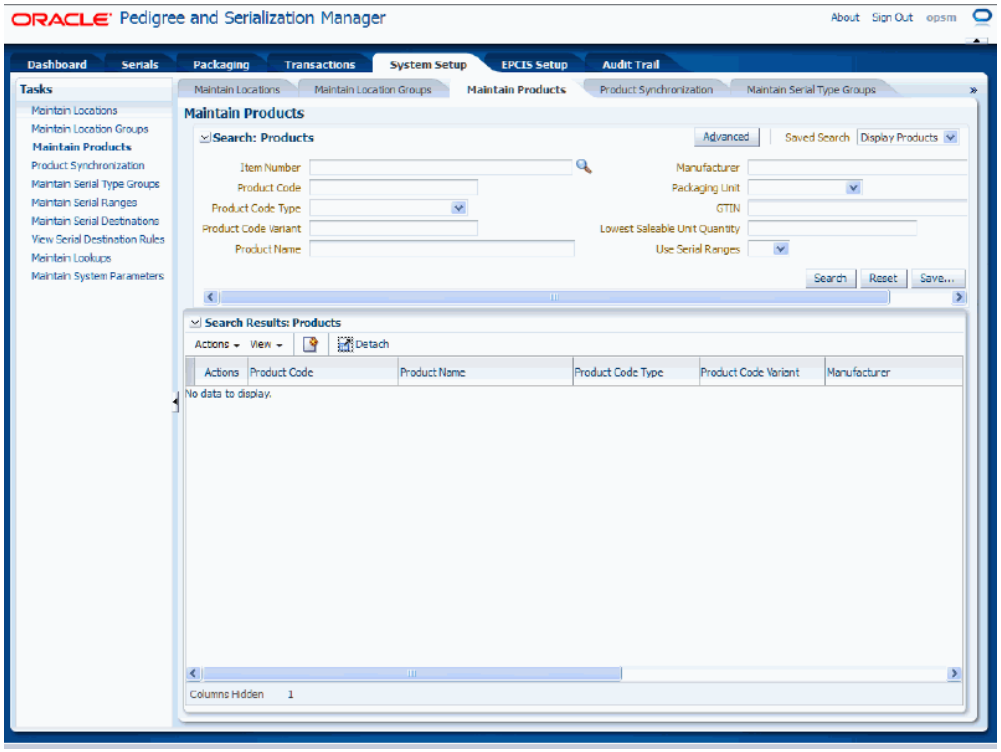
  This information will enable overrides for a specific location. You can specify by location if you want tracking for internal shipments and returns and whether OPSM will create the serial numbers in OPSM when a shipment transaction occurs. You can also override the serialization control for a specific location.

Use these procedures to search for, create, edit, and delete products:

To Search for Products (Basic Search):

1. Navigate to the Maintain Products page, page A-2.

Maintain Products page (Basic Search)



2. In the Search: Products region, enter the search criteria for the products using one or more of these fields:

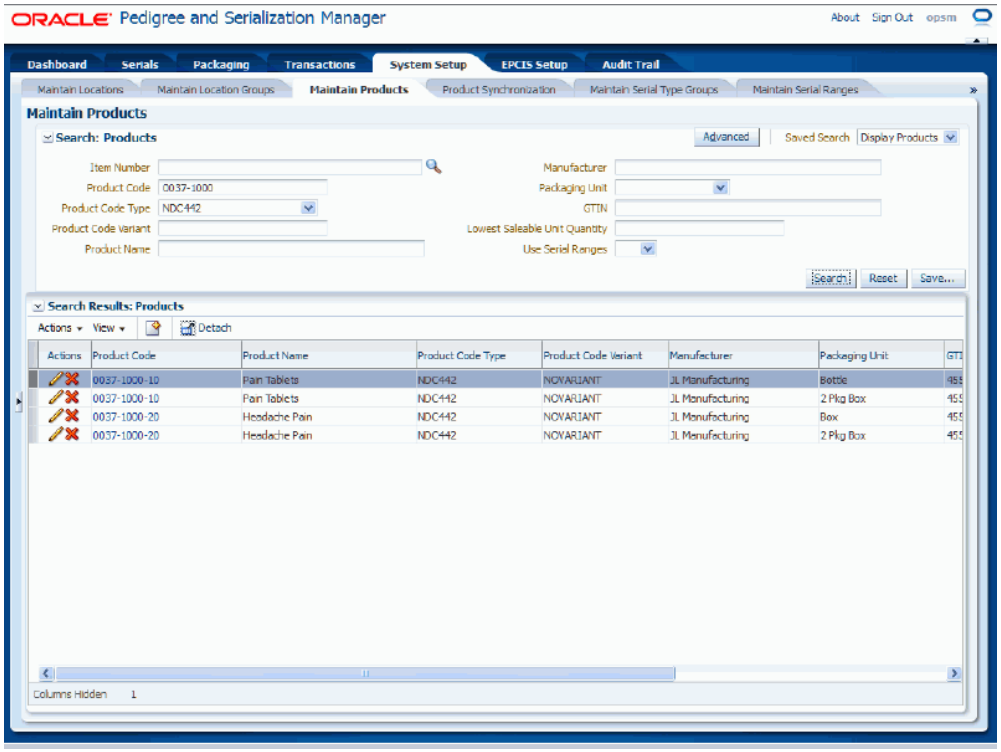
Field Name	Description
Item Number	(Optional) Select the item number for the product code. This is the transactional systems item number. It is used to find the Product Code to perform the search. The item number search is merely a way for you to search for the correct product code. When you select the Item Number, the Product Code, Product Code Type, Product Code Variant, Product Name, and Manufacturer fields are automatically populated. If you clear the Item Number, then the Product Code, Product Code Type, Product Code Variant, Product Name, and Manufacturer fields get cleared as well.

Field Name	Description
Product Code	(Optional) Enter the product code. You can enter a partial product code value on which to search.
Product Code Type	(Optional) Select the product code type. Product code types are defined using extensible Lookup Type PAS_PRODUCT_CODE_TYPE. OPSM provides several product code types.
Product Code Variant	(Optional) Enter the product code variant. **Note:** GTIN and NDC product codes can be reused after a specified number of years. The product code variant is used to differentiate between multiple products using the same product code.
Product Name	(Optional) Enter the name of the product.
Manufacturer	(Optional) Enter the manufacturer for the product.
Packaging Unit	(Optional) Select the packaging unit for this product.
GTIN	(Optional) Enter the Global Trade Identification Number (GTIN) assigned to the product.
Lowest Saleable Unit Quantity	(Optional) Enter the total number of the lowest saleable units contained in this packaging unit for the product.
Use Serial Ranges	(Optional) Select the setting for the Use Serial Ranges field. Values are: • Off • On

Otherwise, you can click the Search button without entering any search criteria and all available products will appear.

3. Click the Search button.

Maintain Products page (Basic Search)



All of the products that match the search criteria appear in the Search Results: Products region in a table format.

4. Click the Advanced button to perform an advanced search.

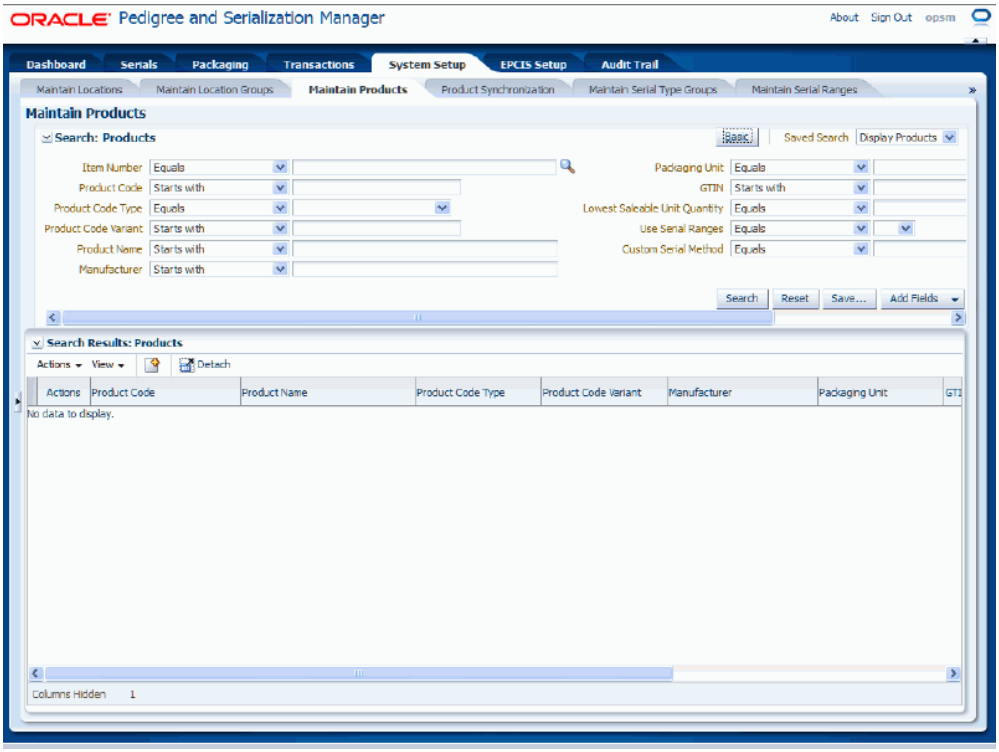
To Search for Products (Advanced Search):

1. Navigate to the Maintain Products page, page A-2.

2. Click the Advanced button.

> **Note:** Clicking the Advanced or Basic button will keep the values in the base criteria fields.

Maintain Products page (Advanced Search)



3. In the Search: Products region, enter the search criteria for the products using one or more of these fields:

Field Name	Description
Item Number	(Optional) Select the field operator and then select the item number for the product code. Operators are: • Starts with • Ends with • Equals • Does not equal • Less than • Greater than • Less than or equal to • Greater than or equal to • Between • Not between • Contains • Does not contain • Is blank • Is not blank This is the transactional systems item number. It is used to find the Product Code to perform the search. The item number search is merely a way for you to search for the correct product code. When you select the Item Number, the Product Code, Product Code Type, Product Code Variant, Product Name, and Manufacturer fields are automatically populated. If you clear the Item Number, then the Product Code, Product Code Type, Product Code Variant,

Field Name	Description
	Product Name, and Manufacturer fields get cleared as well.
Product Code	(Optional) Select the field operator and then enter the product code. You can enter a partial product code value on which to search. The field operators are the same as that for the Item Number field.
Product Code Type	(Optional) Select the field operator and then select the product code type. The field operators are the same as that for the Item Number field. Product code types are defined using extensible Lookup Type PAS_PRODUCT_CODE_TYPE. OPSM provides several product code types.
Product Code Variant	(Optional) Select the field operator and then enter the product code variant. The field operators are the same as that for the Item Number field. **Note:** GTIN and NDC product codes can be reused after a specified number of years. The product code variant is used to differentiate between multiple products using the same product code.
Product Name	(Optional) Select the field operator and then enter the name of the product. The field operators are the same as that for the Item Number field.

Field Name	Description
Manufacturer	(Optional) Select the field operator and then enter the manufacturer for the product. The field operators are the same as that for the Item Number field.
Packaging Unit	(Optional) Select the field operator and then select the packaging unit for this product. The field operators are the same as that for the Item Number field.
GTIN	(Optional) Select the field operator and then enter the Global Trade Identification Number (GTIN) assigned to the product. The field operators are the same as that for the Item Number field.
Lowest Saleable Unit Quantity	(Optional) Select the field operator and then enter the total number of the lowest saleable units contained in this packaging unit for the product. The field operators are the same as that for the Item Number field.
Use Serial Ranges	(Optional) Select the field operator and then select the setting for the Use Serial Ranges field. Values are: • Off • On The field operators are the same as that for the Item Number field.

Field Name	Description
Custom Serial Method	(Optional) Select the field operator and then select the Custom Serial Method. The field operators are the same as that for the Item Number field. Custom Serial Methods are user-defined using Lookup Type PAS_CUSTOM_SERIAL_METHOD. These methods must also be configured by the end user for use in custom serial generation.

Otherwise, you can click the Search button without entering any search criteria and all available products will appear.

4. (Optional) To enter additional search criteria fields, click the Add Fields button and select the field you would like to add to the search criteria.

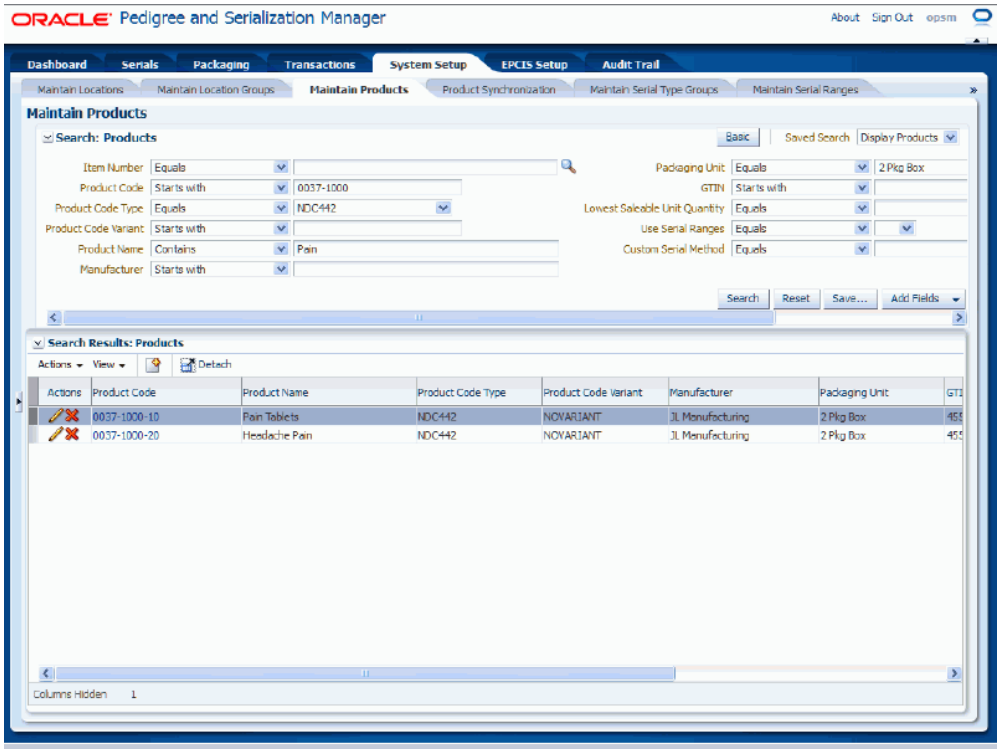
   The selected field appears as a search criteria field.

   > **Note:** To remove the additional field, click the Remove icon next to the field. The field will be removed from the search criteria.

5. (Optional) Enter search criteria for the additional fields.

6. Click the Search button.

Maintain Products page (Advanced Search)



All of the products that match the search criteria appear in the Search Results: Products region in a table format.

> **Note:** Clicking the Reset button clears the values in all of the criteria fields.

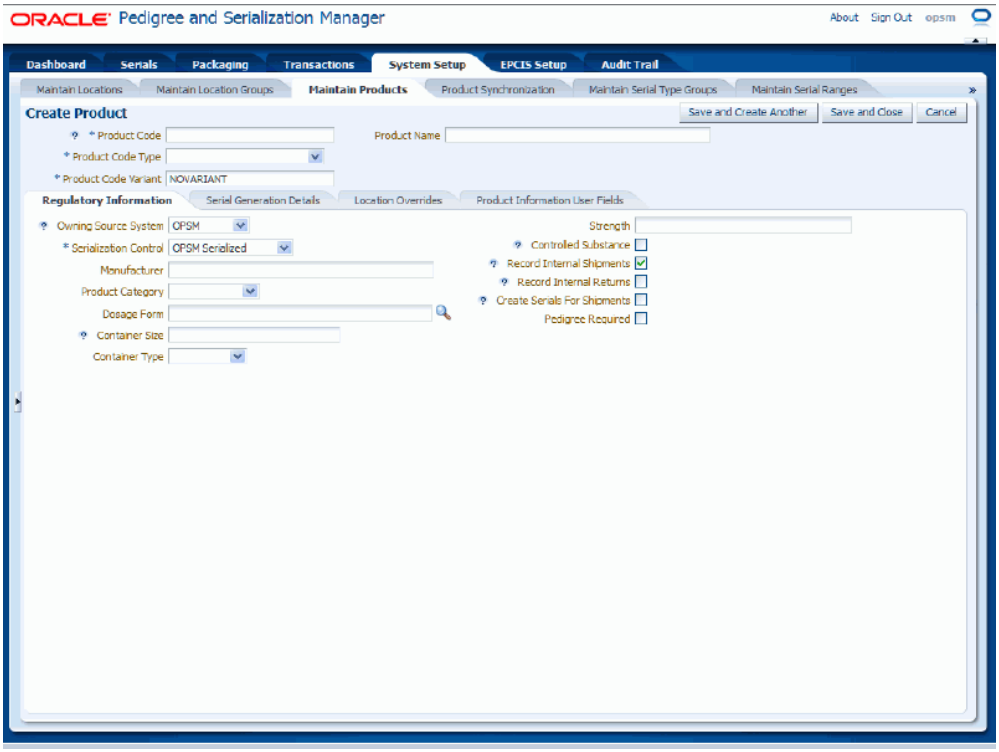
7. Click the Basic button to have the page hide the advanced search criteria fields and re-display the basic search criteria fields.

To Create Products:

1. Navigate to the Maintain Products page, page A-2.

2. Select Create from the Actions menu or click the Create icon located at the top of the Search Results: Products region.

Create Product page



The Create Product page appears.

3. Enter the following information:

Field Name	Description
Product Code	Enter the product code. The product code length must match that for the product code type selected. For example, a product code must be 14 digits for a GTIN product code type.
Product Code Type	Select the product code type. Product code types are defined using extensible Lookup Type PAS_PRODUCT_CODE_TYPE. OPSM provides several product code types.

Field Name	Description
Product Code Variant	(Optional) Enter the product code variant. NOVARIANT appears by default. **Note:** GTIN and NDC product codes can be reused after a specified number of years. The product code variant is used to differentiate between multiple products using the same product code.
Product Name	(Optional) Enter the name of the product.

4. Select the Regulatory Information sub tab.

   Use this sub tab to enter information that is required for regulatory requirements.

5. Enter the following information:

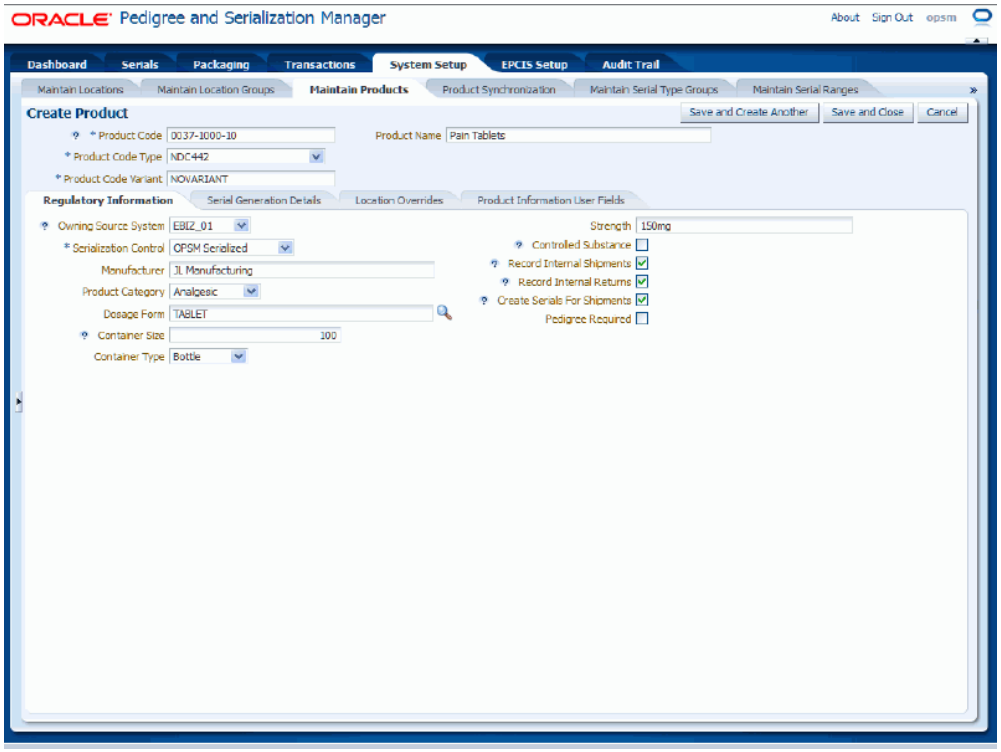
Field Name	Description
Owning Source System	Select the transactional system that has ownership of the product definition. The System Parameters value for the Owning System Source Default field appears by default. For information on the system parameters, see Maintaining System Parameters, page 4-23.

Field Name	Description
Serialization Control	Select whether serials for this product are externally generated or generated by the OPSM system. Values are: • Externally Generated • OPSM Serialized OPSM Serialized appears by default. If Serial Control is set to OPSM Serialized, serials can be generated by OPSM for this product. When set to Externally Generated, serials can be created in OPSM by either importing the serials or uploading the serials at time of shipment. The value for Serial Control can be overridden by product and location.
Manufacturer	(Optional) Enter the name of the Manufacturer for this product. Manufacturer is required if the Pedigree Required check box is selected.
Product Category	(Optional) Select a product category code. For example, painkillers, anti-depressants, anti-anxiety, and so on. Product categories are user defined using Lookup Type PAS_PRODUCT_CATEGORY.
Dosage Form	(Optional) Select the form of dosage for the product. For example, tablet, liquid, or capsule. Dosage Form is required if the Pedigree Required check box is selected. Dosage forms are user defined using Lookup Type PAS_DOSAGE_FORM.

Field Name	Description
Container Size	(Optional) Enter the number of units contained in a package of the product. For example, 60 or 100. Container Size is required if the Pedigree Required check box is selected.
Container Type	(Optional) Select the type of container for the product. Container types are user defined using Lookup Type PAS_CONTAINER_TYPE.
Strength	(Optional) Enter the strength or potency for the product including the unit of measure. For example, 60mg or 25ml. Strength is required if the Pedigree Required check box is selected.
Controlled Substance check box	(Optional) Select this check box if this product is a controlled substance. This field is used only for informational purposes.
Record Internal Shipments check box	This check box setting appears by default from the Maintain System Parameters page. Select this check box if you want the system to record shipments from internal customers for this product.
Record Internal Returns check box	This check box setting appears by default from the Maintain System Parameters page. Select this check box if you want the system to record returns from internal customers for this product.

Field Name	Description
Create Serials for Shipments check box	This check box setting appears by default from the Maintain System Parameters page. Select this check box if the system will create serials in the Oracle Pedigree and Serialization Manager system at the time of shipment.
Pedigree Required check box	(Optional) Select this check box if you require a Pedigree to be created upon Shipment of the product. If selected, the system will automatically create a Pedigree for the Shipment transaction. Product Name, Strength, Manufacturer, Dosage Form, and Container Size are required when Pedigree Required is selected.

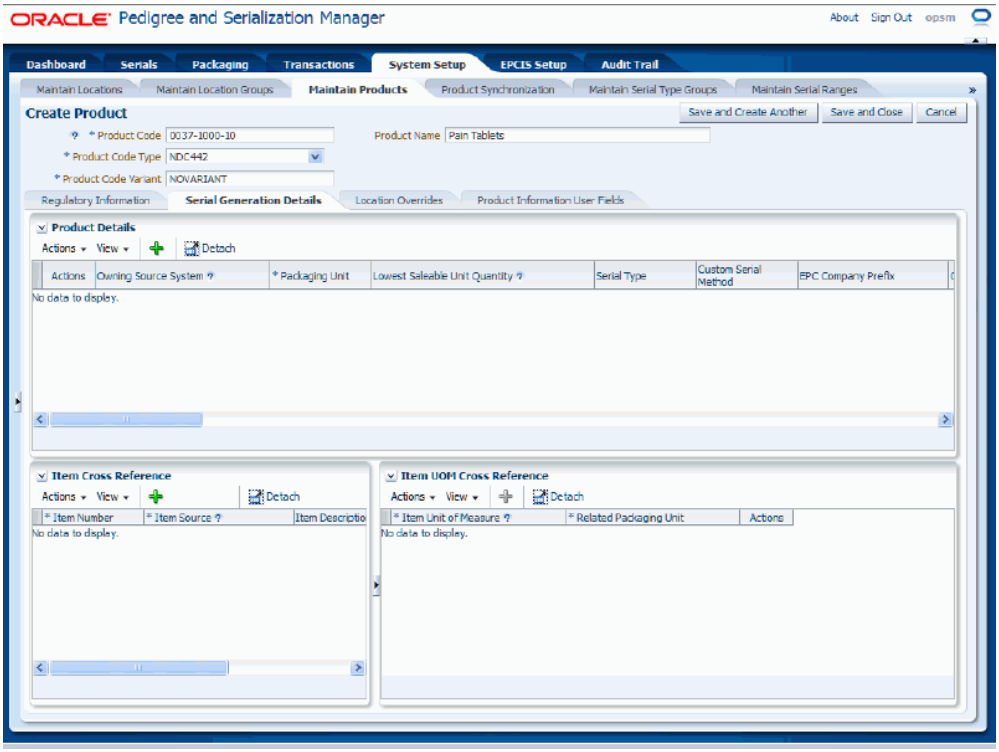
Create Product page - Regulatory Information sub tab



6. Select the Serial Generation Details sub tab.

   The system will use the information specified for this sub tab to generate the serials for the product. Packaging information is included so that the system has the ability to generate serials for multiple levels of packaging based on a request for serials at the lowest saleable unit.

Create Product page - Serial Generation Details sub tab



7. To add product details, select Add Product Detail from the Actions menu or click the Add Product Detail ("+" plus sign) icon located at the top of the Product Details region.

   Note: At least one product detail row must be created for each product code that you define.

   Note: You can only create one product detail row for a product code associated with a GTIN product code type.

   A new row appears in the Product Details region where you can add the information.

8. Enter the following information:

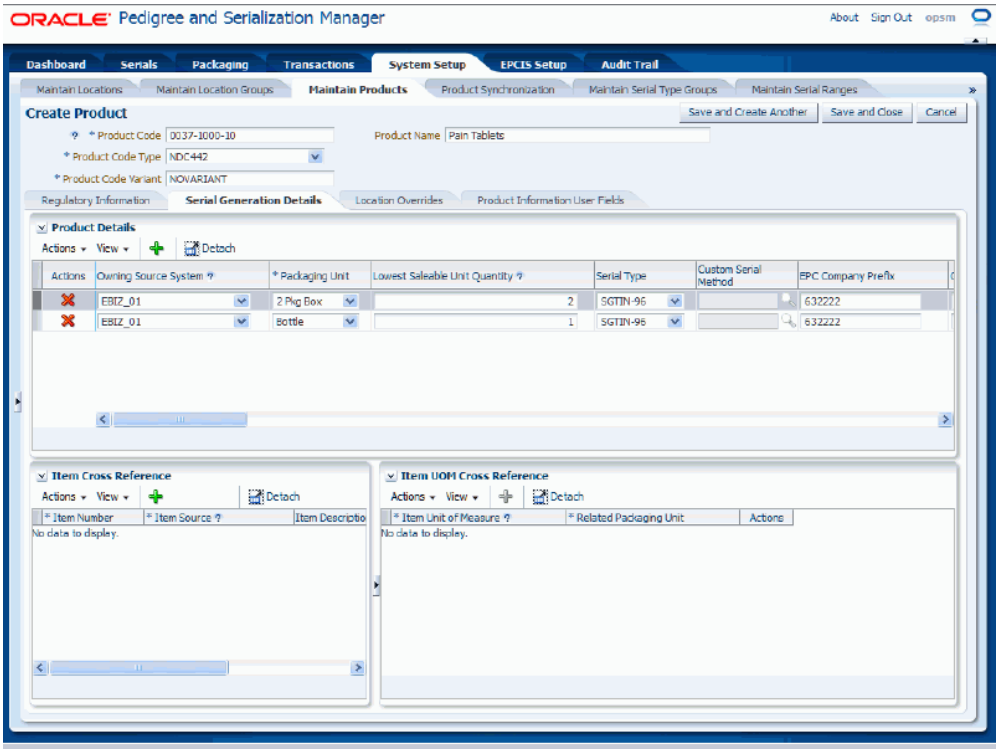
Field Name	Description
Owning Source System	Select the transactional system that has ownership of the product detail information. The System Parameters value for the Owning System Source Default field appears by default. For information on the system parameters, see Maintaining System Parameters, page 4-23.
Packaging Unit	(Optional) Select the packaging unit for this product. Packaging units are user defined using Lookup Type PAS_PACKAGE_UNIT. **Note:** If you are entering packaging units for the product, at least one of the packaging units must represent the products lowest level of detail where lowest saleable unit quantity equal 0 (zero).
Lowest Saleable Unit Quantity	(Optional) Enter the total number of the lowest saleable units contained in this packaging unit. Zero appears by default. You cannot enter a negative value. For example, a 10 package box (packaging unit) holds 10 saleable units, a 5 package case (packaging unit) holds 50 saleable units, and so on. The 5 package case contains 5 10 package boxes, which accounts for the 50 saleable units. A syringe (packaging unit) is the lowest saleable unit, it does not have any saleable units packed within it so it's represented by a zero in this field.

Field Name	Description
Serial Type	Select the type of serial that will be generated. The System Parameters value for the Serial Type Default field appears by default. For information on the system parameters, see Maintaining System Parameters, page 4-23.
Custom Serial Method	(Optional) Select the custom serial method to be used when generating the serial numbers for the product. This field becomes available if you select a custom serial type in the Serial Type field. OPSM delivers predefined serial types in the Lookup Type PAS_SERIAL_TYPES but you can add additional custom serial types to this lookup type.
EPC Company Prefix	(Optional) Enter the Electronic Product Code (EPC) company prefix assigned to the product. When serials are generated in OPSM, the EPC company prefix within the SGTIN-96 AND SGTIN-198 serials is verified against this EPC company prefix to ensure that they are correct.
GTIN	(Optional) Enter the Global Trade Identification Number (GTIN) assigned to the product. GTIN is required for SGTIN serial types or serial types that are associated to a serial type group where the Product Unit Identifier Formula is set to GTIN. For products associated with a GTIN product code type, the system populates the GTIN with the value in the Product Code field and it cannot be changed.

Field Name	Description
EPC Filter Value	(Optional) Enter the EPC (Electronic Product Code) filter value that represents the packaging level for the product. EPC Filter Value is required for SGTIN serial types.
Product Unit Identifier	Displays the product unit identifier associated with the serial type group.
Overage	(Optional) Enter how many additional serials should be generated above the quantity/percent requested. Zero appears by default. You cannot enter a negative value. The Overage Type determines whether you will enter a quantity or a percentage.
Overage Type	(Optional) Select the type. Types are: • Percent • Quantity
Use Serial Ranges check box	(Optional) Select this check box if you want the system to use a specific range when generating serials. The System Parameters value for the Use Serial Ranges Default check box field appears by default. For information on the system parameters, see Maintaining System Parameters, page 4-23.
Label Print Format	(Optional) Select the print label format for the product and packaging unit.
User Field 1 through 15	(Optional) Enter user-defined data using any of these fields.

Field Name	Description
User Number 1 through 5	(Optional) Enter user-defined data using any of these fields.
User Date 1 through 5	(Optional) Enter user-defined data using any of these fields.

Create Product page - Serial Generation Details sub tab



9. To add item cross-references, select Add Product Item from the Actions menu or click the Add Product Item ("+" plus sign) icon located at the top of the Item Cross Reference region.

   Item cross-reference information is where you can specify the mapping from one or more transactional system items to a product.

   A new row appears in the Item Cross Reference region where you can add the information.

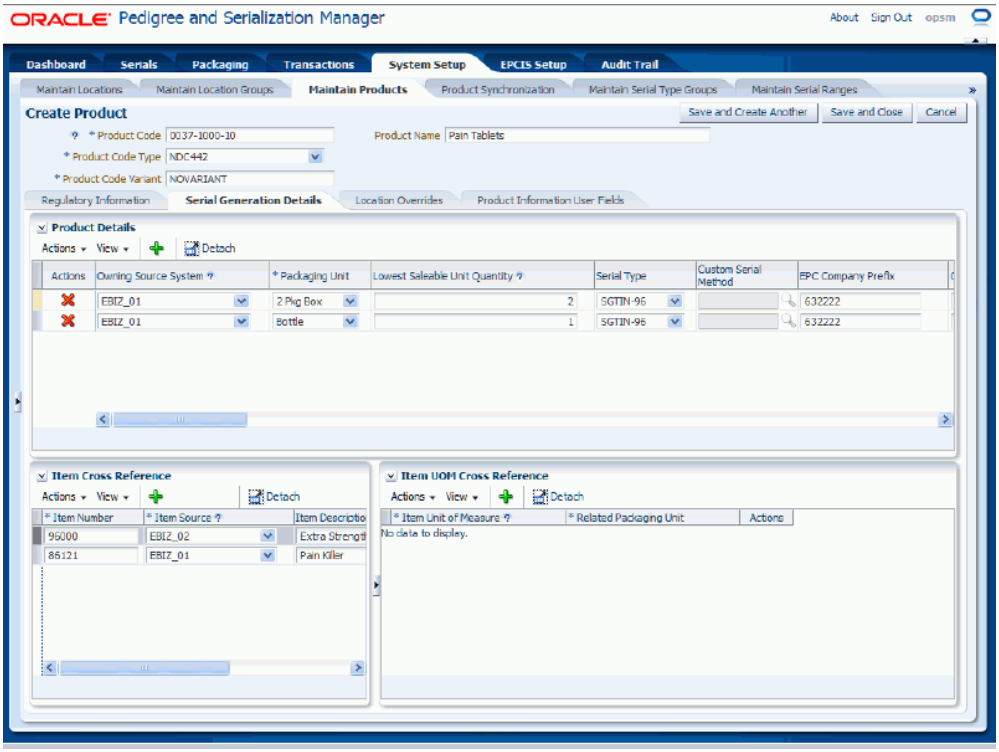
10. Enter the following information:

Field Name	Description
Item Number	Enter the item number.
Item Source	Select the item source (transactional system) from which this item originates.
Item Description	(Optional) Enter the description for the item.

Note: The item cross-reference rows are related to the item UOM cross-references rows. When you select an item in the Item Cross Reference region the associated row will appear in the Item UOM Cross Reference region if a cross-reference UOM has been entered. Otherwise, you can create the cross-reference UOM row for the item cross-reference.

Important: You must enter an Item UOM cross-reference record if you plan to reference the product using the transaction system item number when searching for serials or transactions, generating serials, or recording transactions in OPSM.

Create Product page - Serial Generation Details sub tab



11. To add item UOM cross-references, select Add Product Item UOM from the Actions menu or click the Add Product Item UOM ("+" plus sign) icon located at the top of the Item UOM Cross Reference region.

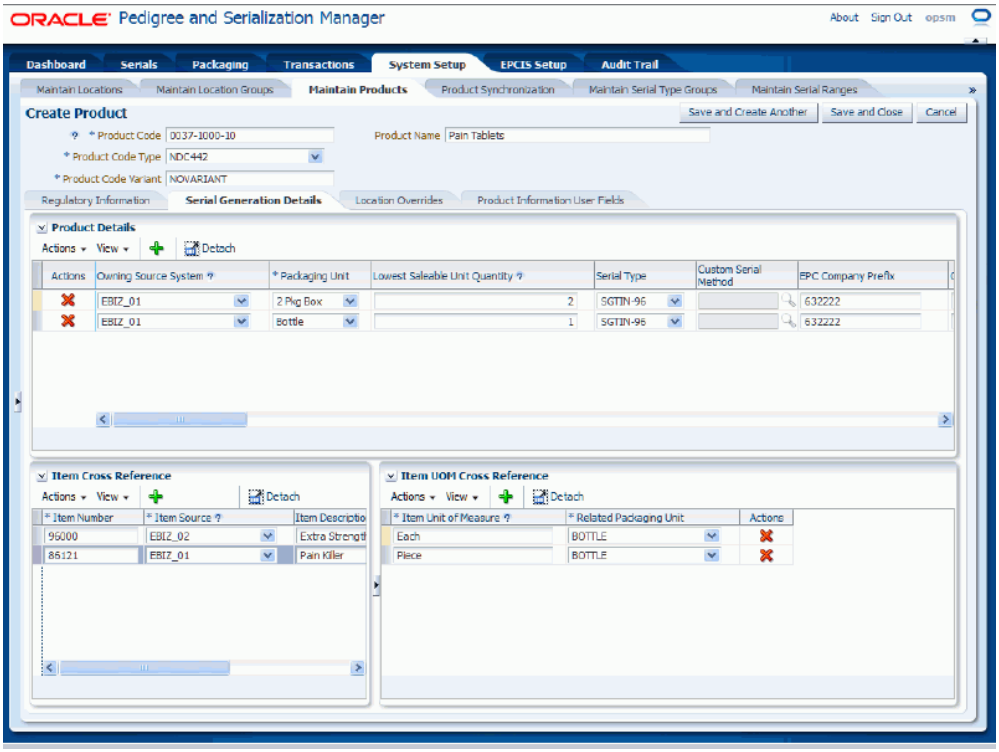
    Note: You cannot create item UOM cross-references without first entering item cross-reference information.

    A new row appears in the Item UOM Cross Reference region where you can add the information.

12. Enter the following information:

Field Name	Description
Item Unit of Measure	Enter the item unit of measure provided by the item source. This field is case sensitive. Values should be entered as they are stored in the transactional system for integration. For example, Ea versus EA.
Related Packaging Unit	Select the related packaging unit. The packaging units that appear for selection are based on the packaging units defined in the Product Details region of the page. The system uses this field to relate the item UOM to the correct product detail record.

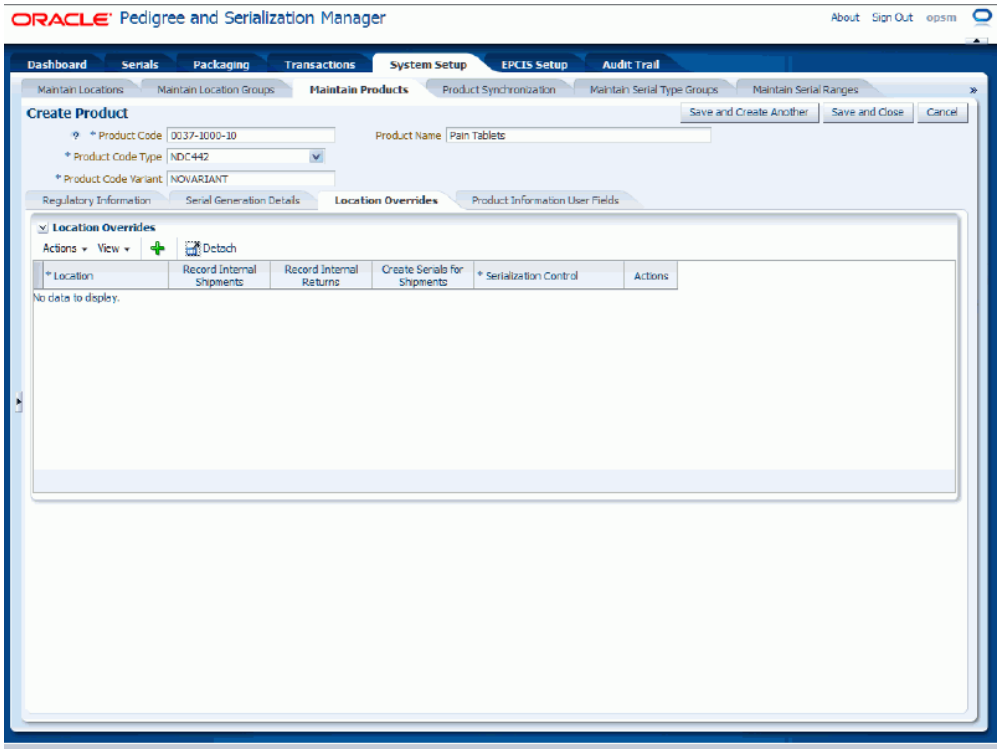
Create Product page - Serial Generation Details sub tab



13. Select the Location Overrides sub tab.

    Use this tab to provide override information for locations. The override parameters at the location level will override those specified at the product level.

Create Product page - Location Overrides sub tab



14. To add location overrides, select Add Product Location from the Actions menu or click the Add Product Location ("+" plus sign) icon located at the top of the Location Overrides region.

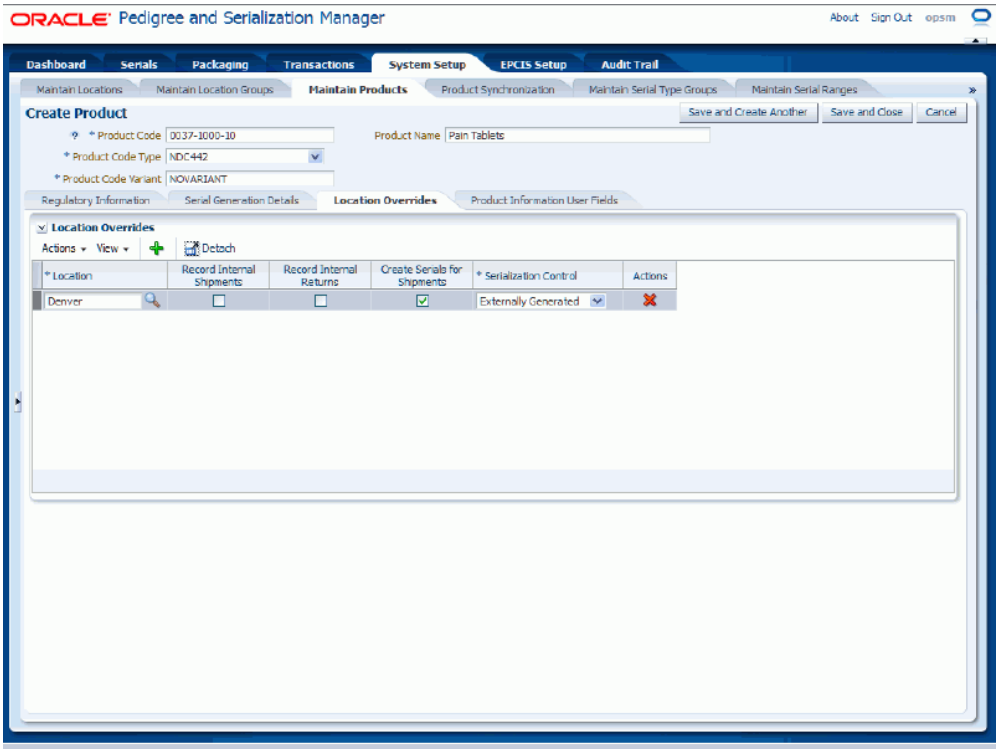
    A new row appears in the Location Overrides region where you can add the information.

15. Enter the following information:

Field Name	Description
Location	Select the location.
Record Internal Shipments check box	(Optional) Select this check box if you want the system to record shipments to internal customers for this product at this location.
Record Internal Returns check box	(Optional) Select this check box if you want the system to record returns to internal customers for this product at this location.

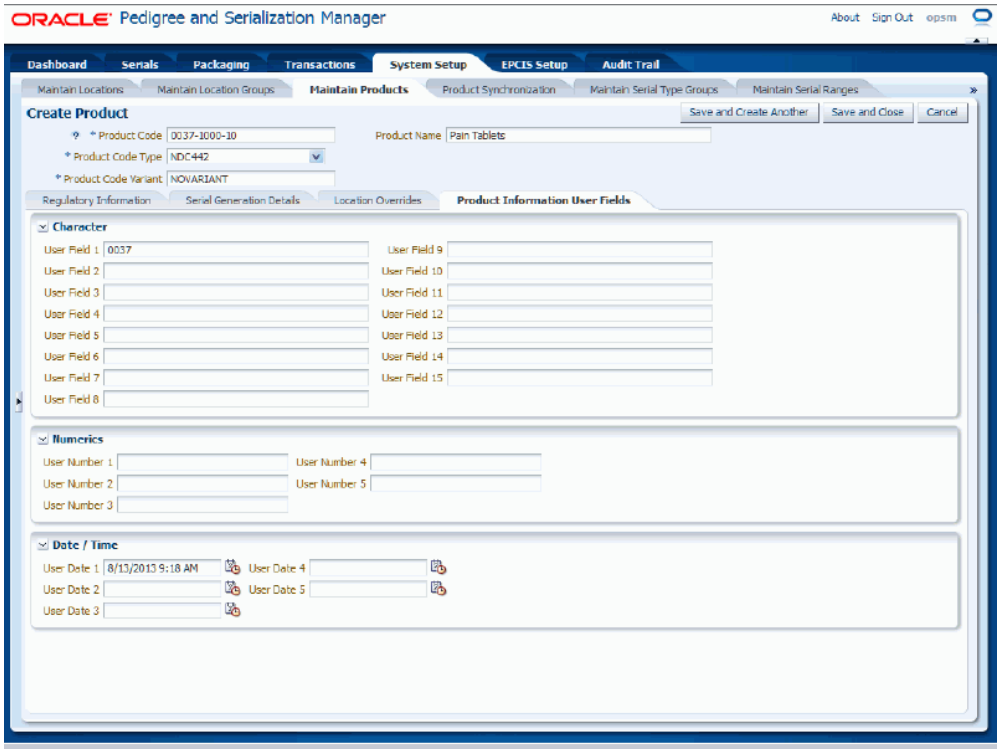
Field Name	Description
Create Serials for Shipments check box	(Optional) Select this check box if the system will create serials in the Oracle Pedigree and Serialization Manager system at the time of shipment at this location. If serials are not sent in with the Shipment transaction, the system will issue an exception.
Serialization Control	(Optional) Select if the serials for this location are externally generated or OPSM serialized.

Create Product page - Location Overrides sub tab



16. Select the Product Information User Fields sub tab.

Create Product page - Product Information User Fields sub tab



17. Enter user-defined data using any of the fields in the Character, Numeric, and Date/Time regions of the page.

18. Save your work. Choose one of these options:

    - Click the Save and Close button to save this product and return back to the Maintain Products page.

    - Click Save and Create Another button to save this product and to stay on this page so you can create another product. The system displays a message that the product was saved successfully and it clears all of the values in the fields.

To Edit Products:

1. Navigate to the Maintain Products page, page A-2.

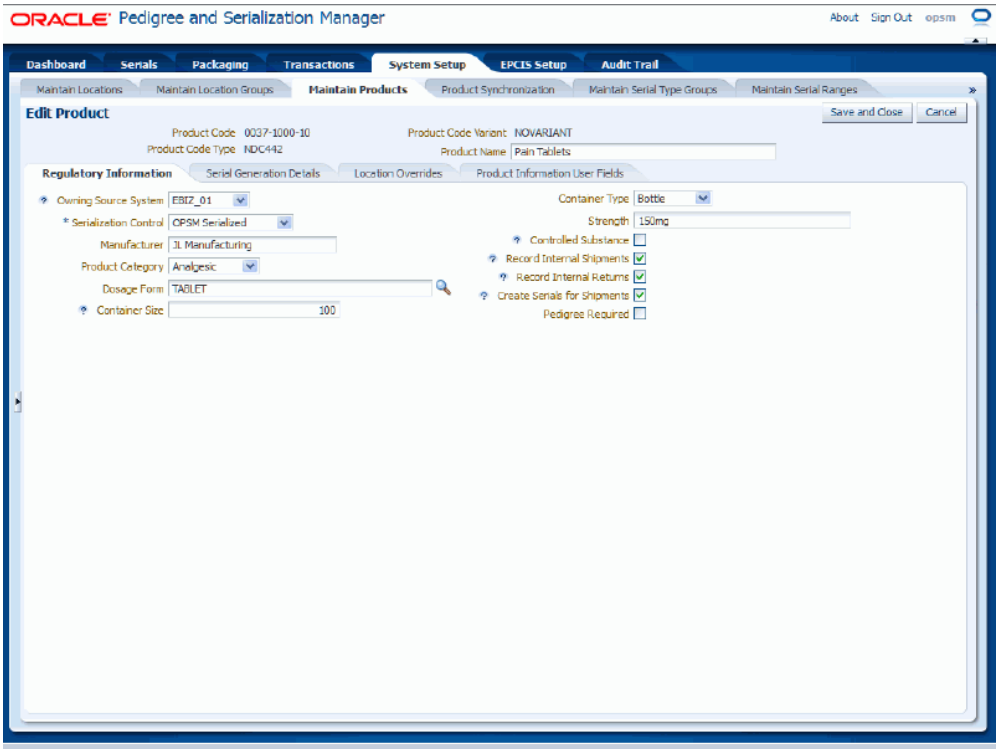
2. Enter search criteria for the products you want to edit and click the Search button.

   All of the products that match the search criteria appear in the Search Results: Products table.

3. Select the product in the table that you want to edit.

4. Select Edit in the Actions menu or click the Edit Product icon associated with the product in the Actions column of the results table.

Edit Product page



The Edit Product page appears displaying all of the existing information for the product.

5. Edit any of the product fields located within the sub tabs.

6. Click the Save and Close button to save the changes you made to the product information and to return back to the Maintain Products page.

To Delete all of the Product Information:

1. Navigate to the Maintain Products page, page A-2.

2. Enter search criteria for the products you want to delete and click the Search button.

   All of the products that match the search criteria appear in the Search Results: Products table.

3. Select the product in the table that you want to delete.

4. Select Delete in the Actions menu or click the Delete Product icon in the Actions

column of the results table.

> **Note:** If you try to delete a product that has associated transactions, serials, or lots the system will issue an error message.

The system displays a message asking if you are sure to want to delete the product.

5. Click the Yes button.

   The product is deleted from the system.

To Delete Serial Generation Details for a Product:

1. Navigate to the Maintain Products page, page A-2.
2. Enter search criteria for the products you want to delete serial generation details for and click the Search button.

   All of the products that match the search criteria appear in the Search Results: Products table.
3. Select the product in the table that you want to delete serial generation details for.
4. Select Edit in the Actions menu or click the Edit Product icon in the Actions column of the results table.

   The Edit Product page appears.
5. Select the Serial Generation Details sub tab.
6. Delete product details.

   #### To Delete Product Details

   1. Select the product detail row you want to delete in the Product Details region.

      > **Note:** You cannot delete a product detail row if there are associated item UOM cross-references associated with that product detail. Delete the item UOM cross-references first and then you will be able to delete the product detail.

   2. Select Delete Product Detail from the Actions menu or click the Delete Product Detail icon in the Actions column for the row.

      The system displays a message asking if you are sure to want to delete the product details.
   3. Click the Yes button.

The product details are deleted from the system.

7. Delete item cross-references.

   To Delete Item Cross-References

   1. Select the item cross-reference row you want to delete in the Item Cross Reference region.

      The item UOM cross-references associated with this item appear in the Item UOM Cross Reference region.

   2. Select Delete Product Item from the Actions menu or click the Delete Product Item icon in the Actions column for the row.

      The system displays a message asking if you are sure to want to delete the product item.

   3. Click the Yes button.

      The item cross-reference and all of its associated item UOM cross-references are deleted from the system.

8. Delete item unit of measure cross-references.

   To Delete Item Unit of Measure Cross-References

   1. Select the item unit of measure cross-reference row you want to delete in the Item UOM Cross Reference region.

   2. Select Delete Product Item UOM from the Actions menu or click the Delete Product Item UOM icon in the Actions column for the row.

      The system displays a message asking if you are sure to want to delete the product item UOM.

   3. Click the Yes button.

      The item UOM cross-reference is deleted from the system.

To Delete Location Overrides for a Product:

1. Navigate to the Maintain Products page, page A-2.

2. Enter search criteria for the products you want to delete location overrides for and click the Search button.

   All of the products that match the search criteria appear in the Search Results: Products table.

3. Select the product in the table that you want to delete location overrides for.

4. Select Edit in the Actions menu or click the Edit Product icon in the Actions column of the results table.

   The Edit Product page appears.

5. Select the Location Overrides sub tab.

6. Select the location override row you want to delete in the Location Overrides region.

7. Select Delete Product Location from the Actions menu or click the Delete Product Location icon in the Actions column for the row.

   The system displays a message asking if you are sure you want to delete the product location.

8. Click the Yes button.

   The location override is deleted from the system.

Defining Product and Item Cross Reference Information from Integrated Transactional Systems

Oracle Pedigree and Serialization Manager (OPSM) can be integrated with transactional systems to define product and item cross reference based on the item information passed between the systems. Item information from one or more transactional systems can be cross referenced to the same product within OPSM.

The Define Product and Item Cross Reference page can only be accessed from an externally calling system. This page is not available in OPSM from the Tasks menu. OPSM provides a web page, external.jspx, which can be used to integrate external systems to OPSM.

From the external system, you can call the OPSM Define Product and Item Cross Reference page. If you have not previously signed in to OPSM, you will be prompted for user authentication. After successful authentication, you can use the Define Product and Item Cross Reference page to define all of the different product attributes for the item in OPSM and you can specify the product overrides by location if necessary.

The Source System Precedence setting in the OPSM system parameters controls whether product and product detail information can be updated from any source system or only from the owning source system. The owning source system is recorded on the product and product detail records.

For more information on the product definition process, see Understanding the Product Definition Process, page 4-2.

For more information on integrating Oracle E-Business Suite with OPSM, see the *Oracle Serialization and Tracking Integration Pack for Oracle Pedigree and Serialization Manager and Oracle E-Business Suite 3.1 - Implementation Guide.*

Use these procedures to:

- Define product and packaging information from an external system (product does not exist in OPSM).
- Define product and packaging information from an external system (product does exist in OPSM).
- Edit product and packaging information from an external system.

To Define Product and Packaging Information from an External System (Product Does Not Exist in OPSM):

To Invoke the Define Product and Item Cross Reference Page in OPSM

1. Call the URL to invoke the Define Product and Item Cross Reference page passing the parameter values:

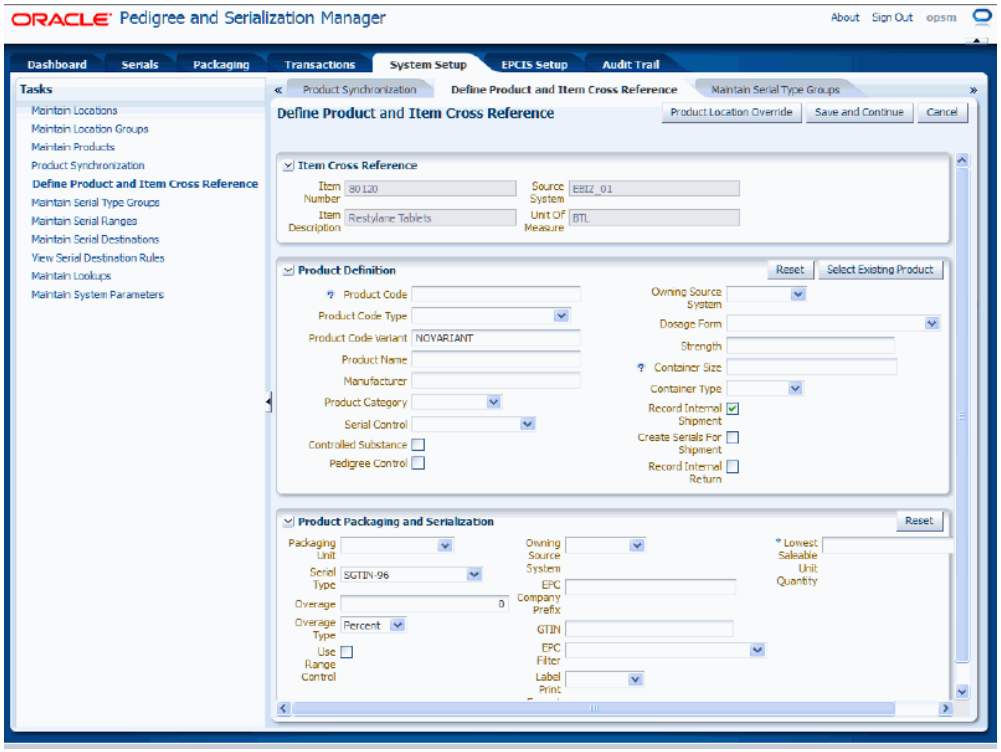
Parameter Name	Description
page	'defineProduct'
key	The item in the external system to be cross referenced to a product in OPSM.
unit	The unit of measure of the item to be cross referenced to a product packaging unit in OPSM.
keydesc	The description of the item in the external system.
loc	The location identifier for the item in the external system.
src	The identifier for the external system that invoked OPSM (for example, EBIZ_01).

2. If prompted for user authentication, enter your user ID and password.

To Complete the Product Definition in OPSM

3. Upon entry, the Define Item and Product Cross Reference page will be displayed.

Define Product and Item Cross Reference page



The Define Product and Item Cross Reference page is called asynchronously. The Define Product and Item Cross Reference page appears displaying the Item Number, Item Description, Source System, and Unit of Measure in the Item Cross Reference region of the page from the item number information.

4. Enter the following information:

Field Name	Description
Product Definition region	
Product Code	Enter the product code. The product code length must match that for the product code type selected. For example, a product code must be 14 digits for a GTIN product code type.

Field Name	Description
Product Code Type	Select the product code type. Product code types are defined using extensible Lookup Type PAS_PRODUCT_CODE_TYPE. OPSM provides several product code types.
Product Code Variant	(Optional) Enter the product code variant. NOVARIANT appears by default. **Note:** GTIN and NDC product codes can be reused after a specified number of years. The product code variant is used to differentiate between multiple products using the same product code.
Product Name	(Optional) Enter the name of the product. Product Name is required if the Pedigree Control check box is selected.
Manufacturer	(Optional) Enter the name of the Manufacturer for this product. Manufacturer is required if the Pedigree Control check box is selected.
Product Category	(Optional) Select a product category code. For example, painkillers, anti-depressants, anti-anxiety, and so on. Product categories are user defined using Lookup Type PAS_PRODUCT_CATEGORY.
Serial Control	Select whether serials for this product are externally generated or generated by the OPSM system. Values are: • Externally Generated • OPSM Serialized

Field Name	Description
Controlled Substance check box	(Optional) Select this check box if this product is a controlled substance. This field is used only for informational purposes.
Pedigree Control check box	(Optional) Select this check box if you require a Pedigree to be created upon Shipment of the product. If selected, the system will automatically create a Pedigree for the Shipment transaction.
Owning Source System	Select the transactional system that owns the product definition. The Owning Source System field appears by default from the item source system passed from the transactional system.
Dosage Form	(Optional) Select the form of dosage for the product. For example, tablet, liquid, or capsule. Dosage Form is required if the Pedigree Control check box is selected. Dosage forms are user defined using Lookup Type PAS_DOSAGE_FORM.
Strength	(Optional) Enter the strength or potency for the product including the unit of measure. For example, 60mg or 25ml. Strength is required if the Pedigree Control check box is selected.
Container Size	(Optional) Enter the number of units contained in a package of the product. For example, 60 or 100. Container Size is required if the Pedigree Control check box is selected.

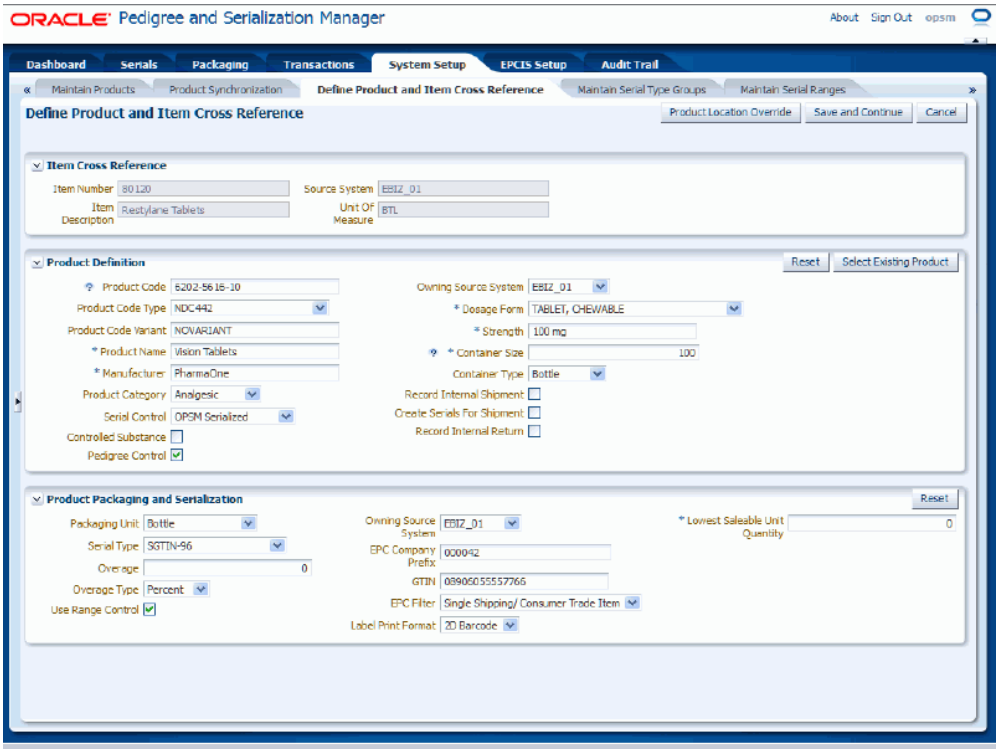
Field Name	Description
Container Type	(Optional) Select the type of container for the product. Container types are user defined using Lookup Type PAS_CONTAINER_TYPE.
Record Internal Shipment check box	This check box setting appears by default from the Maintain System Parameters page. Select this check box if you want the system to record shipments to internal customers for this product. For information on the system parameters, see Maintaining System Parameters, page 4-23.
Create Serials for Shipment check box	This check box setting appears by default from the Maintain System Parameters page. Select this check box if the system can create serials in the Oracle Pedigree and Serialization Manager system at the time of shipment. For information on the system parameters, see Maintaining System Parameters, page 4-23.
Record Internal Return check box	This check box setting appears by default from the Maintain System Parameters page. Select this check box if you want the system to record returns from internal customers for this product. For information on the system parameters, see Maintaining System Parameters, page 4-23.
Product Packaging and Serialization region	

Field Name	Description
Packaging Unit	(Optional) Select the packaging unit for this product. Packaging units are user defined using Lookup Type PAS_PACKAGE_UNIT. **Note:** If you are entering packaging units for the product, at least one of the packaging units must represent the lowest saleable unit quantity equal 0 (zero).
Serial Type	(Optional) Select the type of serial that will be generated. The System Parameters value for the Serial Type Default field appears by default. For information on the system parameters, see Maintaining System Parameters, page 4-23.
Overage	(Optional) Enter how many additional serials should be generated above the quantity/percent requested. Zero appears by default. You cannot enter a negative value. The Overage Type determines whether you will enter a quantity or a percentage.
Overage Type	(Optional) Select the type. Types are: • Percent • Quantity

Field Name	Description
Use Range Control check box	(Optional) Select this check box if you want the system to use a product specific range when generating serials. The System Parameters value for the Use Serial Ranges Default field appears by default. For information on the system parameters, see Maintaining System Parameters, page 4-23.
Owning Source System	Select the transactional system that owns the product detail definition. The Owning Source System field appears by default from the item source system passed from the transactional system.
EPC Company Prefix	(Optional) Enter the Electronic Product Code (EPC) company prefix assigned to the product.
GTIN	(Optional) Enter the Global Trade Identification Number (GTIN) assigned to the product. If the Product Unit Identifier Formula defined in Serial Type Groups is GTIN, then this field is required.
EPC Filter	(Optional) Select the EPC (Electronic Product Code) filter value that represents the packaging level for the product.
Label Print Format	(Optional) Select the print label format for the product and packaging unit.

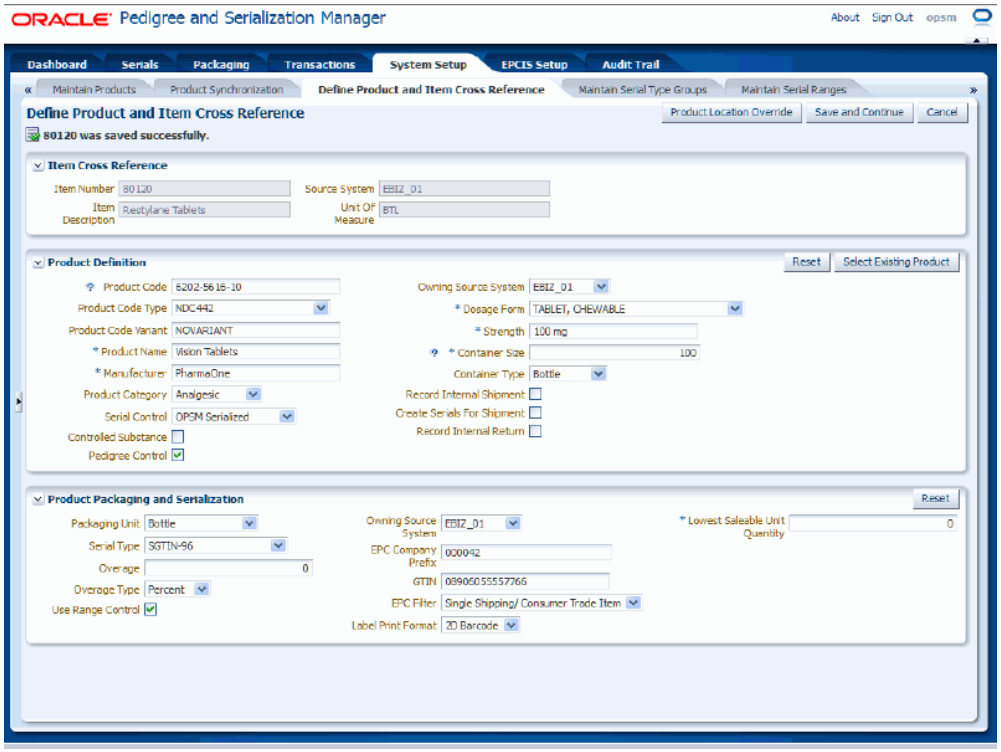
Field Name	Description
Lowest Saleable Unit Quantity	(Optional) Enter the total number of the lowest saleable units contained in this packaging unit. Zero appears by default. You cannot enter a negative value. For example, a 10 package box (packaging unit) holds 10 saleable units, a 5 package case (packaging unit) holds 50 saleable units, and so on. A syringe (packaging unit) is the lowest saleable unit; it does not have any saleable units packed within it so it's represented by a zero in this field.

Define Product and Item Cross Reference page



5. Click the Save and Continue button.

Define Product and Item Cross Reference page

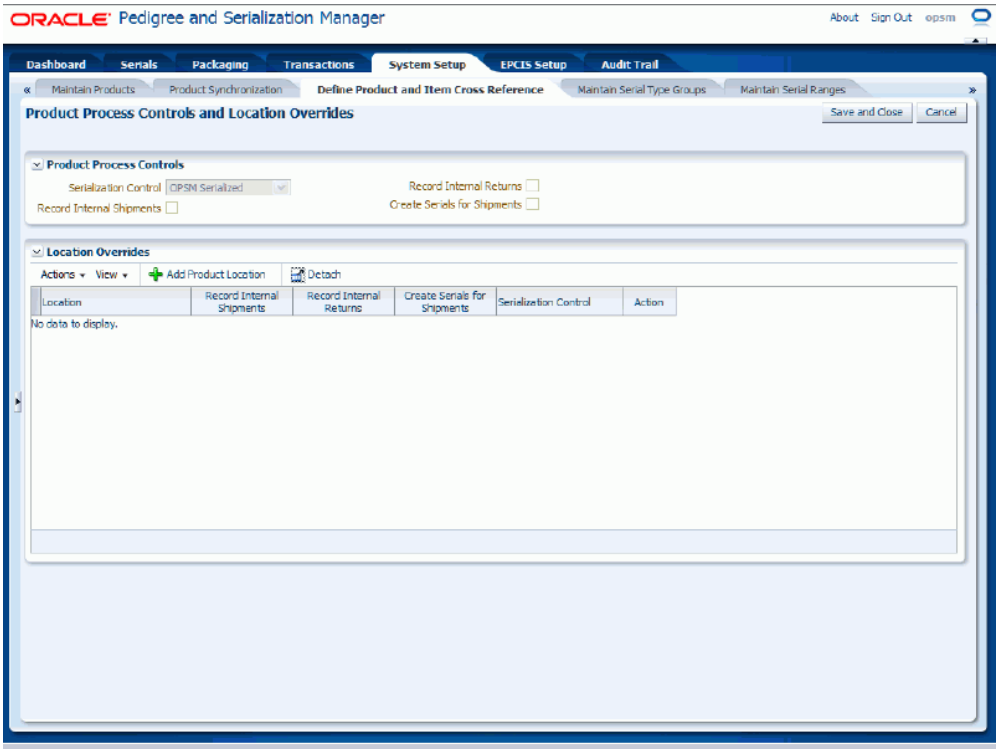


A message appears in the upper left hand corner stating that the item was saved successfully. The Product Location Override button becomes available in the upper right hand corner of the page after you have successfully saved all of the product definition information.

To Enter Product Location Overrides

6. (Optional) Click the Product Location Override button at the top of the page.

Product Process Controls and Location Overrides page



The Product Process Controls and Location Overrides page appears displaying the Serialization Control, Record Internal Shipments check box, Record Internal Returns check box, and Create Serials For Shipments check box settings for the product code in the Product Process Controls region of the page.

7. Select Add Product Location from the Actions menu or click the Add Product Location ("+" plus sign) icon located at the top of the Location Overrides region.

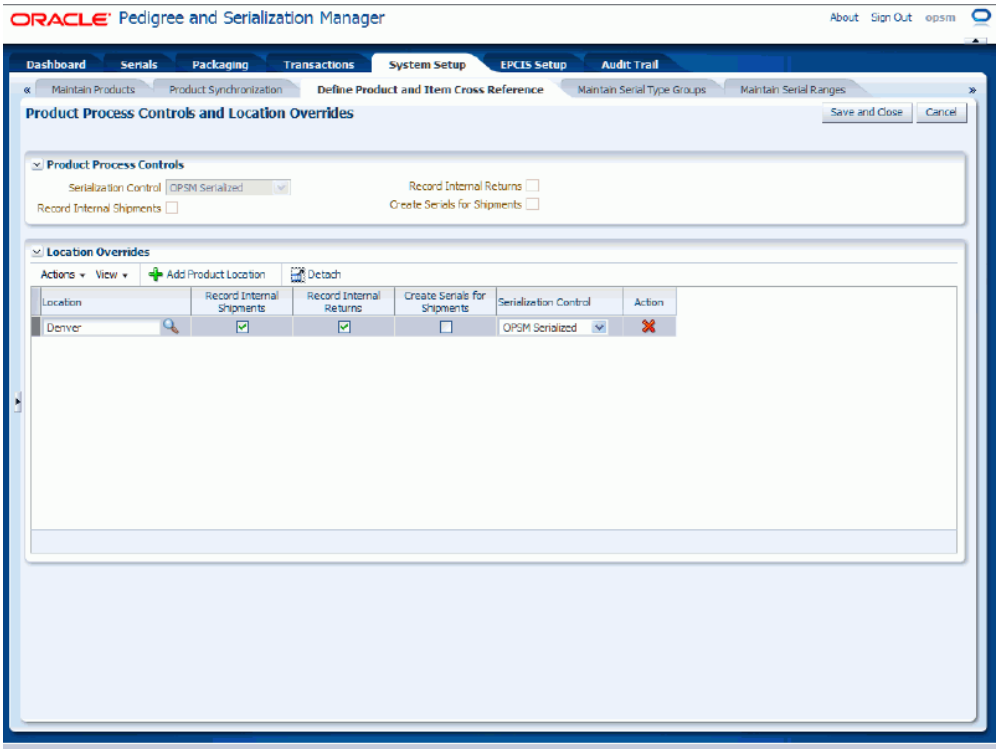
   A new row appears in the Location Overrides region where you can add the information.

8. Enter the following information:

Field Name	Description
Location	Select the location.

Field Name	Description
Record Internal Shipments check box	(Optional) Select this check box if you want the system to record shipments from internal customers for this product at this location.
Record Internal Returns check box	(Optional) Select this check box if you want the system to record returns from internal customers for this product at this location.
Create Serials for Shipments check box	(Optional) Select this check box if the system will create serials in the Oracle Pedigree and Serialization Manager system at the time of shipment at this location. If serials are not sent in with the Shipment transaction, the system will issue an exception.
Serialization Control	(Optional) Select if the serials for this location are Externally Generated or OPSM Serialized.

Product Process Controls and Location Overrides page



9. Click the Save and Close button.

   The product definition is saved in OPSM. To view the product code and item cross references that were created, you can access the Maintain Products page in OPSM and view the product code information.

   For more information on viewing a product code in OPSM, see Maintaining Products, page 4-78.

To Define Product and Packaging Information from an External System (Product Exists in OPSM):

To Invoke the Define Product and Item Cross Reference Page in OPSM

1. Call the URL to invoke the Define Product and Item Cross Reference page passing the parameter values:

Parameter Name	Description
page	'defineProduct'

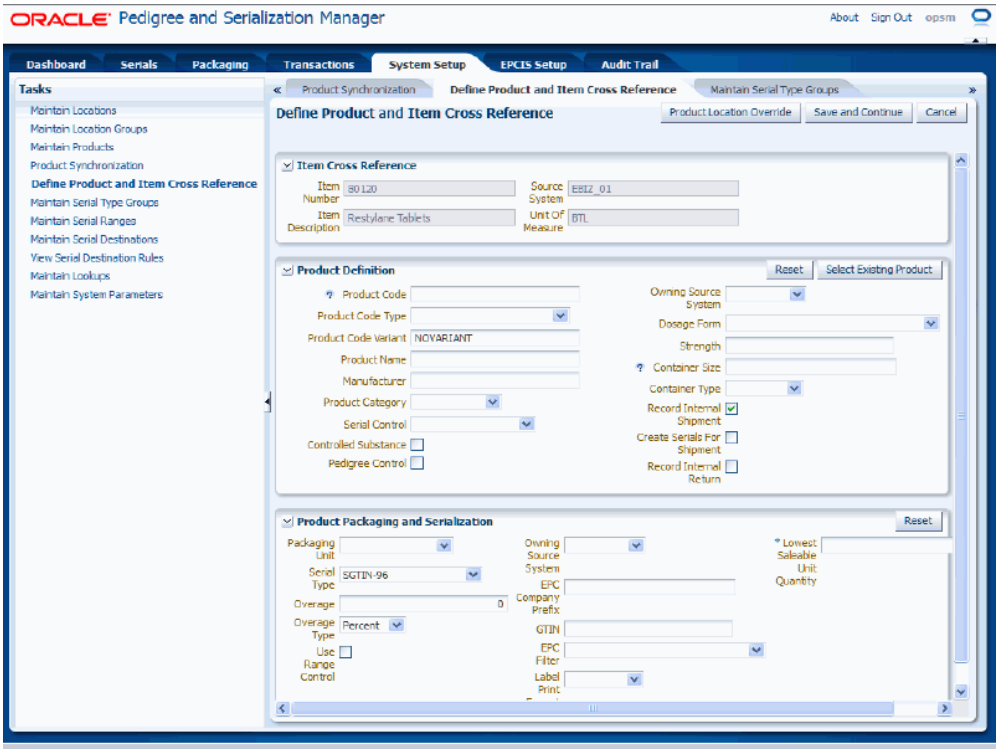
Parameter Name	Description
key	The item in the external system to be cross referenced to a product in OPSM.
unit	The unit of measure of the item to be cross referenced to a product packaging unit in OPSM.
keydesc	The description of the item in the external system.
loc	The location identifier for the item in the external system.
src	The identifier for the external system that invoked OPSM (for example, EBIZ_01).

2. If prompted for user authentication, enter your user ID and password.

To Complete the Product Definition in OPSM

3. Upon entry, the Define Item and Product Cross Reference page will be displayed.

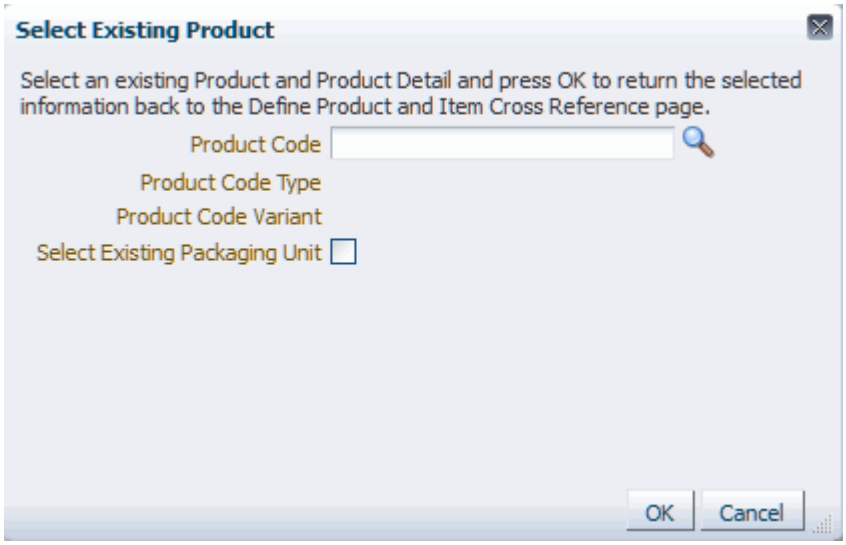
Define Product and Item Cross Reference page



The Define Product and Item Cross Reference page is called asynchronously. The Define Product and Item Cross Reference page appears displaying the Item Number, Item Description, Source System, and Unit of Measure in the Item Cross Reference region of the page from the item number information.

4. Click the Select Existing Product button in the Product Definition region.

Select Existing Product dialog box



The Select Existing Product dialog box appears.

5. Enter product code search criteria using one of these methods:

To Search for an Existing Product Only

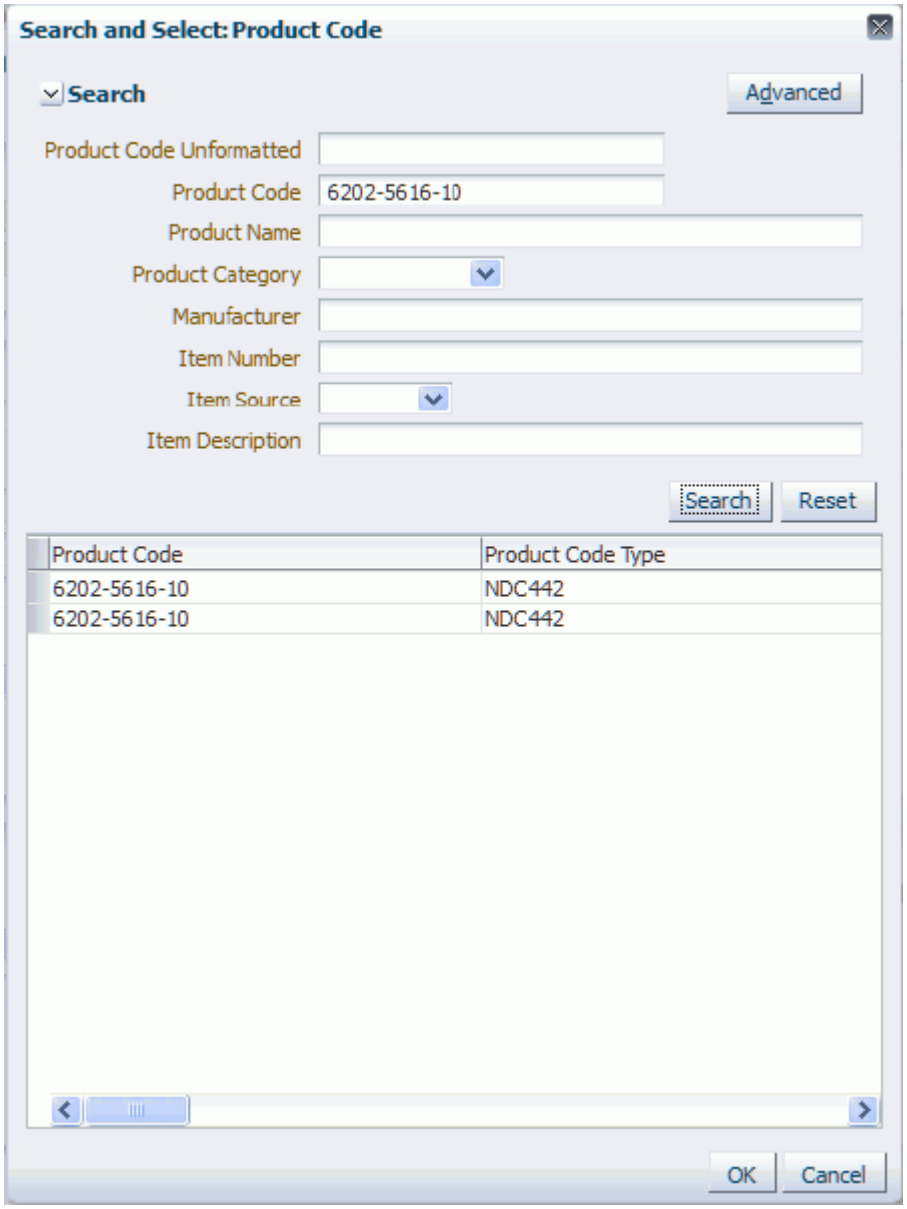
1. Click the Search for Product Code icon next to the Product Code field.

   The Search and Select: Product Code dialog box appears.

2. Enter search criteria for the product code using one or more of these fields (Product Code Unformatted, Product Code, Product Name, Product Category, Manufacturer, Item Number, Item Source, and Item Description) and click the Search button.

   Otherwise, you can click the Search button without entering any search criteria and all available product codes will appear.

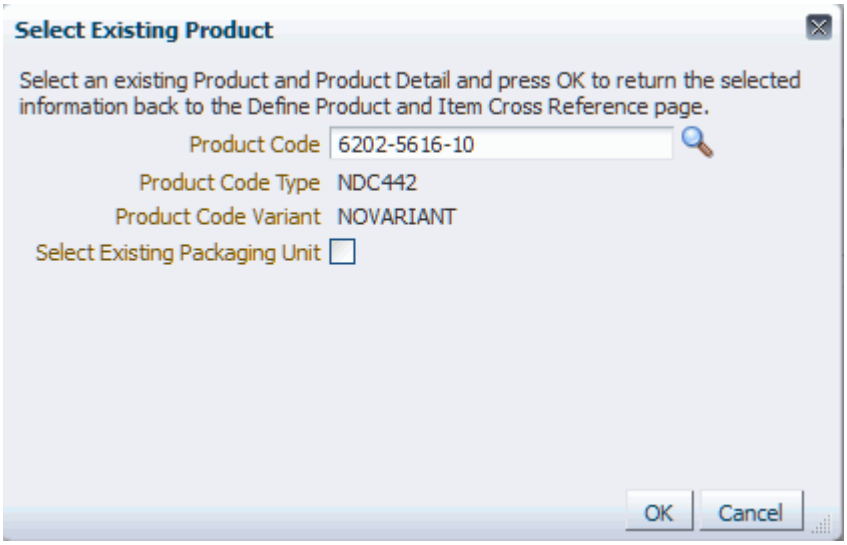
Search and Select: Product Code dialog box



All of the product codes that match the search criteria appear in the lower portion of the dialog box in a table format.

3. Select the Product Code and Product Code Type combination and click the OK button.

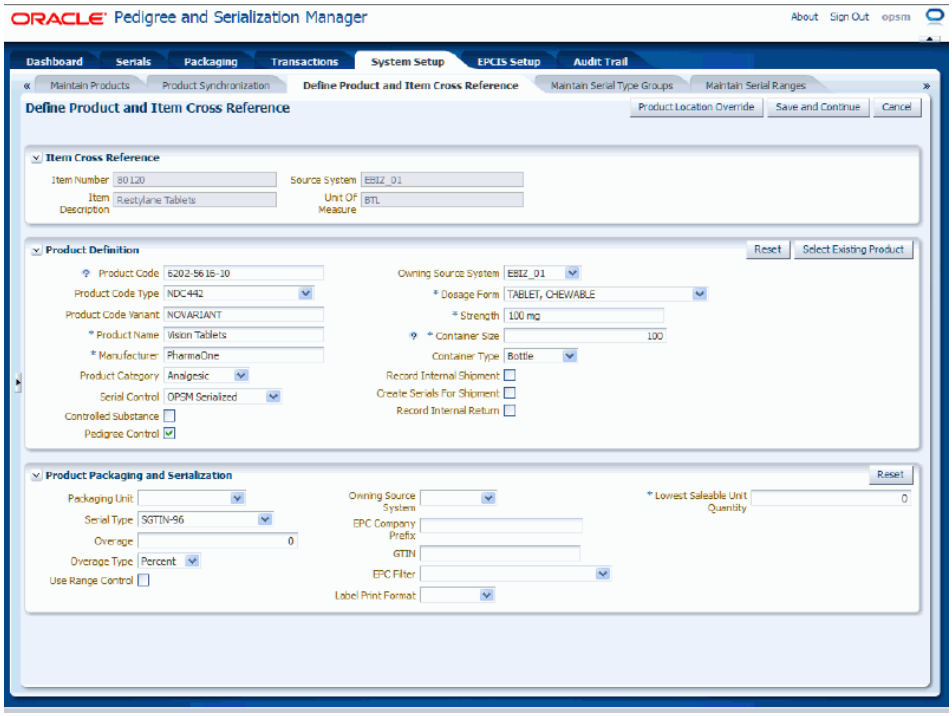
Select Existing Product dialog box



The Select Existing Product dialog box reappears.

4. Click the OK button.

Define Product and Item Cross Reference page

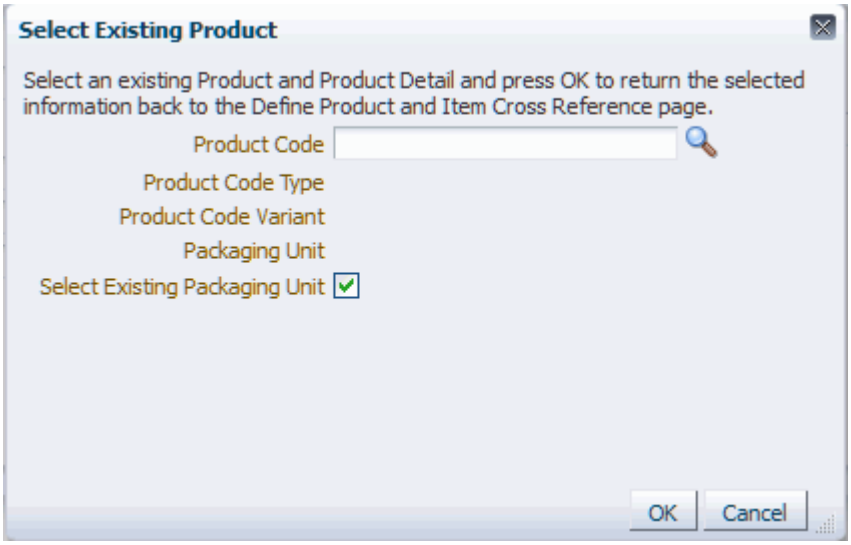


The Define Product and Item Cross Reference page appears displaying the fields associated with product code and product code type that you selected in the Product Definition region of the page. You will still need to enter values for the fields in the Product Packaging and Serialization region of the page.

To Search for an Existing Product and Packaging Unit

1. Select the Select Existing Packaging Unit check box.

Select Existing Product dialog box



The Packaging Unit field appears on the Select Existing Product dialog box.

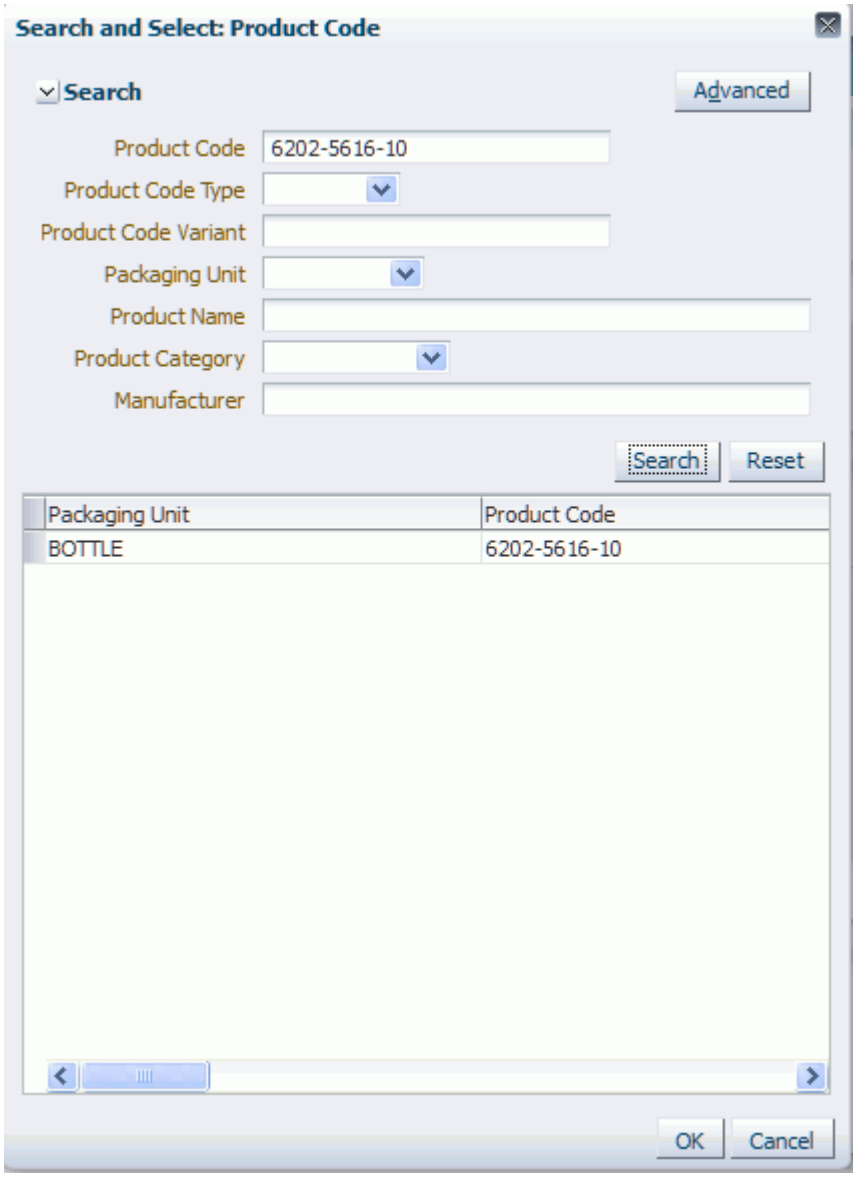
2. Click the Search for Product Code icon next to the Product Code field.

   The Search and Select: Product Code dialog box appears displaying packaging unit as a search criteria field.

3. Enter search criteria for the product code and packaging unit using one or more of these fields (Product Code, Product Code Type, Product Code Variant, Packaging Unit, Product Name, Product Category, and Manufacturer) and click the Search button.

   Otherwise, you can click the Search button without entering any search criteria and all available product codes will appear.

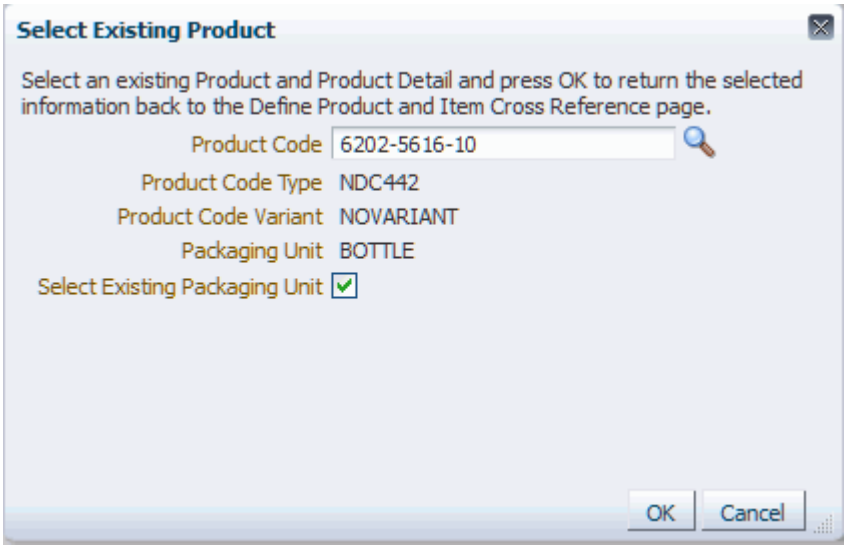
Search and Select Product Code dialog box



All of the product codes and packaging units that match the search criteria appear in the lower portion of the dialog box in a table format.

4. Select the product code and packaging unit combination and click the OK button.

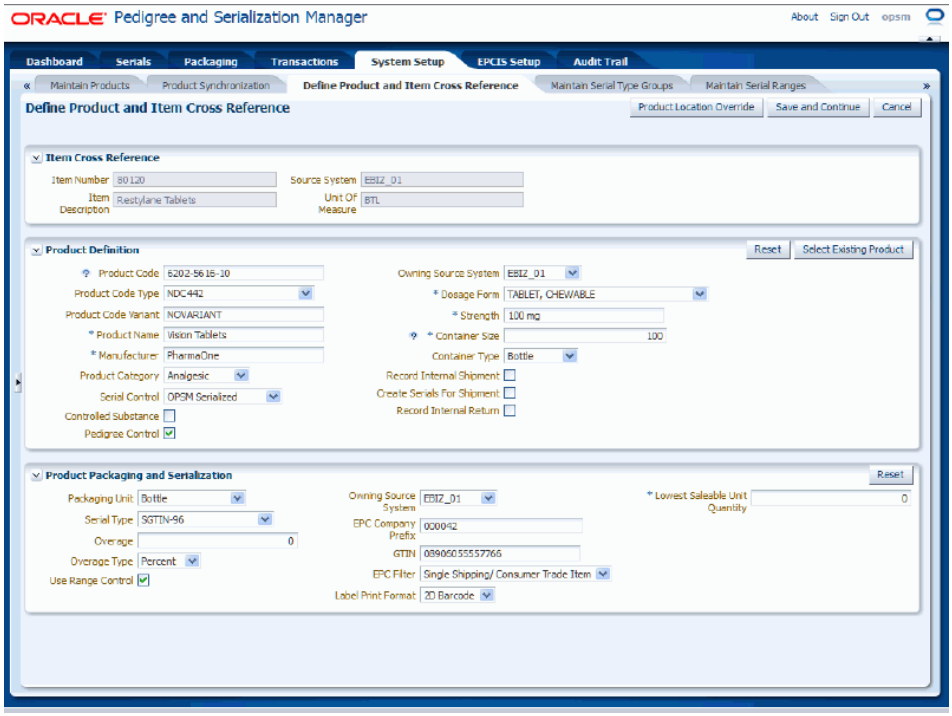
Select Existing Product dialog box



The Select Existing Product dialog box reappears displaying the packaging unit and product code selected.

5. Click the OK button.

Define Product and Item Cross Reference page

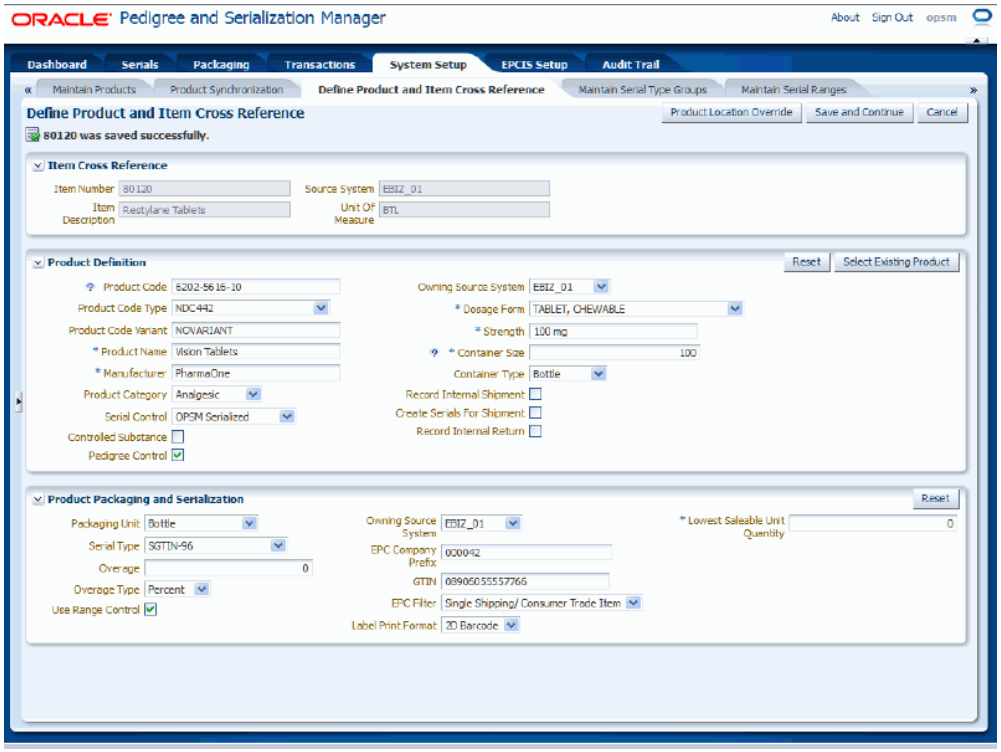


The Define Product and Item Cross Reference page appears displaying the fields associated with product code and packaging unit that you selected in the Product Definition and Product Packaging and Serialization regions of the page.

6. Enter information in the Product Definition or Product Packaging and Serialization regions that was not provided by the existing product code and packaging unit that you selected.

7. Click the Save and Continue button.

Define Product and Item Cross Reference page

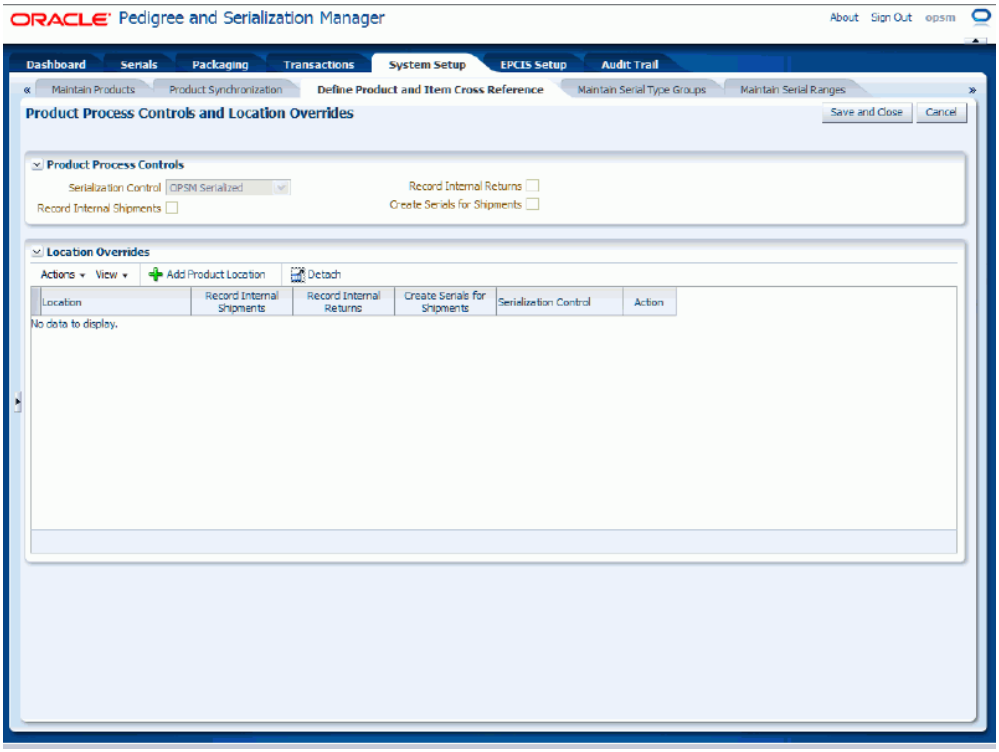


A message appears in the upper left hand corner stating that the item was saved successfully. The Product Location Override button becomes available in the upper right hand corner of the page after you have successfully saved all of the product definition information.

To Enter Product Location Overrides

8. (Optional) Click the Product Location Override button on the top of the page.

Product Process Controls and Location Overrides page



The Product Process Controls and Location Overrides page appears displaying the Serialization Control, Record Internal Shipments check box, Record Internal Returns check box, and Create Serials For Shipments check box settings for the product code in the Product Process Controls region of the page.

9. Select Add Product Location from the Actions menu or click the Add Product Location ("+" plus sign) icon located at the top of the Location Overrides region.

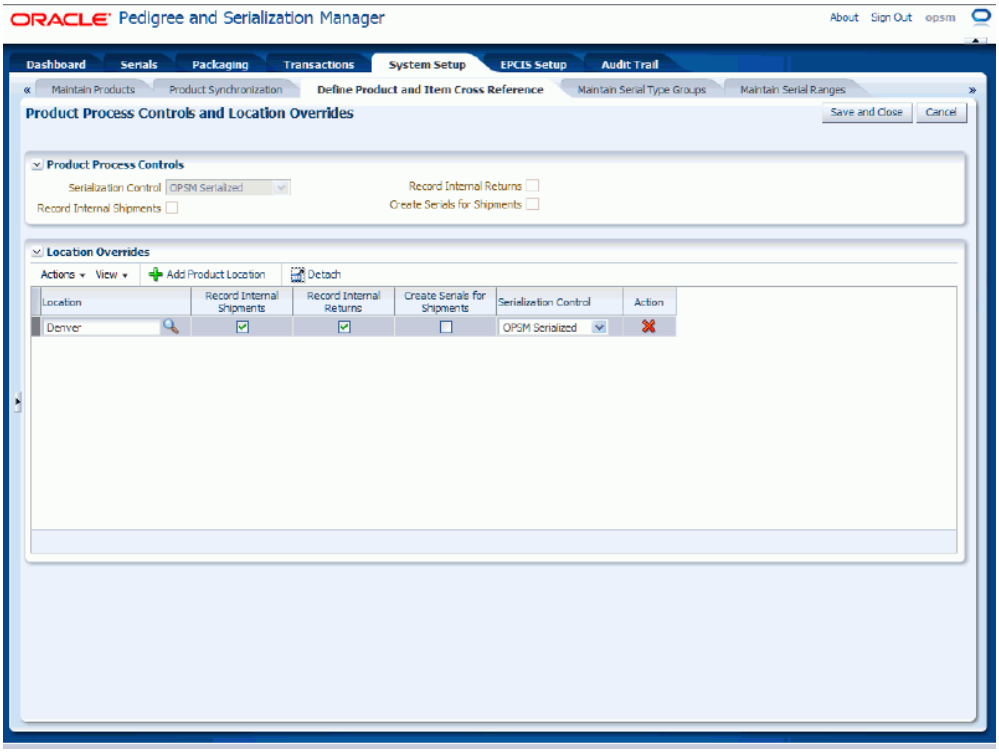
   A new row appears in the Location Overrides region where you can add the information.

10. Enter the following information:

Field Name	Description
Location	Select the location.

Field Name	Description
Record Internal Shipments check box	(Optional) Select this check box if you want the system to record shipments from internal customers for this product at this location.
Record Internal Returns check box	(Optional) Select this check box if you want the system to record returns from internal customers for this product at this location.
Create Serials for Shipments check box	(Optional) Select this check box if the system will create serials in the Oracle Pedigree and Serialization Manager system at the time of shipment at this location. If serials are not sent in with the Shipment transaction, the system will issue an exception.
Serialization Control	(Optional) Select if the serials for this location are Externally Generated or OPSM Serialized.

Product Process Controls and Location Overrides page



11. Click the Save and Close button.

    The product definition is saved in OPSM. To view the product code and item cross references that were created, you can access the Maintain Products page in OPSM and view the product code information.

    For more information on viewing a product code in OPSM, see Maintaining Products, page 4-78.

To Edit Product and Packaging Information from an External System:

To Invoke the Define Product and Item Cross Reference Page in OPSM

1. Call the URL to invoke the Define Product and Item Cross Reference page passing the parameter values:

Parameter Name	Description
page	'defineProduct'

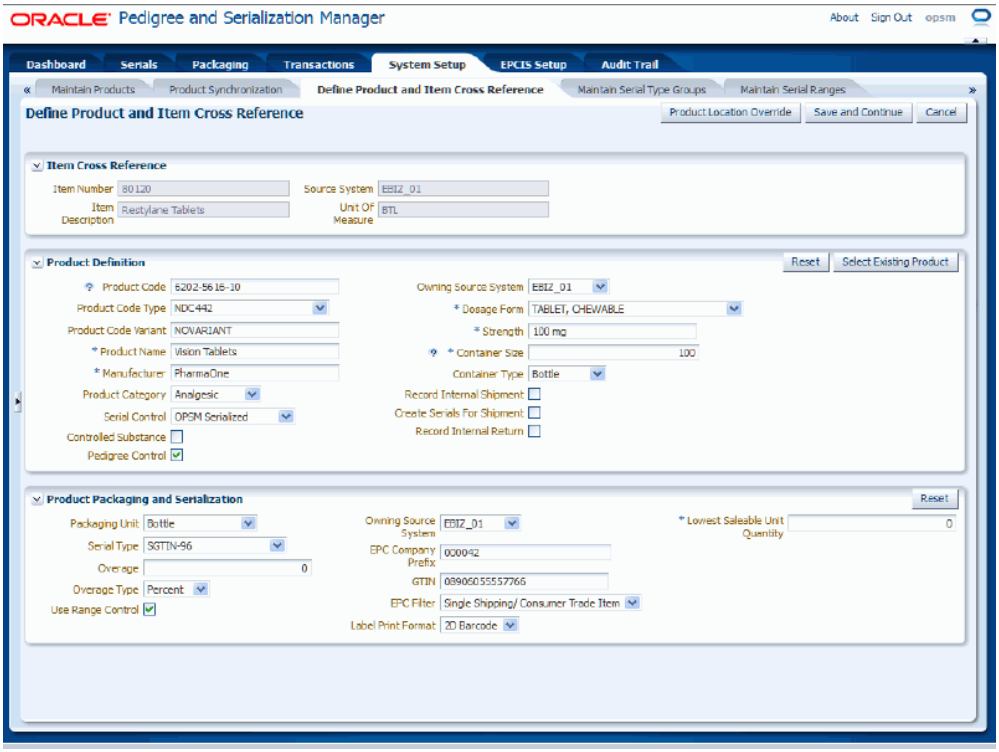
Parameter Name	Description
key	The item in the external system to be cross referenced to a product in OPSM.
unit	The unit of measure of the item to be cross referenced to a product packaging unit in OPSM.
keydesc	The description of the item in the external system.
loc	The location identifier for the item in the external system.
src	The identifier for the external system that invoked OPSM (for example, EBIZ_01).

2. If prompted for user authentication, enter your user ID and password.

To Edit Product and Packaging Information

3. Upon entry, the Define Item and Product Cross Reference page will be displayed.

Define Product and Item Cross Reference page

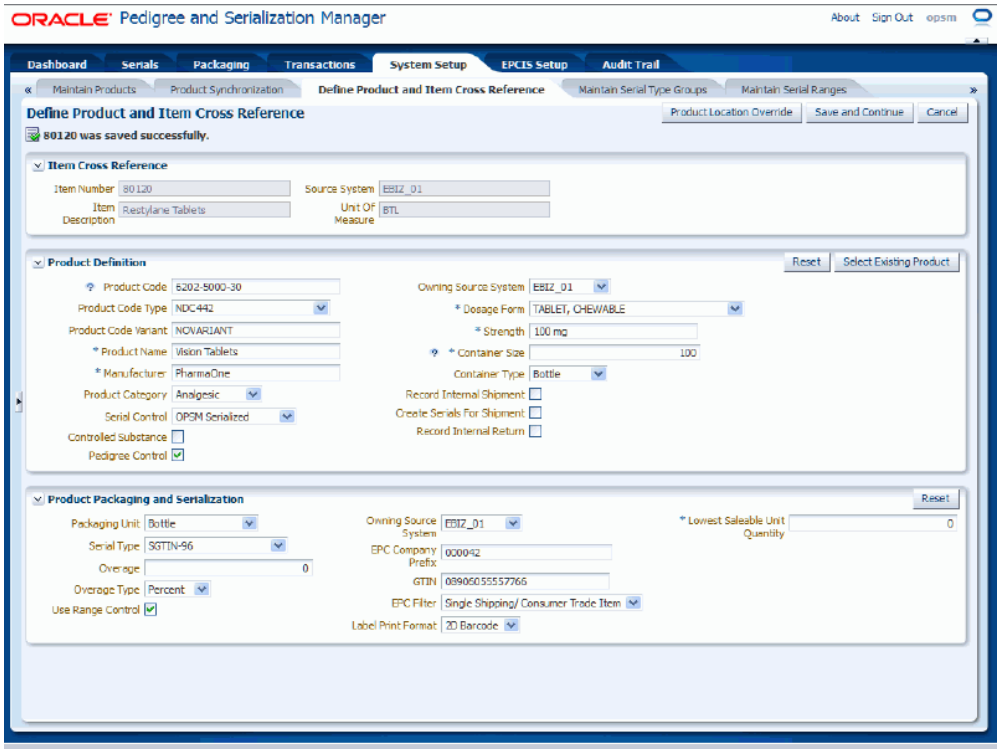


The Define Product and Item Cross Reference page is called asynchronously. The Define Product and Item Cross Reference page appears displaying all the information that is currently associated with the item number and product code.

4. Update or modify any of the fields in the Product Definition or Product Packaging and Serialization regions of the page.

5. Click the Save and Continue button.

Define Product and Item Cross Reference page (product code changed)

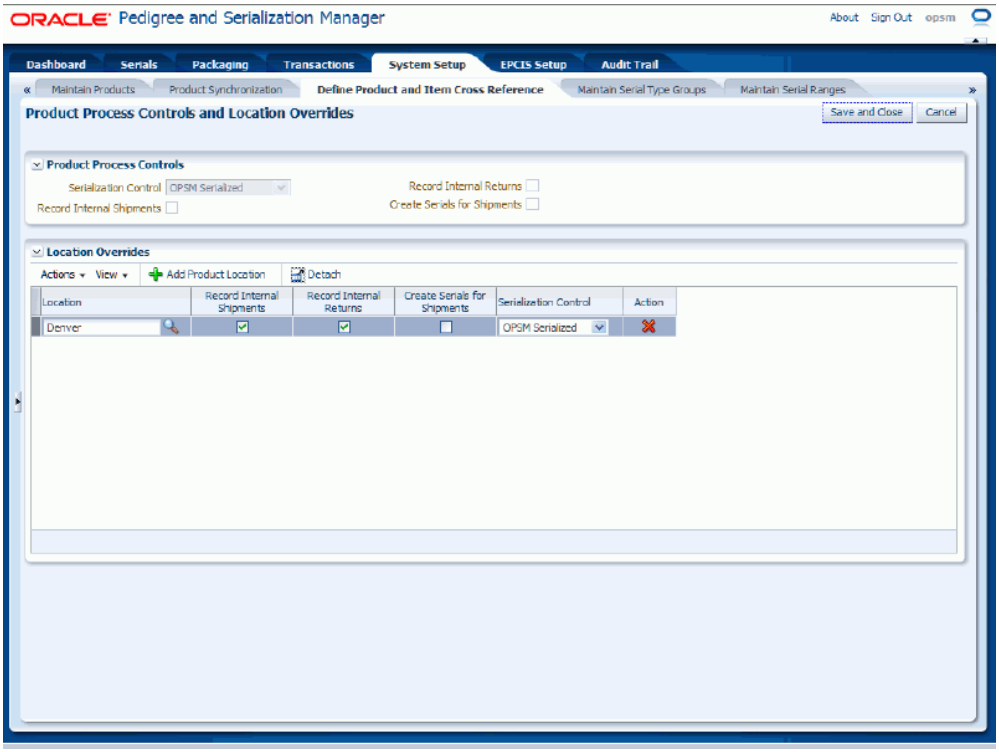


The system removes the old record containing the product and item cross reference information and creates another record with the new product and item cross reference information.

To Edit Product Location Overrides

6. Click the Product Location Override button on the top of the page.

Product Process Controls and Location Overrides page



The Product Process Controls and Location Overrides page appears displaying the current location override information for the product definition.

7. Update or modify any of the information. Perform one of these actions:

   - Modify any of the field settings for a current location that is displayed.

   - Add an additional location and its location override field settings.

     1. Select Add Product Location from the Actions menu or click the Add Product Location ("+" plus sign) icon located at the top of the Location Overrides region.

     2. Enter a new location and select the override settings for that location.

   - Delete a current location and its override settings that are currently displayed.

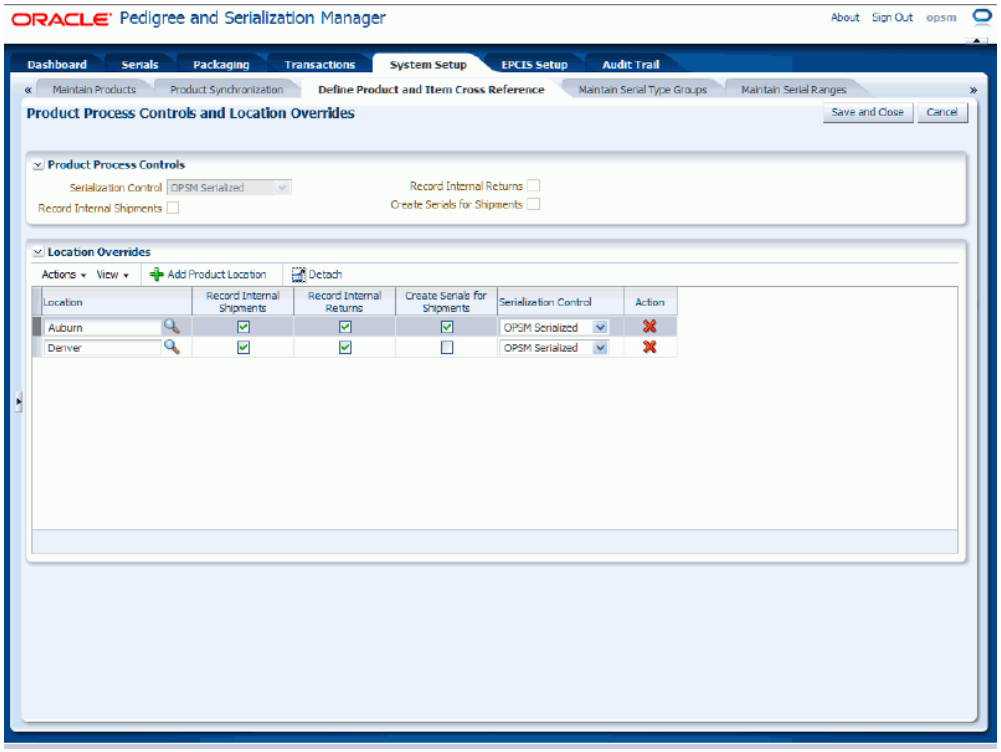
     1. Select the location override row you want to delete in the Location Overrides region.

     2. Select Delete Product Location from the Actions menu or click the Delete Product Location icon in the Action column for the row.

The system displays a message asking if you are sure you want to delete the product location.

3. Click the Yes button.

Product Process Controls and Location Overrides page (additional location added)



8. Click the Save and Close button.

   The product definition is saved in OPSM. To view the product code and item cross references that were created, you can access the Maintain Products page in OPSM and view the product code information.

   For more information on viewing a product code in OPSM, see Maintaining Products and Item Cross Reference, page 4-78.

Synchronizing Products (Products Interface Table)

Oracle Pedigree and Serialization Manager (OPSM) provides a Products Interface table that enables external systems to integrate with OPSM for Product Synchronization.

Using the Product Synchronization page in OPSM you will initiate a process which will perform one of the following synchronization actions:

- Extract Items
- Extract Items and Merge Product and Item Cross Reference
- Merge Product and Item Cross Reference

The Source System Precedence setting in the OPSM system parameters controls whether product and product detail information can be updated from any source system or only from the owning source system. The owning source system is recorded on the product and product detail records.

For more information on the product definition process, see Understanding the Product Definition Process, page 4-2.

For more information on defining Product Synchronization scenarios, see Defining Product Synchronization, Lot Synchronization, and Work Order Serialization Scenarios, page 4-216.

For more information on integrating Oracle E-Business Suite with OPSM, see the *Oracle Serialization and Tracking Integration Pack for Oracle Pedigree and Serialization Manager and Oracle E-Business Suite 3.1 - Implementation Guide.*

Use these procedures to:

- Extract item information from an external system.
- Merge the extracted items into OPSM.
- Extract and merge item information from an external system.

Prerequisites

❒ For Item Extract:

- A product extract scenario must be defined in OPSM.
- An Oracle Data Integrator (ODI) extract application that conforms to the required specifications must exist and must be configured to communicate with OPSM.

  For more information, see the *Oracle Serialization and Tracking Integration Pack for Oracle Pedigree and Serialization Manager and Oracle E-Business Suite 3.1.*

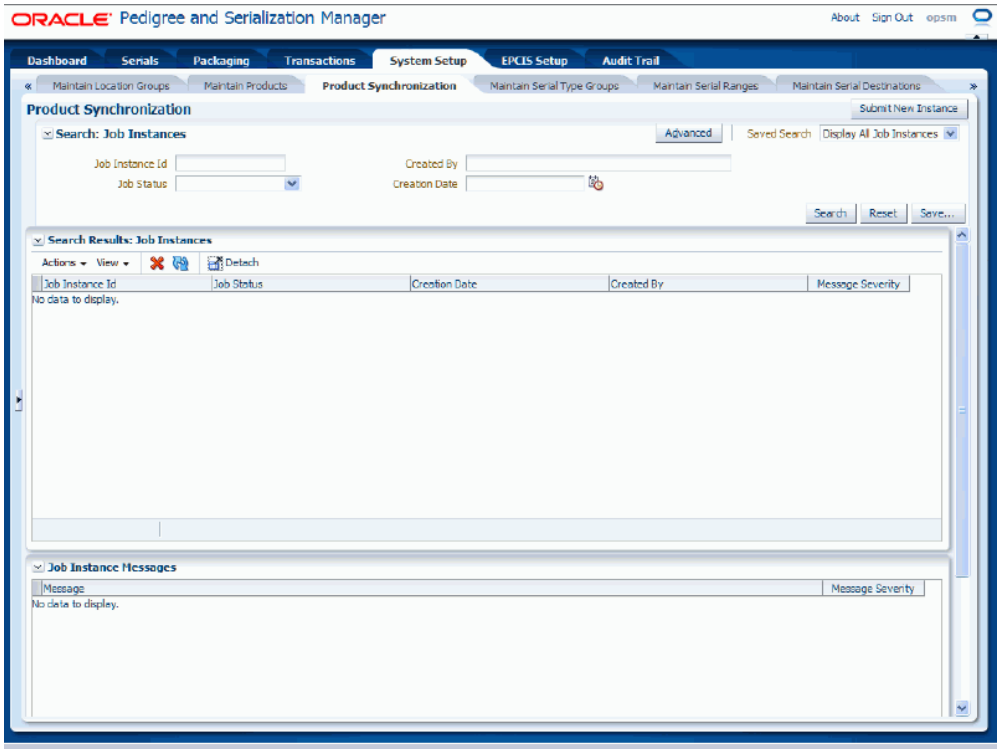
For Product and Item Cross Reference Merge:

- The Products Interface table must be populated by the extract system or another method.
- The Action Code column for each record that is ready to be merged must be set to *MERGE.*

To Extract Item Information from an External System:

1. Navigate to the Product Synchronization page, page A-2.

Product Synchronization page



2. Click the Submit New Instance button in the upper right hand corner of the Product Synchronization page.

Product Synchronization dialog box

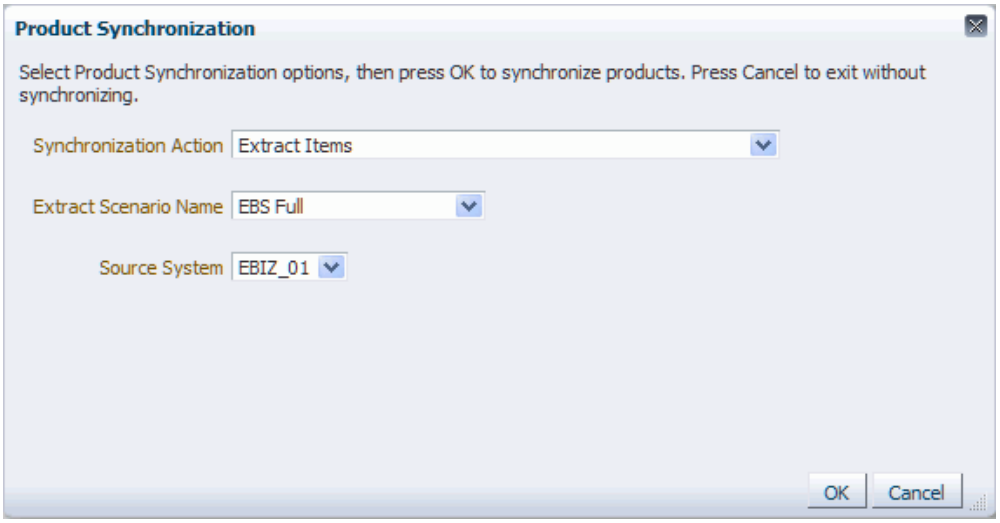
The Product Synchronization dialog box appears.

3. Enter the following options for the Product Synchronization process:

Field Name	Description
Synchronization Action	Select *Extract Items.* After you select the Synchronization Action, the Extract Scenario Name and Source System fields become available.
Extract Scenario Name	Select the extract scenario name. Extract Scenario Names are user defined using Lookup Type PAS_PRODUCT_EXTRACT. Oracle delivers two lookup codes for Product Synchronization between OPSM and Oracle E-Business Suite for the PAS_PRODUCT_EXTRACT lookup type. They are: • EBS_PROD_SYNC_FULL (EBS Full) • EBS_PROD_SYNC_INCR (EBS Incremental)

Field Name	Description
Source System	Select the source system where you are going to synchronize item information from into OPSM. Source Systems are user defined using the Lookup Type PAS_SOURCE_SYSTEM.

Product Synchronization Dialog Box



4. Click the OK button to initiate the Product Synchronization process.

   The Product Synchronization process runs in the background. The system assigns a job instance Id for that specific run of the process. The Product Synchronization page reappears.

   The Product Synchronization (Extract Items) background process will invoke an Oracle Data Integrator (ODI) application to extract item information from an external system. The item information that is extracted from the source system will be uploaded into the target OPSM Products Interface table (PAS_S_PRODUCT_INTERFACE).

5. Enter the following information in the Search: Job Instances region of the page:

Field Name	Description
Job Instance ID	(Optional) Enter a specific job instance ID.
Job Status	(Optional) Select the job status for the job instances. Job Statuses are: • Complete • Error(s) Exist • In Progress • Submitted • Abnormal Termination • Warning(s) Exist
Creation Date	Select a creation date for the job instance that is equal to the current date.
Created By	Enter the individual that initiated the process.

6. Click the Search button.

7. Locate the job instance Id for the process and verify that the Job Instance Id completed successfully or completed with warnings.

   The Job Status associated with job instance Id is at one of these statuses:

   - *Complete:* Job instance completed successfully with no errors or warnings.
   - *Error(s) Exist:* Job instance did not complete successfully.
   - *In Progress:* Job instance is in progress.
   - *Submitted:* Job instance has been submitted but not started.
   - *Abnormal Termination:* The job instance did not complete successfully due to a catastrophic failure (for example, the system went down during processing).
   - *Warning(s) Exist:* Job completed successfully but there are warning messages.

   Scroll to the Job Instance Messages region and view the following:

- Informational messages (blue circle with the letter "i"): These messages display the parameters used to initiate the process and the results of the process.
- Warning messages (A yellow triangle with an exclamation point): These messages display the warning messages for the process.

For more information on the job instances functionality, see Using Job Instances functionality, page 3-19.

To Merge the Extracted Items into OPSM:

1. Navigate to the PAS_S_PRODUCT_INTEFACE table.
2. Enrich the data in the table with OPSM specific product information.

   Enter an action code of MERGE and enter OPSM product data for each item number listed in the table.
3. Navigate to the Product Synchronization page, page A-2.
4. Click the Submit New Instance button in the upper right hand corner of the Product Synchronization page.

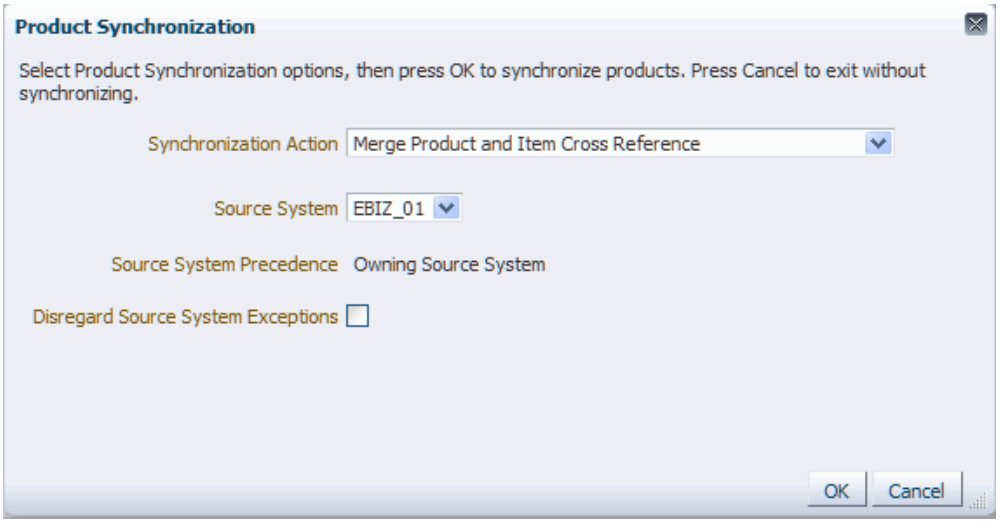
   The Product Synchronization dialog box appears.
5. Enter the following options for the Product Synchronization process:

Field Name	Description
Synchronization Action	Select *Merge Item and Product Cross Reference.* After you select the Synchronization Action, the Source System and Disregard Source System Exceptions fields become available. The Source System Precedence field appears displaying by default the Source System Precedence setting from the OPSM System Parameters page.
Source System	Select the source system where you are going to synchronize item information from into OPSM. Source Systems are user defined using the Lookup Type PAS_SOURCE_SYSTEM.

Field Name	Description
Source System Precedence	Displays the Source System Precedence setting from the OPSM System Parameters page. Values are: • Any Source System • Owning Source System

Field Name	Description
Disregard Source System Exceptions	If the Source System Precedence is set to Owning Source System, select the Disregard Source Systems Exceptions check box if you don't want the system to notify you if source systems exceptions occur. This check box is not selected by default. Both the product and the product details can be associated with an owning source system. Within the System Parameters in OPSM you have the ability to select the source system precedence. If you select to give source system precedence to the " owning source system" then no other system can update that data. For example, if the products owning source system is EBIZ_02 and an update comes in from EBIZ_01, the system issues an error because EBIZ_01 isn't the owning source system and the system parameter setup states that only the owning source system can update the product. If you select the Disregard Source Systems Exceptions check box that means you do not want to be notified if these types of exceptions occur. It does not mean that the system ignores source system precedence and updates the record anyway; it simply means that the error is not written to the error table and subsequently they will not display in the Job Instance Message area on the bottom part of the page. The record will still be cleared from the Product Interface table even though it was not successfully processed. If you do not select the Disregard Source Systems Exceptions check box, the system will record an error every time a source system precedence issue occurs and the messages will display in the Job Instance Message area. The records that are in error will remain in the Product Interface table.

Product Synchronization dialog box



6. Click the OK button to initiate the Product Synchronization process.

   The Product Synchronization process runs in the back ground. The system assigns a job instance Id for that specific run of the process. The Product Synchronization page reappears.

   The Product Synchronization (Merge Product and Item Cross Reference Information) background process takes the item number and product information that was enriched from the PAS_S_PRODUCT_INTERFACE table and validates and inserts the transformed data into the OPSM Product and Item Cross Reference tables (PAS_S_PRODUCTS, PAS_S_PRODUCT_DETAILS, PAS_S_PRODUCT_ITEMS, and PAS_S_PRODUCT_ITEM_UOMS).

7. Enter the following information in the Search: Job Instances region of the page:

Field Name	Description
Job Instance ID	(Optional) Enter a specific job instance ID.

Field Name	Description
Job Status	(Optional) Select the job status for the job instances. Job Statuses are: • Complete • Error(s) Exist • In Progress • Submitted • Abnormal Termination • Warning(s) Exist
Creation Date	Select a creation date for the job instance that is equal to the current date.
Created By	Enter the individual that initiated the process.

8. Click the Search button.

9. Locate the job instance Id for the process and verify that the Job Instance Id completed successfully or completed with warnings.

   The Job Status associated with job instance Id is at one of these statuses:

   - *Complete:* Job instance completed successfully with no errors or warnings.
   - *Error(s) Exist:* Job instance did not complete successfully.
   - *In Progress:* Job instance is in progress.
   - *Submitted:* Job instance has been submitted but not started.
   - *Abnormal Termination:* The job instance did not complete successfully due to a catastrophic failure (for example, the system went down during processing).
   - *Warning(s) Exist:* Job completed successfully but there are warning messages.

   Scroll to the Job Instance Messages region and view the following:

   - Informational messages (blue circle with the letter "i"): These messages display

the parameters used to initiate the process and the results of the process.

- Warning messages (A yellow triangle with an exclamation point): These messages display the warning messages for the process.

You can also verify the results of the Product Synchronization process (Merge Product and Item Cross Reference Information synchronization action) by navigating to the OPSM Edit Product page. The Serial Generation Details sub tab will display the item and product information that was created in OPSM.

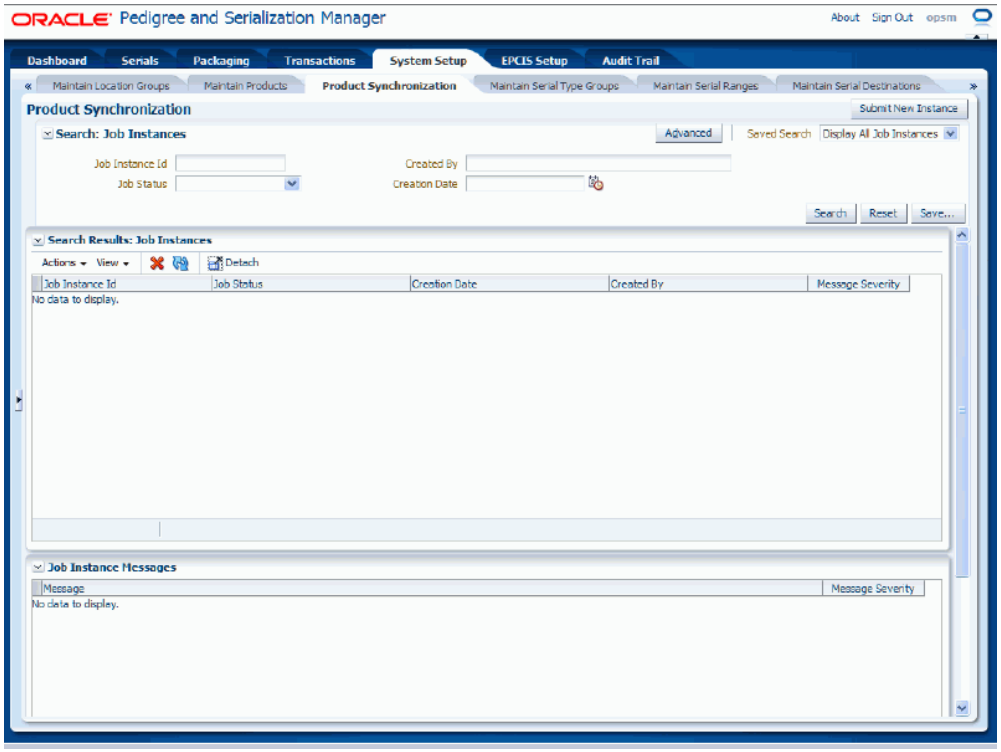
For more information on the job instances functionality, see Using Job Instances functionality, page 3-19.

For more information on the OPSM Edit Product page, see Maintaining Products, page 4-78.

To Extract and Merge Item Information from an External System:

1. Navigate to the Product Synchronization page, page A-2.

Product Synchronization page



2. Click the Submit New Instance button in the upper right hand corner of the Product Synchronization page.

Product Synchronization dialog box

The Product Synchronization dialog box appears.

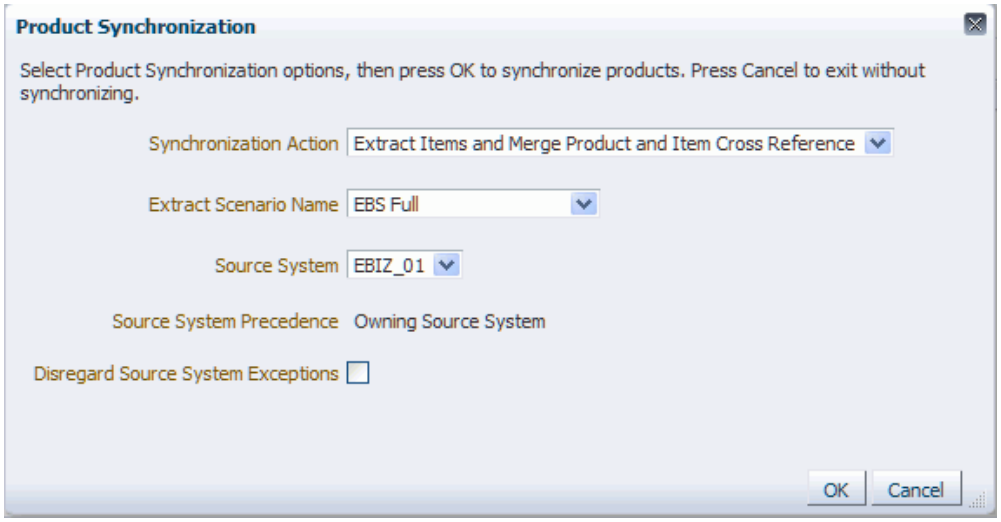
3. Enter the following options for the Product Synchronization process:

Field Name	Description
Synchronization Action	Select *Extract Items and Merge Product and Item Cross Reference.* After you select the Synchronization Action, the Extract Scenario Name, Source System, and Disregard Source System Exceptions fields become available. The Source System Precedence field appears displaying by default the Source System Precedence setting from the OPSM System Parameters page.
Source System	Select the source system where you are going to synchronize item information from into OPSM. Source Systems are user defined using the Lookup Type PAS_SOURCE_SYSTEM.

Field Name	Description
Extract Scenario Name	Select the extract scenario name. Extract Scenario Names are user defined using Lookup Type PAS_PRODUCT_EXTRACT. Oracle delivers two lookup codes for Product Synchronization between OPSM and Oracle E-Business Suite for the PAS_PRODUCT_EXTRACT lookup type. They are: • EBS_PROD_SYNC_FULL (EBS Full) • EBS_PROD_SYNC_INCR (EBS Incremental)
Source System Precedence	Displays the Source System Precedence setting from the OPSM System Parameters page. Values are: • Any Source System • Owning Source System

Field Name	Description
Disregard Source System Exceptions	If the Source System Precedence is set to Owning Source System, select the Disregard Source Systems Exceptions check box if you don't want the system to notify you if source systems exceptions occur. This check box is not selected by default. Both the product and the product details can be associated with an owning source system. Within the System Parameters in OPSM you have the ability to select the source system precedence. If you select to give source system precedence to the " owning source system" then no other system can update that data. For example, if the products owning source system is EBIZ_02 and an update comes in from EBIZ_01, the system issues an error because EBIZ_01 isn't the owning source system and the system parameter setup states that only the owning source system can update the product. If you select the Disregard Source Systems Exceptions check box that means you do not want to be notified if these types of exceptions occur. It does not mean that the system ignores source system precedence and updates the record anyway; it simply means that the error is not written to the error table and subsequently they will not display in the Job Instance Message area on the bottom part of the page. The record will still be cleared from the Product Interface table even though it was not successfully processed. If you do not select the Disregard Source Systems Exceptions check box, the system will record an error every time a source system precedence issue occurs and the messages will display in the Job Instance Message area. The records that are in error will remain in the Product Interface table.

Product Synchronization dialog box



4. Click the OK button to initiate the Product Synchronization process.

   The Product Synchronization process runs in the back ground. The system assigns a job instance Id for that specific run of the process. The Product Synchronization page reappears.

   The Product Synchronization (Extract Items) background process will invoke an Oracle Data Integrator (ODI) application to extract item information from an external system. The item information that is extracted from the source system will be uploaded into the target OPSM Products Interface table (PAS_S_PRODUCT_INTERFACE).

   The Product Synchronization (Merge Product and Item Cross Reference Information) background process takes the item number and product information from the PAS_S_PRODUCT_INTERFACE table and validates and inserts the transformed data into the OPSM Product and Item Cross Reference tables (PAS_S_PRODUCTS, PAS_S_PRODUCT_DETAILS, PAS_S_PRODUCT_ITEMS, and PAS_S_PRODUCT_ITEM_UOMS).

5. Enter the following information in the Search: Job Instances region of the page:

Field Name	Description
Job Instance ID	(Optional) Enter a specific job instance ID.

Field Name	Description
Job Status	(Optional) Select the job status for the job instances. Job Statuses are: • Complete • Error(s) Exist • In Progress • Submitted • Abnormal Termination • Warning(s) Exist
Creation Date	Select a creation date for the job instance that is equal to the current date.
Created By	Enter the individual that initiated the process.

6. Click the Search button.

7. Locate the job instance Id for the process and verify that the Job Instance Id completed successfully or completed with warnings.

   The Job Status associated with job instance Id is at one of these statuses:

   - *Complete:* Job instance completed successfully with no errors or warnings.
   - *Error(s) Exist:* Job instance did not complete successfully.
   - *In Progress:* Job instance is in progress.
   - *Submitted:* Job instance has been submitted but not started.
   - *Abnormal Termination:* The job instance did not complete successfully due to a catastrophic failure (for example, the system went down during processing).
   - *Warning(s) Exist:* Job completed successfully but there are warning messages.

   Scroll to the Job Instance Messages region and view the following:

   - Informational messages (blue circle with the letter "i"): These messages display

the parameters used to initiate the process and the results of the process.

- Warning messages (A yellow triangle with an exclamation point): These messages display the warning messages for the process.

You can also verify the results of the Product Synchronization process (Merge Product and Item Cross Reference Information synchronization action) by navigating to the OPSM Edit Product page. The Serial Generation Details sub tab will display the item and product information that was created in OPSM.

For more information on the job instances functionality, see Using Job Instances functionality, page 3-19.

For more information on the OPSM Edit Product page, see Maintaining Products, page 4-78.

Maintaining Serial Type Groups and Serial Types

Use the Serial Type Group pages in Oracle Pedigree and Serialization Manager (OPSM) to maintain serial type groups and serial types that are used by the system when generating serial numbers. Serial types are required in OPSM and are used to define the criteria and method for the generation of serial numbers. Serial type groups are used to group one or more serial types for serial range management. New serial types and new serial type groups can be added. If a new serial type is added to an existing serial type group, the new serial type will utilize the existing serial ranges defined for the serial type group. Adding a new serial type group will establish a new set of serial ranges.

After serial type groups are created, you can optionally define serial ranges for the serial type groups. Serial ranges contain information to reserve ranges of unique numbers for the generation of serial numbers.

For more information on serial ranges, see Maintaining Serial Ranges, page 4-176.

Product Unit Identifier

The Product Unit Identifier (PUID) is used to define the control level for management of serial ranges and generation of unique serial numbers. The control level can be defined by Product, Product Packaging Unit, or GTIN level. Use these criteria when deciding which PUID level to use:

- Use a PUID equal to GTIN if the serial type is based off the GTIN (for example, SGTIN-96).

- Use either PUID equal to Product or PUID equal to Product Packaging Unit when the serial is not GTIN based. Choose based on business need to serialize uniquely by Product or Product Packaging Unit.

Important: The PUID Formula defined on the Serial Type Group cannot be changed if products, serial ranges, or serials exist for any of the serial types within the Serial Type Group.

Product Code	Product Code Type	Packaging Unit	GTIN	Serial Type	PUID	Item Serial Number
0037-0209-10	NDC442	BlisterPack	00000037002092	SGTIN-96	00000037002092	10000370002091
00000037002092	GTIN	BlisterPack	00000037002092	SGTIN-96	00000037002092	10000370002092
00000037002884	GTIN	Box		USN-1	00000037002884 GTIN	1
00000037002884	GTIN	Box+10%		USN-1	00000037002884 GTIN	2
00000037002884	GTIN	Box+20%		USN-1	00000037002884 GTIN	3
00000037012297	GTIN	16 OZ		USN-1	00000037012297 GTIN 16 OZ	1
00000037033428	GTIN	12 OZ		USN-1	00000037033428 GTIN 12 OZ	1
00000037087874	GTIN	9 OZ		USN-1	00000037012297 GTIN 10 OZ	1
0037-0456-10	NDC442	BlisterPack		SNI	0037045610NDC442	00003702091000000001
0037-0456-10	NDC442	Box	10000037004561	SGTIN-96	10000037004561	20000371004561
0037-0456-10	NDC442	Case	20000037004565	SGTIN-96	20000037004565	20000372004561

Following are scenarios illustrating the various PUID control levels:

Scenario 1: Two product codes that can represent the same product (PUID = GTIN).

Two different product codes are used to define the same product. Product Codes are different, but they share the same GTIN. GTIN is used to control serials ranges and unique serial generation validation.

Example of where GTIN control level would be used for an SGTIN serial

Product Code	Product Code Type	Packaging Unit	GTIN	Serial Type	PUID	Item Serial Number
0037-0209-10	NDC442	BlisterPack	**00000037002092**	SGTIN-96	00000037002092	1000037000209**1**
00000037002092	GTIN	BlisterPack	**00000037002092**	SGTIN-96	00000037002092	1000037000209**2**

Scenario 2: Serialization by Product without consideration for packaging (PUID = Product).

Different packaging units of a product exist that share a common product code. Product Code is used to assure unique serialization across different product packaging units

Example where Product control level would be used for a product based serial number

Product Code	Product Code Type	Packaging Unit	GTIN	Serial Type	PUID	Serial Number
00000037002884	**GTIN**	Box		USN-1	**00000037002884.GTIN**	**1**
00000037002884	**GTIN**	Box+10%		USN-1	**00000037002884.GTIN**	**2**
00000037002884	**GTIN**	Box+15%		USN-1	**00000037002884.GTIN**	**3**

Scenario 3: Serialization by Product Packaging (USN-1) (PUID = Product Packaging Unit).

Unique serial number at each product packaging level without a GTIN.

Example where Product Packaging (Product Detail) control level would be used for a product packaging based serial number

Product Code	Product Code Type	Packaging Unit	GTIN	Serial Type	PUID	Serial Number
00000037012297	**GTIN**	**16 OZ**		USN-1	**00000037012297.GTIN.16OZ**	**1**
00000037033428	**GTIN**	**12 OZ**		USN-1	**00000037033428.GTIN.12OZ**	**1**
00000037087874	**GTIN**	**10 OZ**		USN-1	**00000037087874.GTIN.10OZ**	**1**

Serial Types

Serial Type definitions are used to define the attributes used for serial generation. These attributes include the minimum and maximum value of the unique number portion of the generated serial.

Attributes defined for serial types include:

- Minimum value
- Maximum value
- Unique Serial Number Method
- Increment By
- Random Minimum
- Random Maximum

Example of Serial Type Groups and Serial Types Setup

Serial Groups			Serial Types		
Group	Range Control Level	Product Specific	Serial Type	Minimum	Maximum
SGTIN	Location and PUID	Yes	SGTIN-96	1	27,432,887
			SGTIN-198	1	99999999999999999999
USN	Location	No	USN-1	1	9999999999

When defining serial types, one or more serial types can be assigned to a serial group. If more than one serial type is assigned to a serial group, all the serial types within the serial group will share a common set of serial range records.

- SGTIN-96 serial type and SGTIN-198 serial type are in the same serial type group. Serials generated for either of these serial types will share the same serial range definition.

- SGTIN-96 serial type and USN-1 serial type are in separate serial type groups. This enables separate serial ranges to be defined for each of the serial types.

Use these procedures to search for, view, create, edit, and delete serial type groups:

Prerequisites

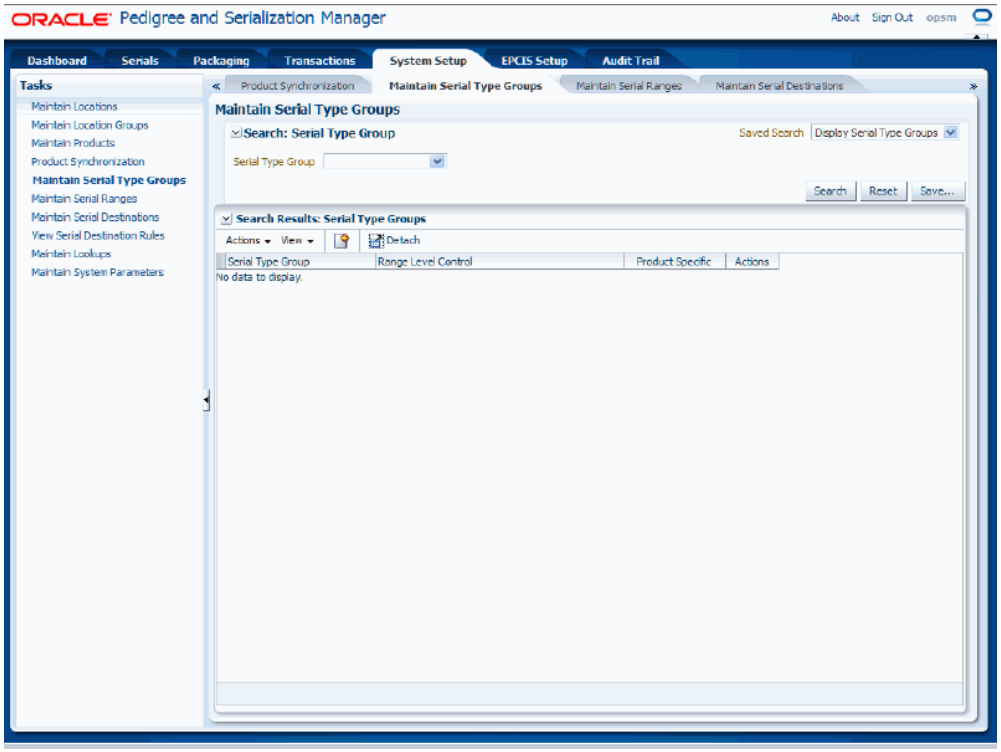
❒ Serial Types (PAS_SERIAL_TYPE) and Serial Type Groups (PAS_SERIAL_TYPE_GROUP) have been previously created using the Maintain Lookups page.

For more information, see Maintaining Lookups, page 4-4.

To Search for Serial Type Groups:

1. Navigate to the Maintain Serial Type Groups page, page A-2.

Maintain Serial Type Groups page

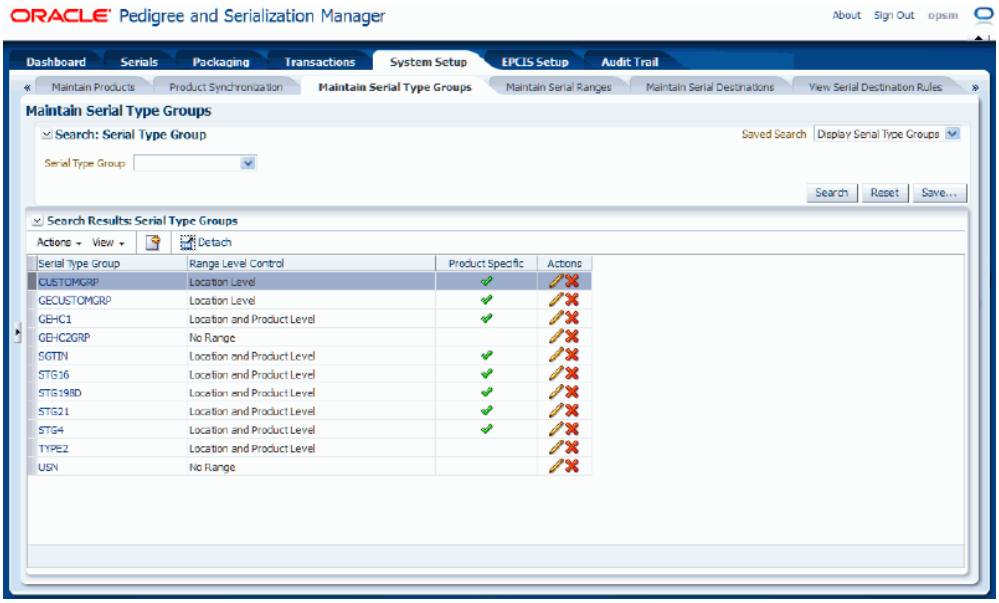


2. (Optional) In the Search: Serial Type Group region, select the Serial Type Group you want to search for using the Serial Type Group field.

   Note: You can click the Search button without entering any search criteria and all available serial type groups will appear.

3. Click the Search button.

Maintain Serial Type Groups page



All of the serial type groups that match the search criteria appear in the Search Results: Serial Type Groups region in a table format. The following information displays for each serial type group:

Field Name	Description
Serial Type Group	Displays the serial type group.
Range Level Control	Displays the range level control for the serial type group. Range Level Controls are: • No Range • Location Level • Location and Product Level
Product Specific	Displays a green check mark icon if a serial type group is product specific.
Actions	Displays the Edit Serial Type Group and Delete Serial Type Group icons.

To View Serial Type Group Information:

1. Navigate to the Maintain Serial Type Groups page, page A-2.

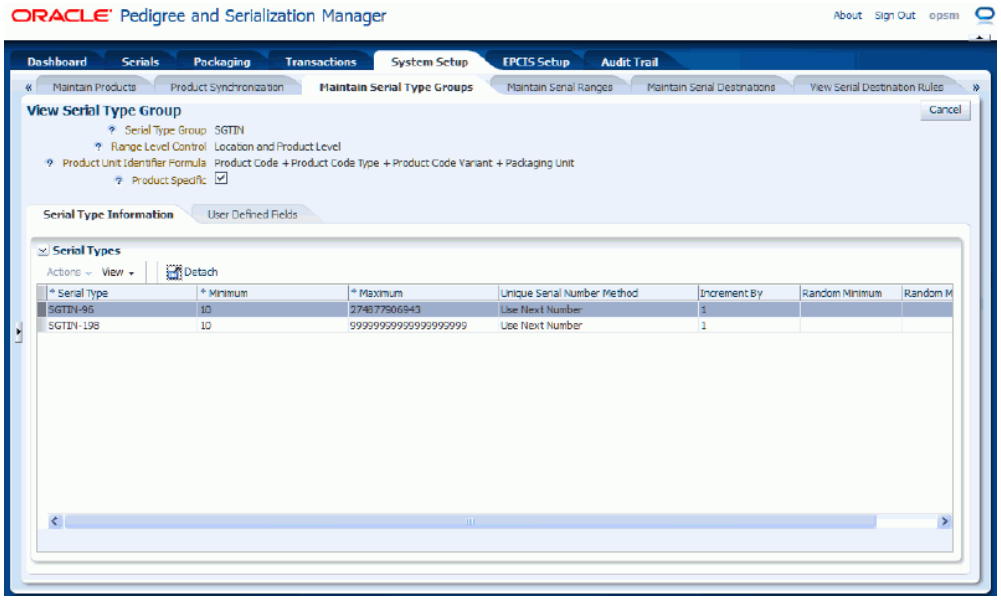
2. Enter search criteria for the serial type group you want to view and click the Search button.

   All of the serial type groups that match the search criteria appear in the Search Results: Serial Type Groups table.

3. Select the serial type group in the table that you want to view.

4. Click the Serial Type Group link.

View Serial Type Group page



The View Serial Type Group page appears.

5. Select the different sub tabs (Serial Type Information and User Defined Fields) to the view that particular type of information for the serial type group.

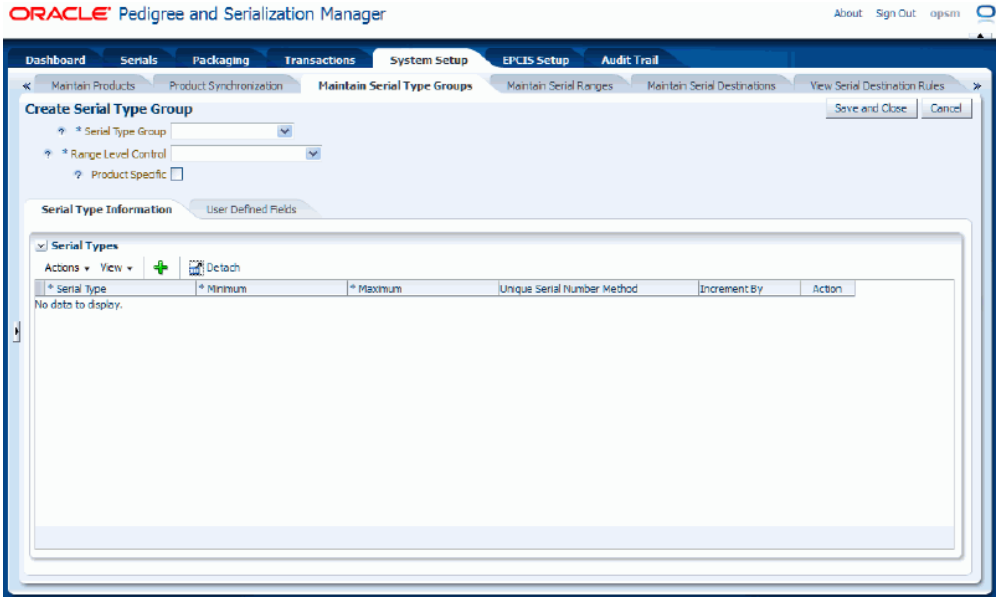
6. Click the Cancel button to return back to the Maintain Serial Type Groups page.

To Create Serial Type Groups:

1. Navigate to the Maintain Serial Type Groups page, page A-2.

2. Select Create from the Actions menu or click the Create Serial Type Group icon located at the top of the Search Results: Serial Type Groups region.

Create Serial Type Group page



The Create Serial Type Group page appears.

3. Enter the following information:

Field Name	Description
Serial Type Group	Select the serial type group. Serial type groups are a grouping of common serial types.

Field Name	Description
Range Level Control	Select the range level control for the serial type group. The system uses this field to determine how to access serial ranges. Range Level Controls are: • No Range: Serial ranges will not be used. • Location Level: All requests for serial numbers for the specified location consume numbers within the range specified for the location. The serials may or may not be associated to a product when the serial is generated. • Location and Product Level: All requests for serial numbers consume the numbers from a product and location specific pool of numbers. This enables you to allocate serial numbers by product to a location. When you select a range level control of *Location and Product Level* the Product Unit Identifier Formula field is required and the Product Specific check box must be selected. The Product Unit Identifier Formula field will become available after the Product Specific check box is selected or after the range level control of *Location and Product Level* is selected.

Field Name	Description
Product Unit Identifier Formula	The Product Unit Identifier (PUID) is used to define the control level for management of serials ranges and generation of unique serial numbers. The control level can be defined by Product, Product Packaging Unit, or GTIN level. Select the Product Unit Identifier Formula for the serial type group. Formulas are: • GTIN • Product (Product Code + Product Code Type + Product Code Variant) • Product Packaging Unit (Product Code + Product Code Type + Product Code Variant + Packaging Unit)

Field Name	Description
Product Specific check box	(Optional) Product Specific check box is selected: • The product will be required for creation of serials. • When *Location Level* range level control is specified, each unique product grouping identified by the PUID will be allocated a separate set of unique numbers. • *Location and Product Level* range level control can be selected. Product Specific check box is clear: • The product is not required for the creation of serials. • When *Location Level* range level control is specified, all products share the same set of unique numbers. The Product Specific check box should be selected for serial types such as, SGTIN-96 and SGTIN-198 that incorporate the product code into the serial number. Optionally, serial types that do not incorporate the product code can be marked as product specific to make them behave like a product specific serial type. When you select a range level control of *Location and Product Level* the Product Unit Identifier Formula field is required and the Product Specific check box must be selected. The Product Unit Identifier Formula field will become available after the Product Specific check box is selected or after the range level control of *Location and Product Level* is selected.

4. Select the Serial Type Information sub tab.

5. Select Add from the Actions menu or click the Add Serial Type icon located at the top of the Serial Types table.

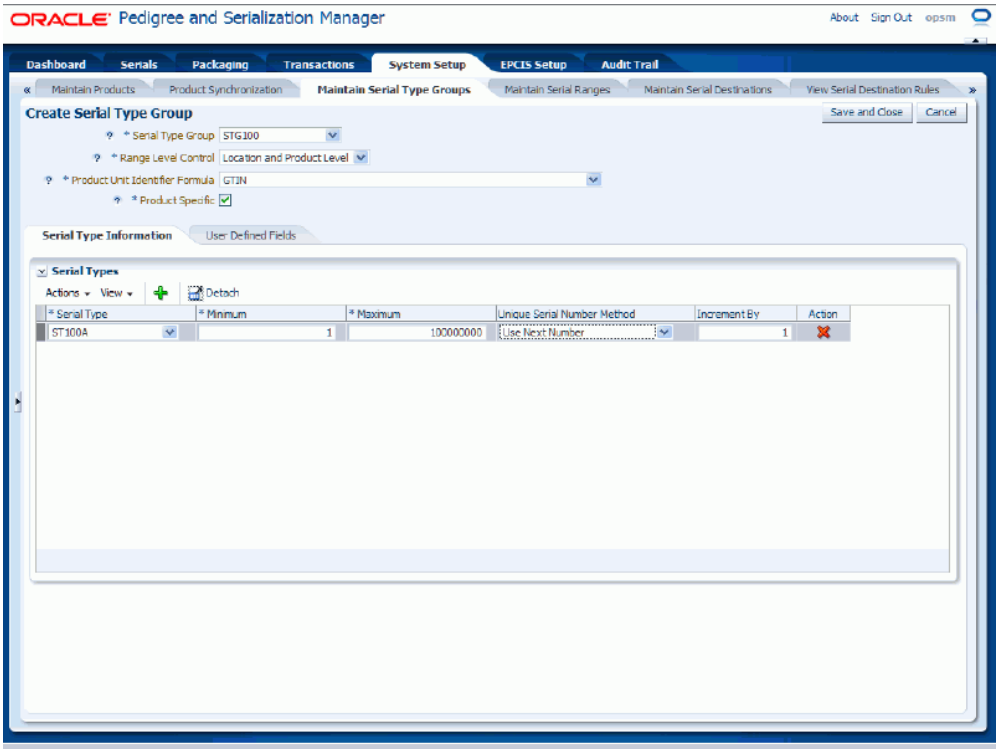
   A new blank row appears in the table.

6. Enter the following information:

Field Name	Description
Serial Type	Select the serial type you would like to add to this serial type group.
Minimum	Enter the minimum value of the serial number that can be created for this serial type.
Maximum	Enter the maximum value of the serial number that can be created for this serial type. **Note:** The maximum value on the serial type can be set based on the standards for the serial type, limitations of label size for printing, or limitations on serial size from integrated systems.
Unique Serial Number Method	Select the unique serial number method. Methods are: • Use Random Number: The system will generate a random number for the unique serial number portion of the serial. If ranges are set up, the system will ensure the random number is within the range specified. • Use Next Number: The system will use the next number for the unique serial number portion of the serial. If ranges are set up, the system will ensure the next number is within the range specified.

Field Name	Description
Increment By	Enter the increment by value for the serial number. This field is used in conjunction with the *Use Next Number* unique serial number method. This field is not available for a method of *Use Random Number*.
Random Minimum	Enter the minimum random increment used when the Unique Serial Number Method is *Use Random Number*.
Random Maximum	Enter the maximum random increment used when the Unique Serial Number Method is *Use Random Number*.

Create Serial Type Group page - Serial Type Information sub tab

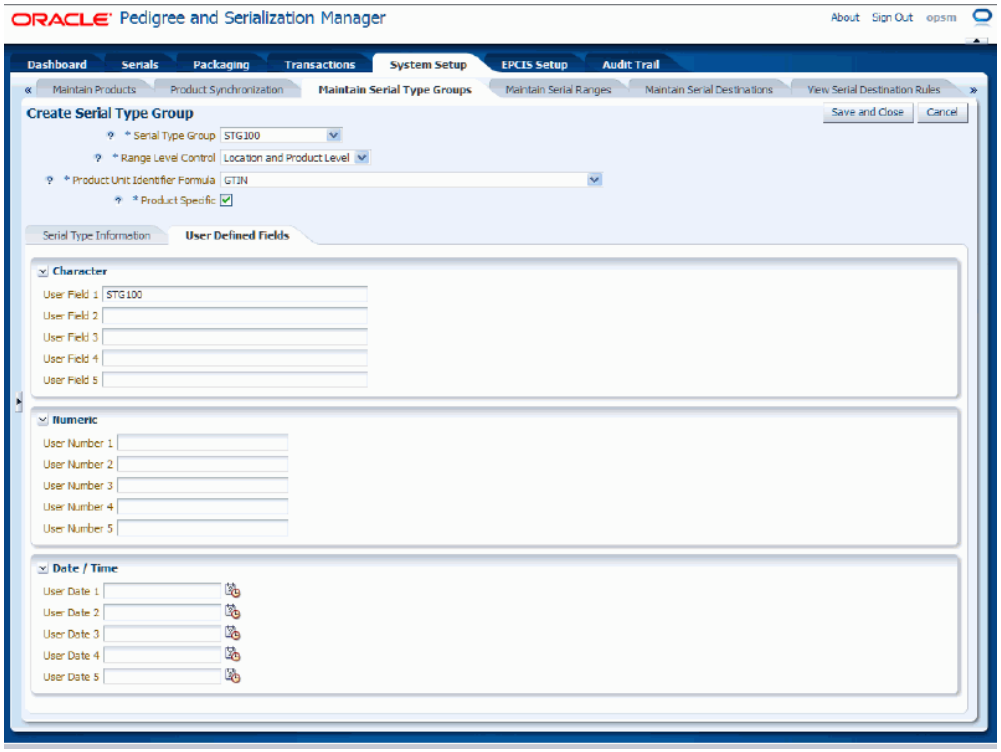


7. Repeat steps 5-6 until all serial types have been added.

8. Select the User Defined Fields sub tab.

9. Enter user-defined data using any of the fields in the Character, Numeric, and Date/Time regions of the page.

Create Serial Type Group page - User Defined Fields sub tab



10. Click the Save and Close button to save this serial type group and return back to the Maintain Serial Type Groups page.

To Edit Serial Type Groups:

1. Navigate to the Maintain Serial Type Groups page, page A-2.

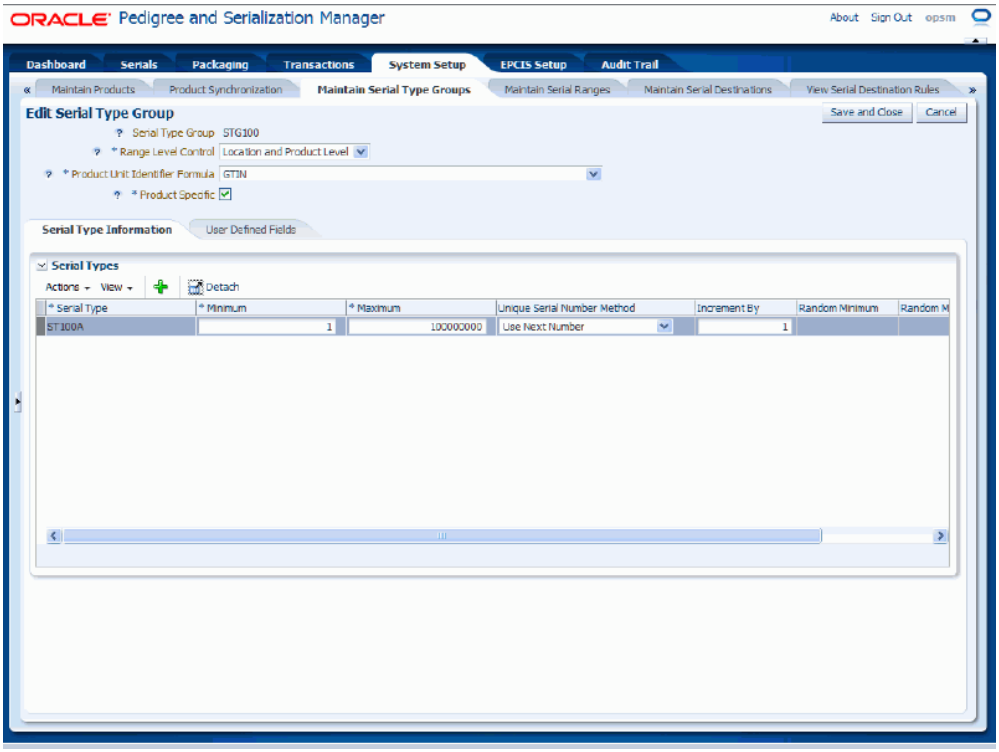
2. Enter search criteria for the serial type groups you want to edit and click the Search button.

   All of the serial type groups that match the search criteria appear in the Search Results: Serial Type Groups table.

3. Select the serial type group in the table that you want to edit.

4. Select Edit in the Actions menu or click the Edit Serial Type Group icon associated with the serial type group in the Actions column of the results table.

Edit Serial Type Group page



The Edit Serial Type Group page appears displaying all of the existing information for the serial type group.

5. Edit any of the serial type group fields.

   You can edit any of the fields pertaining to the serial type group.

   The PUID Formula and Product Specific check box cannot be changed if:

   - Locations are defined with the location serial type defined within the serial type group.
   - Product detail records have been defined with a Serial Type that is associated to the Serial Type Group.
   - Serial ranges have been defined for the Serial Type Group.
   - Serials have been generated for any serial type within the serial type group.

   If the Product Specific check box is clear, Range Level Control cannot be changed to *Location and Product Level* after products are defined with a serial type associated to the serial type group.

6. Click the Save and Close button to save the changes you made to the serial type

group information and to return back to the Maintain Serial Type Groups page.

To Delete Serial Type Groups:

1. Navigate to the Maintain Serial Type Groups page, page A-2.

2. Enter search criteria for the serial type groups you want to delete and click the Search button.

   All of the serial type groups that match the search criteria appear in the Search Results: Serial Type Groups table.

3. Select the serial type group in the table that you want to delete.

4. Select Delete in the Actions menu or click the Delete Serial Type Group icon in the Actions column of the results table.

   The system displays a message asking if you are sure you to want to delete the serial type group.

   > **Note:** If you try to delete a serial type group that has associated serial types the system will issue an error message. You must first delete the serial types associated with the serial type group and then you will be able to delete the serial type group.

   For more information on deleting serial types associated with a serial type group, see Procedure: To Delete Serial Types Associated with a Serial Type Group, page 4-175.

5. Click the Yes button.

   The serial type group is deleted from the system.

To Delete Serial Types Associated with a Serial Type Group:

1. Navigate to the Maintain Serial Type Groups page, page A-2.

2. Enter search criteria for the serial type groups you want to delete serial types for and click the Search button.

   All of the serial type groups that match the search criteria appear in the Search Results: Serial Type Groups table.

3. Select the serial type group in the table that you want to delete the associated serial type from.

4. Select Edit in the Actions menu or click the Edit Serial Type Group icon in the Actions column of the results table.

The Edit Serial Type Group page appears displaying all of the associated serial types within the Serial Type Information sub tab.

5. Select the Serial Type in the Serial Types table that you want to delete.

   Serial types cannot be deleted if locations or products are defined for the serial type or serial numbers are created for the serial type in OPSM.

6. Select Delete from the Actions menu or click the Delete Serial Type icon located in the Action column for the serial type.

   The system displays a message asking if you are sure you to want to delete the serial type.

7. Click the Yes button.

   The serial type is deleted from the serial type group.

Maintaining Serial Ranges

The use of the serial range management feature in Oracle Pedigree and Serialization Manager (OPSM) is optional. Serial range management enables ranges of serials to be reserved for the following:

- Location
- Location Group
- Location and product unit identifier (PUID)
- Location Group and product unit identifier (PUID)

The range control level is established in the Serial Group definition. The reservation of the serial range will prevent other locations from generating or importing serial numbers within the reserved range.

Use the Maintain Serial Ranges page in OPSM to maintain unique serial ranges for a serial type group. These ranges are used by the system when generating serial numbers.

You do need to define a serial type group for the OPSM system to be able to generate serial numbers. The serial type group provides the parameters for how the serial ranges should be defined.

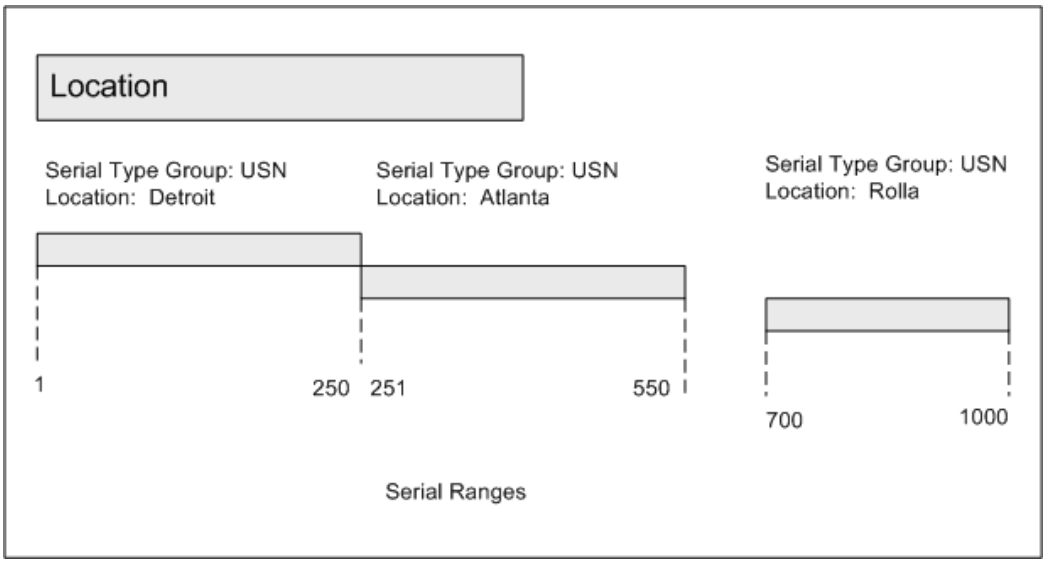
Defining Serial Ranges by Location

The rules for establishing serial ranges by location are:

- Serial type group and location are required.

- Starting serial number must be greater than or equal to the serial type minimum value within the serial type group.
- Ending serial number must be less than or equal to the serial type maximum value within the serial type group.
- Ranges with the same serial type group but different locations or location groups cannot overlap.
- Ranges with the same serial type group and with the same location cannot overlap.
- Ranges with the same serial type group and with a location group that contains a location that may already have a range defined cannot overlap.

The system uses this logic to find the serial range for processing a serial generation request:



1. If *Use Serial Ranges* on the Product Detail record is not enabled, the system will bypass the usage of a range even if a range is defined.
2. If a serial range is found that matches the serial type group and location, the starting serial number and ending serial number defined for the range will establish the available range of serials.
3. If a serial range that matches the serial type group and location is not found, the system will issue an exception error. For example, a request from Location: Denver for serials where Serial Type Group is USN would fail because a range for Denver has not been established.

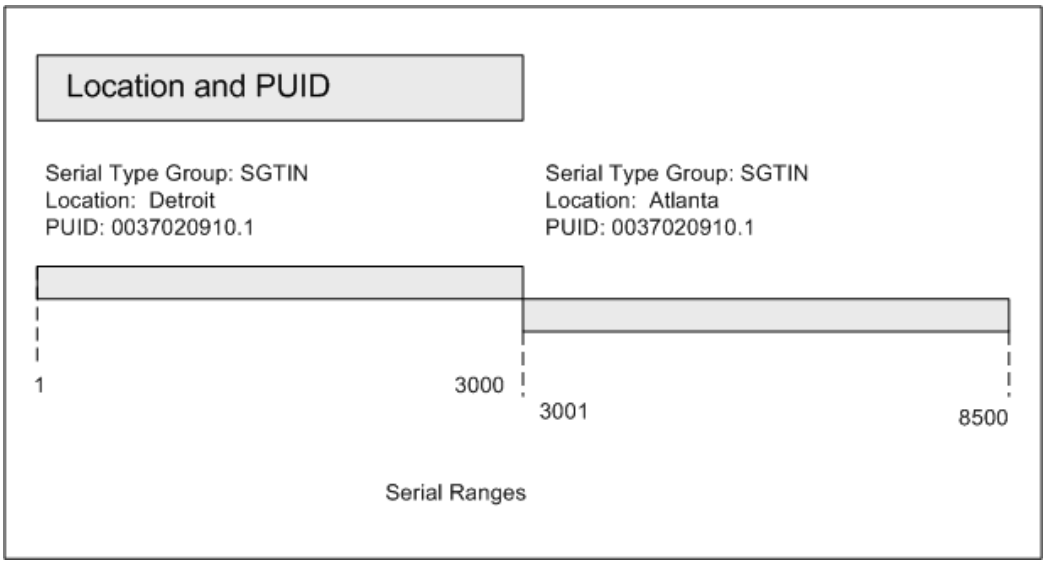
Defining Serial Ranges by Location and Product Unit Identifier

The rules for establishing serial ranges by location and PUID are:

- Serial type group, location, and PUID are required.
- Starting serial number must be greater than or equal to the serial type minimum value within the serial type group.
- Ending serial number must be less than or equal to the serial type maximum value within the serial type group.
- Ranges with the same serial type group but different locations or location groups with the same PUID cannot overlap.
- Ranges with the same serial type group and with the same location and PUID cannot overlap.
- Ranges with the same serial type group and a location group that contains a location that is already defined cannot overlap.
- After a range is established for a product based on the Product's PUID, ranges must be established for all locations requesting serial generation for that product. If a request for serials is received from a location that does not have a range established for the product, the request will fail.

  Note: Range control can be turned off for a product packaging unit by manually turning off range control in the Product Details table. This enables range control to be turned off without having to delete the existing ranges.

The system uses this logic to find the serial range for processing a serial generation request:



1. If *Use Serial Ranges* on the Product Detail record is not enabled, the system will bypass the usage of a range even if a range is defined.

2. If the Product Detail record identified on the serial generation request is set to *Use Serial Ranges*, the system will issue an exception error if a serial range is not found.

3. If a serial range is found that matches the Serial Type Group, Location, and PUID, the starting serial number and ending serial number defined for the range will establish the available range of serials.

4. If a serial range that matches the Serial Type Group, Location, and PUID is not found, the system will issue an exception error. For example, a request where the Serial Type Group is "SGTIN", the Location is "Rolla", and PUID is "0037020910.1" would fail because a range for this PUID has not been established for Rolla.

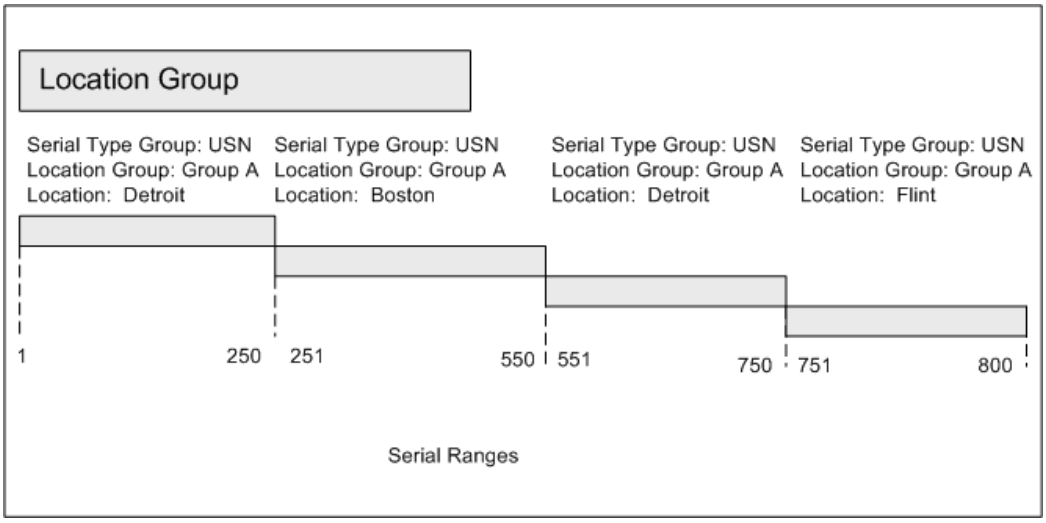
Defining Serial Ranges by Location Group

The rules for establishing serial ranges by location group are:

- Serial type group and location group are required.
- Starting serial number must be greater than or equal to the serial type minimum value within the serial type group.
- Ending serial number must be less than or equal to the serial type maximum value within the serial type group.
- Ranges with the same serial type group but different location groups or locations cannot overlap.

- Ranges with the same serial type group and location group cannot overlap.
- Ranges with the same serial type group and with a location that already has a location group set up for that serial type group cannot overlap.

The system uses this logic to find the serial range for processing a serial generation request:



1. If *Use Serial Ranges* on the Product Detail record is not enabled, the system will bypass the usage of a range even if a range is defined.
2. If a serial range is found that matches the serial type group and location group, the starting serial number and ending serial number defined for the range will establish the available range of serials.
3. If a serial range that matches the serial type group and location group is not found, the system will issue an exception error. For example, a request from Location Group: Group C for serials where Serial Type Group is USN would fail because a range for Group C has not been established.

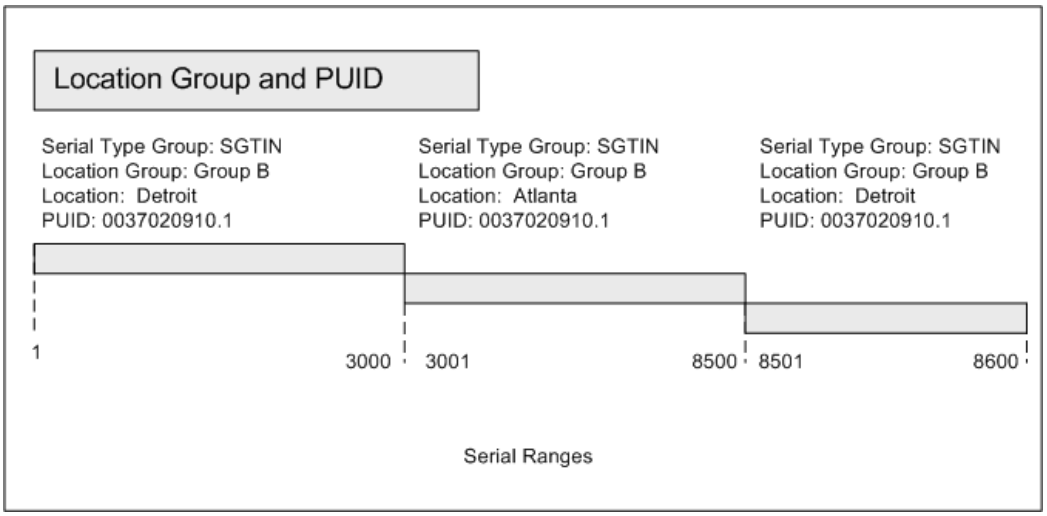
Defining Serial Ranges by Location Group and Product Unit Identifier

The rules for establishing serial ranges by location group and PUID are:

- Serial type group, location group, and PUID are required.
- Starting serial number must be greater than or equal to the serial type minimum value within the serial type group.
- Ending serial number must be less than or equal to the serial type maximum value within the serial type group.

- Ranges with the same serial type group but different location groups or locations with the same PUID cannot overlap.
- Ranges with the same serial type group, PUID, and location group cannot overlap.
- Ranges with the same serial type group, PUID, and with a location that already has a location group set up for the serial type group cannot overlap.
- After a range is established for a product based on the Product's PUID, ranges must be established for all location groups requesting serial generation for that product. If a request for serials is received from a location group that does not have a range established for the product, the request will fail.

The system uses this logic to find the serial range for processing a serial generation request:



1. If *Use Serial Ranges* on the Product Detail record is not enabled, the system will bypass the usage of a range even if a range is defined.
2. If the Product Detail record identified on the serial generation request is set to *Use Serial Ranges,* the system will issue an exception error if a serial range is not found.
3. If a serial range is found that matches the Serial Type Group, Location Group, and PUID, the starting serial number and ending serial number defined for the range will establish the available range of serials.
4. If a serial range that matches the Serial Type Group, Location Group, and PUID is not found, the system will issue an exception error. For example, a request where the Serial Type Group is "SGTIN", the Location Group is "Group C", and PUID is "0037020910.1" would fail because a range for this PUID has not been established for "Group C".

Use these procedures to search for, create, edit, and delete serial ranges:

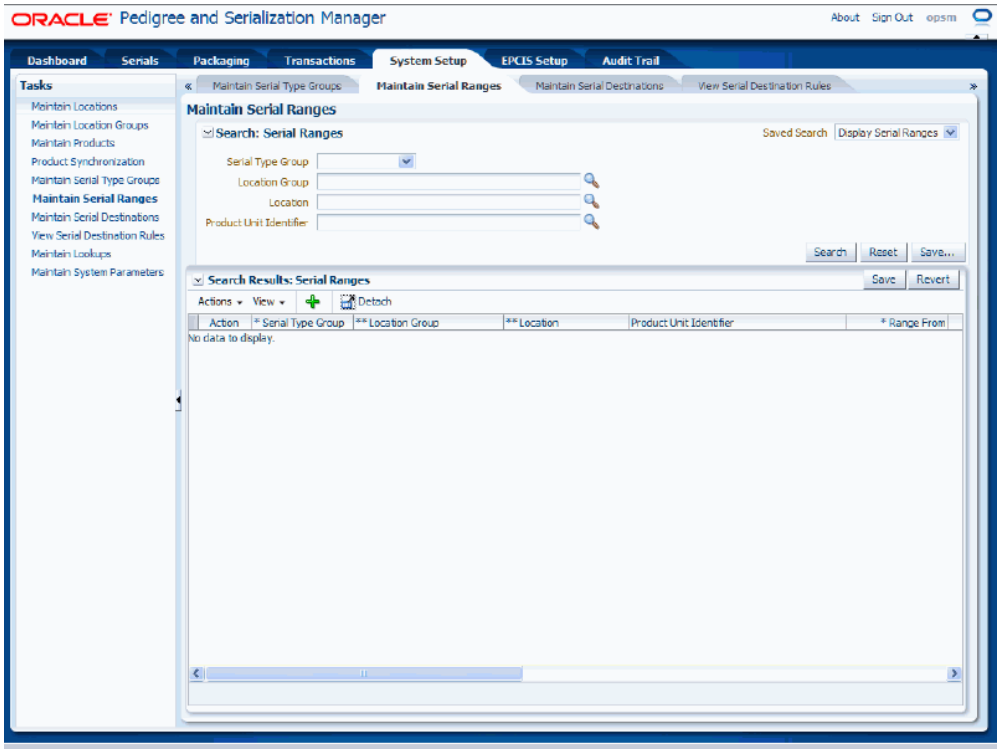
Prerequisites

- ❒ Serial Type Groups have been previously created using the Serial Type Group pages. For more information, see Maintaining Serial Type Groups and Serial Types, page 4-159.
- ❒ At least one serial type has been defined for the serial type group.
- ❒ Working knowledge of Serial Type Groups and Product Unit Identifiers (PUIDs) before setting up serial ranges. For more information, see Maintaining Serial Type Groups and Serial Types, page 4-159
- ❒ Locations or Location Groups have been previously created using the Location or Location Group pages. For more information, see Maintaining Locations, page 4-42 or Maintaining Location Groups, page 4-66.

To Search for Serial Ranges:

1. Navigate to the Maintain Serial Ranges page, page A-2.

Maintain Serial Ranges page



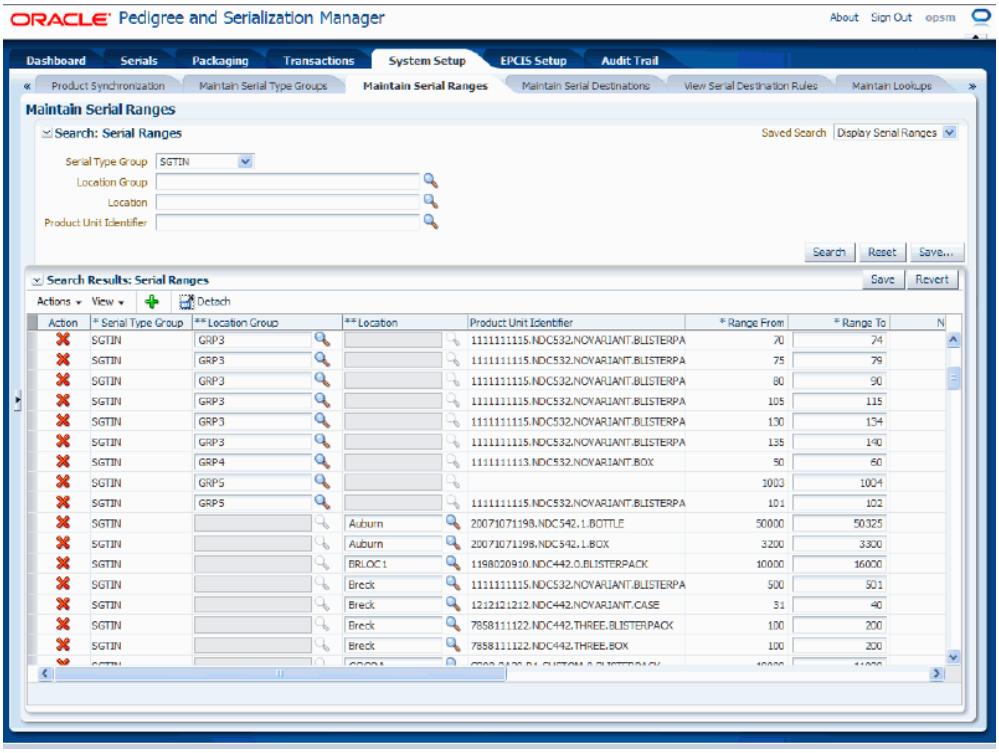
2. In the Search: Serial Ranges region, enter the search criteria for the serial ranges using one or more of these fields:

Field Name	Description
Serial Type Group	(Optional) Select the serial type group for the serial range.
Location Group	(Optional) Select the location group for the serial range.
Location	(Optional) Select the location for the serial range.
Product Unit Identifier	(Optional) Select the product unit identifier for the serial range.

Otherwise, you can click the Search button without entering any search criteria and all available serial ranges will appear.

3. Click the Search button.

Maintain Serial Ranges page



All of the serial ranges that match the search criteria appear in the Search Results: Serial Ranges region in a table format. The following information displays for each serial range:

Field Name	Description
Action	Displays a Delete Serial Range icon.
Serial Type Group	Displays the serial type group for the serial range.

Field Name	Description
Location Group	Displays the location group for the serial range. **Note:** Serial ranges are either associated with a location or a location group but not both at the same time. If a location group displays for a serial range then the location field is not available and vice versa.
Location	Displays the location for the serial range. **Note:** Serial ranges are either associated with a location or a location group but not both at the same time. If a location displays for a serial range then the location group field is not available and vice versa.
Product Unit Identifier	Displays the product unit identifier for the serial range.
Range From	Displays the beginning of the serial range.
Range To	Displays the end of the serial range.
Next Serial	Displays the next serial number that will be generated.
Effective Start Date	Displays the date the serial range became effective.
Effective End Date	Displays the date the serial range will no longer be effective.
Date Exhausted	Displays the date the last serial number within the range was generated.

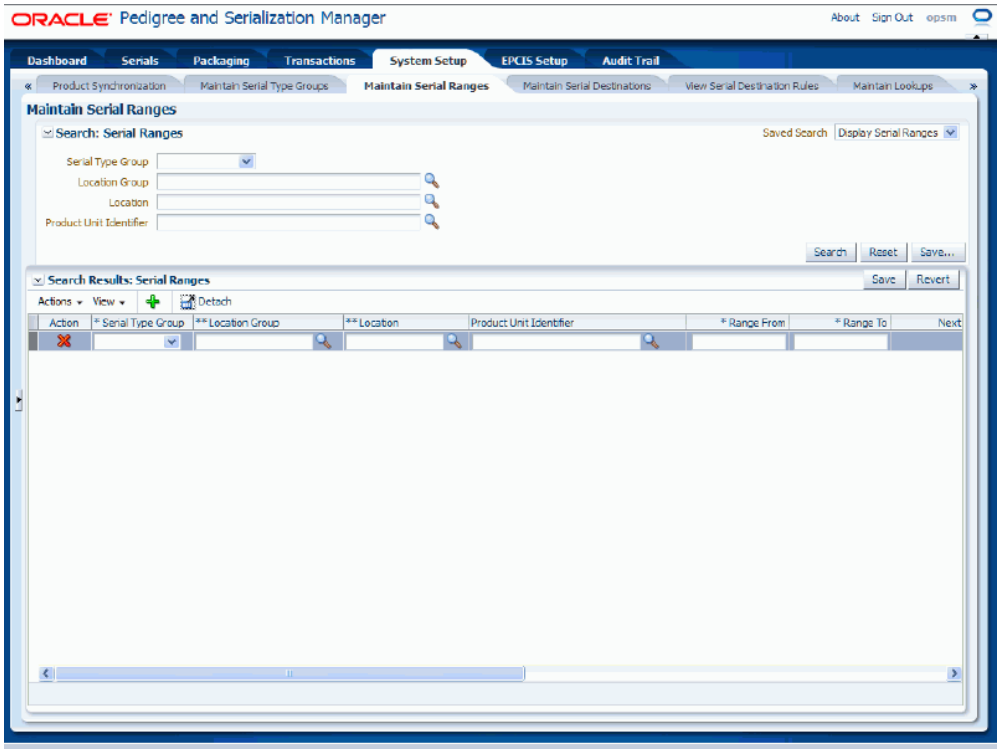
Field Name	Description
Critical Threshold	Displays the critical threshold value for this serial range. If the remaining serials within the range are less than this value, the range is included in the Critical count in the Serial Range Management component of the Operations Dashboard.
At Risk Threshold	Displays the at risk threshold value for this serial range. If the remaining serials within the range are less than this value, and greater than or equal to the critical threshold value, the range is included in the At Risk count in the Serial Range Management component of the Operations Dashboard.

To Create Serial Ranges:

1. Navigate to the Maintain Serial Ranges page, page A-2.

2. Select Add from the Actions menu or click the Add Serial Range icon located at the top of the Search Results: Serial Ranges region.

Maintain Serial Ranges page - Add Action



A new blank row appears in the table. Enter data in this row.

3. Enter the following information:

Field Name	Description
Serial Type Group	Select the serial type group for this serial range. Serial type groups are a grouping of common serial types.
Location Group	Select the location group for this serial range. If you select a location group the Location field becomes unavailable for entry. You can select a location group or a location for the serial range but not both at the same time.

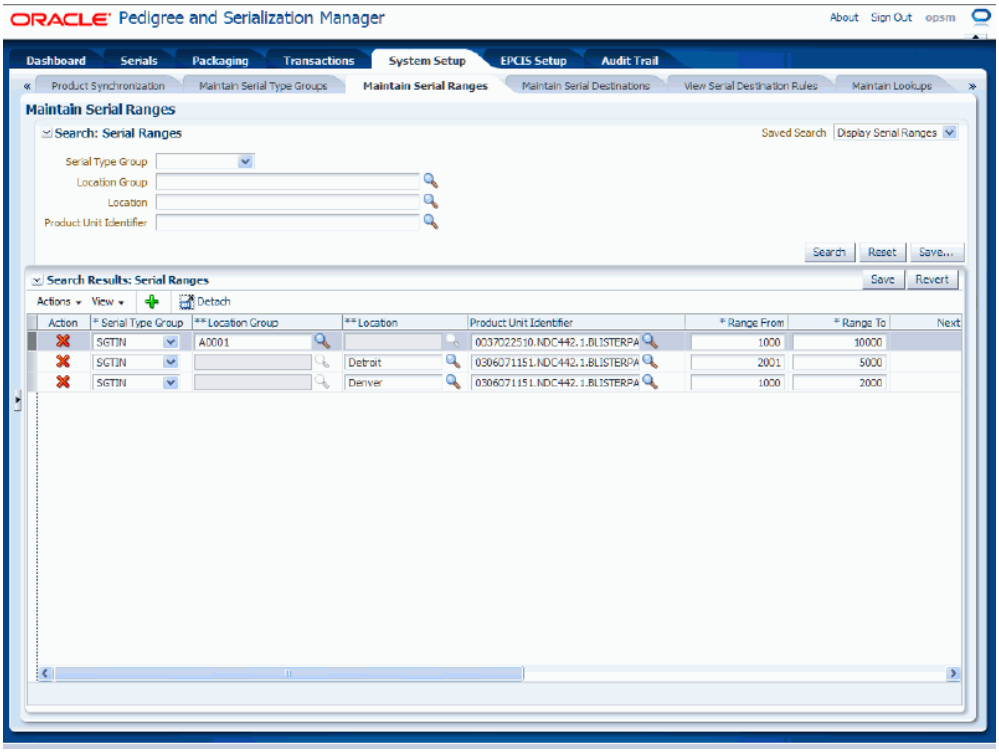
Field Name	Description
Location	Select the location for this serial range. If you select a location the Location Group field becomes unavailable for entry. You can select a location group or a location for the serial range but not both at the same time.
Product Unit Identifier	Select the Product Unit Identifier for this serial range. For example, Electronic Product Code (EPC) Number.
Range From	Enter the beginning of the range for this serial range. **Note:** If the serial type group is defined with a Range Level Control of *Location Level,* ranges cannot overlap with ranges assigned to other locations. This applies if you are specifying a location or a location group. If the serial type group is defined with a Range Level Control of *Location and Product Level,* the ranges cannot overlap the ranges assigned to another location with the same company prefix for the same product. This applies if you are specifying a location or a location group.
Range To	Enter the end of the range for this serial range.
Effective Start Date	Enter the date this serial range becomes effective. The current date appears by default.
Effective End Date	Enter the date this serial range will no longer be effective.

Field Name	Description
Critical Threshold	Enter the Critical Threshold value for this serial range. If the remaining serials within the range are less than this value, the range is included in the Critical count on the Operations Dashboard.
At Risk Threshold	Enter the At Risk Threshold value for this serial range. If the remaining serials within the range are less than this value, and greater than or equal to the critical threshold value, the range is included in the At Risk count on the Operations Dashboard.

4. Repeat steps 2-3 until all serial ranges have been added.

5. Click the Save button to save the serial ranges.

Maintain Serial Ranges page - Add Action



6. Click the Revert button to have the system reverse all of the changes you have made.

   The system will re-display the serial ranges as they were before the last save.

To Edit Serial Ranges:

1. Navigate to the Maintain Serial Ranges page, page A-2.

2. Enter search criteria for the serial ranges you want to edit and click the Search button.

   All of the serial ranges that match the search criteria appear in the Search Results: Serial Ranges table.

3. Edit the serial range fields.

   You can only edit the Location Group, Location, Range To, Effective Start Date, Effective End Date, Critical Threshold, and At Risk Threshold fields pertaining to the serial range.

   Note: You may want to delete the entire range and start over.

4. Click the Save button to save the changes you made to the serial ranges.

To Delete Serial Ranges:

1. Navigate to the Maintain Serial Ranges page, page A-2.

2. Enter search criteria for the serial ranges you want to delete and click the Search button.

   All of the serial ranges that match the search criteria appear in the Search Results: Serial Ranges table.

3. Select the serial range in the table that you want to delete.

4. Select Delete in the Actions menu or click the Delete Serial Range icon in the Action column of the results table.

   The system displays a message asking if you are sure you to want to delete the serial range.

5. Click the Yes button.

   The serial range is deleted from the system.

Maintaining Serial Destinations and Destination Rules

Use the Serial Destination pages in Oracle Pedigree and Serialization Manager (OPSM) to maintain serial destinations and their associated destination rules. OPSM supports the web service and file exchange communication methods.

You can then define serial destination rules for each serial destination. Destination rules can be created for a transaction type, location, and product code. These rules are then used by the system to determine the destination to send a serial number to during its processing. After destination rules are set up for the transaction, when serials are transacted (generated, imported, shipped, and returned), the system will check to see if there are any destination rules set up for the transaction. If it finds a destination rule, the system will transmit the transacted serials to the destination specified. The system will create a resulting Serial Transmission transaction that you can view using the Maintain Transactions page.

The system uses the following hierarchy when determining the destination:

1. First, the system uses Destination Group, Transaction Type, Location, and Product Code to determine the serial destination. The system throughout the process only looks at information that is within the effective dates.

2. If no information is found with destination group, transaction type, location, and product code then the system uses Destination Group, Transaction Type, and Product Code to determine the serial destination.

3. If no information is found with destination group, transaction type, and product code then the system uses Transaction Type and Location to determine the serial destination.

4. Finally, if no information is found with transaction type and location the system only uses the Transaction Type to determine the serial destination.

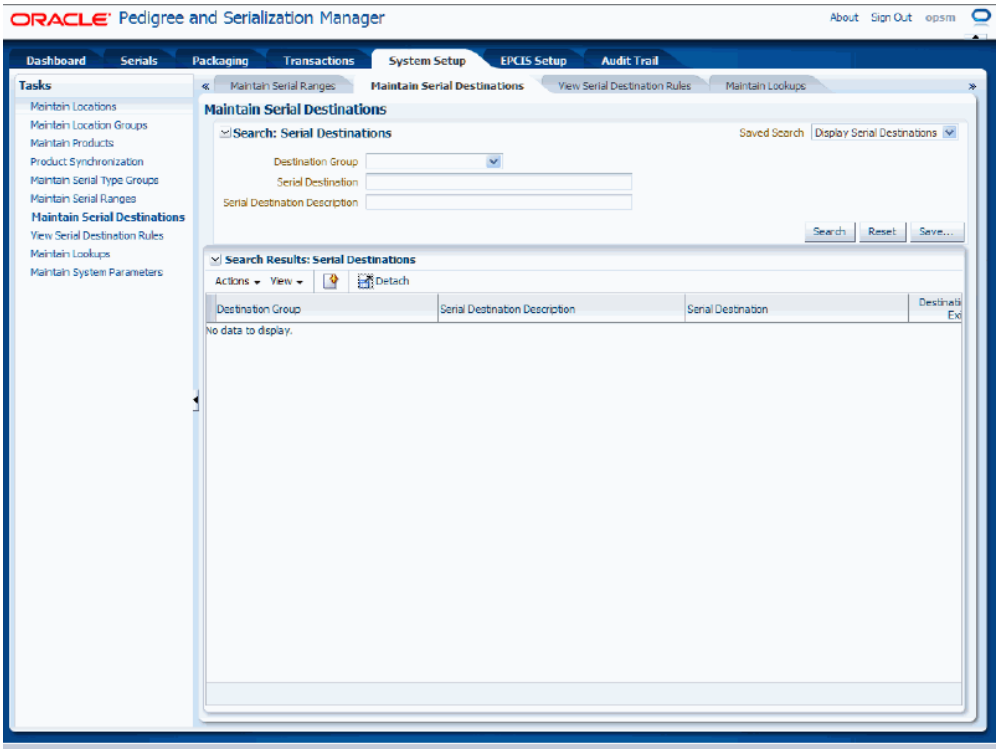
The moment the system finds a match at any of the above 4 levels going from most specific to least specific, it stops looking any further.

Use these procedures to search for, view, create, edit, and delete serial destinations and to add, edit, and delete serial destination rules for a destination:

To Search for Serial Destinations:

1. Navigate to the Maintain Serial Destinations page, page A-2.

Maintain Serial Destinations page



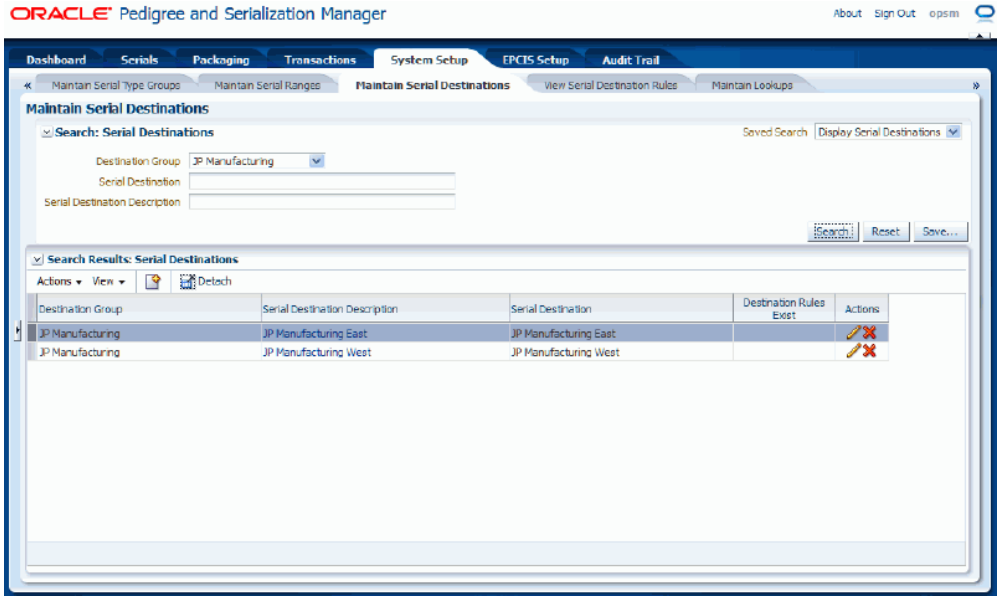
2. In the Search: Serial Destinations region, enter the search criteria for the serial destinations using one or both of these fields:

Field Name	Description
Destination Group	(Optional) Select the destination group. Destination Groups are user defined using Lookup Type PAS_DESTINATION_GROUPS.
Serial Destination	(Optional) Enter the serial destination.
Serial Destination Description	(Optional) Enter the description for the serial destination.

Otherwise, you can click the Search button without entering any search criteria and all available serial destinations will appear.

3. Click the Search button.

Maintain Serial Destinations page



All of the serial destinations that match the search criteria appear in the Search Results: Serial Destinations region in a table format. If the serial destination has rules associated with it a green Check Mark icon will display in the Destination Rules Exist column for the serial destination.

For more information on Serial Destination Rules, see Procedure: To Add Destination Rules to a Serial Destination, page 4-200 in this section of the guide.

To View Serial Destination Detail Information:

1. Navigate to the Maintain Serial Destinations page, page A-2.

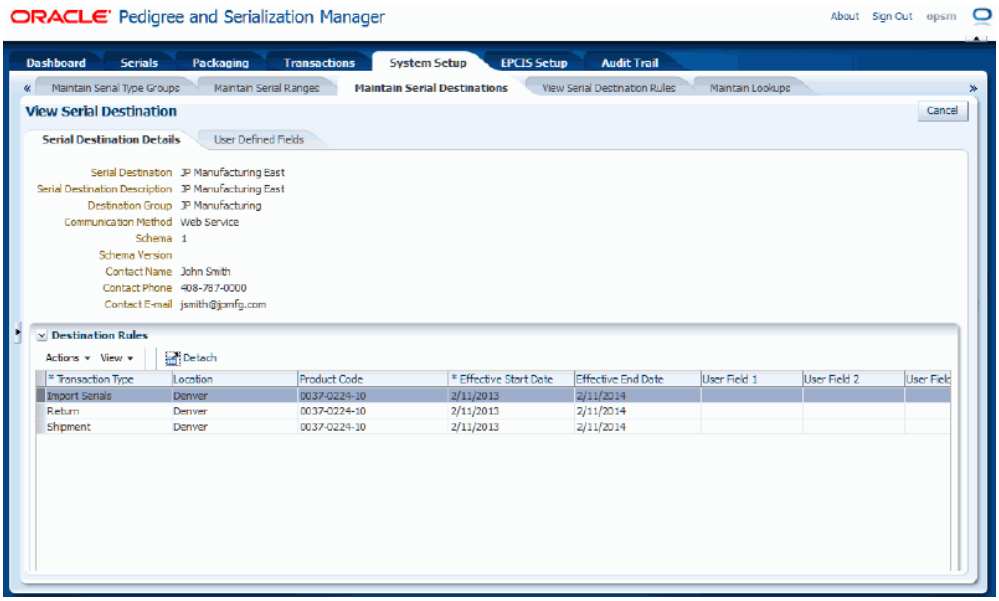
2. Enter search criteria for the serial destinations you want to view and click the Search button.

   All of the serial destinations that match the search criteria appear in the Search Results: Serial Destinations table.

3. Select the serial destination in the table that you want to view.

4. Click the Serial Destination Description link.

View Serial Destination page



   The View Serial Destination page appears.

5. Select the different tabs (Serial Destination Details and User Defined Fields) to the view that particular type of information for the serial destination.

   At the bottom of the Serial Destination Detail tab is a Destination Rules region that displays all of the existing rules for the serial destination.

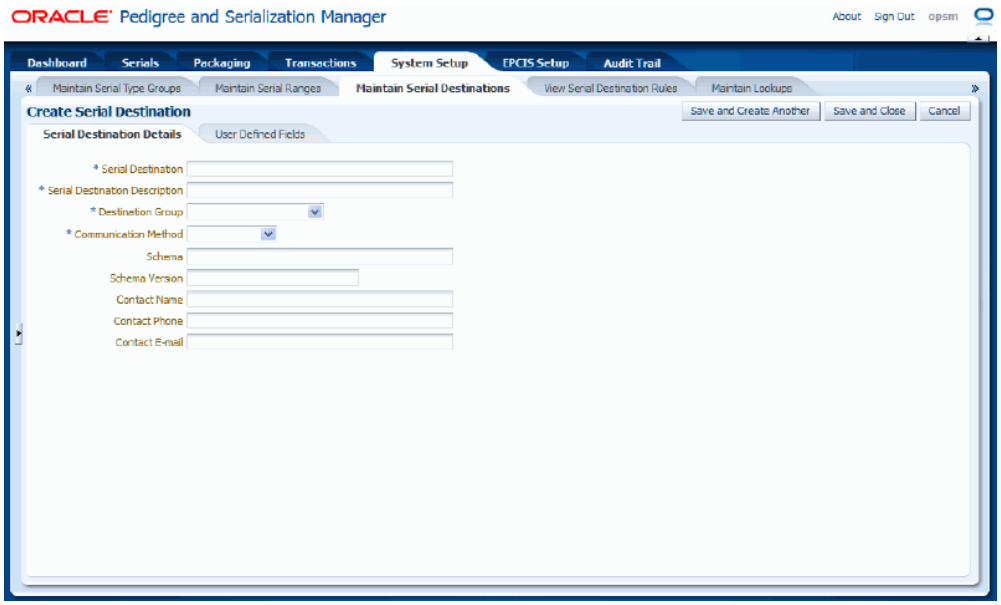
6. Click the Cancel button to return back to the Maintain Serial Destinations page.

To Create Serial Destinations:

1. Navigate to the Maintain Serial Destinations page, page A-2.

2. Select Create from the Actions menu or click the Create icon located at the top of the Search Results: Serial Destinations region.

Create Serial Destination page



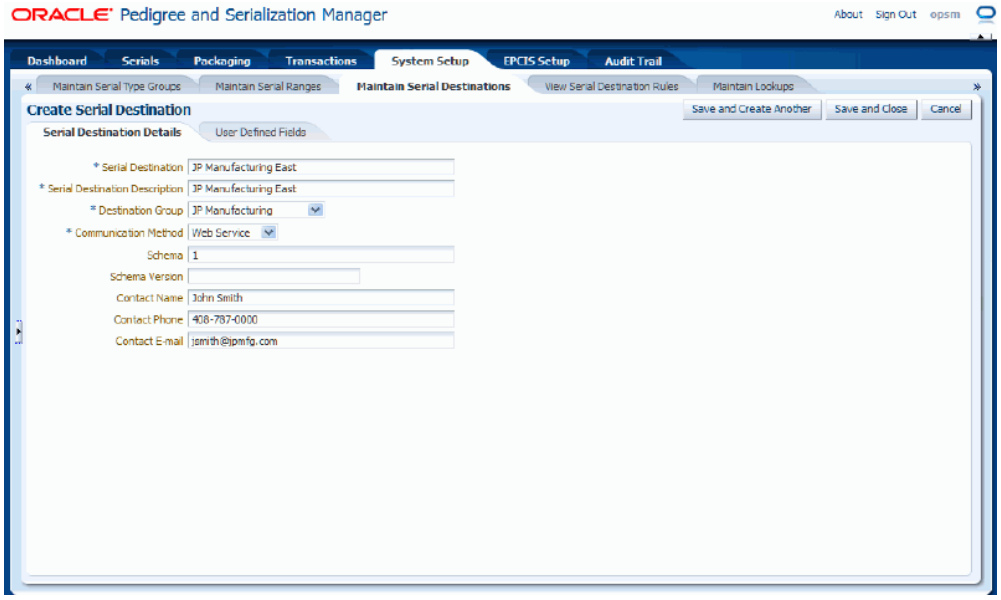
The Create Serial Destination page appears displaying Serial Destination Details and User Defined Fields tabs.

3. Enter the following information for the Serial Destination Details tab:

Field Name	Description
Serial Destination	Enter a destination. This should match the destination name that you have set up in the Oracle SOA Suite.
Serial Destination Description	Enter a description for the destination.
Destination Group	Select the destination group for this serial destination. Destination Groups are user defined using Lookup Type PAS_DESTINATION_GROUPS.

Field Name	Description
Communication Method	Select the method of communication for this destination. Communication Methods are: File Exchange and Web Service.
Schema	(Optional) Enter the schema for the destination. Schemas are the format of the xml that OPSM is sending. The consuming Web Service will need to know the schema so they can communicate with OPSM.
Schema Version	(Optional) Enter the schema version for the destination.
Contact Name	(Optional) Enter the name of the person to contact for this destination.
Contact Phone	(Optional) Enter the phone number of the person to contact for this destination.
Contact E-mail	(Optional) Enter the e-mail address of the person to contact for this destination.

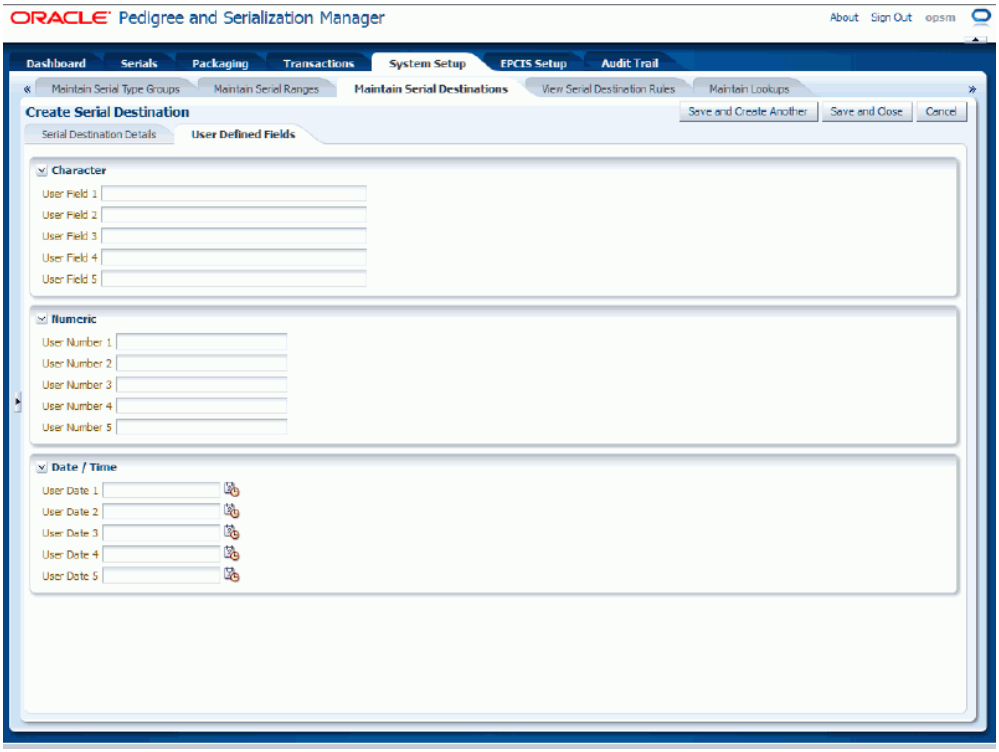
Create Serial Destination page - Serial Destination Details sub tab



4. Select the User Defined Fields tab.

5. Enter user-defined data using any of the fields in the Character, Numeric, and Date/Time regions of the page.

Create Serial Destination page - User Defined Fields sub tab



6. Save your work. Choose one of these options:

   - Click the Save and Close button to save this serial destination and return back to the Maintain Serial Destinations page.

   - Click the Save and Create Another button to save this serial destination and to stay on this page so you can create another serial destination. The system displays a message stating that the serial destination was saved successfully and it clears all of the values in the fields.

To Edit Serial Destinations:

1. Navigate to the Maintain Serial Destinations page, page A-2.

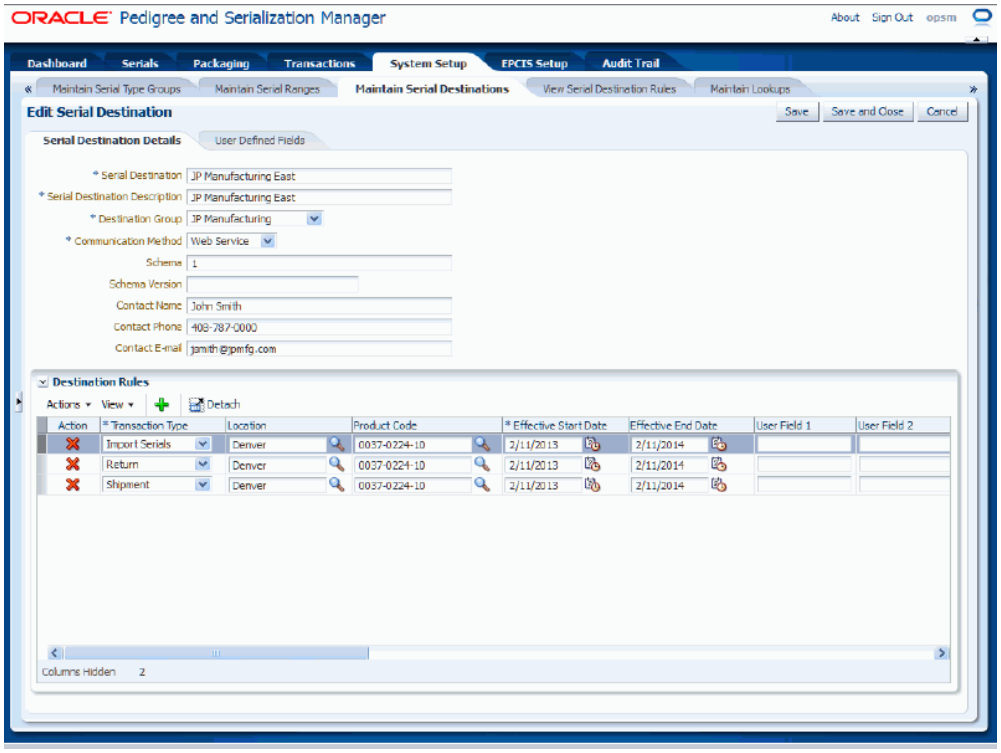
2. Enter search criteria for the serial destinations you want to edit and click the Search button.

   All of the serial destinations that match the search criteria appear in the Search Results: Serial Destinations table.

3. Select the serial destination in the table that you want to edit.

4. Select Edit in the Actions menu or click the Edit Serial Destination icon associated with the serial destination in the Actions column of the results table.

Edit Serial Destination page



The Edit Serial Destination page appears displaying all of the existing information for the serial destination. At the bottom of the Serial Destination Details tab a Destination Rules region appears displaying the rules associated with the serial destination if they exist. The Destination Rules region is available for entry at this time.

5. Edit any of the serial destination fields.

   You can edit any of the fields pertaining to the serial destination.

6. Add, edit, or delete destination rules.

   For information, see the procedures in this section:

   - To Add Destination Rules to a Serial Destination, page 4-200
   - To Edit Destination Rules for a Serial Destination, page 4-204
   - To Delete Destination Rules for a Serial Destination, page 4-205

7. Save your work. Choose one of these options:

- Click the Save button to save the changes you made to the serial destination information and to stay on the page so that you can make additional modifications.

- Click the Save and Close button to save the changes you made to the serial destination information and return back to the Maintain Serial Destinations page.

To Delete Serial Destinations:

1. Navigate to the Maintain Serial Destinations page, page A-2.

2. Enter search criteria for the serial destinations you want to delete and click the Search button.

   All of the serial destinations that match the search criteria appear in the Search Results: Serial Destinations table.

3. Select the serial destination in the table that you want to delete.

4. Select Delete in the Actions menu or click the Delete Serial Destination icon in the Actions column of the results table.

   The system displays a message asking if you are sure to want to delete the serial destination.

   > **Note:** If you try to delete a serial destination that has associated serial destination rules the system will issue an error message. You must first delete the serial destination rules associated with the serial destination before you can delete the serial destination.

   For information on deleting serial destination rules, see Procedure: To Delete Serial Destination Rules for a Serial Destination, page 4-205 in this section.

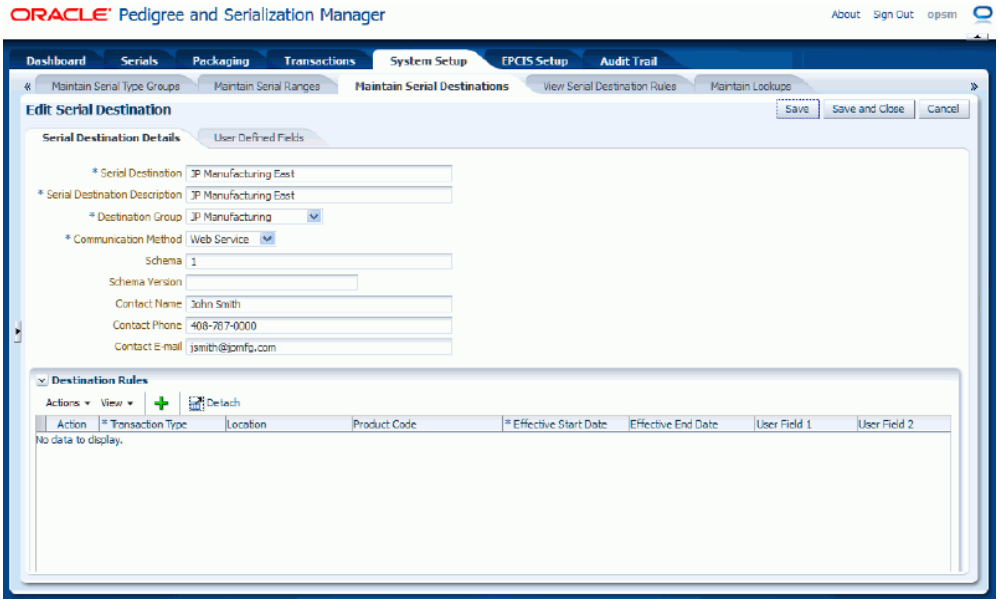
5. Click the Yes button.

   The serial destination is deleted from the system.

To Add Destination Rules to a Serial Destination:

1. Navigate to the Edit Serial Destination page, page A-2.

Edit Serial Destination page

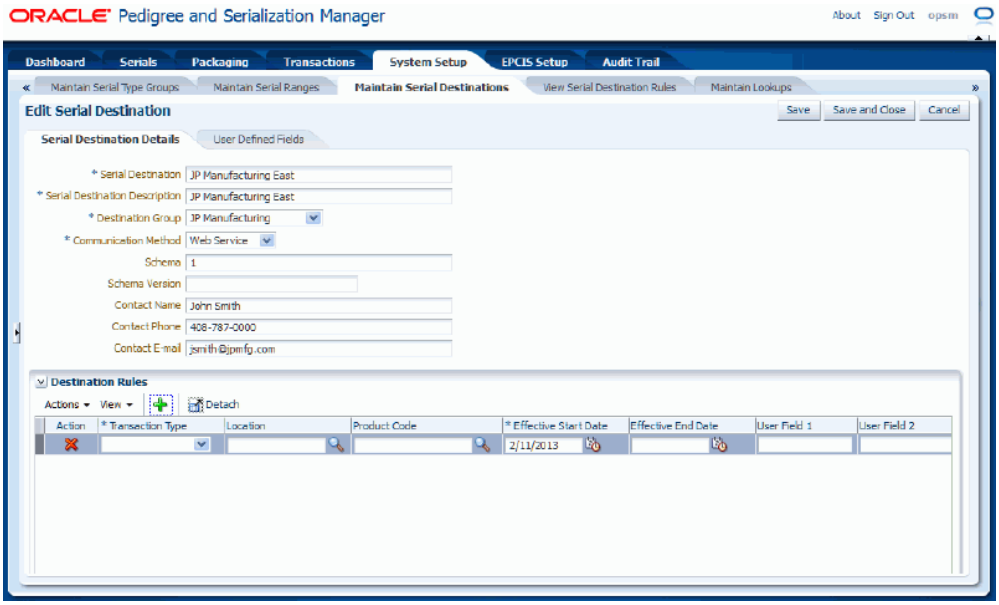


The Edit Serial Destination page appears displaying all of the existing information for the serial destination. At the bottom of the Serial Destination Details tab is a Destination Rules region. The Destination Rules region is available for entry at this time.

> **Note:** You must first create a destination before you can add destination rules to it. See the Procedure: To Create Serial Destinations, page 4-194 in this section.

2. Select Add Destination Rule from the Actions menu or click the Add Destination Rule icon at the top of Destination Rules region.

Edit Serial Destination page



A blank row appears in the table.

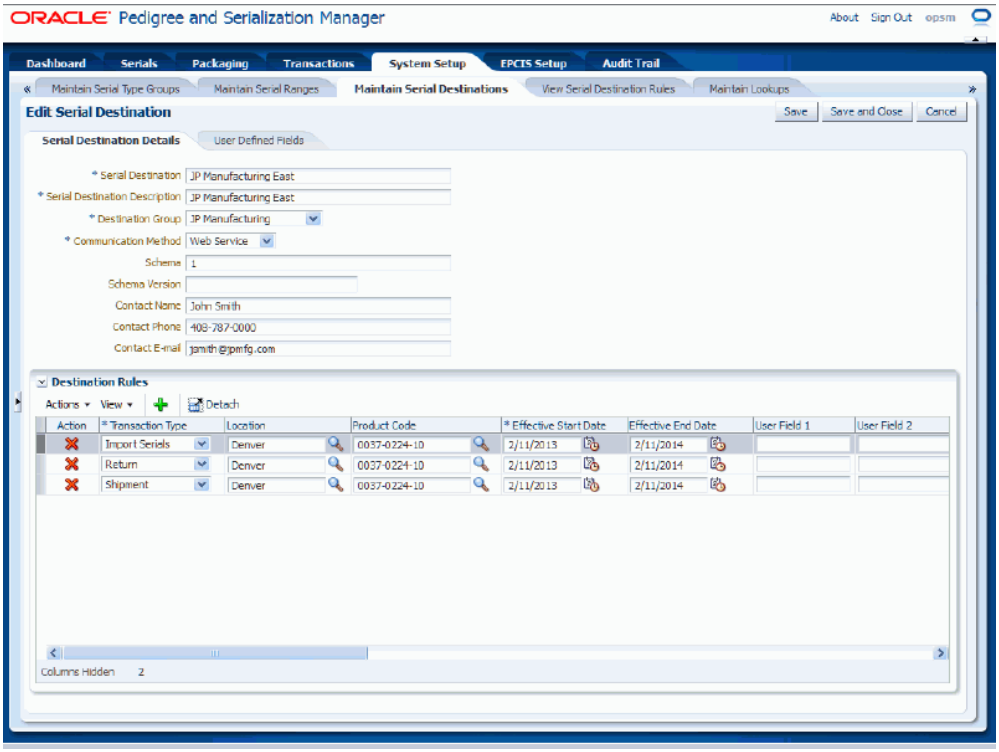
3. Enter the following information:

Field Name	Description
Transaction Type	Select a type of transaction. Transaction Types are: • Serial Generation • Import Serials • Return • Shipment
Location	(Optional) Select a location.
Product Code	(Optional) Select the product code.
Product Code Type	The product code type displays after you select the product code.

Field Name	Description
Product Code Variant	The product code variant displays after you select the product code.
Effective Start Date	Enter the start date this rule becomes effective. The current date appears by default.
Effective End Date	Enter the end date this rule will no longer be effective.
User Fields 1-5	Enter user-defined data using any of these fields.
User Number 1-5	Enter user-defined data using any of these fields.
User Date 1-5	Enter user-defined data using any of these fields.

4. Repeat Steps 2-3 until all of the serial destination rules you want to add have been entered for the destination.

Edit Serial Destination page



5. Save your work. Choose one of these options:

   - Click the Save button to save the serial destination rules and to stay on this page so you can create another serial destination rule.

   - Click the Save and Close button to save the serial destination rules and return back to the Maintain Serial Destinations page.

To Edit Destination Rules for a Serial Destination:

1. Navigate to the Edit Serial Destinations page, page A-2.

   The Edit Serial Destination page appears displaying all of the existing information for the serial destination. At the bottom of the Serial Destination Details tab is a Destination Rules region. This region displays all of the existing destination rules for the destination.

2. In the Destination Rules region, modify any of the fields pertaining to a destination rule.

3. Add additional destination rules.

To add additional destination rules

1. Select Add Destination Rule from the Actions menu or click the Add Destination Rule icon.

2. Enter the destination rule information.

4. Remove destination rules.

To remove destination rules

1. Select the destination rule you want to delete.

2. Select Delete Destination Rule from the Actions menu or click the Delete Destination Rule icon in the Action column in the table for the destination rule.

   The system displays a message asking if you are sure to want to delete the serial destination rule.

3. Click the Yes button.

   The serial destination rule is deleted from the system.

5. Save your work. Choose one of these options:

   - Click the Save button to save the serial destination rules and to stay on this page so you can continue to make modifications.

   - Click the Save and Close button to save the serial destination rules and return back to the Maintain Serial Destinations page.

To Delete Destination Rules for a Serial Destination:

1. Navigate to the Edit Serial Destination page, page A-2.

   The Edit Serial Destination page appears displaying all of the existing information for the serial destination. At the bottom of the Serial Destination Details tab is a Destination Rules region. This region displays all of the existing destination rules for the destination.

2. Select the destination rule you want to delete.

3. Select Delete Destination Rule from the Actions menu or click the Delete Destination Rule icon in the Action column in the table for the destination rule.

   The system displays a message asking if you are sure to want to delete the serial destination rule.

4. Click the Yes button.

The serial destination rule is deleted from the system.

5. Save your work. Choose one of these options:
   - Click the Save button to save the serial destination rules and to stay on this page so you can continue to make modifications.
   - Click the Save and Close button to save the serial destination rules and return back to the Maintain Serial Destinations page.

Viewing Serial Destination Rules

Use the View Serial Destination Rules page in Oracle Pedigree and Serialization Manager (OPSM) to view a comprehensive list of destination rules and their associated destinations. You can view the destination rules in a multitude of ways by using the search criteria fields that include destination group, transaction type, location, product code, effective dates, and serial destination.

By using the advanced search functionality you can search for a range of serial destination rules by using the operator field (equals, contains, ends with, starts with, and so on) associated with the search criteria fields.

Use these procedures to view serial destination rules:

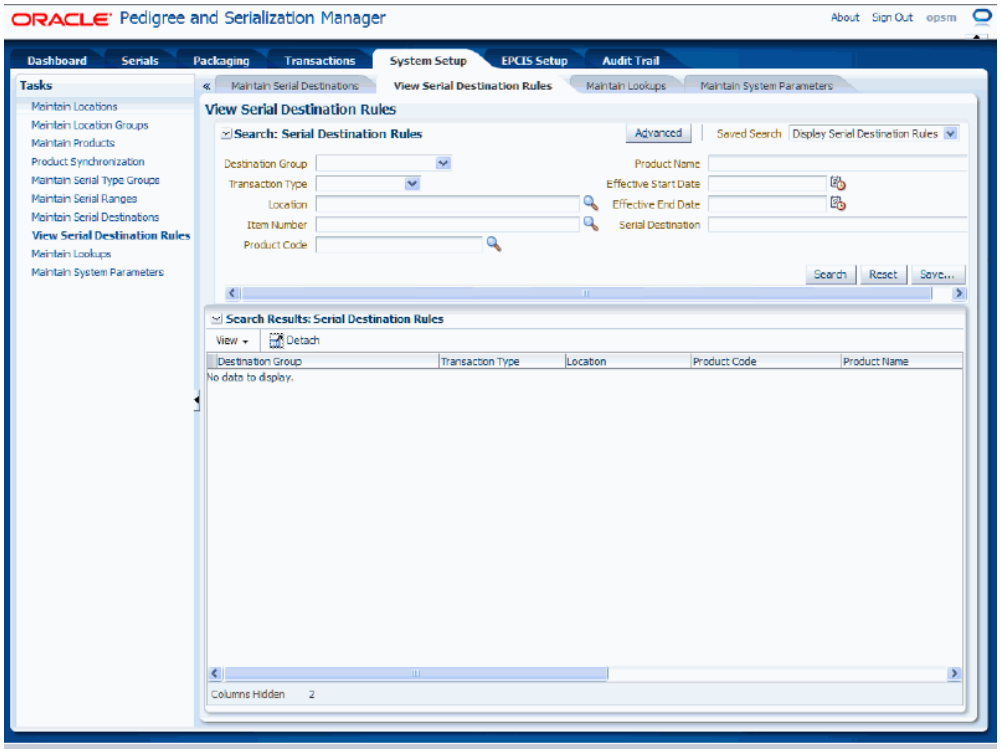
Prerequisites

❒ Serial Destinations and Destination Rules have been created.

To View Serial Destination Rules (Basic Search):

1. Navigate to the View Serial Destination Rules page, page A-2.

View Serial Destination Rules page (Basic Search)



2. In the Search: Serial Destination Rules region, enter the search criteria for the serial destination rules using one or more of these fields:

Field Name	Description
Destination Group	(Optional) Select the destination group. Destination Groups are user defined using Lookup Type PAS_DESTINATION_GROUPS.

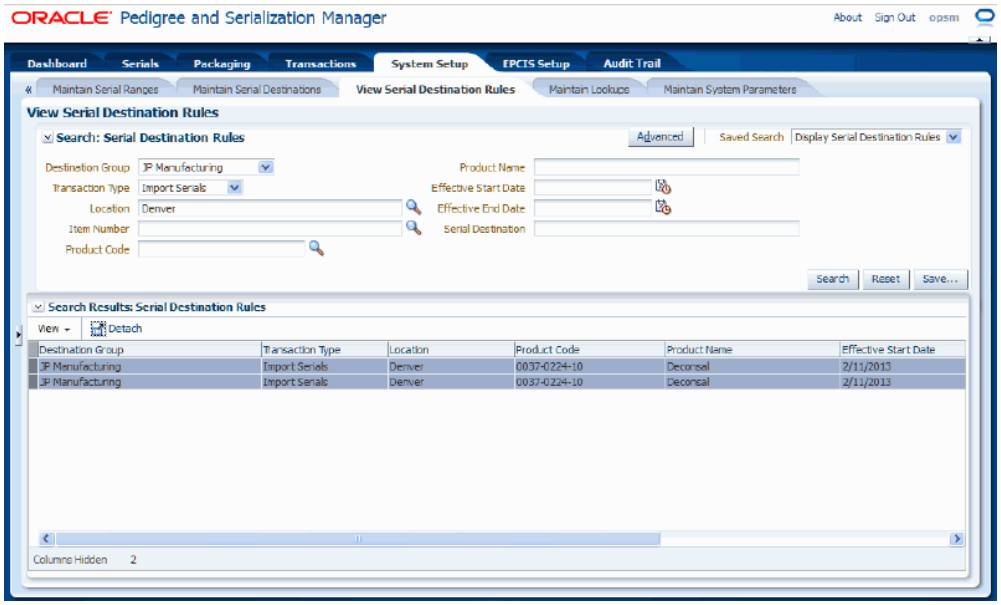
Field Name	Description
Transaction Type	(Optional) Select the transaction type. Transaction types are: • Serial Generation • Import Serials • Return • Shipment
Location	(Optional) Select the location.
Item Number	(Optional) Select the item number for the serial destination rule. This is the transactional systems item number. It is used to find the Product Code to perform the search. The item number search is merely a way for you to search for the correct product code. When you select the Item Number, the Product Code and Product Name fields are automatically populated. If you clear the Item Number, then the Product Code and Product Name fields get cleared as well. You cannot enter both the Item Number and the product fields (Product Code and Product Name) on the search.
Product Code	(Optional) Select the product code.
Product Name	(Optional) Enter the product name associated with the product.
Effective Start Date	(Optional) Enter the effective start date for the destination rules.
Effective End Date	(Optional) Enter the effective end date for the destination rules.
Serial Destination	(Optional) Enter the serial destination.

Otherwise, you can click the Search button without entering any search criteria and

all available serial destination rules will appear.

3. Click the Search button.

View Serial Destination Rules page (Basic Search)



All of the serial destination rules that match the search criteria appear in the Search Results: Serial Destination Rules region in a table format. The fields that appear for each destination rule are:

Field Name	Description
Destination Group	Displays the destination group associated with the rule. Destination Groups are user defined using Lookup Type PAS_DESTINATION_GROUPS.

Field Name	Description
Transaction Type	Displays the transaction type associated with the rule. Transaction types are: • Serial Generation • Import Serials • Return • Shipment
Location	Displays the location associated with the rule.
Product Code	Displays the product code associated with the rule.
Product Name	Displays the product name associated with the product.
Effective Start Date	Displays the effective start date for the destination rule.
Effective End Date	Displays the effective end date for the destination rule.
Serial Destination	Displays the serial destination associated with the rule.

4. Click the Advanced button to perform an advanced search.

To View Serial Destination Rules (Advanced Search):

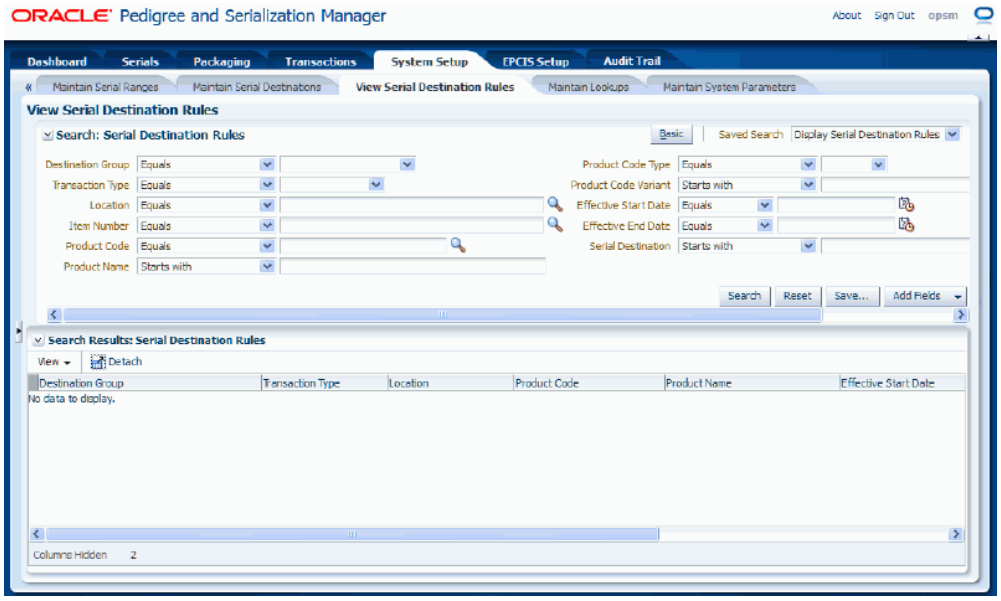
Use the Advanced Search functionality to perform a more detailed search for specific serial destination rules. Field operators associated with the search criteria fields can be used during an Advanced Search so that a range of serial destination rules can be easily retrieved.

1. Navigate to the View Serial Destination Rules page, page A-2.

2. Click the Advanced button.

Note: Clicking the Advanced or Basic button will keep the values in the base criteria fields.

View Serial Destination Rules (Advanced Search)



3. In the Search: Serial Destination Rules region, enter the search criteria for the serial destination rules using one or more of these fields:

Field Name	Description
Destination Group	(Optional) Select the field operator and then select the destination group. Operators are: • Starts with • Ends with • Equals • Does not equal • Less than • Greater than • Less than or equal to • Greater than or equal to • Between • Not between • Contains • Does not contain • Is blank • Is not blank Destination Groups are user defined using Lookup Type PAS_DESTINATION_GROUPS.

Field Name	Description
Transaction Type	(Optional) Select the field operator and then select the transaction type. Transaction types are: • Serial Generation • Import Serials • Return • Shipment The field operators are the same as that for the Destination Group field.
Location	(Optional) Select the field operator and then enter the location. The field operators are the same as that for the Destination Group field.
Item Number	(Optional) Select the field operator and then select the item number for the serial destination rule. This is the transactional systems item number. It is used to find the Product Code to perform the search. The item number search is merely a way for you to search for the correct product code. When you select the Item Number, the Product Code, Product Name, Product Code Type, and Product Code Variant fields are automatically populated. If you clear the Item Number, then the Product Code, Product Name, Product Code Type, and Product Code Variant fields get cleared as well. You cannot enter both the Item Number and the product fields (Product Code, Product Name, Product Code Type, and Product Code Variant) on the search. The field operators are the same as that for the Destination Group field.

Field Name	Description
Product Code	(Optional) Select the field operator and then select the product code. The field operators are the same as that for the Destination Group field.
Product Name	(Optional) Select the field operator and then enter the product name associated with the product. The field operators are the same as that for the Destination Group field.
Product Code Type	(Optional) Select the field operator and then select a product code type. For example, NDC442 and GTIN. The field operators are the same as that for the Destination Group field.
Product Code Variant	(Optional) Select the field operator and then enter the product code variant. The field operators are the same as that for the Destination Group field.

Field Name	Description
Effective Start Date	(Optional) Select the field operator and then enter the effective start date for the destination rules. Operators are: • Equals • Does not equal • Before • After • On or before • On or after • Between • Not between • Is blank • Is not blank
Effective End Date	(Optional) Select the field operator and then enter the effective end date for the destination rules. The field operators are the same as that for the Effective Start Date field.
Serial Destination	(Optional) Select the field operator and then enter the destination. The field operators are the same as that for the Destination Group field.

Otherwise, you can click the Search button without entering any search criteria and all available serial destination rules will appear.

4. (Optional) To enter additional search criteria fields, click the Add Fields button and select the field you would like to add to the search criteria.

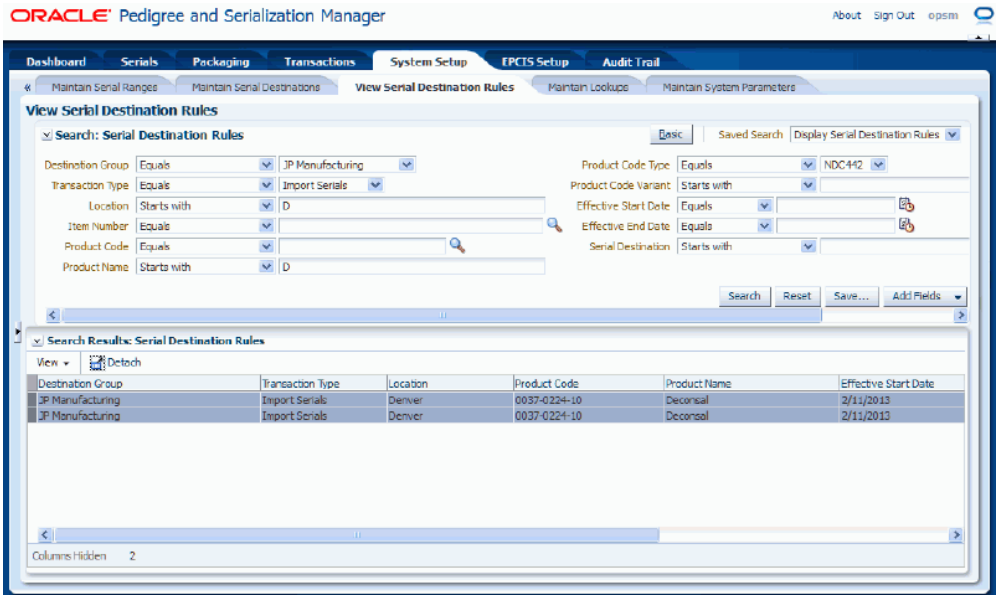
   The selected field appears as a search criteria field.

Note: To remove the additional field, click the Remove icon next to the field. The field will be removed from the search criteria.

5. (Optional) Enter search criteria for the additional fields.

6. Click the Search button.

View Serial Destination Rules (Advanced Search)



All of the serial destination rules that match the search criteria appear in the Search Results: Serial Destination Rules region in a table format.

7. Click the Basic button to have the page hide the advanced search criteria fields and re-display the basic search criteria fields.

Note: Clicking the Reset button clears the values in all of the criteria fields.

Defining Synchronization and Work Order Serialization Scenarios

The Product Synchronization, Lot Synchronization, and Work Order Serialization processes use Oracle Data Integrator (ODI). When you run the Product Synchronization, Lot Synchronization, and Work Order Serialization processes in Oracle Pedigree and Serialization Manager (OPSM) you must specify a synchronization action. If you select an extract synchronization action you must also enter an extract scenario name. The ODI process uses the extract scenario name to determine the data to

be extracted.

Use this procedure to create an extract scenario:

Prerequisites

❒ An ODI extract scenario must exist that meets the specifications for the input parameters and loading information into one of the OPSM Interface tables.

The Oracle Serialization and Tracking Integration Pack for Oracle Pedigree and Serialization Manager and Oracle E-Business Suite 3.1 provides the ODI scenarios as part of the integration pack. These scenarios can be used as-is or can be modified or copied to create a new scenario.

For more information on integrating Oracle E-Business Suite with OPSM, see the *Oracle Serialization and Tracking Integration Pack for Oracle Pedigree and Serialization Manager and Oracle E-Business Suite 3.1 - Implementation Guide.*

To Create an Extract Scenario:

1. Access the database table PAS_S_ODI_EXTRACT_DEF.
2. Add a new extract definition to the database table for the particular type of process (product synchronization, lot synchronization, and work order serialization).
3. Access the database table PAS_S_ODI_CONNECT_CONFIG.

   Verify that a record exists in this table. Add a record if one does not exist. This table contains connection information for ODI. You need information from the ODI installation process to add a record to this table.
4. Navigate to the OPSM Maintain Lookups page, page A-2.
5. Search for the Lookup Type that pertains to the Product, Lot, or Work Order Serialization extracts.

   The Lookup Types are:

   - PAS_PRODUCT_EXTRACT for Product Synchronization
   - PAS_LOT_EXTRACT for Lot Synchronization
   - PAS_WORK_ORDER_EXTRACT for Work Order Serialization
6. Add a Lookup Code to the PAS_PRODUCT_EXTRACT, PAS_LOT_EXTRACT, or PAS_WORK_ORDER_EXTRACT Lookup Type that matches the extract definition that you created in Step 2.
7. Save your work.

The extract scenario you created is available for selection and use by the Product Synchronization, Lot Synchronization, or Work Order Serialization processes.

5

Setting Up the EPCIS Repository

This chapter covers the following topics:

- Understanding the EPCIS Repository Setup Process
- Maintaining EPCIS Preferences
- Maintaining Policies
- Maintaining Users

Understanding the EPCIS Repository Setup Process

Before you can capture EPCIS events and post to the EPCIS repository or query the EPCIS repository you must first set up the EPCIS repository preferences, policies, and users. The EPCIS Capture web service and the EPCIS Query web service use this setup information during their processing of data.

For more information on the Capture and Query web services, see Web Services Overview, page 14-1.

Setting Up the EPCIS Repository

Follow this high-level process flow to set up the EPCIS repository:

1. Set up EPCIS Preferences.

   For more information, see Maintaining EPCIS Preferences, page 5-2.

2. Create EPCIS policies.

   For more information, see Maintaining Policies, page 5-5.

3. Create EPCIS users.

   For more information, see Maintaining Users, page 5-18.

Maintaining EPCIS Preferences

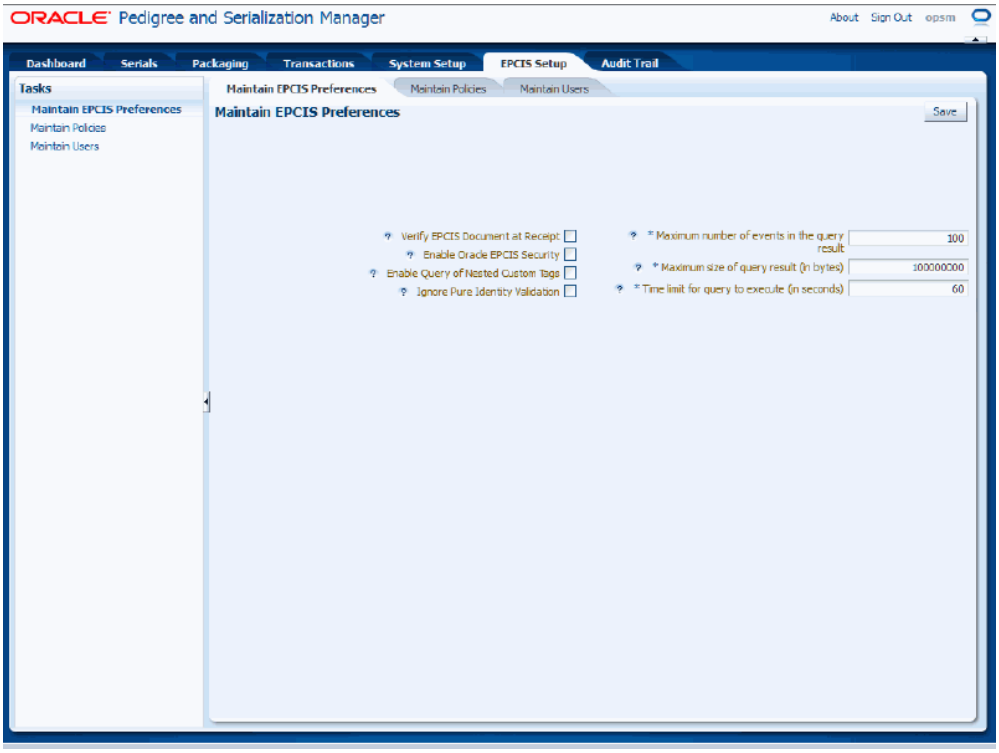
Before you can begin to interact with the EPCIS repository you must first set up EPCIS preferences. Use the Maintain EPCIS Preferences page to define the preferences used by the EPCIS Capture web service when capturing and storing data in the EPCIS repository and the EPCIS Query web service when querying the EPCIS repository.

Use these procedures to view, set, and modify EPCIS preferences:

To View EPCIS Preferences:

1. Navigate to the Maintain EPCIS Preferences page, page A-2.

Maintain EPCIS Preferences page



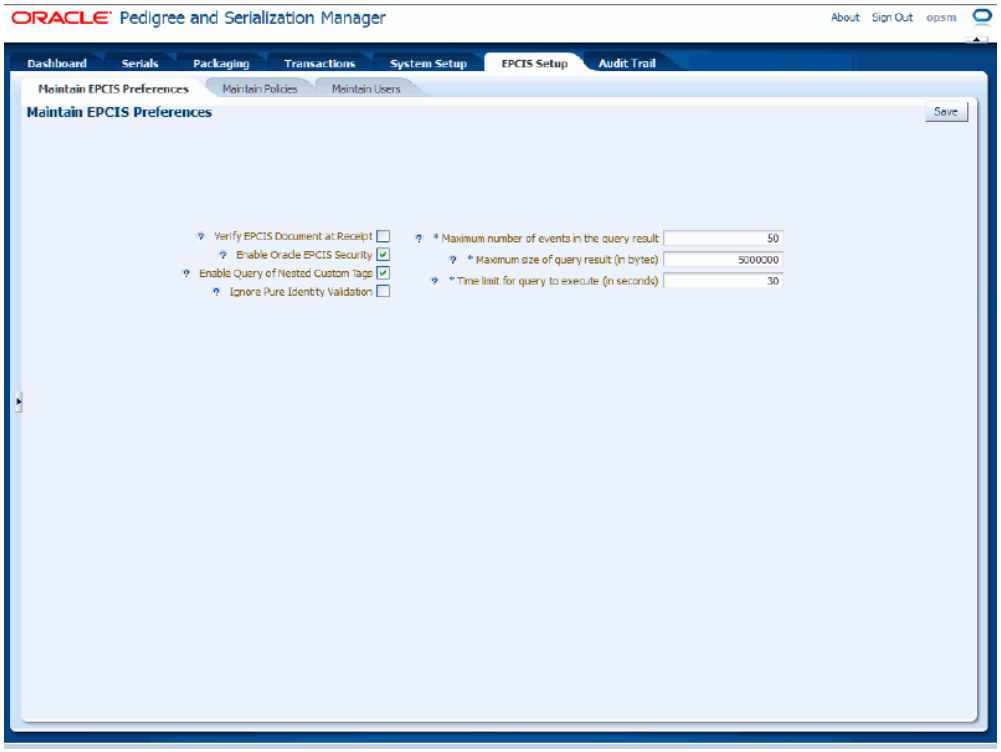
The Maintain EPCIS Preferences page appears displaying the current settings for the EPCIS preferences.

2. View the EPCIS preferences and their current settings.

To Set EPCIS Preferences:

1. Navigate to the Maintain EPCIS Preferences page, page A-2.

Maintain EPCIS Preferences page



2. Select the settings for the following preferences:

Field Name	Description
Verify EPCIS Document at Receipt check box	(Optional) Select this check box, if you want the EPCIS event sent into the EPC Capture web service to be validated against EPCglobal's XSD prior to any additional processing taking place. **Note:** The event is always validated and this check box just controls the timing of that validation. If this check box is unchecked, and the format is invalid, the system will throw an error when it gets to the invalid section of the XSD. Having the validation happen up front can potentially increase performance.

Field Name	Description
Enable Oracle EPCIS Security check box	(Optional) Select this check box, if you want the system to check for EPCIS policies to verify that the user has access to the data being queried.
Enable Query of Nested Custom Tags check box	(Optional) Select this check box, if the system will allow the query of data in nested custom tags provided in the file extension.
Ignore Pure Identity Validation check box	(Optional) Select this check box, if you want the system to not validate that the EPC codes provided are in compliance with the GS1 standard.
Maximum number of events in the query result	Enter the number of events that can be returned in one query. If the number of events returned by the query exceeds this value, the result will not be returned. 50 appears by default. If you enter zero or a negative value upon saving the system will change the value back to the default value. Zero and negative values are not allowed.
Maximum size of query result (in bytes)	Enter the file size in bytes that can be returned in one query. If the size of the file exceeds this value, the result will not be returned. 50000000 appears by default. If you enter zero or a negative value upon saving the system will change the value back to the default value. Zero and negative values are not allowed.

Field Name	Description
Time limit for query to execute (in seconds)	Enter the allowed duration in seconds for processing a query. If the processing time exceeds this value, the result will not be returned. 30 appears by default. If you enter zero or a negative value upon saving the system will change the value back to the default value. Zero and negative values are not allowed.

To Modify EPCIS Preferences:

1. Navigate to the Maintain EPCIS Preferences page, page A-2.
2. Modify any of the preferences.
3. Click the Save button.

Maintaining Policies

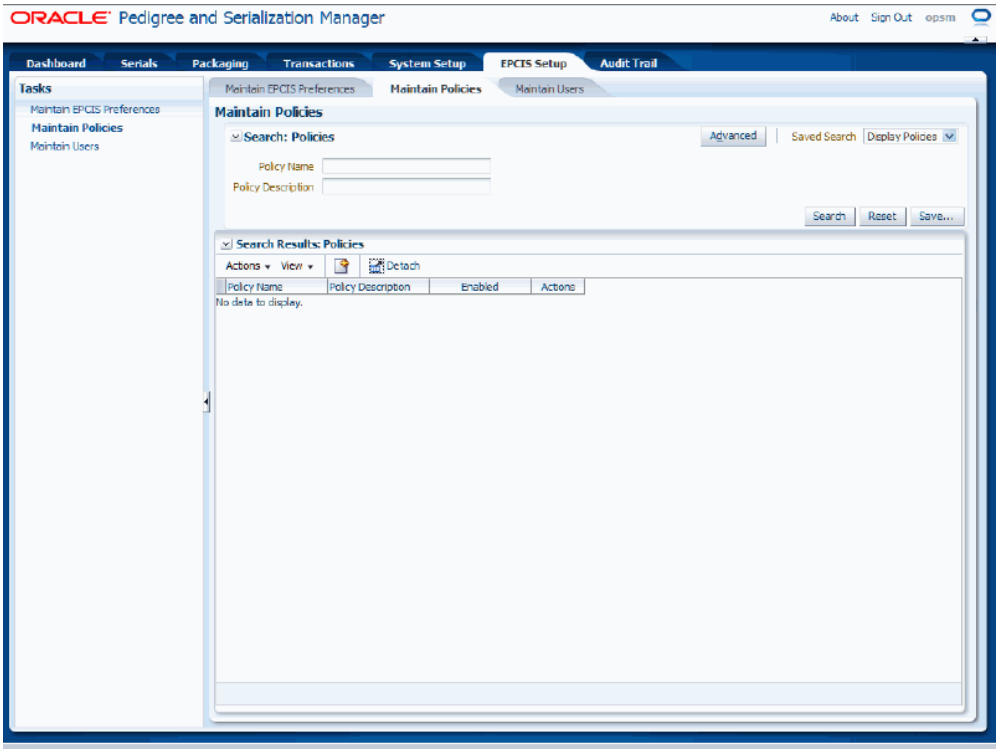
Use the Maintain Policies page to define the policies used by the EPCIS Query web service when querying the EPCIS repository. You only have to set up policies if the Enable Oracle EPCIS Security check box is selected on the Maintain EPCIS Preferences page. These policies determine which data an external user has the ability to access through the EPCIS Query web service.

Use these procedures to search (basic and advanced), create, edit, and delete policies:

To Search for Policies (Basic Search):

1. Navigate to the Maintain Policies page, page A-2.

Maintain Policies page (Basic Search)



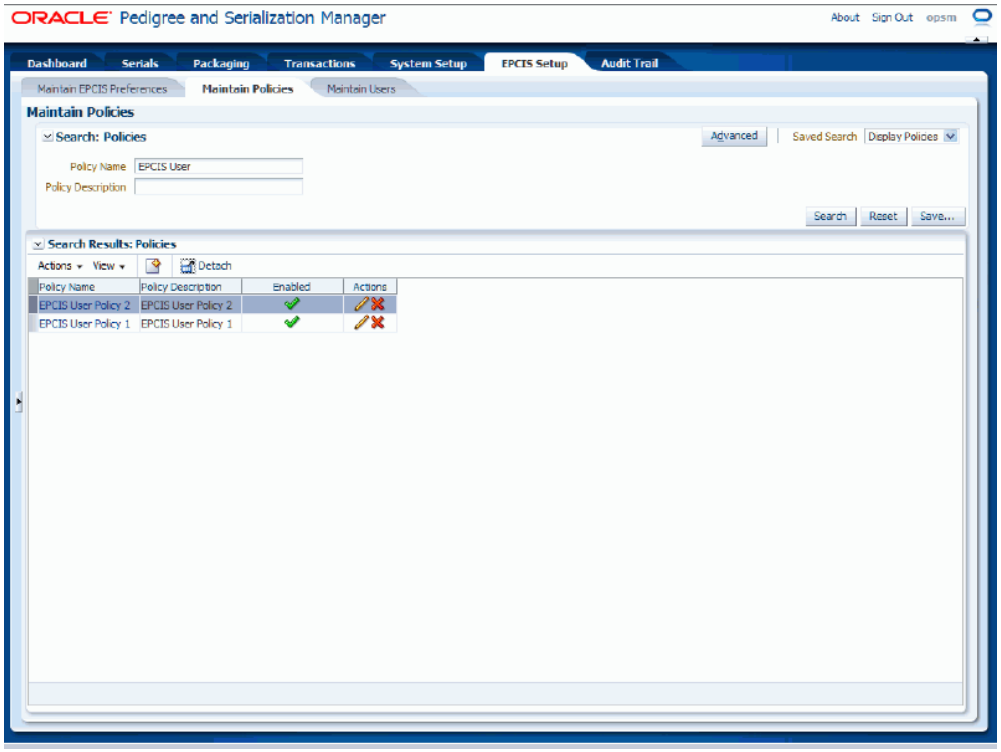
2. In the Search: Policies region, enter the search criteria for the policies using one or both of these fields:

Field Name	Description
Policy Name	(Optional) Enter the policy name.
Policy Description	(Optional) Enter the policy description.

Otherwise, you can click the Search button without entering any search criteria and all available policies will appear

3. Click the Search button.

Maintain Policies page (Basic Search)



All of the policies that match the search criteria appear in the Search Results: Policies region in a table format.

4. Click the Advanced button to perform an advanced search.

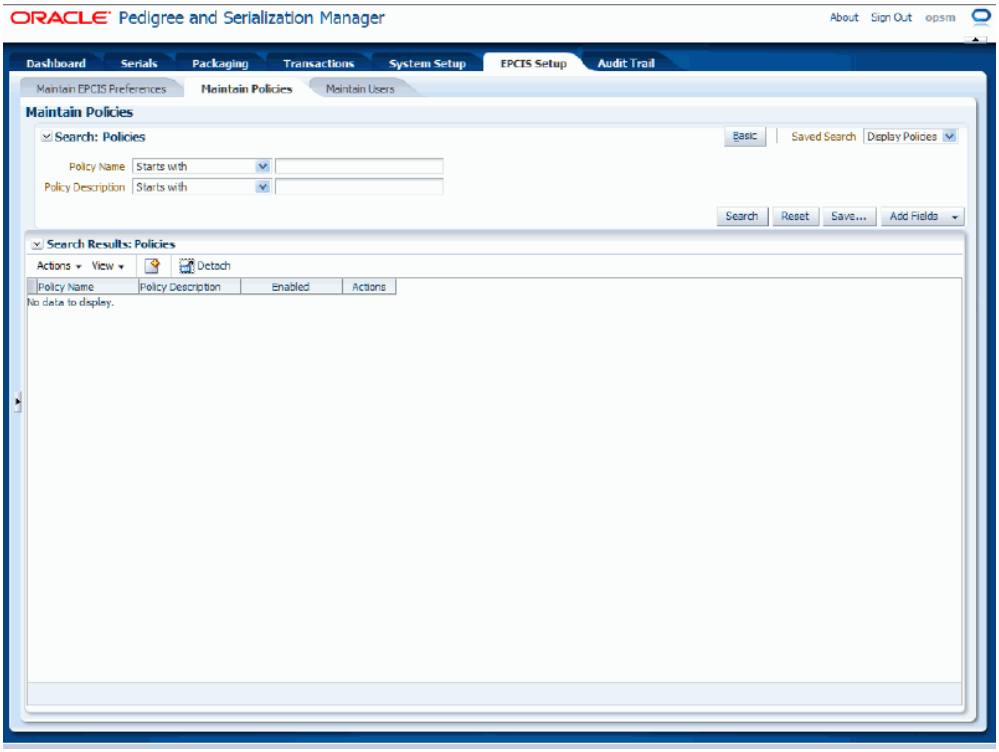
To Search for Policies (Advanced Search):

1. Navigate to the Maintain Policies page, page A-2.

2. Click the Advanced button.

> **Note:** Clicking the Advanced or Basic button will keep the values in the base criteria fields.

Maintain Policies page (Advanced Search)



3. In the Search: Policies region, enter the search criteria for the policies using one or both of these fields:

Field Name	Description
Policy Name	(Optional) Select the field operator and then enter the policy name. Operators are: • Starts with • Ends with • Equals • Does not equal • Less than • Greater than • Less than or equal to • Greater than or equal to • Between • Not between • Contains • Does not contain • Is blank • Is not blank
Policy Description	(Optional) Select the field operator and then enter the policy description. The field operators are the same as that for the Policy Name field.

Otherwise, you can click the Search button without entering any search criteria and all available policies will appear

4. (Optional) To enter additional search criteria fields, click the Add Fields button and select the field you would like to add to the search criteria.

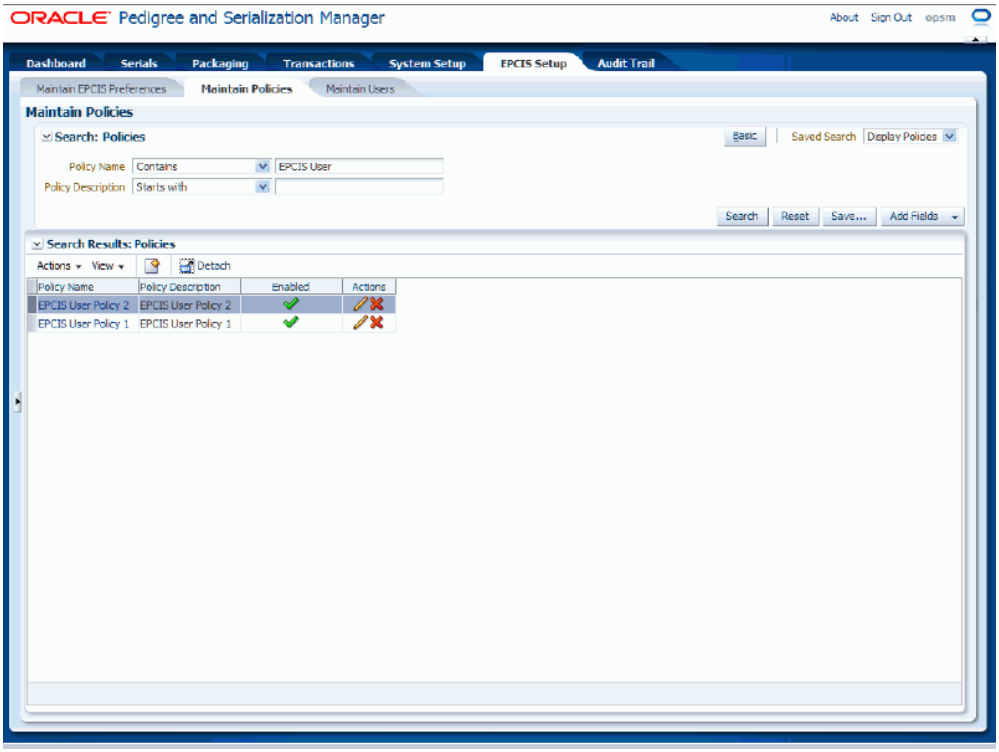
The selected field appears as a search criteria field.

> **Note:** To remove the additional field, click the Remove icon next to the field. The field will be removed from the search criteria.

5. (Optional) Enter search criteria for the additional fields.

6. Click the Search button.

Maintain Policies page (Advanced Search)



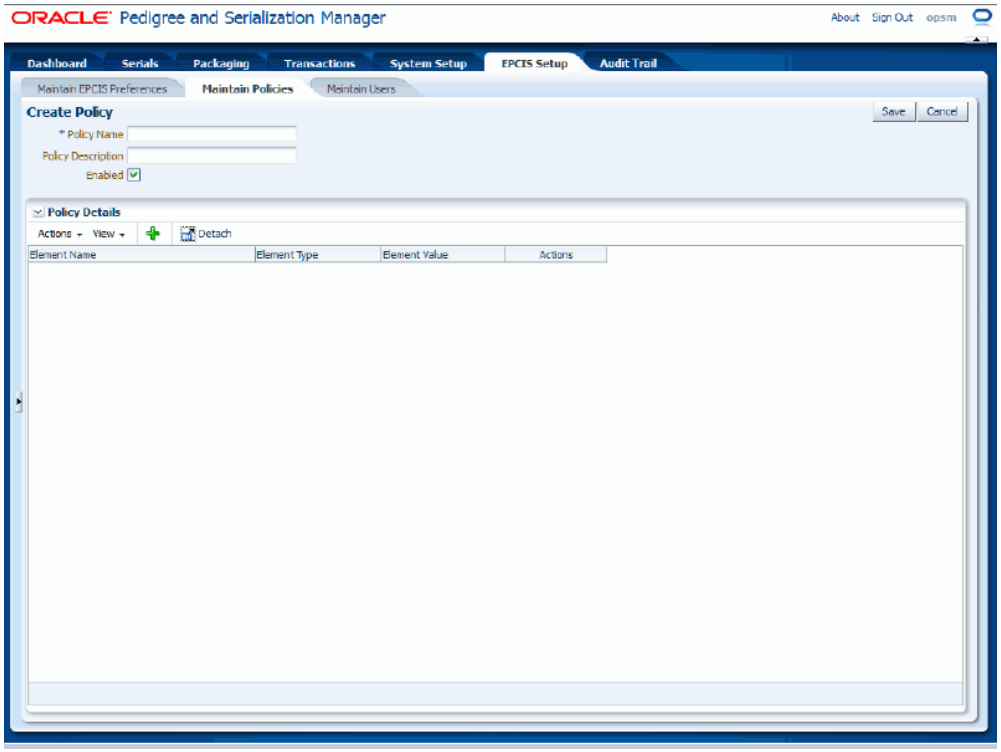
All of the policies that match the search criteria appear in the Search Results: Policies region in a table format.

To Create Policies:

1. Navigate to the Maintain Policies page, page A-2.

2. Select Create from the Actions menu or click the Create Policy icon located at the top of the Search Results: Policies region.

Create Policy page

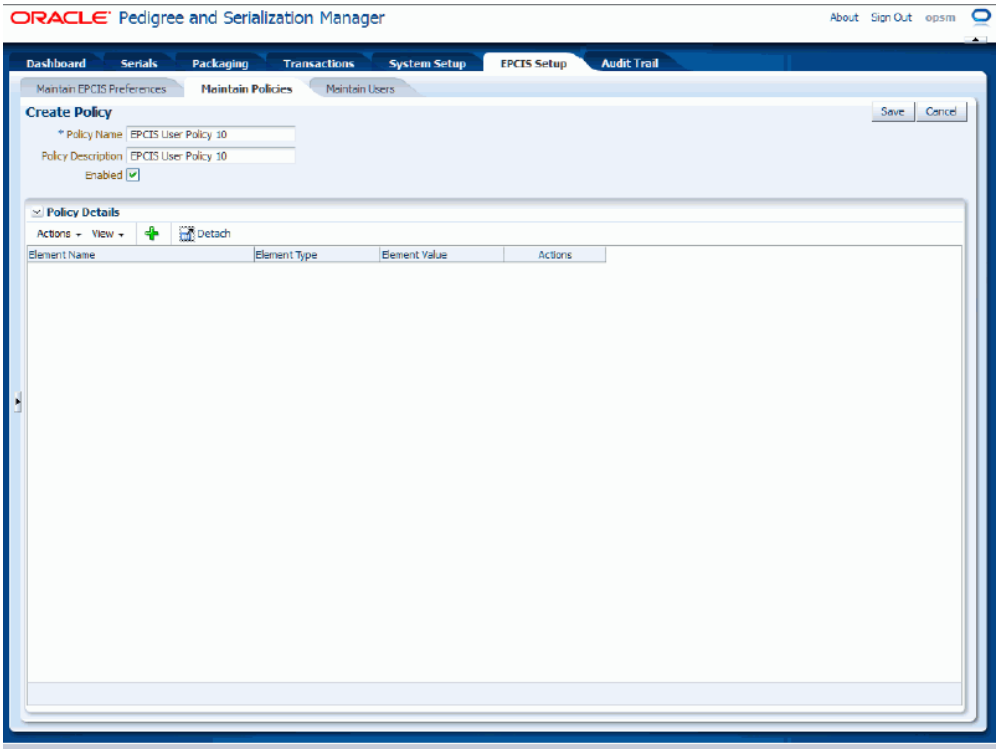


The Create Policy page appears.

3. Enter the following information:

Field Name	Description
Policy Name	Enter the name of the policy.
Policy Description	(Optional) Enter a description of the policy.
Enabled check box	Select this check box to enable the policy for use. This check box appears selected by default.

Create Policy page

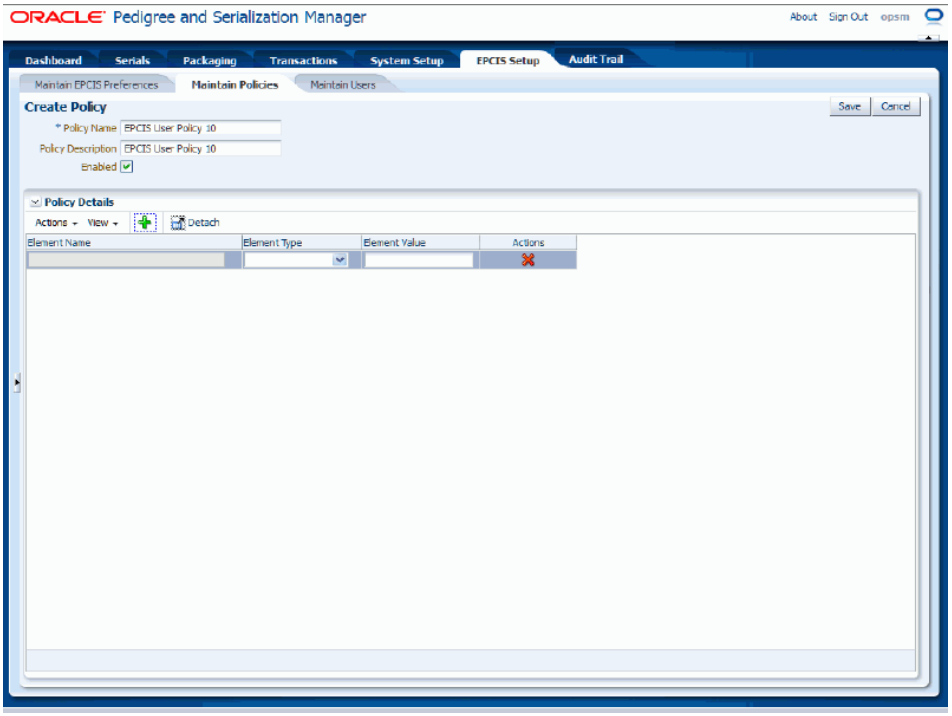


4. Add policy details.

To Add Policy Details

1. Select Add from the Actions menu or click the Add Policy Element icon located at the top of the Policy Details region.

Create Policy page



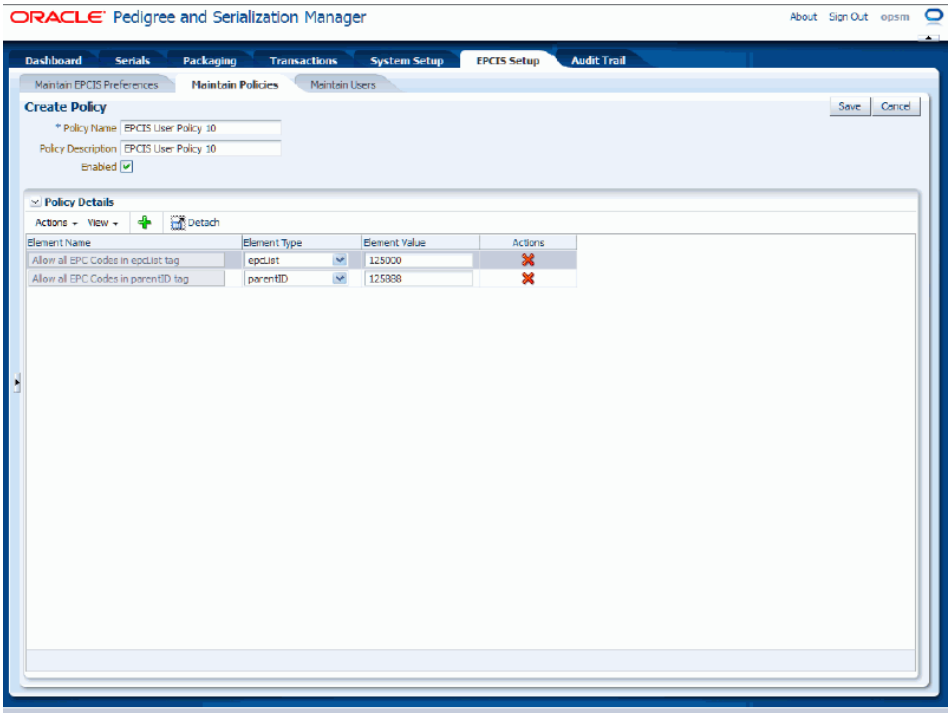
A new row appears in the Policy Details table.

2. Enter the following information:

Field Name	Description
Element Name	The name of the element displays after you select an Element Type. You cannot update this field.

Field Name	Description
Element Type	Select the type of element you want to add to the policy. Element Types are: • parentID (Allow all EPC codes in parentID tag) • epcList (Allow all EPC codes in epcList tag) • noepc (Allow all entries without EPC codes) • childEPCs (All EPC codes in childEPCs tag) • epcClass (Allow all EPC codes in epcClass tag)
Element Value	Enter an element value. Values must be a 6-12 digit number or an asterisk (*).

Create Policy page



To Delete Policy Details

1. Select the policy detail (Element Name, Element Type , and Element Value) that you want to delete in the table.

2. Select Delete from the Actions menu or click the Delete Policy icon associated with the policy detail in the Action column of the Policy Details table.

5. Click the Save button to save the policy and to return back to the Maintain Policies page.

Note: At least one Policy Detail record is required for each policy.

To Edit Policies:

1. Navigate to the Maintain Policies page, page A-2.

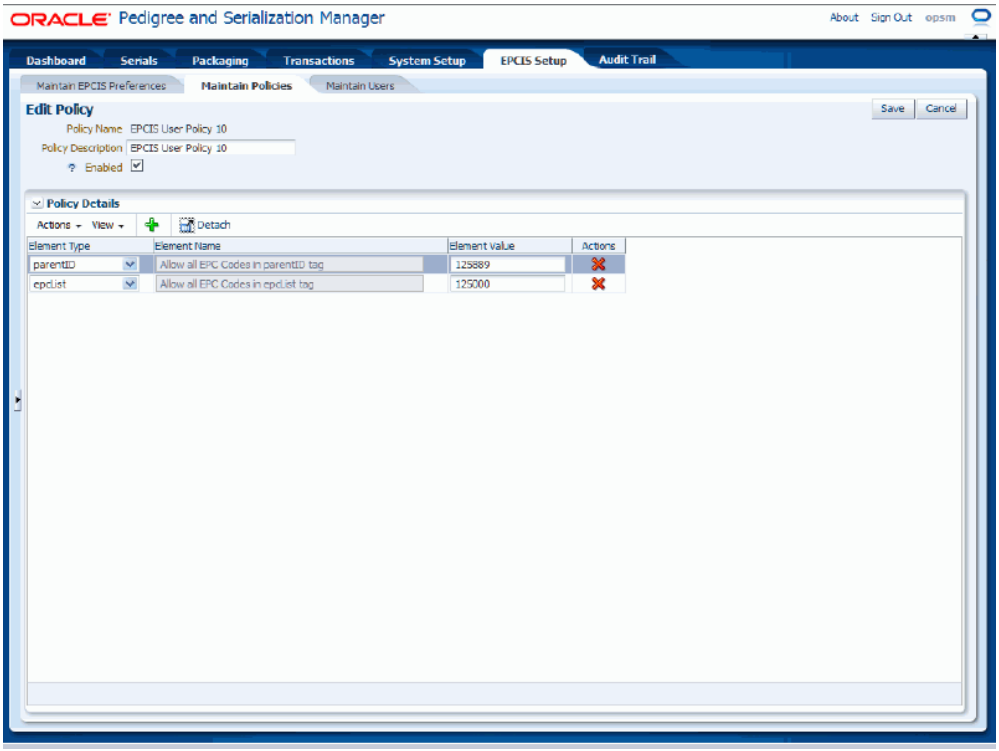
2. Enter search criteria for the policies you want to edit and click the Search button.

   All of the policies that match the search criteria appear in the Search Results: Policies table.

3. Select the policy in the table that you want to edit.

4. Select Edit in the Actions menu or click the Edit Policy icon associated with the policy in the Actions column of the results table.

Edit Policy page



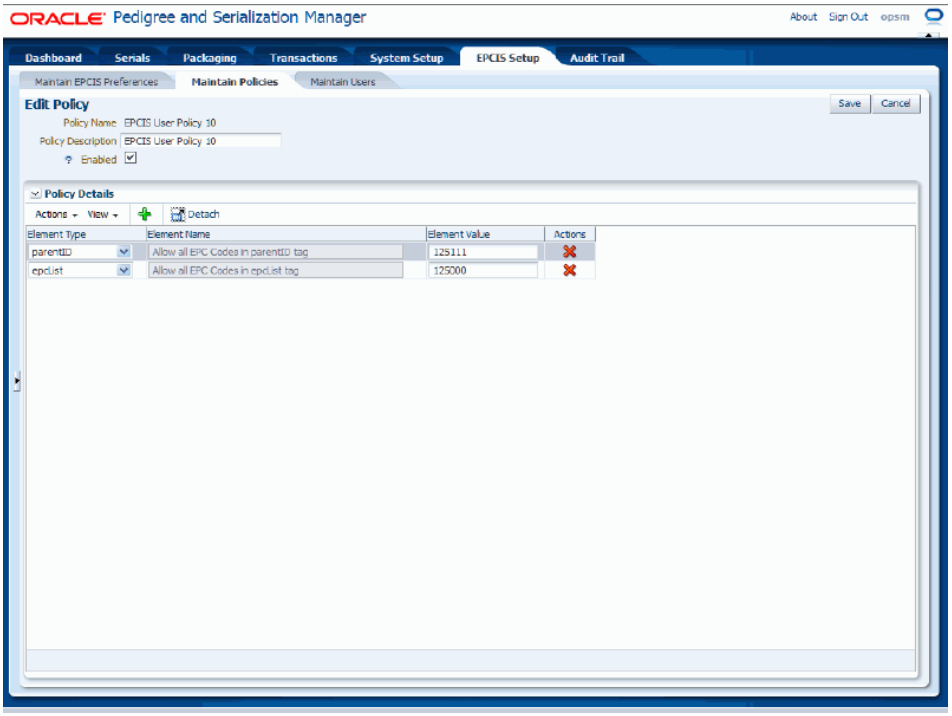
The Edit Policy page appears displaying all of the existing information for the policy.

5. Edit the policy.

To Edit Policy Details

1. Modify any of the existing details associated with the policy.

Edit Policy page



To Add Policy Details

1. Select Add in the Actions menu or click the Add Policy Element icon located at the top of the Policy Details region.

2. Add the additional policy information.

To Delete Policy Details

1. Select Delete in the Actions menu or click the Delete Policy icon associated with a policy detail in the Actions column of the Policy Details table.

2. Click the Yes button to confirm

6. Click the Save button to save the changes you made to the policy information and to return back to the Maintain Policies page.

Note: At least one Policy Detail record is required for each policy.

To Delete Policies:

1. Navigate to the Maintain Policies page, page A-2.

2. Enter search criteria for the policies you want to delete and click the Search button.

   All of the policies that match the search criteria appear in the Search Results: Policies table.

   > **Note:** You cannot delete a policy if it is associated to an EPCIS user. You will either need to delete the associated user or assign a new policy to the user and then you will able to delete the policy.
   >
   > For more information on deleting users, see Maintaining Users, page 5-18.

3. Select the policy in the table that you want to delete.

4. Select Delete in the Actions menu or click the Delete Policy icon associated with the policy in the Actions column of the results table.

   The system displays a message stating are you sure you want to delete this policy?

5. Click the Yes button.

   The policy is deleted from the system.

Maintaining Users

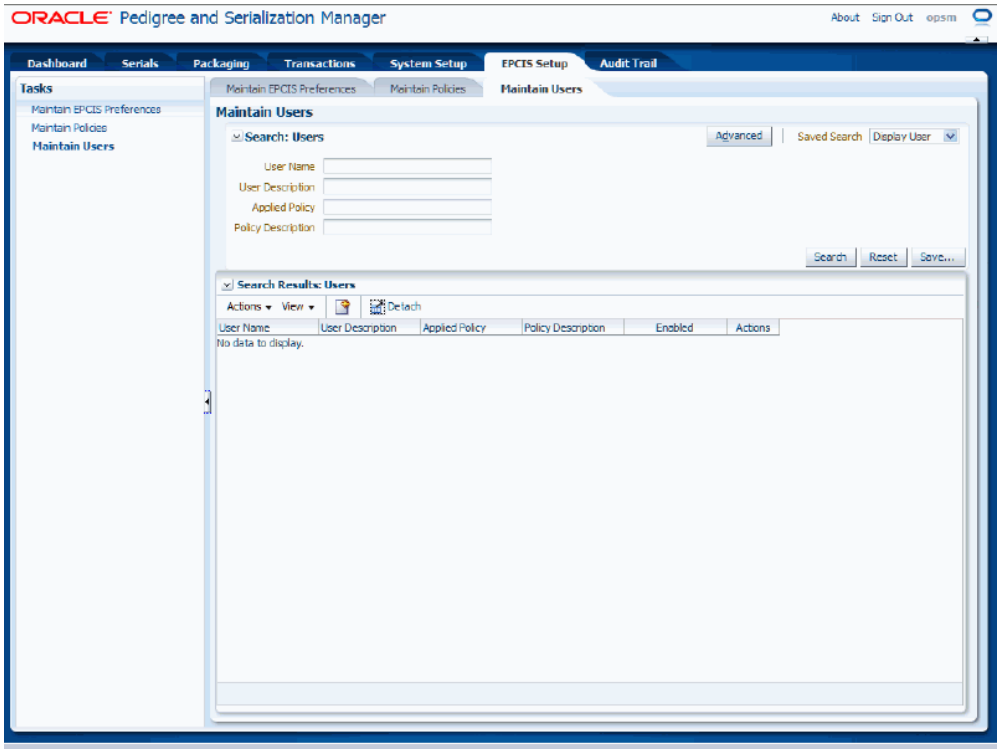
Use the Maintain Users page to define the users and their associated EPCIS policies that are used by the EPCIS Query web service when querying the EPCIS repository. You only have to set up users if the Enable Oracle EPCIS Security check box is selected on the Maintain EPCIS Preferences page. These users are the external users who are attempting to access the EPCIS repository through the EPCIS Query web service.

Use these procedures to search (basic and advanced), create, edit, and delete users:

To Search for Users (Basic Search):

1. Navigate to the Maintain Users page, page A-2.

Maintain Users page (Basic Search)



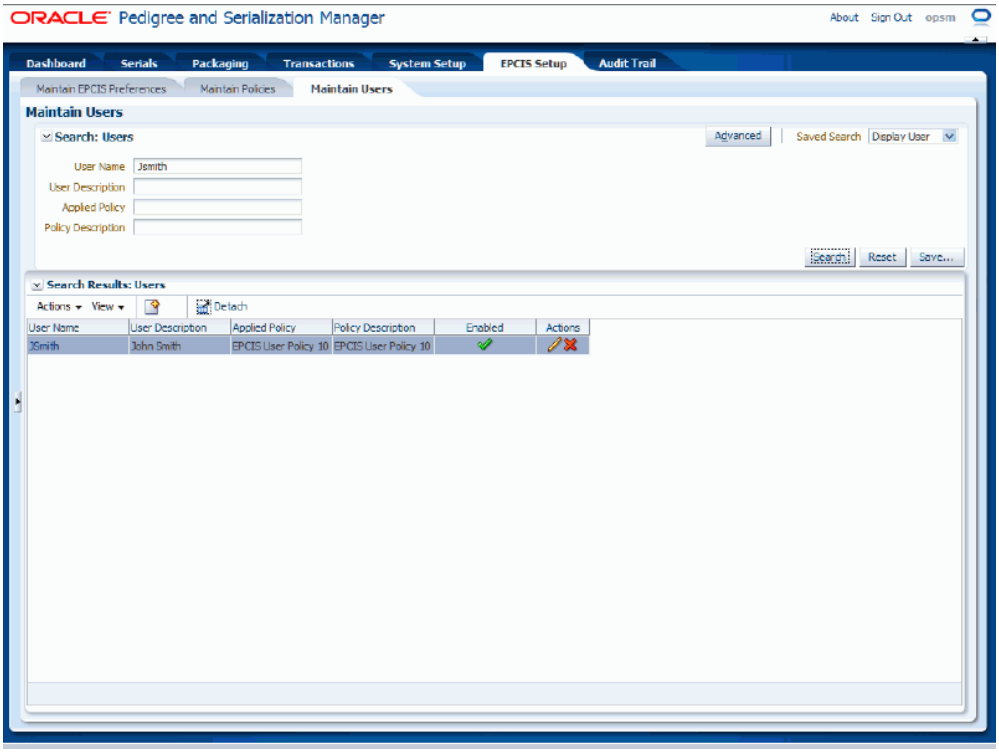
2. In the Search: Users region, enter the search criteria for the users using one or more of these fields:

Field Name	Description
User Name	(Optional) Enter the user name.
User Description	(Optional) Enter the user description.
Applied Policy	(Optional) Enter the policy associated with the user.
Policy Description	(Optional) Enter the policy description for the policy associated with the user.

Otherwise, you can click the Search button without entering any search criteria and all available users will appear.

3. Click the Search button.

Maintain Users page (Basic Search)



All of the users that match the search criteria appear in the Search Results: Users region in a table format.

4. Click the Advanced button to perform an advanced search.

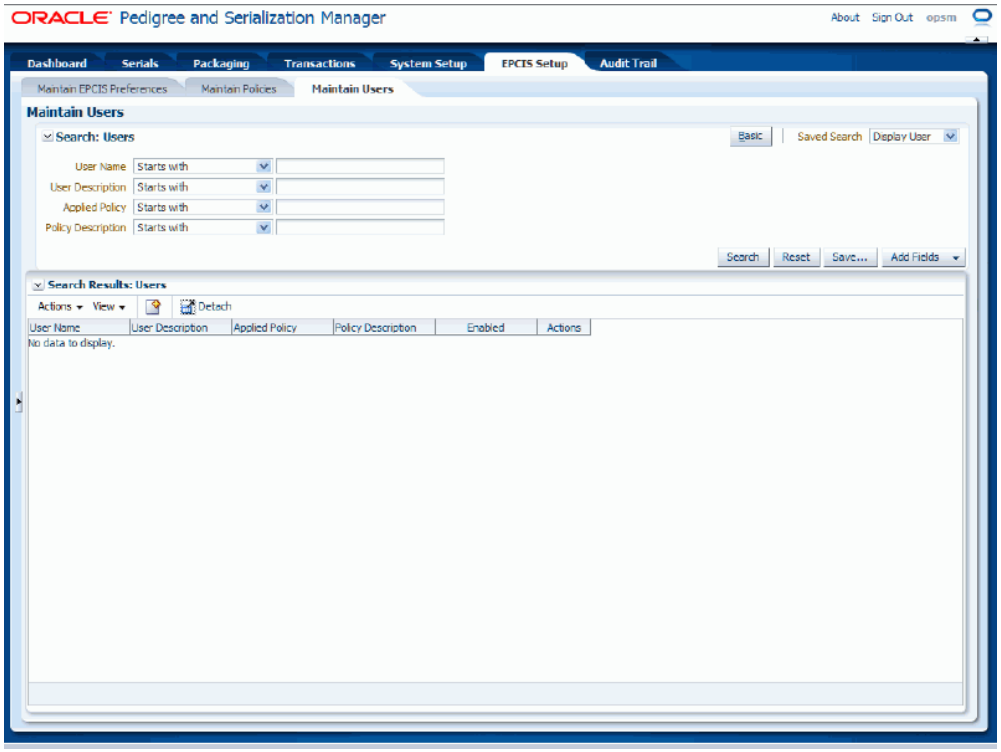
To Search for Users (Advanced Search):

1. Navigate to the Maintain Users page, page A-2.

2. Click the Advanced button.

> **Note:** Clicking the Advanced or Basic button will keep the values in the base criteria fields.

Maintain Users page (Advanced Search)



3. In the Search: Users region, enter the search criteria for the users using one or more of these fields:

Field Name	Description
User Name	(Optional) Select the field operator and then enter the user name. Operators are: • Starts with • Ends with • Equals • Does not equal • Less than • Greater than • Less than or equal to • Greater than or equal to • Between • Not between • Contains • Does not contain • Is blank • Is not blank
User Description	(Optional) Select the field operator and then enter the user description. The field operators are the same as that for the User Name field.
Applied Policy	(Optional) Select the field operator and then enter the policy associated with the user. The field operators are the same as that for the User Name field.

Field Name	Description
Policy Description	(Optional) Select the field operator and then enter the policy description for the policy associated with the user. The field operators are the same as that for the User Name field.

Otherwise, you can click the Search button without entering any search criteria and all available users will appear.

4. (Optional) To enter additional search criteria fields, click the Add Fields button and select the field you would like to add to the search criteria.

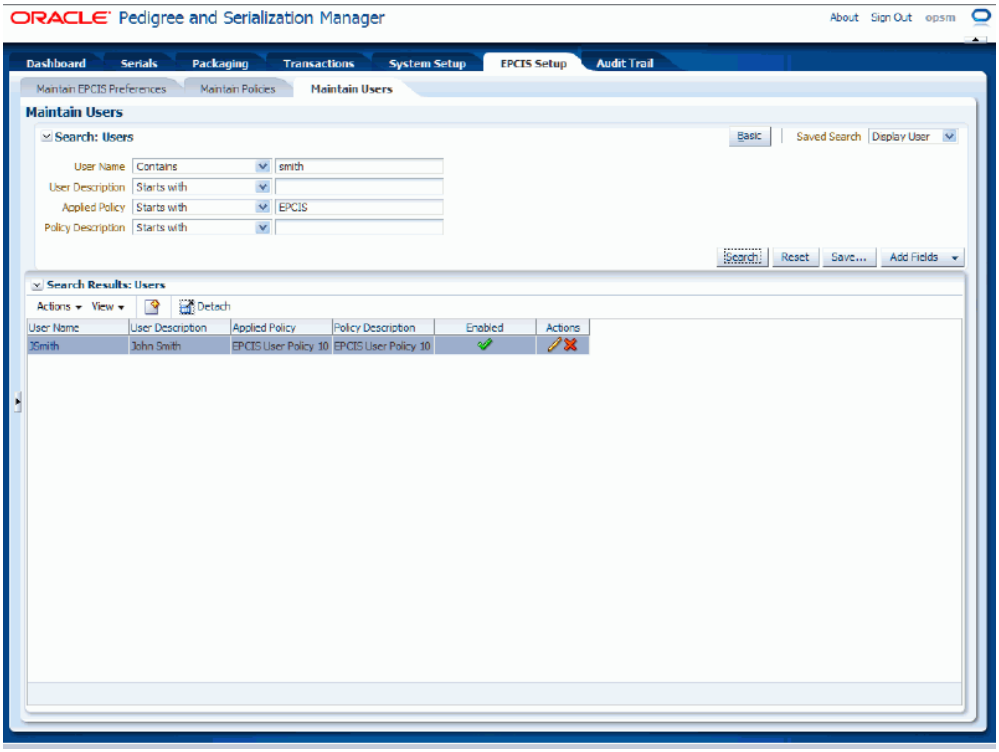
   The selected field appears as a search criteria field.

   > **Note:** To remove the additional field, click the Remove icon next to the field. The field will be removed from the search criteria.

5. (Optional) Enter search criteria for the additional fields.

6. Click the Search button.

Maintain Users page (Advanced Search)



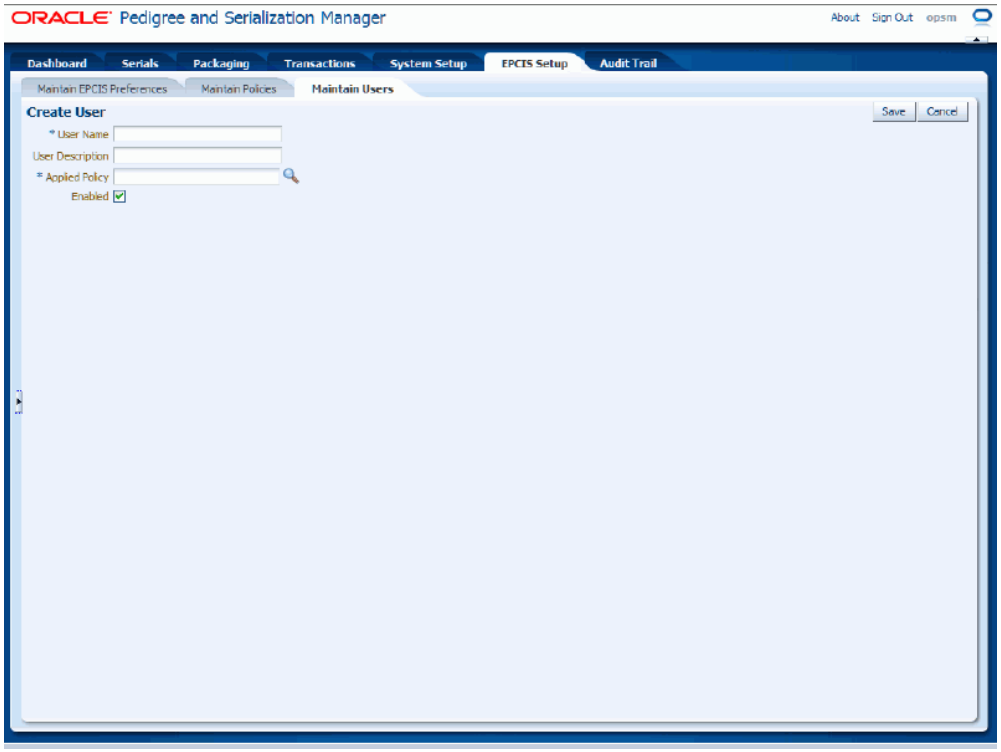
All of the policies that match the search criteria appear in the Search Results: Users region in a table format.

To Create Users:

1. Navigate to the Maintain Users page, page A-2.

2. Select Create from the Actions menu or click the Create icon located at the top of the Search Results: Users region.

Create User page



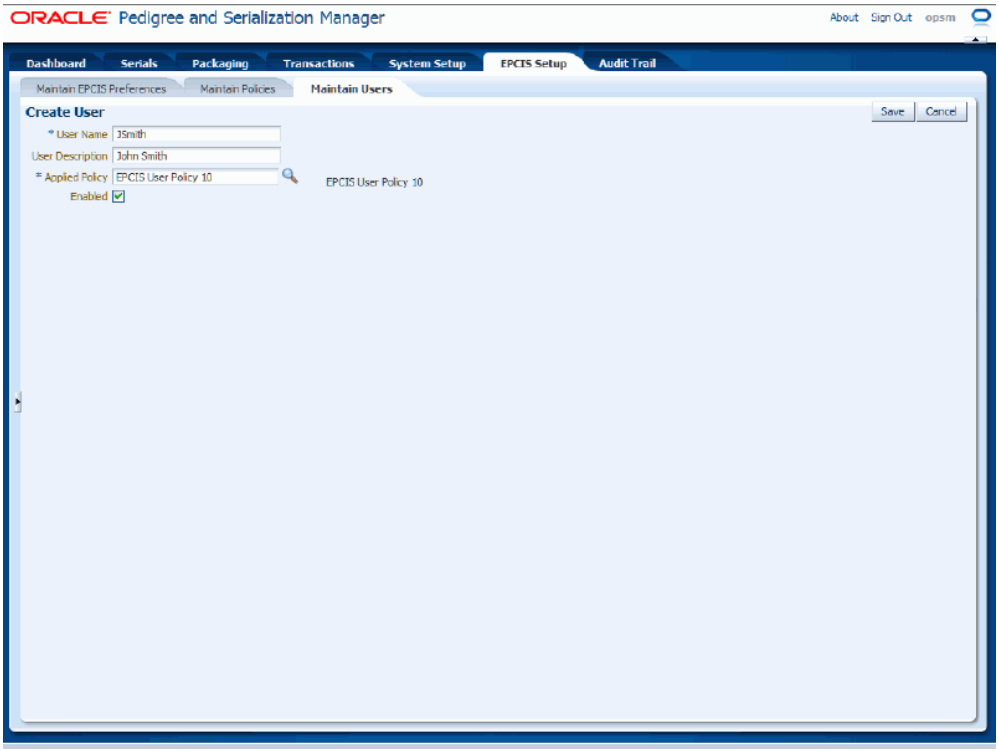
The Create User page appears.

3. Enter the following information:

Field Name	Description
User Name	Enter the user name.
User Description	(Optional) Enter a user description.
Applied Policy	Select a policy to associate with the user. **Note:** You can't associate a disabled policy to a user, and disabled policies do not display in the search and select. For information on maintaining policies, see Maintaining Policies, page 5-5.

Field Name	Description
Enabled check box	Select this check box if the user is enabled. The check box is selected by default. If the user is not enabled, the security validation for EPCIS Query will fail and no data will be returned.

Create User page



4. Click the Save button to save the user and return back to the Maintain Users page.

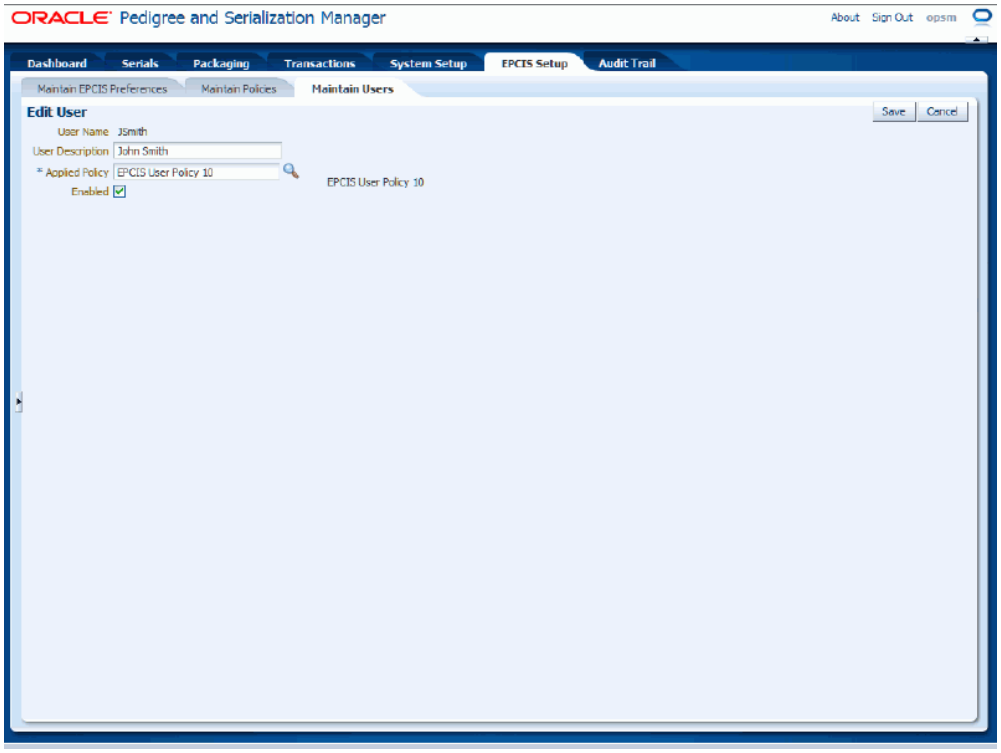
To Edit Users:

1. Navigate to the Maintain Users page, page A-2.
2. Enter search criteria for the users that you want to edit and click the Search button.

   All of the users that match the search criteria appear in the Search Results: Users table.
3. Select the user in the table that you want to edit.

4. Select Edit in the Actions menu or click the Edit User icon associated with the user in the Actions column of the results table.

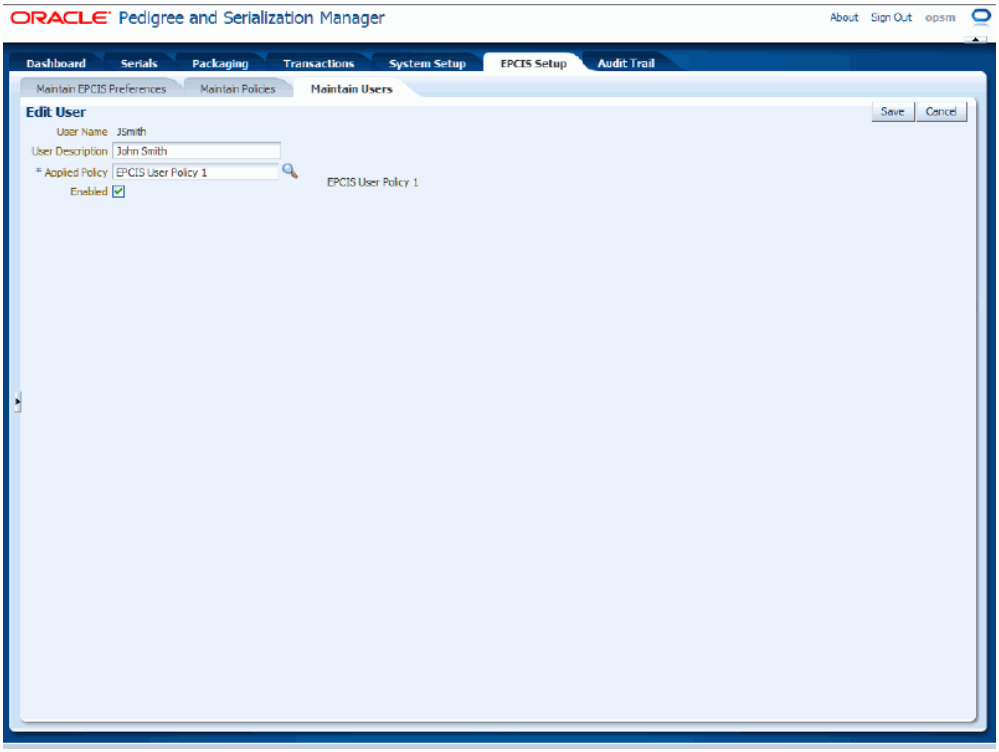
Edit User page



The Edit User page appears displaying all of the existing information for the user.

5. Modify any of the existing details associated with the user.

Edit User page



6. Click the Save button to save the changes you made to the user information and to return back to the Maintain Users page.

To Delete Users:

1. Navigate to the Maintain Users page, page A-2.
2. Enter search criteria for the users you want to delete and click the Search button.

   All of the users that match the search criteria appear in the Search Results: Users table.
3. Select the user in the table that you want to delete.
4. Select Delete in the Actions menu or click the Delete User icon associated with the user in the Actions column of the results table.

   The system displays a message stating are you sure you want to delete this user?
5. Click the Yes button.

   The user is deleted from the system.

Part 3

Managing Lots and Serials

6

Maintaining Lots

This chapter covers the following topics:

- Understanding the Lot Definition Process
- Searching for Lots
- Viewing Lot Detail Information
- Creating Lots
- Editing Lots
- Deleting Lots
- Synchronizing Lots (Lot Interface Table)
- Merging Lots Using JMS Queue

Understanding the Lot Definition Process

Lot information is essential when managing and tracking serial data. The lot number is uniquely identified by the Lot Number, Source System, Location (optional), Product Code, Product Code Type, Product Code Variant, and Packaging Unit. The lot must be identified on a serial when it is commissioned, shipped, or returned. A valid lot expiration date is required for shipment and return of the serials.

Oracle Pedigree and Serialization Manager (OPSM) stores duplicate lots, where a separate lot definition is kept for each location and source system. The identification of the location on the lot is optional. When the lot is not identified, a duplicate lot will be stored for each source system interfacing with OPSM. When a transaction is recorded in OPSM, the source system and location identified on the transaction is used to retrieve the appropriate lot information.

Lot information can be created in OPSM using one of these methods:

- Using the Maintain Lots page in OPSM. Lot information can be created, modified, or deleted using the OPSM lot pages.

For more information on maintaining lots in OPSM, see:

- Searching for Lots, page 6-3.
- Viewing Lot Detail Information, page 6-13.
- Creating Lots, page 6-14.
- Editing Lots, page 6-18.
- Deleting Lots, page 6-20.

- Using the Lot Synchronization process. Lot information can be merged from the Lot Interface table.

  For more information see, Synchronizing Lots (Lot Interface Table, page 6-21.

- Using the Lot Web Services in OPSM. Lot information can be merged.

  For more information see, Lot Web Services, page 14-28.

OPSM Integration with Oracle E-Business Suite

The Oracle Serialization and Tracking Integration Pack for Oracle Pedigree and Serialization Manager and Oracle E-Business Suite 3.1 can be used to synchronize lot information from Oracle E-Business Suite to OPSM using one of the following methods:

- Using the Application Integration Architecture (AIA) integration between Oracle E-Business Suite and OPSM.

  This real-time synchronization process uses the OPSM mergeLot Web Service to insert the lot information into OPSM. If any exceptions occur during the processing you can view the web service exceptions using the Web Service Exceptions page in OPSM.

  For more information on the real-time lot synchronization process between Oracle E-Business Suite and OPSM, see:

  - Merging Lots Using the JMS Queue, page 6-36.
  - *Oracle Serialization and Tracking Integration Pack for Oracle Pedigree and Serialization Manager and Oracle E-Business Suite 3.1 - Implementation Guide.*

- Using the batch lot synchronization process between Oracle E-Business Suite and OPSM. Using the Lot Synchronization page in OPSM you initiate the lot synchronization process between these two systems.

  For more information on batch lot synchronization, see:

  - Synchronizing Lots (Lot Interface Table), page 6-21.

- *Oracle Serialization and Tracking Integration Pack for Oracle Pedigree and Serialization Manager and Oracle E-Business Suite 3.1 - Implementation Guide.*

Searching for Lots

Use the Maintain Lots page in Oracle Pedigree and Serialization Manager (OPSM) to search for existing lots. You can view the lots in a multitude of ways by using the search criteria fields that include, lot number, parent lot, location, item number, product code, product name, packaging unit, lot source, origination date, and expiration date.

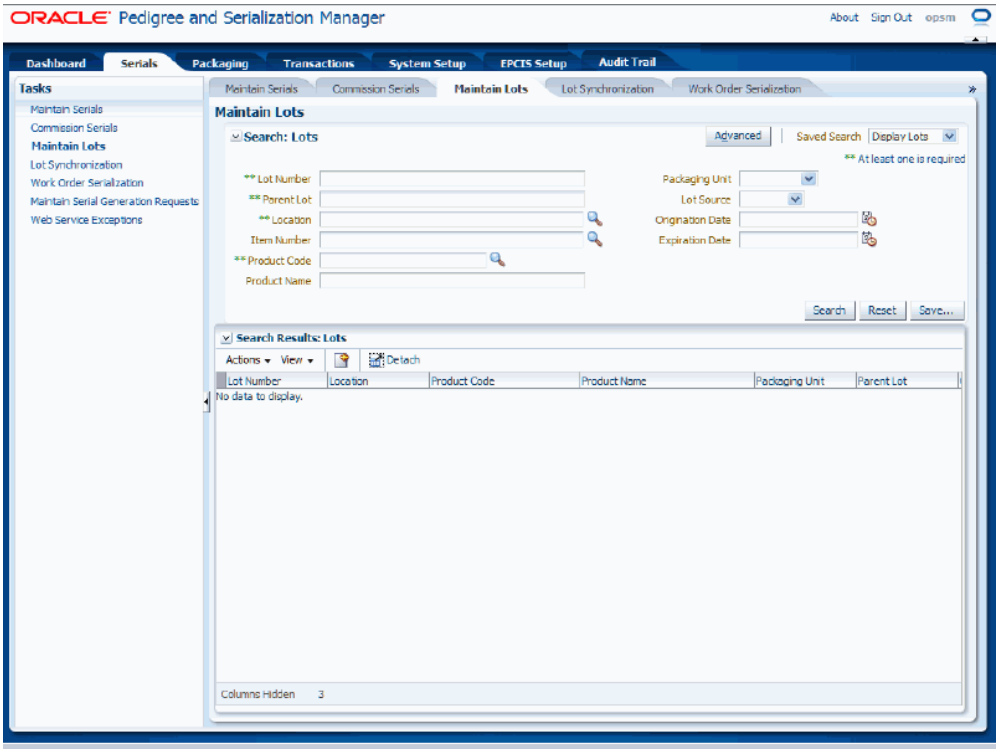
Plus, using the advanced search functionality you can search for a range of lots by using the operator field (equal to, contains, ends with, starts with, and so on) associated with the search criteria fields.

Use these procedures to search for lots:

To Search for Lots (Basic Search):

1. Navigate to the Maintain Lots page, page A-2.

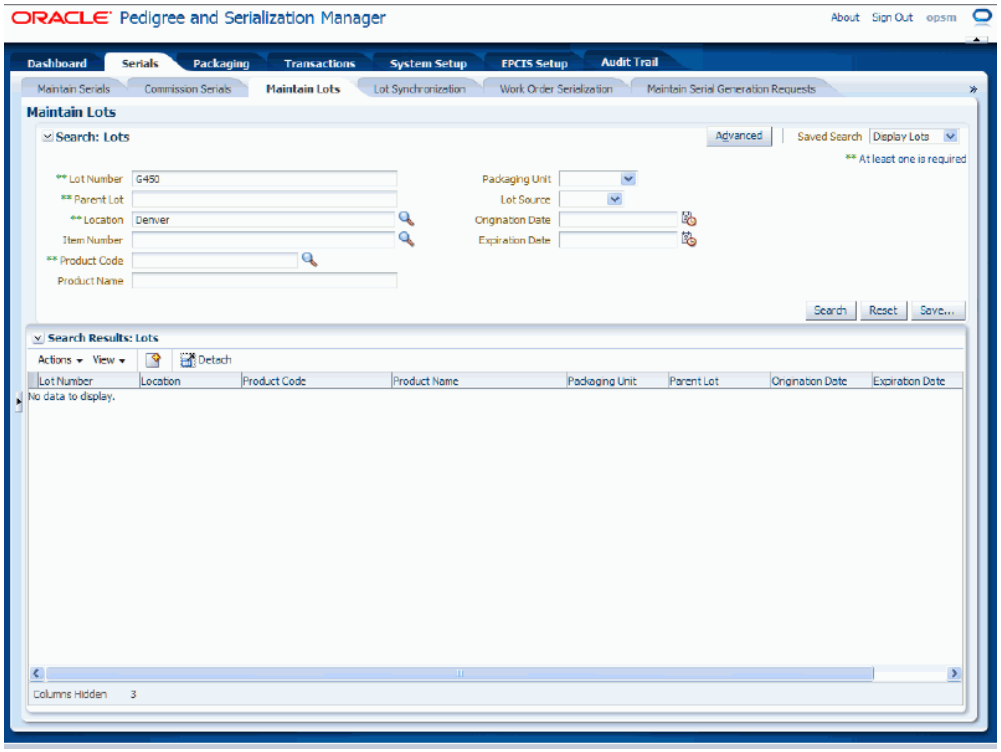
Maintain Lots page (Basic Search)



2. In the Search: Lots region, enter the search criteria for the lots using one or more of these fields:

Field Name	Description
Lot Number	Enter the lot number.
Parent Lot	Enter the parent lot associated with the lot number.
Location	Select the location associated with the lot number.
Product Code	Select the product code associated with the lot number.

Maintain Lots page (Basic Search)



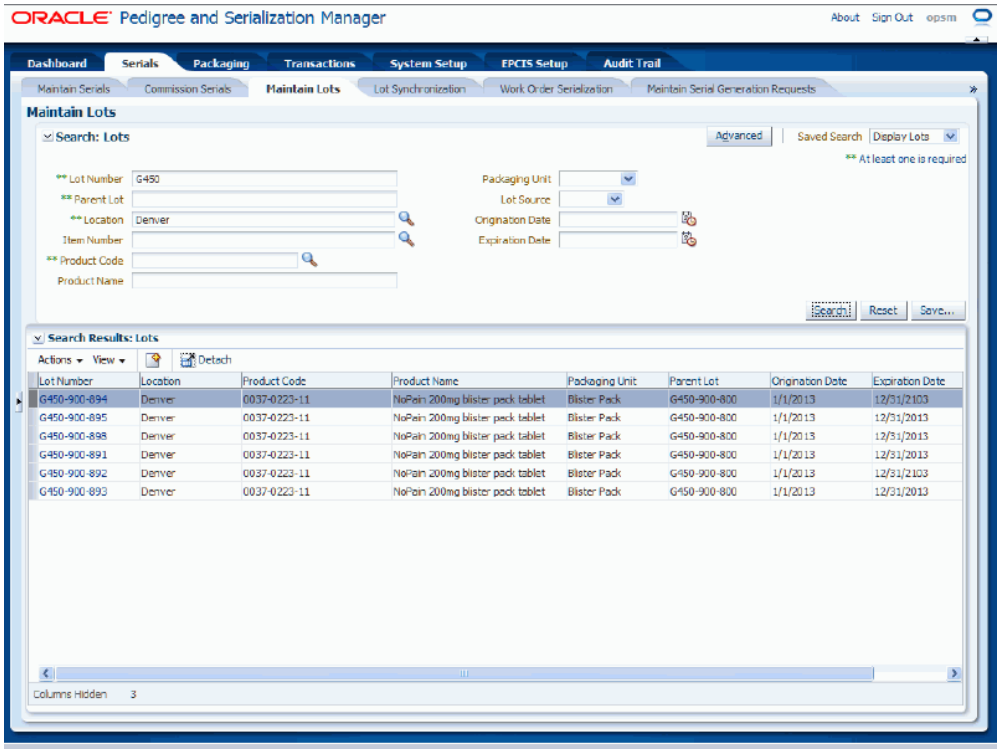
3. (Optional) In the Search: Lots region, further specify the lots search criteria by entering one or more of these fields:

Field Name	Description
Item Number	Select the item number for the lot. This is the transactional systems item number. It is used to find the Product Code to perform the search. The item number search is merely a way for you to search for the correct product code. When you select the Item Number, the Product Code and Product Name fields are automatically populated. If you clear the Item Number, then the Product Code and Product Name fields get cleared as well. You cannot enter both the Item Number and the product fields (Product Code and Product Name) on the search.

Field Name	Description
Product Name	Enter the product name associated with the product.
Packaging Unit	Select the packaging unit associated with the product.
Lot Source	Select the source for the lot.
Origination Date	Select the origination date for the lot.
Expiration Date	Select the expiration date for the lot.

4. Click the Search button.

Maintain Lots page (Basic Search)



All of the lots that match the search criteria appear in the Search Results: Lots region in a table format. An Actions column appears in the table at the end of the row with an Edit Lot icon and a Delete Lot icon.

5. Click the Advanced button to perform an advanced search.

To Search for Lots (Advanced Search):

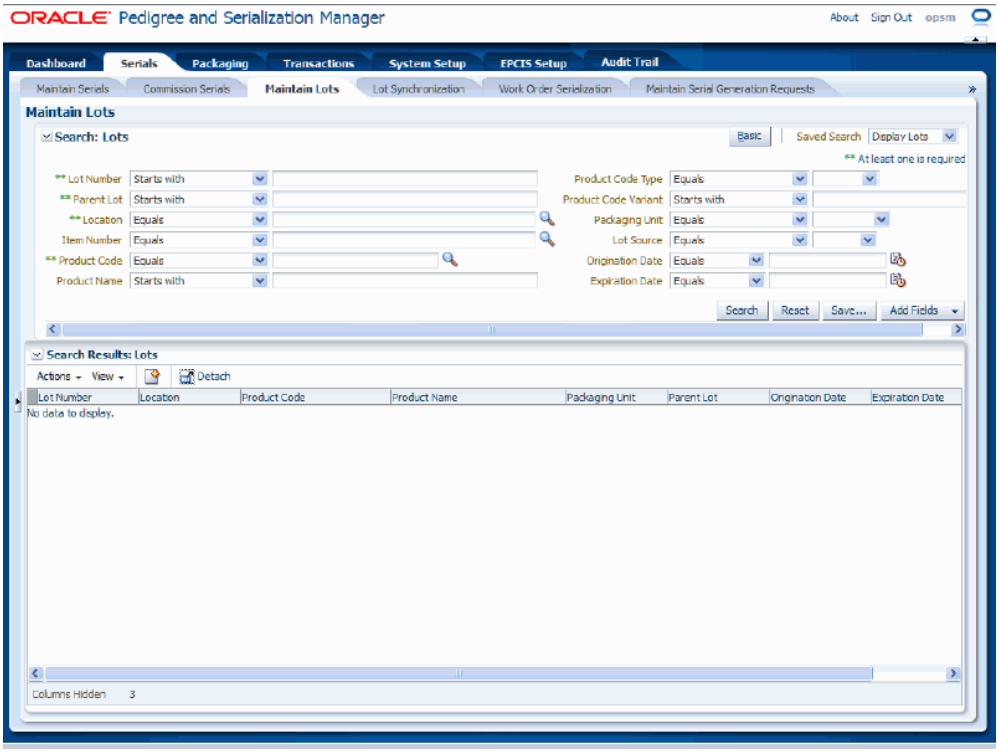
Use the Advanced Search functionality to perform a more detailed search for specific lots. Field operators associated with the search criteria fields can be used during an Advanced Search so that a range of lots can be easily retrieved.

1. Navigate to the Maintain Lots page, page A-2.

2. Click the Advanced button located at the top of the page.

> **Note:** Clicking the Advanced or Basic button will keep the values in the base criteria fields.

Maintain Lots page (Advanced Search)



3. In the Search: Lots region, enter the search criteria for the lots using one or more of these fields:

Field Name	Description
Lot Number	Select the field operator and then enter the lot number. Operators are: • Not equal to • Not between • Contains • Is not blank • Equal to • Less than • Greater than • Is blank • Less than or equal to • Greater than or equal to • Does not contain • Starts with • Ends with • Between
Parent Lot	Select the field operator and then enter the parent lot associated with the lot number. The field operators are the same as that for the Lot Number field.
Location	Select the field operator and then enter the location associated with the lot number. The field operators are the same as that for the Lot Number field.

Field Name	Description
Product Code	Select the field operator and then enter the product code associated with the lot number. The field operators are the same as that for the Lot Number field.

4. (Optional) In the Search: Lots region, further specify the lots search criteria by entering one or more of these fields:

Field Name	Description
Item Number	Select the field operator and then select the item number for the lot. This is the transactional systems item number. It is used to find the Product Code to perform the search. The item number search is merely a way for you to search for the correct product code. When you select the Item Number, the Product Code, Product Name, Product Code Type and Product Code Variant fields are automatically populated. If you clear the item number, then the Product Code, Product Name, Product Code Type, and Product Code Variant fields get cleared as well. You cannot enter both the item number and the product fields (Product Code, Product Name, Product Code Type and Product Code Variant) on the search. The field operators are the same as that for the Lot Number field.
Product Name	Select the field operator and then enter the product name associated with the product. The field operators are the same as that for the Lot Number field.

Field Name	Description
Product Code Type	Select the field operator and then select the product code type associated with the product. The field operators are the same as that for the Lot Number field.
Product Code Variant	Select the field operator and then enter the product code variant associated with product. The field operators are the same as that for the Lot Number field.
Packaging Unit	Select the field operator and then select the packaging unit associated with the product. The field operators are the same as that for the Lot Number field.
Lot Source	Select the field operator and then select the source for the lot. The field operators are the same as that for the Lot Number field.

Field Name	Description
Origination Date	Select the field operator and then select the origination date for the lot. Operators are: • Not equal to • Is blank • On or After • Before • Not between • Is not blank • On or Before • After • Between • Equal to
Expiration Date	Select the field operator and then select the expiration date for the lot. The field operators are the same as that for the Origination Date field.

5. (Optional) To enter additional search criteria fields, click the Add Fields button and select the field you would like to add to the search criteria.

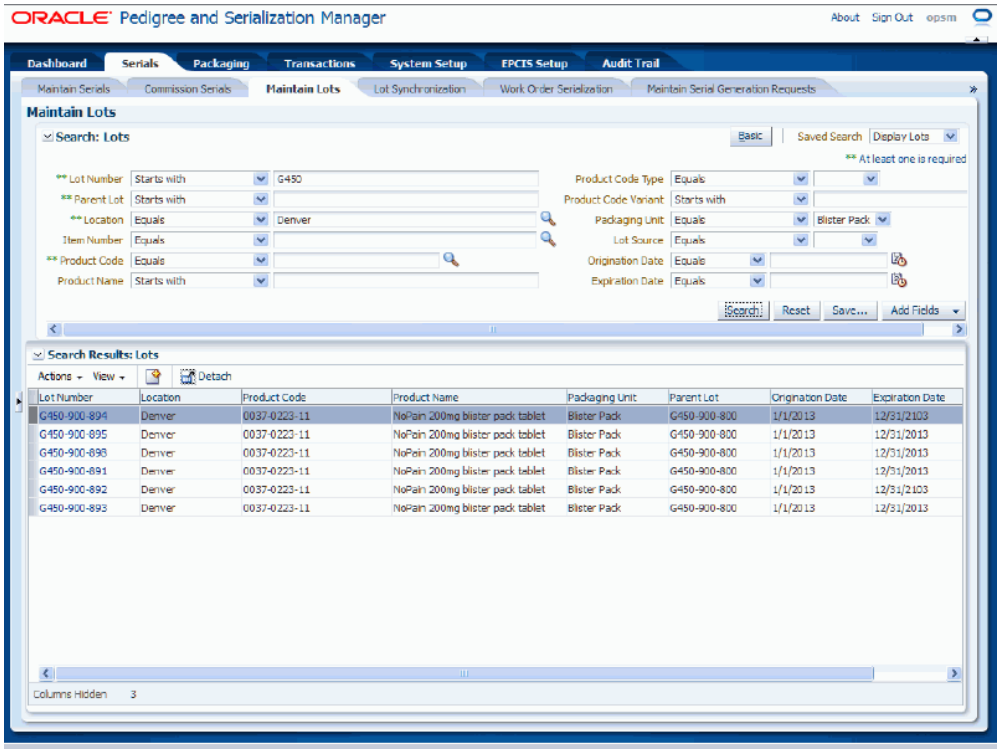
   The selected field appears as a search criteria field.

   > **Note:** To remove the additional field, click the Remove icon next to the field. The field will be removed from the search criteria.

6. (Optional) Enter search criteria for the additional fields.

7. Click the Search button.

Maintain Lots page (Advanced Search)



All of the lots that match the search criteria appear in the Search Results: Lots region in a table format. An Actions column appears in the table with an Edit Lot icon and a Delete Lot icon.

8. Click the Basic button to have the page hide the advanced search criteria fields and re-display the basic search criteria fields.

> **Note:** Clicking the Reset button clears the values in all of the criteria fields.

Viewing Lot Detail Information

Use the View Lot page in Oracle Pedigree and Serialization Manager (OPSM) to view all the detail information for the lot.

Use this procedure to view lot detail information:

To View Lot Detail Information:

1. Navigate to the Maintain Lots page, page A-2.

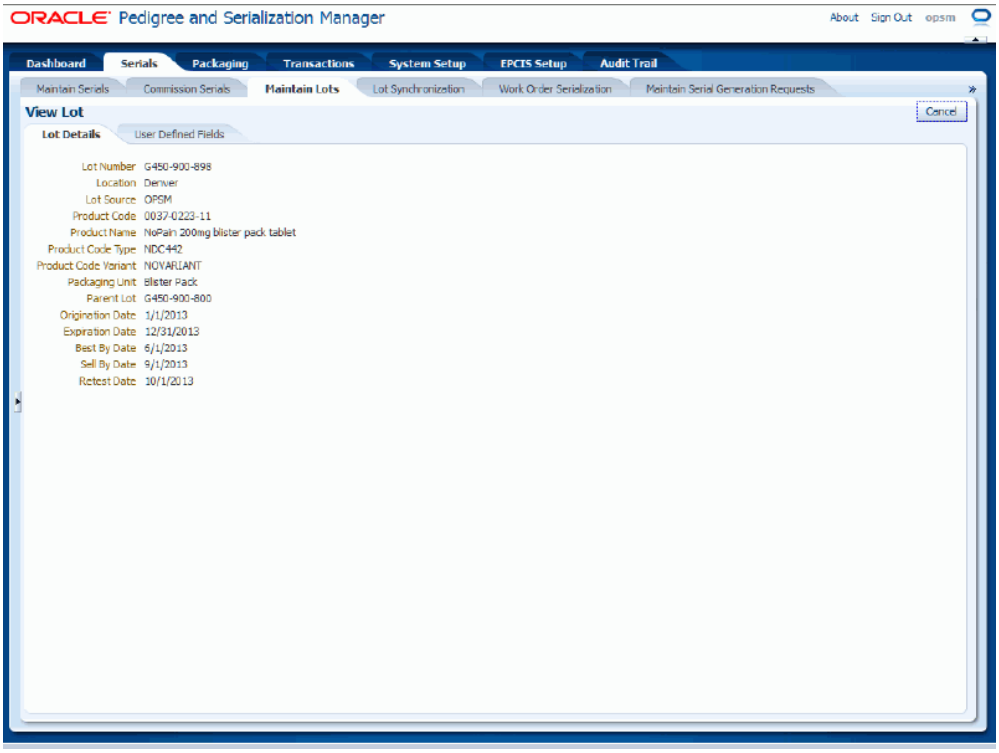
2. Enter search criteria for the lots you want to view and click the Search button.

   All of the lots that match the search criteria appear in the Search Results: Lots table in a table format.

3. Select the lot in the table that you want to view.

4. Click the Lot Number link.

View Lot page



   The View Lot page appears.

5. Select the different sub tabs (Lot Details and User Defined Fields) to the view that particular type of information for the lot.

6. Click the Cancel button to return back to the Maintain Lots page.

Creating Lots

Use the Create Lot page in Oracle Pedigree and Serialization Manager (OPSM) to create lots. Lots can also be created through lot synchronization from the transactional system or through Lot Web Services.

Use this procedure to create lots:

To Create Lots:

1. Navigate to the Maintain Lots page, page A-2.

2. Select Create from the Actions menu or click the Create icon located at the top of the Search Results: Lots region.

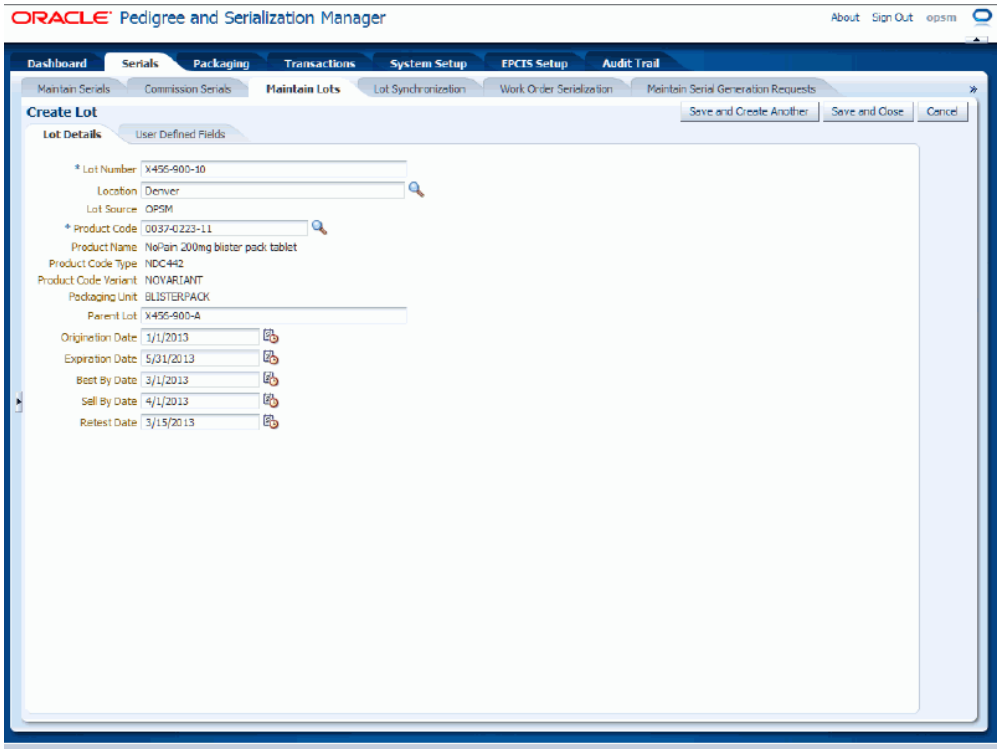
   The Create Lot page appears.

3. Enter the following information:

Field Name	Description
Lot Number	Enter the lot number.
Location	(Optional) Select the location for the lot.
Lot Source	Select the transactional system that was the source for the lot. Lot source appears by default from the location if location is entered for the lot and cannot be changed. If no location is entered for the lot, you can select a lot source from the drop down list.
Product Code	Select the product code for the lot. After you select the product code the system displays by default the product code type, product code variant, product name, and packaging unit associated with the product code.
Product Name	The product name appears by default from the product code you select.
Product Code Type	The product code type appears by default from the product code you select.
Product Code Variant	The product code variant appears by default from the product code you select.
Packaging Unit	The packaging unit appears by default from the product code you select.

Field Name	Description
Parent Lot	(Optional) Enter the parent lot for the lot.
Origination Date	(Optional) Select the date the lot originated. Origination Date must be earlier than Sell By Date, Best By Date, and Expiration Date.
Expiration Date	(Optional) Select the date the lot will expire. Expiration Date must be the same as or later than Sell By Date and Best By Date.
Best By Date	(Optional) Select the best by date for the lot.
Sell By Date	(Optional) Select the sell by date for the lot.
Retest Date	(Optional) Select the retest date for the lot.

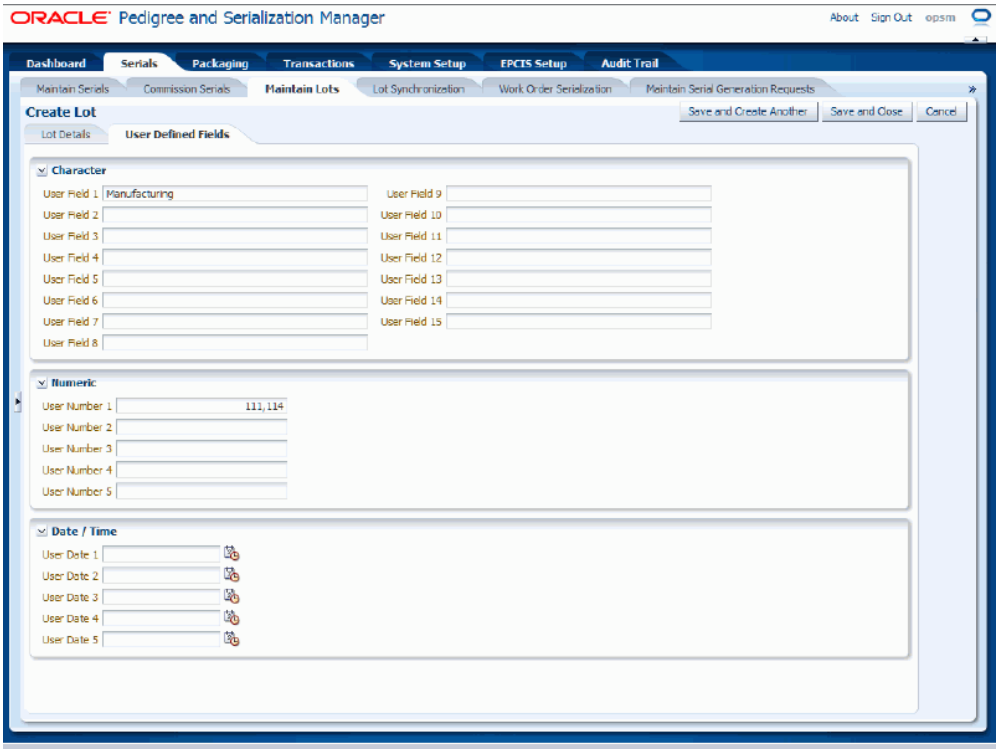
Create Lot page - Lot Details tab



4. Select the User Defined Fields tab.

5. Enter user-defined data using any of the fields in the Character, Numeric, and Date/Time regions of the page.

Create Lot page - User Defined Fields tab



6. Save your work. Choose one of these options:

   - Click the Save and Close button to save this lot and return back to the Maintain Lots page.

   - Click Save and Create Another button to save this lot and to stay on this page so you can create another lot. The system displays a message that the lot was saved successfully and it clears all of the values in the fields.

     Note: You can also create duplicate lots. The system will issue a warning to the user that a duplicate lot will be created. Duplicate lots allow the definition of one or more lots with the same lot number and product detail record but for a different location.

Editing Lots

Use the Edit Lot page in Oracle Pedigree and Serialization Manager (OPSM) to edit lot information for a lot.

Use this procedure to edit lots:

To Edit Lots:

1. Navigate to the Maintain Lots page, page A-2.

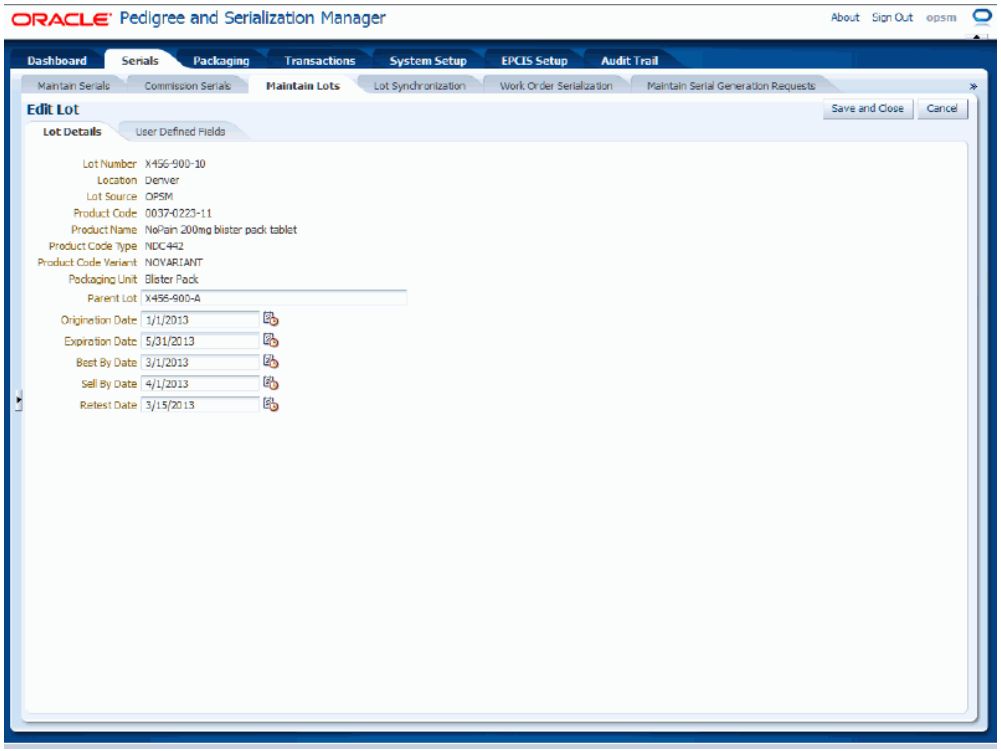
2. Enter search criteria for the lots you want to edit and click the Search button.

   All of the lots that match the search criteria appear in the Search Results: Lots table in a table format.

3. Select the lot in the table that you want to edit.

4. Select Edit in the Actions menu or click the Edit Lot icon associated with the lot in the Actions column of the results table.

Edit Lot page - Lot Details sub tab



   The Edit Lot page appears displaying all of the existing information for the lot.

5. Edit the lot fields.

   You can only edit these fields:

   - Parent Lot
   - Origination Date

Origination Date must be earlier than Sell By Date, Best By Date, and Expiration Date.

- Expiration Date

  Expiration Date must be the same as or later than Sell By Date and Best By Date.

- Best By Date
- Sell By Date
- Retest Date
- User Defined fields using the User Defined Fields sub tab

6. Click the Save and Close button to save the changes you made to the lot information and to return back to the Maintain Lots page.

   Note: The system will display a warning message if you are editing fields for a lot associated to a serial that has already been shipped.

Deleting Lots

Use the Maintain Lots page in Oracle Pedigree and Serialization Manager (OPSM) to delete lots. You cannot delete a lot if it has been associated to any serials in the system.

Use this procedure to delete lots:

To Delete Lots:

1. Navigate to the Maintain Lots page, page A-2.
2. Enter search criteria for the lots you want to delete and click the Search button.

   All of the lots that match the search criteria appear in the Search Results: Lots table in a table format.

3. Select the lot in the table that you want to delete.

   Note: You cannot delete a lot if it has been associated to any serials in the system.

4. Select Delete in the Actions menu or click the Delete Lot icon associated with the lot in the Actions column of the results table.

   The system displays a message asking if you are sure to want to delete the lot.

5. Click the Yes button.

   The lot is deleted from the system.

Synchronizing Lots (Lot Interface Table)

Oracle Pedigree and Serialization Manager (OPSM) provides a Lot Interface table that enables external systems to integrate with OPSM for Lot Synchronization. Synchronization of lot data, including lot expiration dates, is essential for accurate serial data management and tracking.

Using the Lot Synchronization page in OPSM you will initiate a process which will perform one of the following synchronization actions:

- Extract Lots
- Extract Lots and Merge Lots
- Merge Lots

For more information on the lot definition process, see Understanding the Lot Definition process, page 6-1.

For more information on defining Lot Synchronization scenarios, see Defining Product Synchronization, Lot Synchronization, and Work Order Serialization Scenarios, page 4-216.

For more information on integrating Oracle E-Business Suite with OPSM, see the *Oracle Serialization and Tracking Integration Pack for Oracle Pedigree and Serialization Manager and Oracle E-Business Suite 3.1 - Implementation Guide.*

Use these procedures to:

- Extract and merge lot information from an external system.
- Extract log information from an external system.
- Merge the extracted lots into OPSM.

Prerequisites

❒ For Lot Extract:

- A lot extract scenario must be defined in OPSM.
- An Oracle Data Integrator (ODI) extract application that conforms to the required specifications must exist and must be configured to communicate with OPSM.

For more information, see the *Oracle Serialization and Tracking Integration Pack for Oracle Pedigree and Serialization Manager and Oracle E-Business Suite 3.1.*

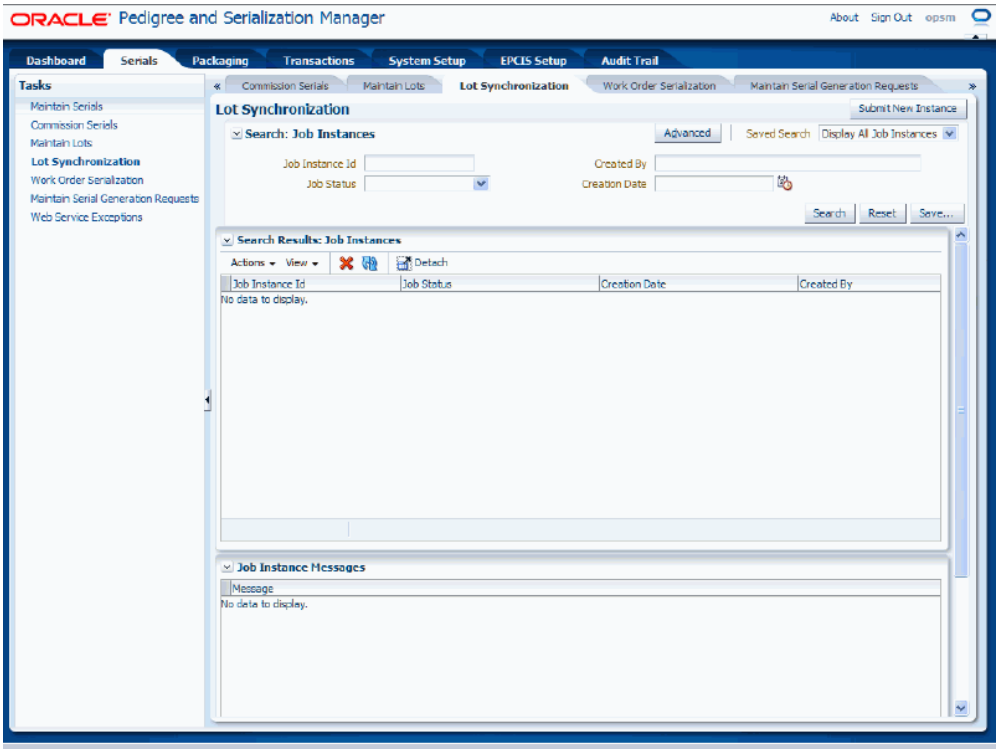
For Lot Merge:

- The Lot Interface table must be populated by the extract system or another method.

To Extract and Merge Lot Information from an External System:

1. Navigate to the Lot Synchronization page, page A-2.

Lot Synchronization page



2. Click the Submit New Instance button in the upper right hand corner of the Lot Synchronization page.

Lot Synchronization dialog box

The Lot Synchronization dialog box appears.

3. Enter the following options for the Lot Synchronization process:

Field Name	Description
Synchronization Action	Select *Extract Lots and Merge Lots.* After you select the Synchronization Action, the Extract Scenario Name, Source System, and Purge Interface Table fields become available.

Field Name	Description
Extract Scenario Name	Select the extract scenario name. Extract Scenario Names are user defined using Lookup Type PAS_LOT_EXTRACT. Oracle delivers four lookup codes for Lot Synchronization between OPSM and Oracle E-Business Suite for the PAS_LOT_EXTRACT lookup type. They are: • EBS_LOT_SYNC_DISCRETE_FULL (EBS Discrete Full) • EBS_LOT_SYNC_DISCRETE_INCR (EBS Discrete Incremental) • EBS_LOT_SYNC_PROCESS_R11_FULL (EBS R11 Process Full) • EBS_LOT_SYNC_PROCESS_R11_INCR (EBS R11 Process Incremental)
Source System	Select the source system where you are going to synchronize lot information from into OPSM. Source Systems are user defined using the Lookup Type PAS_SOURCE_SYSTEM.
Purge Interface Table check box	Select this check box if you want to delete existing records in the interface table for the selected source system.

Lot Synchronization dialog box

4. Click the OK button to initiate the Lot Synchronization process.

   The Lot Synchronization process runs in the background. The system assigns a job instance Id for that specific run of the process. The Lot Synchronization page reappears.

   The Lot Synchronization (Extract Lots) background process will invoke an Oracle Data Integrator (ODI) application to extract lot information from an external system. The lot information that is extracted from the source system will be uploaded into the target OPSM Lot Interface table (PAS_S_LOT_INTERFACE).

   The Lot Synchronization (Merge Lots) background process takes lot information from the PAS_S_LOT_INTERFACE table and validates and inserts the transformed data into the OPSM lot table (PAS_S_LOTS).

5. Enter the following information in the Search: Job Instances region of the page:

Field Name	Description
Job Instance ID	(Optional) Enter a specific job instance ID.

Field Name	Description
Job Status	(Optional) Select the job status for the job instances. Job Statuses are: • Complete • Error(s) Exist • In Progress • Submitted • Abnormal Termination • Warning(s) Exist
Creation Date	Select a creation date for the job instance that is equal to the current date.
Created By	Enter the individual that initiated the process.

6. Click the Search button.

7. Locate the job instance Id for the process and verify that the Job Instance Id completed successfully or completed with warnings.

   The Job Status associated with job instance Id is at one of these statuses:

   - *Complete:* Job instance completed successfully with no errors or warnings.
   - *Error(s) Exist:* Job instance did not complete successfully.
   - *In Progress:* Job instance is in progress.
   - *Submitted:* Job instance has been submitted but not started.
   - *Abnormal Termination:* The job instance did not complete successfully due to a catastrophic failure (for example, the system went down during processing).
   - *Warning(s) Exist:* Job completed successfully but there are warning messages.

   Scroll to the Job Instance Messages region and view the following:

   - Informational messages (blue circle with the letter "i"): These messages display

the parameters used to initiate the process and the results of the process.

- Warning messages (A yellow triangle with an exclamation point): These messages display the warning messages for the process.

You can also verify the results of the Lot Synchronization process (Extract and Merge Lots synchronization action) by navigating to the OPSM Maintain Lots page. The Maintain Lots page will display the lot information that was created in OPSM.

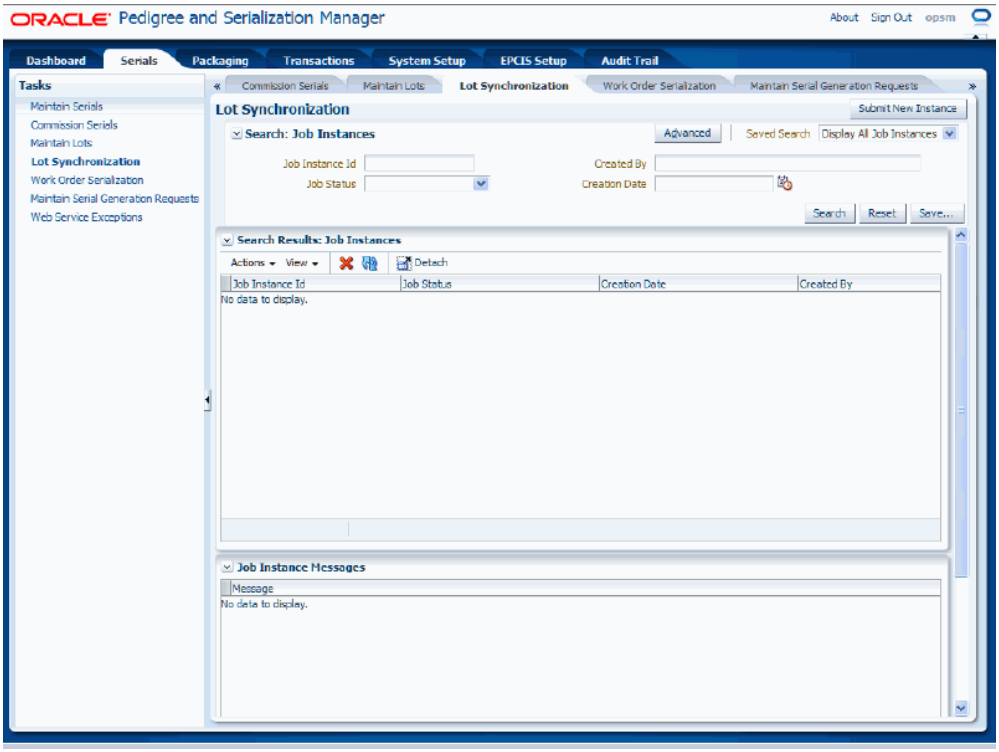
For more information on the job instances functionality, see Using Job Instances functionality, page 3-19.

For more information on the Maintaining Lots page, see Viewing Lot Detail Information, page 6-13.

To Extract Lot Information from an External System:

1. Navigate to the Lot Synchronization page, page A-2.

Lot Synchronization page



2. Click the Submit New Instance button in the upper right hand corner of the Lot Synchronization page.

Lot Synchronization dialog box

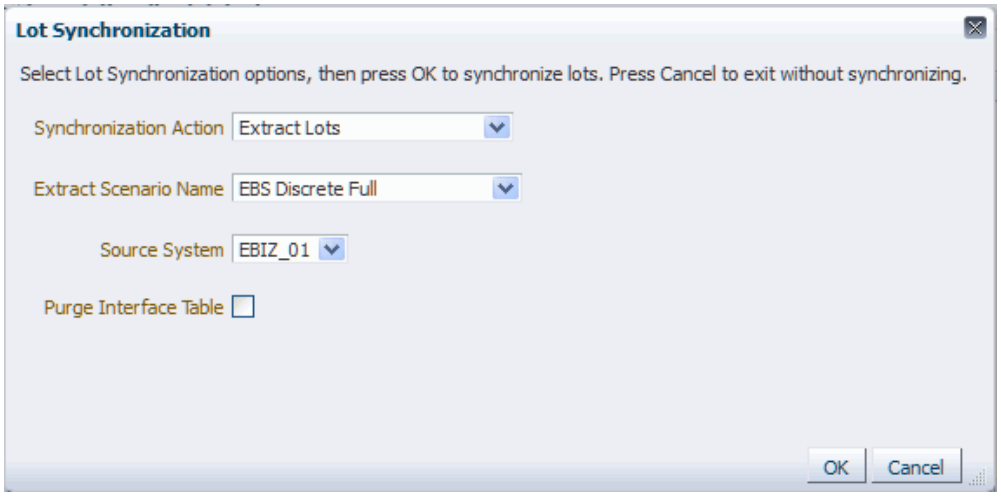
The Lot Synchronization dialog box appears.

3. Enter the following options for the Lot Synchronization process:

Field Name	Description
Synchronization Action	Select *Extract Lots.* After you select the Synchronization Action, the Extract Scenario Name, Source System, and Purge Interface Table fields become available.

Field Name	Description
Extract Scenario Name	Select the extract scenario name. Extract Scenario Names are user defined using Lookup Type PAS_LOT_EXTRACT. Oracle delivers four lookup codes for Lot Synchronization between OPSM and Oracle E-Business Suite for the PAS_LOT_EXTRACT lookup type. They are: • EBS_LOT_SYNC_DISCRETE_FULL (EBS Discrete Full) • EBS_LOT_SYNC_DISCRETE_INCR (EBS Discrete Incremental) • EBS_LOT_SYNC_PROCESS_R11_FULL (EBS R11 Process Full) • EBS_LOT_SYNC_PROCESS_R11_INCR (EBS R11 Process Incremental)
Source System	Select the source system where you are going to synchronize lot information from into OPSM. Source Systems are user defined using the Lookup Type PAS_SOURCE_SYSTEM.
Purge Interface Table check box	Select this check box if you want to delete existing records in the interface table for the selected source system.

Lot Synchronization dialog box



4. Click the OK button to initiate the Lot Synchronization process.

   The Lot Synchronization process runs in the background. The system assigns a job instance Id for that specific run of the process. The Lot Synchronization page reappears.

   The Lot Synchronization (Extract Lots) background process will invoke an Oracle Data Integrator (ODI) application to extract lot information from an external system. The lot information that is extracted from the source system will be uploaded into the target OPSM Lot Interface table (PAS_S_LOT_INTERFACE).

5. Enter the following information in the Search: Job Instances region of the page:

Field Name	Description
Job Instance ID	(Optional) Enter a specific job instance ID.

Field Name	Description
Job Status	(Optional) Select the job status for the job instances. Job Statuses are: • Complete • Error(s) Exist • In Progress • Submitted • Abnormal Termination • Warning(s) Exist
Creation Date	Select a creation date for the job instance that is equal to the current date.
Created By	Enter the individual that initiated the process.

6. Click the Search button.

7. Locate the job instance Id for the process and verify that the Job Instance Id completed successfully or completed with warnings.

   The Job Status associated with job instance Id is at one of these statuses:

   - *Complete:* Job instance completed successfully with no errors or warnings.
   - *Error(s) Exist:* Job instance did not complete successfully.
   - *In Progress:* Job instance is in progress.
   - *Submitted:* Job instance has been submitted but not started.
   - *Abnormal Termination:* The job instance did not complete successfully due to a catastrophic failure (for example, the system went down during processing).
   - *Warning(s) Exist:* Job completed successfully but there are warning messages.

   Scroll to the Job Instance Messages region and view the following:

   - Informational messages (blue circle with the letter "i"): These messages display

the parameters used to initiate the process and the results of the process.

- Warning messages (A yellow triangle with an exclamation point): These messages display the warning messages for the process.

For more information on the job instances functionality, see Using Job Instances functionality, page 3-19.

To Merge the Extracted Lots into OPSM:

1. Navigate to the Lot Synchronization page, page A-2.

2. Click the Submit New Instance button in the upper right hand corner of the Lot Synchronization page.

   The Lot Synchronization dialog box appears.

3. Enter the following options for the Lot Synchronization process:

Field Name	Description
Synchronization Action	Select *Merge Lots.* After you select the Synchronization Action, the Source System, and Purge Interface Table fields become available.
Source System	Select the source system where you are going to synchronize lot information from into OPSM. Source Systems are user defined using the Lookup Type PAS_SOURCE_SYSTEM.
Purge Interface Table check box	Select this check box if you want to delete existing records in the interface table for the selected source system.

Lot Synchronization dialog box

4. Click the OK button to initiate the Product Synchronization process.

   The Lot Synchronization process runs in the back ground. The system assigns a job instance Id for that specific run of the process. The Lot Synchronization page reappears.

   The Lot Synchronization (Merge Lots) background process takes lot information from the PAS_S_LOT_INTERFACE table and validates and inserts the transformed data into the OPSM Lot table (PAS_S_LOTS).

5. Enter the following information in the Search: Job Instances region of the page:

Field Name	Description
Job Instance ID	(Optional) Enter a specific job instance ID.

Field Name	Description
Job Status	(Optional) Select the job status for the job instances. Job Statuses are: • Complete • Error(s) Exist • In Progress • Submitted • Abnormal Termination • Warning(s) Exist
Creation Date	Select a creation date for the job instance that is equal to the current date.
Created By	Enter the individual that initiated the process.

6. Click the Search button.

7. Locate the job instance Id for the process and verify that the Job Instance Id completed successfully or completed with warnings.

   The Job Status associated with job instance Id is at one of these statuses:

   - *Complete:* Job instance completed successfully with no errors or warnings.
   - *Error(s) Exist:* Job instance did not complete successfully.
   - *In Progress:* Job instance is in progress.
   - *Submitted:* Job instance has been submitted but not started.
   - *Abnormal Termination:* The job instance did not complete successfully due to a catastrophic failure (for example, the system went down during processing).
   - *Warning(s) Exist:* Job completed successfully but there are warning messages.

   Scroll to the Job Instance Messages region and view the following:

   - Informational messages (blue circle with the letter "i"): These messages display

the parameters used to initiate the process and the results of the process.

- Warning messages (A yellow triangle with an exclamation point): These messages display the warning messages for the process.

You can also verify the results of the Lot Synchronization process (Merge Lots) by navigating to the OPSM Maintain Lots page. The Maintain Lots page will display the lot information that was created in OPSM.

For more information on the job instances functionality, see Using Job Instances functionality, page 3-19.

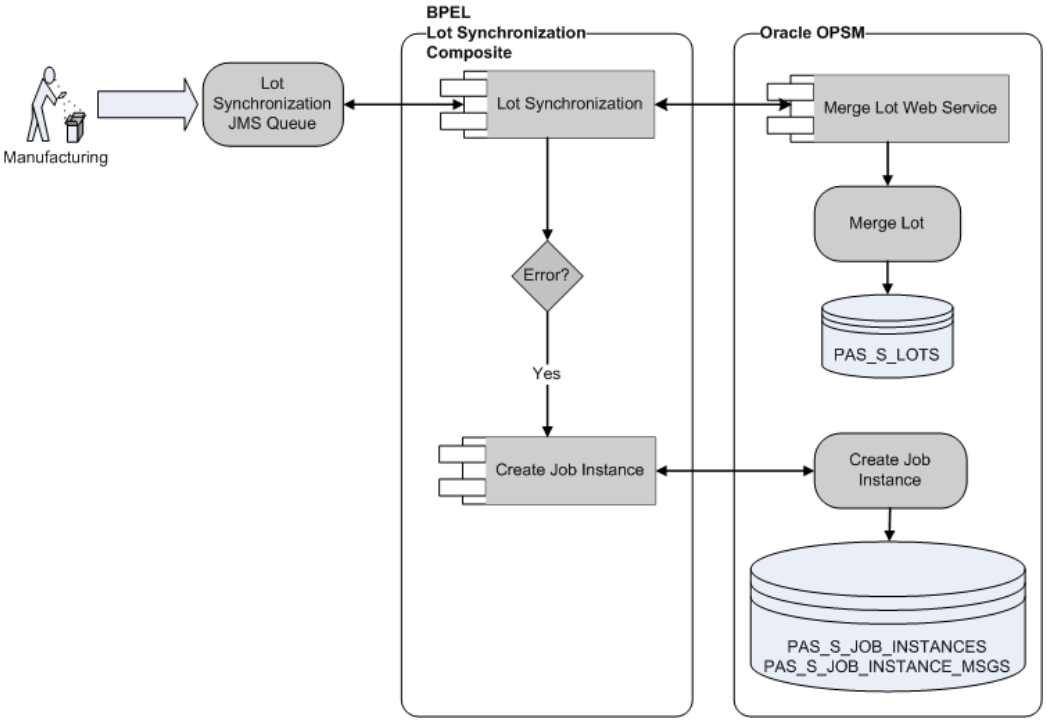
For more information on the Maintaining Lots page, see Viewing Lot Detail Information, page 6-13.

Merging Lots Using JMS Queue

Oracle Pedigree and Serialization Manager (OPSM) uses a JMS Queue for asynchronous processing of inbound mergeLot messages. When a message is placed into the JMS Queue by the producer, the message is picked up and processed by the OPSM BPEL composite (consumer). The BPEL composite calls the mergeLot Web Service. If the web service call fails or returns an error, a job instance along with a job instance message is created in OPSM. Errors related to mergeLot messages that fail to process successfully can be viewed in the Web Services Exception page.

This diagram illustrates the mergeLot Web Service process flow:

mergeLot Web Service Process Flow



You will use the Web Service Exceptions page to view exception messages that are generated when messages are processed by the mergeLot, createTransaction, captureEpcisDoc, Edit Serial by Primary Document, Edit Serial by Label, Edit Serial by List, and HTTP Post web services. Exception messages are only created for exceptions or errors that are detected by the web service. If the web service processes successfully during the integration process no message is recorded.

The Web Service Exceptions page is located under the Serials section and the Transactions section of the Task menu. The page is the same in both locations.

> **Important:** If you call the OPSM Web Services directly without using the JMS Queue you are not able to view exception messages using the OPSM Web Service Exceptions page.

Web Service Exceptions Process Flow

An OPSM process continually monitors the integration message queue and then pulls the JMS messages from the queue and dequeues them. It then invokes the appropriate web service. If the web service fails it creates a job instance message. Using the Web Service Exceptions page you can view the job instance messages created by the web service. A web service can fail because the data that is being passed in the message is invalid or the data being passed is incorrect for the message. In addition, you can view

the overall system problem errors or web services not running errors using the Web Service Exceptions page.

Use this procedure to view web service exceptions:

Prerequisites

- ❒ A JMS Producer must be created for enqueueing the messages into the JMS Queue for mergeLot messages.

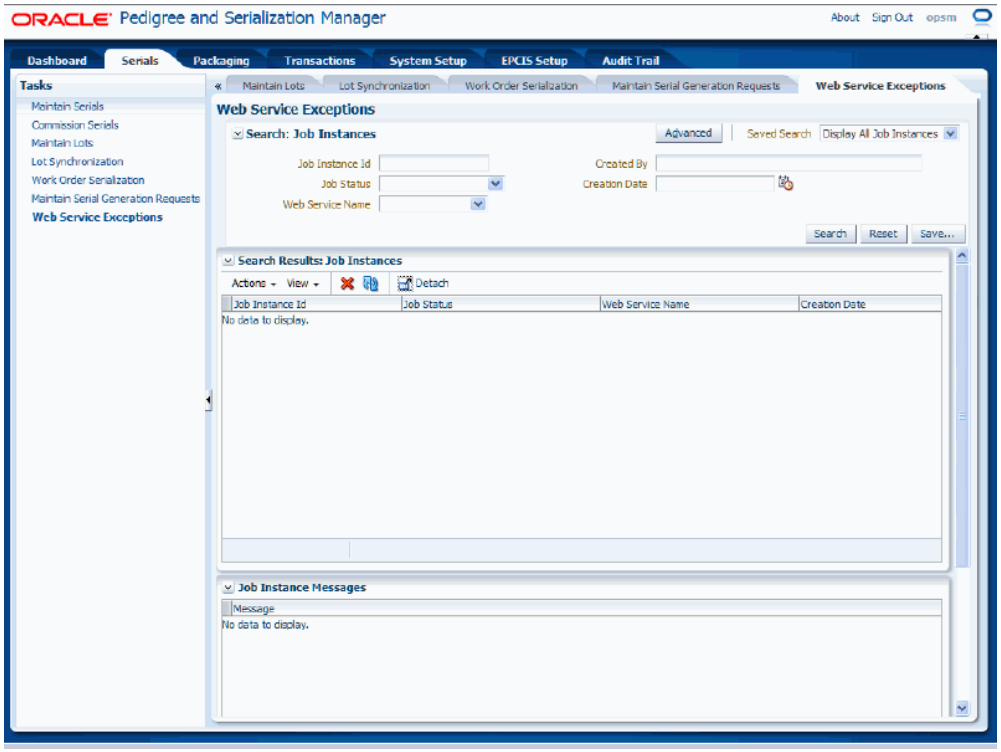
  The Oracle Serialization and Tracking Integration Pack for Oracle Pedigree and Serialization Manager and Oracle E-Business Suite 3.1 provides the JMS Producer as part of the integration pack.

  For more information on integrating Oracle E-Business Suite with OPSM, see the *Oracle Serialization and Tracking Integration Pack for Oracle Pedigree and Serialization Manager and Oracle E-Business Suite 3.1 - Implementation Guide.*

To View Web Service Exceptions:

1. Navigate to the Web Service Exceptions page, page A-2.

Web Service Exceptions page



The Web Service Exceptions page appears. You can only view WEBSERVICES job types on this page.

2. In the Search: Job Instances region, enter the search criteria for the job instances using one or more of these fields:

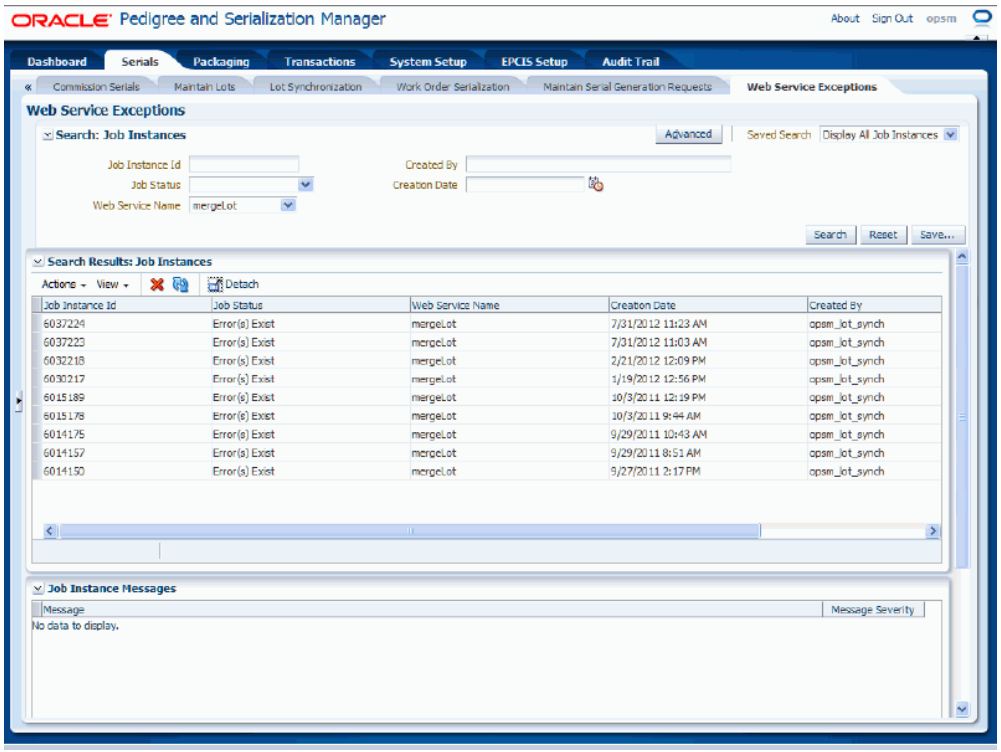
Field Name	Description
Job Instance Id	(Optional) Enter a specific job instance Id.

Field Name	Description
Job Status	(Optional) Select the job status for the job instances. Job Statuses are: • Complete • Error(s) Exist • In Progress • Submitted • Abnormal Termination • Warning(s) Exist Job statuses are defined using the system Lookup Type PAS_JOB_STATUS.
Web Service Name	(Optional) Select the Web Service name. Web Service names are: • captureEpcisDoc • createTransaction • Edit Serial By Primary Document Web Service • Edit Serial By Label Web Service • Edit Serial By List Web Service • HTTPPost • mergeLot When merging lots you will want to select *mergeLot* as the web service name.
Created By	(Optional) Enter the individual that created the job instances (initiated the process).

Field Name	Description
Creation Date	(Optional) Select the date the job instances were created.

Otherwise, you can click the Search button without entering any search criteria and all available job instance Ids will appear.

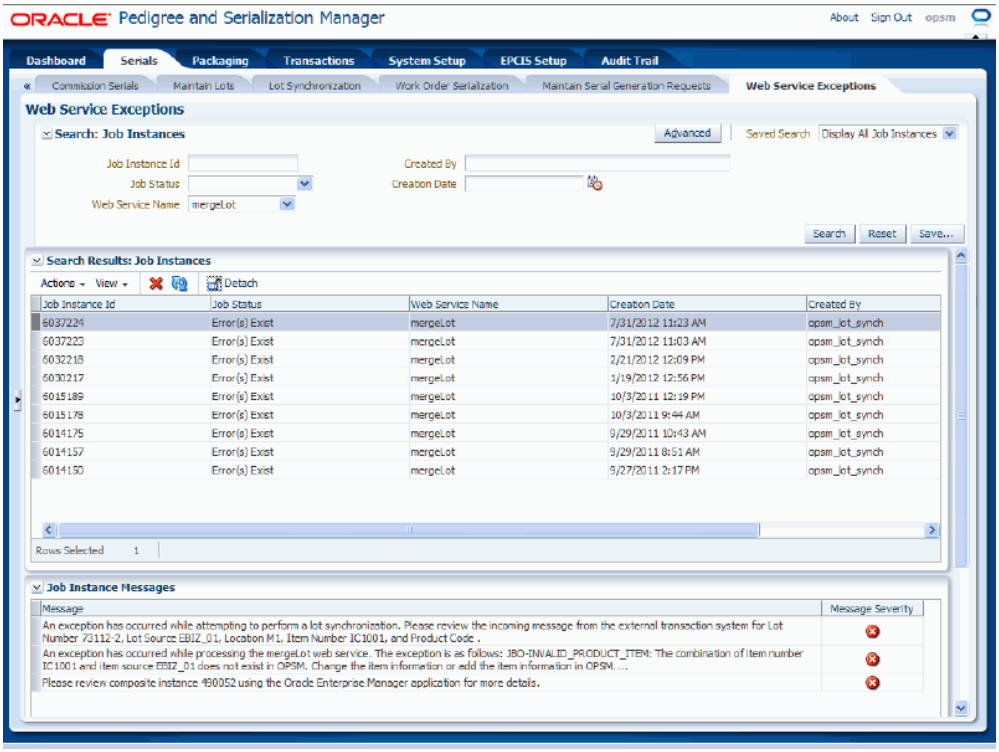
Web Service Exceptions page



All of the exceptions that match the search criteria appear in the Search Results: Job Instances table of the page.

3. Select a Job Instance Id that you want to view the messages for in the Search Results: Job Instances table.

Web Service Exceptions page



The job instance messages for that specific web service job instance appear in the Job Instance Messages region of the page. Three job instance messages appear for each job instance. The messages provide this information:

- The first job instance message provides details indicating that the web service failed and provides the details (actual fields in the message) where the failure occurred. You can use this information to identify the message to re-send from the transactional system.

- The second job instance message provides details indicating a partial explanation of the exception that was triggered by the web service. Only a portion of the exception text appears.

- The third job instance message provides details indicating which composite ID contains more details about the exception. You can view this composite ID within the Oracle Enterprise Manager application to view the entire SOA composite and BPEL flow.

If the SOA composite produces a fault (runtime fault and so on), the BPEL CatchAll activity grabs the fault and writes a job instance record and corresponding job instance message record. This job instance message provides details indicating which composite ID contains more details about the SOA composite fault. You can

view this composite ID within the Oracle Enterprise Manager application to view the entire SOA composite and BPEL flow.

For more information on the job instances functionality, see Using Job Instances functionality, page 3-19.

7

Managing Serials

This chapter covers the following topics:

- Understanding Serial Generation
- Searching for Serial Generation Requests
- Viewing Serial Generation Request Messages
- Creating Serial Generation Requests
- Submitting Serial Generation Requests
- Deleting Serial Generation Requests
- Performing Work Order Serialization from an External System
- Searching for Serials
- Viewing Serial Detail Information
- Editing Serials
- Commissioning Serials
- Decommissioning Serials

Understanding Serial Generation

Oracle Pedigree and Serialization Manager (OPSM) manages the generation of unique serial numbers. Serials can be generated that are either product or non-product specific serial types. If the serial type is product specific, the product number must be identified for creation of the serial. If the serial type is non-product specific, the product number does not have to be identified. When a serial is created without the product and lot identified, the serial is created at a *Reserved* status. When the product and lot are identified, the serial status is changed to *Commissioned.* When commissioning a serial, the product and lot must be identified.

OPSM provides logic for generation of serials for the supported serial types. You can also define a new serial type and customize the logic for generation of the serials. OPSM

supports the generation of the following serial types:

- SGTIN-96
- SGTIN-198
- USN-1

To generate serials in OPSM, a serial generation request must be created and processed. Serial generation requests can be created in OPSM in these ways:

- Using the Create Serial Generation Request page in OPSM.
- Using the Work Order Serialization process (integration between OPSM and an external system).

  For more information on the Work Order Serialization process, see Performing Work Oracle Serialization from an External System, page 7-26.

- Using a Create Serial Generation Request Web Service in OPSM.

When creating a serial generation request in OPSM you specify whether you want to create a quantity of serial numbers or a range of serial numbers. Depending on this selection, you will then specify either the quantity of serial numbers or the start and end range for the serial numbers you want to create. Then you specify the location that is requesting the serial numbers. After that you can enter product and lot information for the request. The serial type that is used for serial generation is based on either the product details or the location that you enter for the serial generation request. If product information is entered, the serial type from the product detail information will be used. If no product information is entered, the locations non-product specific serial type will be used for serial generation. In addition, when creating the serial generation request you have the option to specify a few other parameters they include:

- Ignore Serial Overage Amount (include or do not include)
- Saleable Unit (mark serial numbers as saleable units)
- Automatically Submit (if enabled, the system will automatically submit the serial generation request for processing when you save the request)
- Serial Usage (indicate how the serial will be used. For example, sample)
- Created Document Information
- Alternate Document Information

During the serial generation processing if quantity has been specified the system generates serials for the quantity entered on the serial generation request. Serial numbers will be determined by the serial range setup if used. When a quantity of serials is requested, the serials can be generated by either the *Next Number* or *Random* unique

serial generation method as defined on the serial type. If only some of the requested quantity can be generated, due to a depletion of the serial range or the max serial value defined for the serial type, OPSM generates as many serials as it can and generates a warning message stating that all serials requested were not generated.

If during the serial generation processing a serial number range is specified (starting serial number and ending serial number, this should not be confused with the serial range setup) then the system generates serials from the starting serial number through the ending serial number sequentially. The number of serials to be generated is the same as the difference between the starting serial number and the ending serial number. If only the starting serial number is entered but no ending serial number, then the system generates only one serial number and assigns the starting number to it. If any number between the starting serial number and ending serial number has already been used, then the system skips that number and keeps generating serial numbers.

After the serial generation request is created, it must be submitted for processing. If the serial generation request was created using the Create Serial Generation Request page, an option exists to automatically submit the serial generation request. Otherwise, the serial generation request must be submitted from the Maintain Serial Generation Request page. When the serial generation request is submitted, a business event triggers the processing of your request and a background process is executed to generate the serials and create the Serial Generation transaction. The background process uses the system parameter (Serial Commit Size) value you specify to determine the database commit size. For example, let's say the Serial Commit Size is 1,000. Serial generation requests that result in more than 1,000 serials will be processed in groups. A serial generation request for 10,000 serials will be processed in 10 groups assuming the value has not been changed. When the first 1,000 serials are generated, the system will create the Serial Generation transaction and commit those serials to the database. The remaining serials will be created in groups of 1,000 and the Serial Generation transaction will be updated as each group successfully completes.

When the serial generation processing is complete and finishes successfully for the first group of serials, the system will create the Serial Generation transaction that can be viewed using the Maintain Transactions page. If any error or warning conditions are encountered during the serial generation processing the system will issue error or warning messages and those messages can be viewed using the Maintain Serial Generation Requests page. The system will create "Serial Generation" transactions if warning messages are issued.

Serial Generation Process Flow in OPSM

Following is the basic high-level process flow for serial generation in OPSM:

1. Create a serial generation request in OPSM using the Create Serial Generation Request page, using Work Order Serialization to process the work order information to create serial generation requests, or using the Create Serial Generation Request Web Service.

   For more information on creating serial generation requests, see Creating Serial

Generation Requests, page 7-15 and Performing Work Oracle Serialization from an External System, page 7-26.

After you create a serial generation request the Generation Status of the request is *Generation Requested.* If you select the option of automatically submitting the request, the Generation Status will be *Generation Submitted* or *In Progress.*

2. View all serial generation requests available for processing using the Maintain Serial Generation Requests page.

   For more information on viewing serial generation requests, see Searching for Serial Generation Requests, page 7-5.

3. Submit one or more serial generation requests for processing using the Maintain Serial Generation Requests page.

   If you selected the option to Automatically Submit the serial generation request when creating the serial generation request then this step is not necessary.

   For more information on submitting serial generation requests, see Submitting Serial Generation Requests, page 7-23.

   After you submit the serial generation requests the Generation Status of the requests changes from *Generation Requested* to *Generation Submitted* to *In Progress.*

4. Monitor the processing of the submitted serial generation requests using the Maintain Serial Generation Requests page. Click the Refresh icon or Search button until the processing is complete. You can also view how many serials have been created by looking at the Requested Quantity and Generated Quantity columns.

   For more information on submitting serial generation requests, see Submitting Serial Generation Requests, page 7-23.

   When the process is complete the Generation Status of the requests changes from *In Progress* to one of these statuses *(Successful Generation, Error(s) Exists, or Warning(s) Exists).*

5. (Optional) View the Error and Warning messages associated with serial generation request using the Maintain Serial Generation Requests page.

   For more information on viewing error and warning messages, see Viewing Serial Generation Request Messages, page 7-13.

6. (Optional) Fix the error conditions and then create another serial generation request to reprocess. Repeat Steps 1-5.

7. (Optional) View the Serial Generation transactions that are created for serial generation requests that completed successfully or completed with warnings using the Maintain Transactions page.

   For more information on viewing transactions, see Searching for Transactions, page

10-10.

8. (Optional) View the serial numbers that were created from the serial generation processing using the Maintain Serials page or the Maintain Transactions page.

   For more information on viewing serial numbers, see Searching for Serials, page 7-47.

   For more information on viewing transactions, see Searching for Transactions, page 10-10.

9. (Optional) Delete the serial generation requests that have finished processing using the Maintain Serial Generation Requests page.

   For more information on deleting serial generation requests, see Deleting Serial Generation Requests, page 7-25.

Searching for Serial Generation Requests

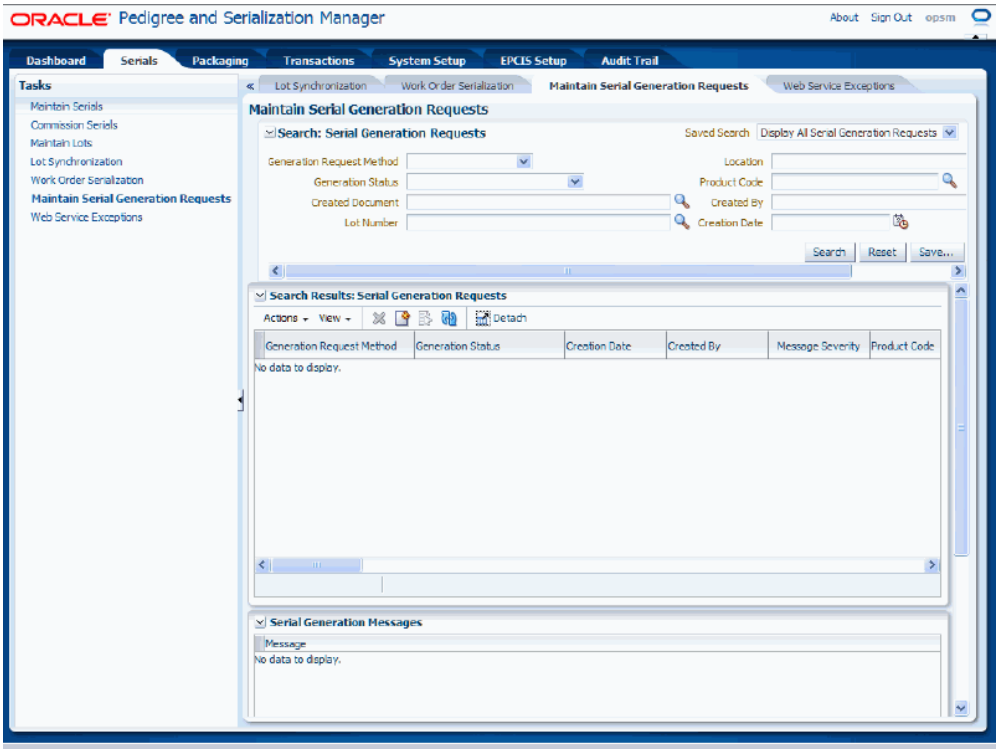
Use the Maintain Serial Generation Requests page in Oracle Pedigree and Serialization Manager (OPSM) to search for existing serial generation requests. You can view the requests in a multitude of ways by using the search criteria fields that include, generation request method, generation status, created document, lot number, location, product code, creation date, and created by.

Use this procedure to search for serial generation requests:

To Search for Serial Generation Requests:

1. Navigate to the Maintain Serial Generation Requests page, page A-2.

Maintain Serial Generation Requests page



2. In the Search: Serial Generation Requests region, enter the search criteria for the serial generation requests using one or more of these fields:

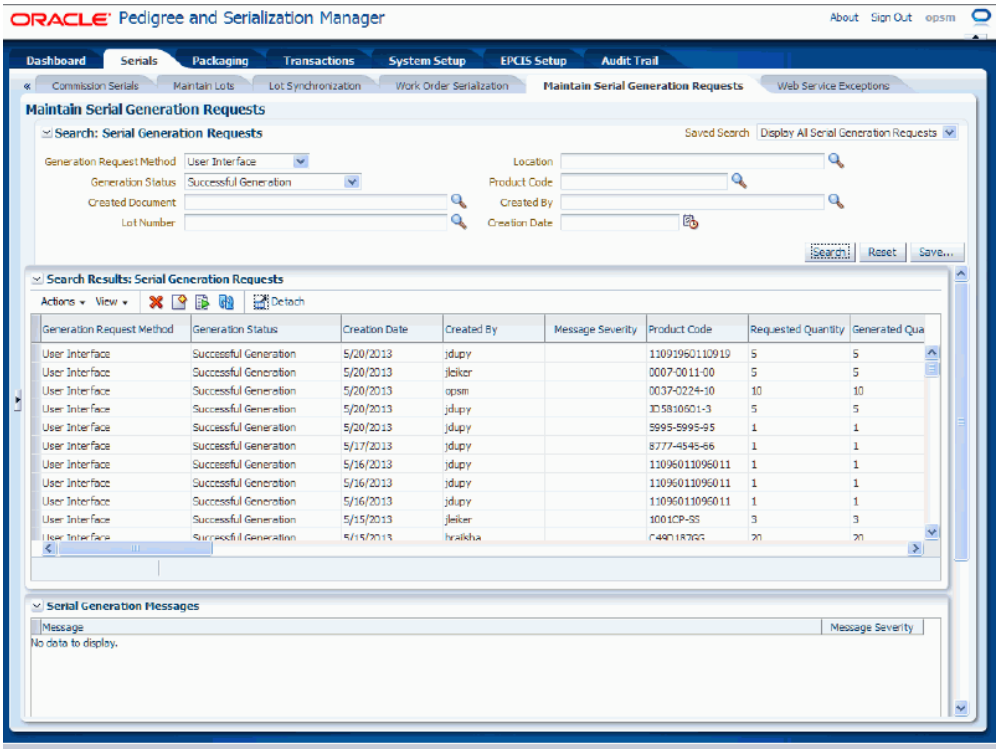
Field Name	Description
Generation Request Method	(Optional) Select how the serial generation requests were created by selecting a Generation Request Method. Methods are: • User Interface • Web Service Request • Work Order Import

Field Name	Description
Generation Status	(Optional) Select the status of the serial generation requests by selecting a Generation Status. Statuses are: • Error(s) Exist • In Progress • Generation Requested • Generation Submitted • Successful Generation • Abnormal Termination • Warning(s) Exist
Created Document	(Optional) Select the created document associated with the serial generation requests.
Lot Number	(Optional) Select the lot number associated with the serial generation requests. If you select the lot number using the Search and Select dialog box, after you select the lot number the Product Code field will appear by default from the lot number selected.
Location	(Optional) Select the location associated with the serial generation requests.
Product Code	(Optional) Select the product code associated with the serial generation requests.
Created By	(Optional) Select the User ID that created the serial generation request.
Creation Date	(Optional) Select the date the serial generation request was created.

Otherwise, you can click the Search button without entering any search criteria and all available serial generation requests will appear.

3. Click the Search button.

Maintain Serial Generation Requests page



All of the serial generation requests that match the search criteria appear in the Search Results: Serial Generation Requests region in a table format. Depending on the definition for the serial generation request certain information appears in the table. The information that may appear for a serial generation request is:

Field Name	Description
Generation Request Method	Displays how the serial generation request was created. Methods are: • User Interface • Web Service Request • Work Order Interface

Field Name	Description
Generation Status	Displays the status of the serial generation request. Statuses are: • Error(s) Exist • In Progress • Generation Requested • Generation Submitted • Successful Generation • Abnormal Termination • Warning(s) Exist
Creation Date	Displays the date the serial generation request was created.
Created By	Displays the user ID that created the serial generation request.
Message Severity	Displays an icon to represent the severity of the messages that were generated for the serial generation request. A red circle with an X indicates the serial generation request was unsuccessful and contains error messages and may also contain warning messages. A yellow triangle with an exclamation point indicates the serial generation request was successful but it contains warning messages.
Product Code	Displays the product code associated with the serial generation request.
Requested Quantity	Displays the requested quantity for the serial generation request.

Field Name	Description
Generated Quantity	Displays the generated quantity for the serial generation request. Serial Generation Requests that result in more serials than serial commit size specified in System Parameters will be processed in groups. The generated quantity will reflect how many serials the system has currently created.
Lot Number	Displays the lot number associated with the serial generation request.
Location	Displays the location associated with the serial generation request.
Starting Serial Number	Displays the starting serial number associated with the serial generation request. This value only appears if the serial generation request was submitted as a Serial Number Range.
Ending Serial Number	Displays the ending serial number associated with the serial generation request. This value only appears if the serial generation request was submitted as a Serial Number Range.
Serialized Unit of Measure	Displays the serialized unit of measure associated with the serial generation request.
Ignore Serial Overage Amount	Displays a green check mark to indicate that the serial generation request indicated to ignore the serial overage amount that is defined for the product. This field is clear if the serial generation request indicated to include the serial overage amount that is defined for the product.

Field Name	Description
Serial Usage	Displays the serial usage associated with the serial generation request. Serial Usages are user defined using Lookup Type PAS_SERIAL_USAGE.
Saleable Unit	Displays a green check mark to indicate that the serial generation request indicated the serial numbers generated were for saleable units. This field is clear if the serial generation request indicated the serial numbers generated where not for saleable units.
Item Number	Displays the item number associated with the serial generation request.
Item Description	Displays the item description associated with the serial generation request.
Source System	Displays the name of the system that requested the serial generation request. Source Systems are user defined using the Lookup Type PAS_SOURCE_SYSTEM.
Packaging Unit	Displays the packaging unit associated with the serial generation request. Packaging unit is user defined using the Lookup Type PAS_PACKAGE_UNIT.
Parent Lot	Displays the parent lot associated with the serial generation request.
Expiration Date	Displays the date the lot associated with the serial generation request expires.
Best By Date	Displays the date the lot associated with the serial generation request is best used by.
Retest Date	Displays the date the lot associated with the serial generation request is to be retested.

Field Name	Description
Sell By Date	Displays the date the lot associated with the serial generation request is to be sold by.
Origination Date	Displays the date the lot associated with the serial generation request originated
Created Document Organization	Displays the created document organization associated with the serial generation request.
Created Document	Displays the created document associated with the serial generation request.
Created Document Type	Displays the created document type associated with the serial generation request. Document Types are user defined using Lookup Type PAS_DOCUMENT_TYPE.
Create Document Line Number	Displays the created document line number associated with the serial generation request.
Alternate Document Organization	Displays the alternate document organization associated with the serial generation request.
Alternate Document	Displays the alternate document associated with the serial generation request.
Alternate Document Type	Displays the alternate document type associated with the serial generation request. Document Types are user defined using Lookup Type PAS_DOCUMENT_TYPE.
Alternate Document Line Number	Displays the alternate document line number associated with the serial generation request.

Field Name	Description
Generation Request ID	Displays the generation request ID that was created by the system when the serial generation request was created.
Batch ID	Displays the Batch ID that was created by the system when the serial generation request was submitted. If multiple requests are submitted at the same time, these requests have the same batch ID.

Below the Search Results: Serial Generation Requests region appears the Serial Generation Messages region. If a row in the Search Results: Serial Generation Requests table contains a warning or error message severity for a serial generation request the messages for that condition display in this region. If no message severity exists then no information displays in this region. Each text message associated with the serial generation request and the message severity icon (warning or error) for the message displays in this region.

Viewing Serial Generation Request Messages

Use the Maintain Serial Generation Requests page in Oracle Pedigree and Serialization Manager (OPSM) to view warning and error messages associated with the processing of serial generation requests.

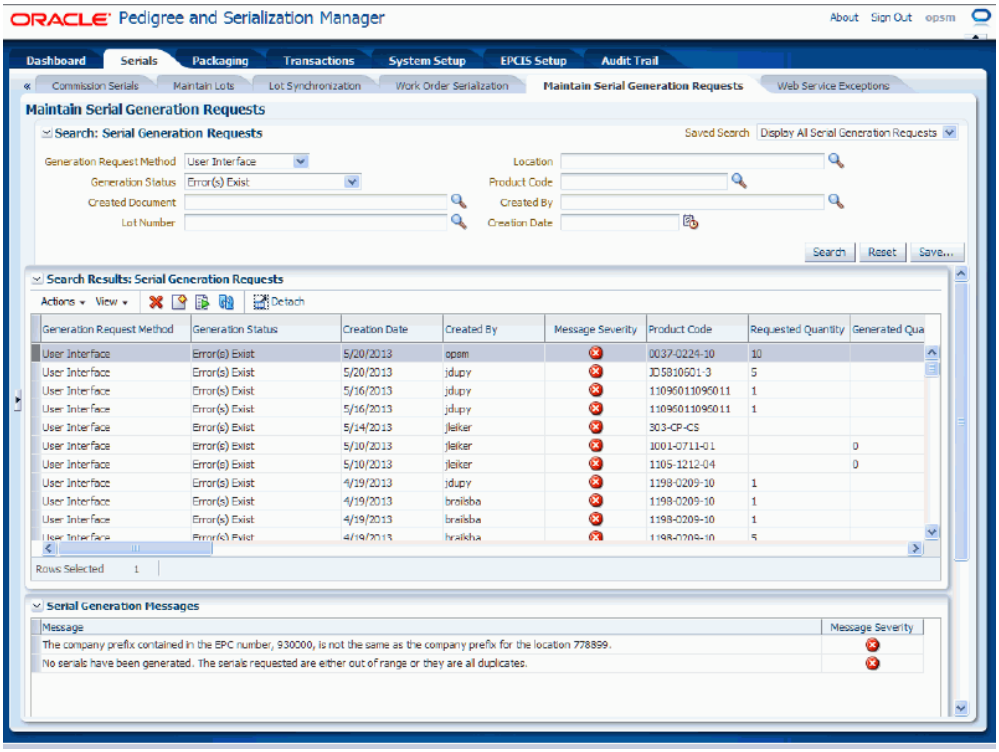
Use this procedure to view serial generation request messages:

To View Serial Generation Request Messages:

1. Navigate to the Maintain Serial Generation Requests page.
2. In the Search: Serial Generation Requests region, enter search criteria for the serial generation requests. Select at least a Generation Status of *Error(s) Exists* or *Warning(s) Exist.*

   Otherwise, you can click the Search button without entering any search criteria and all available serial generation requests will appear.
3. Click the Search button.

Maintain Serial Generation Requests page

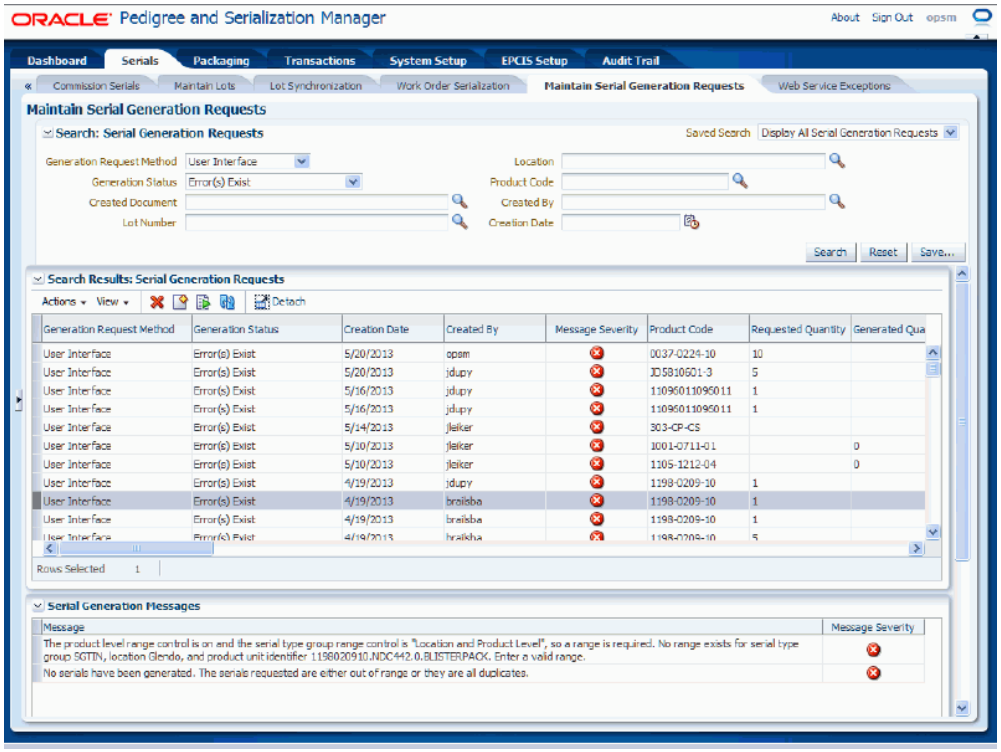


All of the serial generation requests that match the search criteria appear in the Search Results: Serial Generation Requests region in a table format.

In the Message Severity column, a red circle with an X indicates the serial generation request was unsuccessful and contains error messages and may also contain warning messages. A yellow triangle with an exclamation point indicates the serial generation request was successful but it contains warning messages.

4. Select a row in the Search Results: Serial Generation Requests table that contains warnings or errors or a combination of both. A Message Severity icon appears in the Message Severity column in the table.

Maintain Serial Generation Requests page



In the Serial Generation Messages region (bottom of the page) the system displays the warning or error messages associated with the processing of the serial generation request along with each messages severity code icon.

Creating Serial Generation Requests

Use the Create Serial Generation Request page in Oracle Pedigree and Serialization Manager (OPSM) to create serial generation requests. Serial generation requests are used to specify the parameters and data that will be used during the generate serials process in OPSM.

When creating a serial generation request you specify whether you want to create a quantity of serial numbers or a range of serial numbers through the request and then you define all of the other information (location, product, lot, and document) for the serial numbers.

In addition, during the create process you can specify whether you want the system to automatically submit the serial generation request for processing after it is saved or if you want to manually submit the serial generation request. After you submit (manually or automatically) a serial generation request, a business event triggers the processing of your request and a background process is executed to generate the serial numbers and create the Serial Generation transaction. The Maintain Serial Generation Requests page

is used to view the processing.

For more information on manually submitting a serial generation request, see Submitting Serial Generation Requests, page 7-23.

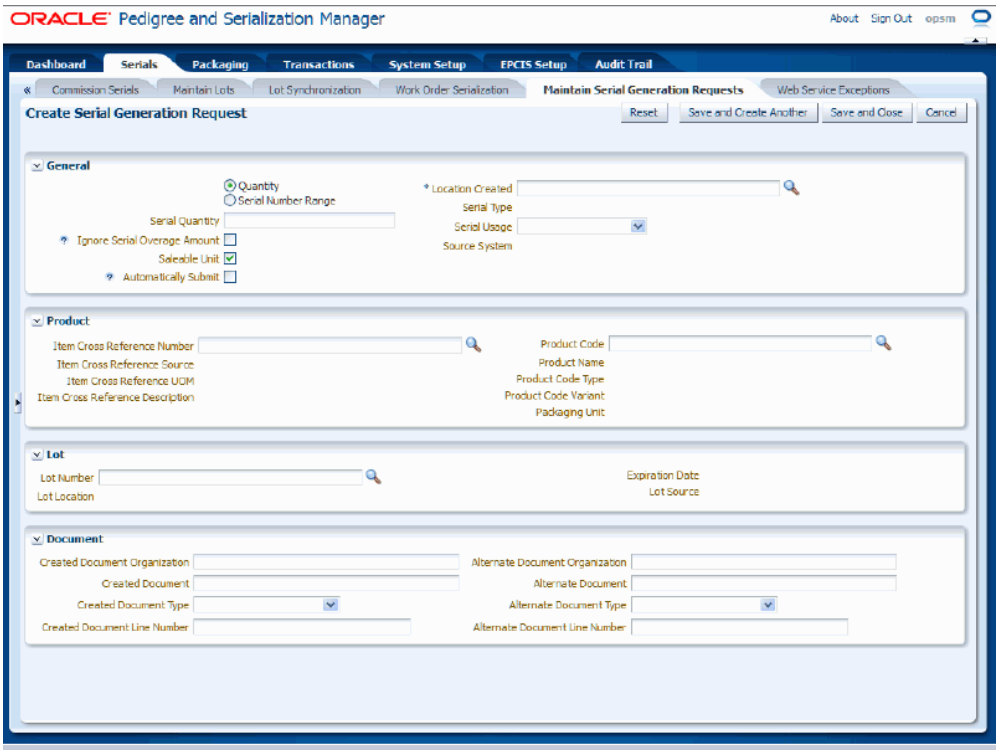
Use this procedure to create serial generation requests:

To Create Serial Generation Requests:

1. Navigate to the Maintain Serial Generation Requests page, page A-2.

2. Select Create from the Actions menu or click the Create icon located at the top of the Search Results: Serial Generation Requests region.

Create Serial Generation Request page



The Create Serial Generation Request page appears displaying four different regions (General, Product, Lot, and Document).

3. In the General region of the page enter the general information for the request. Enter the following information:

Field Name	Description
Quantity or Serial Number Range radio buttons	Select how you want to create serial numbers by selecting the specific radio button. If you want to create a quantity of serial numbers select the Quantity radio button. The Quantity radio button is selected by default. If you want to create a range of serial numbers select the Serial Number Range radio button. After you select this radio button the Quantity field disappears and the Starting Serial Number and Ending Serial Number fields appear. The system will generate sequential serial numbers based upon the starting and ending serial numbers that you have entered.
Serial Quantity	Enter the quantity of serial numbers you want to create. This field is available if you select the Quantity radio button.
Starting Serial Number	Enter the starting serial number for the range of serial numbers you want to create. This field is available if you select the Serial Number Range radio button. If you only want to generate one specific serial number, you can enter the starting serial number and leave the ending serial number blank. **Note:** If the generation method for the serial type is random, you cannot use the starting and ending serial number option (Serial Number Range option).

Field Name	Description
Ending Serial Number	Enter the ending serial number for the range of serial numbers you want to create. This field is available if you select the Serial Number Range radio button. If you only want to generate one specific serial number, you can enter the starting serial number and leave the ending serial number blank. **Note:** If the generation method for the serial type is random, you cannot use the starting and ending serial number option (Serial Number Range option).
Ignore Serial Overage Amount check box	Clear this check box if you want the system to apply the serial overage amount that is setup for the product detail on this request. The check box is clear by default. Select this check box if you do not want the system to apply the serial overage amount that is setup in the product detail on this request.
Saleable Unit check box	(Optional) Select this check box if you want the system to mark the serial numbers that are created as saleable units. This check box is selected by default.
Automatically Submit check box	(Optional) Select this check box if you want the system to automatically submit the serial generation request for processing when you save the request. This check box is clear by default. Otherwise, you will have to manually submit the serial generation request for processing. For more information on manually submitting a serial generation request, see Submitting Serial Generation Requests, page 7-23.

Field Name	Description
Location Created	Select the location for the serial numbers that are to be created. This is a required field.
Serial Type	The serial type associated with the Location Created field value appears in this field. When you enter product code information in the Product region of the page the serial type for the product detail will appear in this field overriding the serial type for the location created. **Note:** You cannot use the Serial Number Range option if the generation method for the serial type is random.
Serial Usage	(Optional) Select the serial usage for the serial numbers that are to be created. Serial Usages are user defined using Lookup Type PAS_SERIAL_USAGE.
Source System	The source system associated to the Location Created field value appears in this field.

4. (Optional) In the Product region of the page select either the Item Cross Reference Number or the Product Code for the serial numbers that are to be created. You cannot enter both fields at that same time. You can use the Item Cross Reference Number to search for the Product Code you wish to serialize.

   If you select an Item Cross Reference Number, the Item Cross Reference Source, Item Cross Reference UOM, and Item Cross Reference Description fields appear by default from the item cross reference number entered. The Product Code, Product Name, Product Code Type, Product Code Variant, and Packaging Unit fields appear by default from the item cross reference number entered. In addition, the serial type for the product code detail will appear in the Serial Type field in the General region overriding the serial type for the location. The Product Code field is unavailable for entry.

   If you select a Product Code, the Product Name, Product Code Type, Product Code Variant, and Packaging Unit fields appear by default from the product code. The

serial type for the product code detail will appear in the Serial Type field in the General region overriding the serial type for the location. The Item Cross Reference Number field is unavailable for entry.

If you identify the lot number and product on the serial generation request, serials will be generated in a *Commissioned* status. If the lot number and product are not entered, serials will be generated in a *Reserved* status.

> **Note:** If you want the item number to appear on the serial generation transaction, the item number must be entered when you create the serial generation request.

5. (Optional) In the Lot region of the page select the Lot Number for the serial numbers that are to be created.

   The Lot Number you enter must be associated to the product code you have entered in the Product region. If you do not know the lot number of the product you are requesting, the search and select popup for lots will display only the lots that are associated with the product. If you identify the lot number and product on the serial generation request, serials will be generated in a *Commissioned* status. If the lot number and product are not entered, serials will be generated in a *Reserved* status.

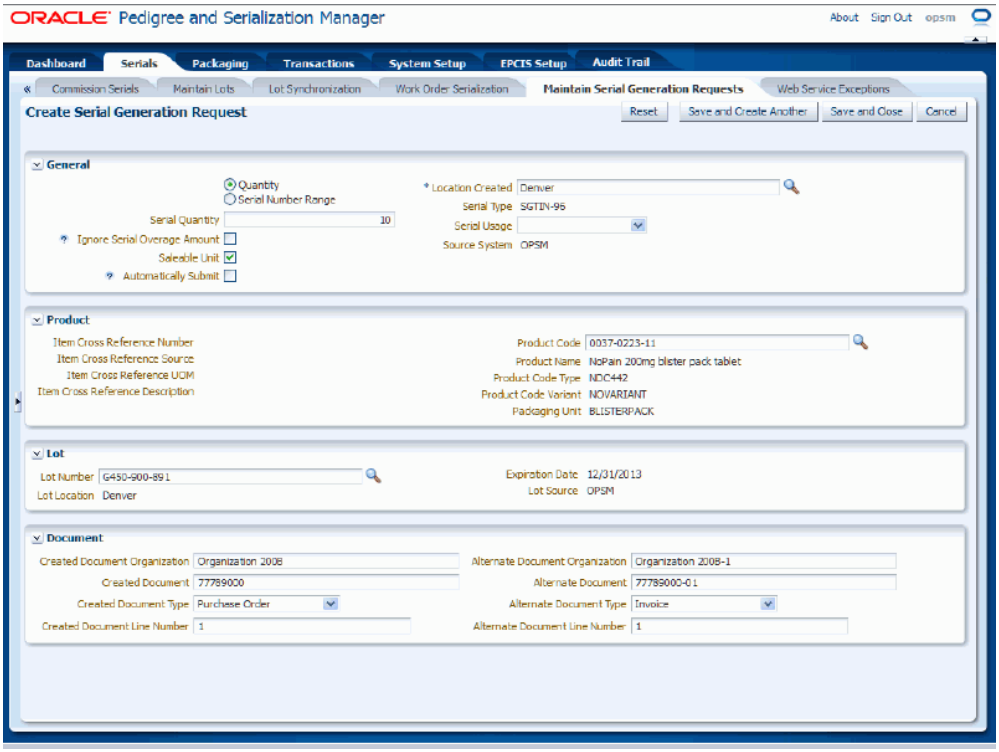
   After you select the Lot Number, the Expiration Date, Lot Location, and Lot Source fields appear by default from the selected lot.

6. (Optional) In the Document region of the page enter the documents for the serial numbers that are to be created. Enter the following information:

Field Name	Description
Created Document Organization	(Optional) Enter the organization that created the document.
Created Document	(Optional) Enter the document number you wish to reference for the serials that are created.
Created Document Type	(Optional) Select the document type for the document. Document Types are user defined using Lookup Type PAS_DOCUMENT_TYPE.
Created Document Line Number	(Optional) Enter the document line number for the document.

Field Name	Description
Alternate Document Organization	(Optional) Enter the organization for the alternate document.
Alternate Document	(Optional) Enter the alternate document number you wish to reference for the serials that are created.
Alternate Document Type	(Optional) Select the document type for the alternate document. Document Types are user defined using Lookup Type PAS_DOCUMENT_TYPE.
Alternate Document Line Number	(Optional) Enter the document line number for the alternate document.

Create Serial Generation Request page



7. Save your work. Choose one of these options:

   - Click the Save and Close button to save this serial generation request and return back to the Maintain Serial Generation Requests page.

     If the Automatically Submit check box is selected, after you save the request, a business event triggers the processing of your request and a background process is executed to generate the serial numbers and create the Serial Generation transaction. The system assigns a Generation Request ID and a Batch ID to this request and the Generation Status of *Generation Submitted* which will turn to *In Progress.* After processing is complete for the request the Generation Status will change to *Successful Generation, Error(s) Exist, Warning(s) Exist*, or *Abnormal Termination.*

     If the Automatically Submit check box is not selected, after you save the request, the system assigns a Generation Request ID and the Generation Status of *Generation Requested* to this request. You must then manually submit the serial generation request for processing.

     For information on manually submitting a serial generation request, see Submitting Serial Generation Requests, page 7-23.

   - Click Save and Create Another button to save this serial generation request and

to stay on this page so you can create another serial generation request. The system displays a message that the serial generation request was created successfully and it clears all of the values in the fields.

If the Automatically Submit check box is selected, after you save the request, a business event triggers the processing of your request and a background process is executed to generate the serial numbers and create the Serial Generation transaction. The system assigns a Generation Request ID and a Batch ID to this request and the Generation Status of *Generation Submitted* which will turn to *In Progress.* After processing is complete for the request the Generation Status will change to *Successful Generation, Error(s) Exist, Warning(s) Exist,* or *Abnormal Termination.*

If the Automatically Submit check box is not selected, after you save the request, the system assigns a Generation Request ID and the Generation Status of *Generation Requested* to this request. You must then manually submit the serial generation request for processing.

For information on manually submitting a serial generation request, see Submitting Serial Generation Requests, page 7-23.

Submitting Serial Generation Requests

Use the Maintain Serial Generation Requests page in Oracle Pedigree and Serialization Manager (OPSM) to submit serial generation requests that are ready for processing. You can submit for processing one or more serial generation requests at one time.

You can also have the system automatically perform the Submit process by selecting the Automatically Submit check box when creating a serial generation request in OPSM. In this case, the system will automatically submit the request for processing when you save the serial generation request.

For more information on automatically submitting a serial generation request, see Creating Serial Generation Requests, page 7-15.

You can only submit for processing those serial generation requests that have a Generation Status of *Generation Requested.*

Use this procedure to submit serial generation requests:

To Submit Serial Generation Requests:

1. Navigate to the Maintain Serial Generation Requests page, page A-2.

2. In the Search: Serial Generation Requests region, enter search criteria for the serial generation requests that you want to submit for processing. Select at least a Generation Status of *Generation Requested.*

   Otherwise, you can click the Search button without entering any search criteria and

all available serial generation requests will appear.

3. Click the Search button.

   All of the serial generation requests that match the search criteria appear in the Search Results: Serial Generation Requests region in a table format.

4. Select one or more serial generation requests in the Search Results: Serial Generation Requests table that you want to submit.

   Use the Ctrl or Shift buttons to select one or more serial generation requests in the table.

5. Select Submit in the Actions menu or click the Submit Serial Generation Request icon located at the top of the Search Results: Serial Generation Requests region.

   A business event triggers the processing of your request and a background process is executed to generate the serial numbers and create the Serial Generation transaction. After you submit the serial generation requests a Batch ID is assigned to the serial generation requests.

   The background process uses the system parameters (Serial Commit Size) value you specify when creating a serial generation request to determine the serial numbers to be created. For example, let's say the Serial Commit Size is 1,000. Serial generation requests that result in more than 1,000 serials will be processed in groups. A serial generation request for 10,000 serials will be processed in 10 groups. When the first 1,000 serials are generated, the system will create the Serial Generation transaction and commit those serials to the database. The remaining serials will be created in groups of 1,000 and the Serial Generation transaction will be updated as each group successfully completes. The system changes the Generation Status from *Generation Requested* to *Generation Submitted* then to *In Progress* while it is processing.

   After the background process is complete the Generation Status will change from *In Progress* to one of these statuses depending on whether the process completed successfully. The statuses are:

   - *Successful Generation:* Process completed successfully with no problems.
   - *Error(s) Exist:* Process completed but was unsuccessful due to the errors.
   - *Warning(s) Exist:* Process completed successfully but there were warning messages issued.
   - *Abnormal Termination:* Process did not complete successfully due to a catastrophic failure (for example, the system went down during processing).

   Select Refresh from the Action menu or click the Refresh icon periodically at the top of the Search Results: Serial Generation Requests region or click the search button to monitor the progress of the process. As the page is refreshed, the Requested Quantity and Generated Quantity fields in the table will be updated.

6. After processing is complete, if the serial generation request has a Generation Status of *Error(s) Exist, Warning(s) Exist,* or *Abnormal Termination* view the messages for the serial generation request in the Serial Generation Messages region of the Maintain Serial Generation Requests page.

Deleting Serial Generation Requests

Use the Maintain Serial Generation Requests page in Oracle Pedigree and Serialization Manager (OPSM) to delete serial generation requests. You can delete one or more serial generation requests at one time.

You cannot delete serial generation requests that have an *In Progress* generation status.

Use this procedure to delete serial generation requests:

To Delete Serial Generation Requests:

1. Navigate to the Maintain Serial Generation Requests page, page A-2.

2. In the Search: Serial Generation Requests region, enter search criteria for the serial generation requests that you want to delete.

   Otherwise, you can click the Search button without entering any search criteria and all available serial generation requests will appear.

3. Click the Search button.

   All of the serial generation requests that match the search criteria appear in the Search Results: Serial Generation Requests region in a table format.

4. Select one or more serial generation requests in the Search Results: Serial Generation Requests table that you want to delete.

   Use the Ctrl or Shift buttons to select one or more serial generation requests in the table.

   Note: You cannot delete *In Progress* serial generation requests.

5. Select Delete in the Actions menu or click the Delete icon located at the top of the Search Results: Serial Generation Requests region.

   The system displays a message asking if you are sure you want to delete the serial generation request as well as its request generation messages.

6. Click the Yes button.

   The serial generation requests are deleted from the system.

Performing Work Order Serialization from an External System

Oracle Pedigree and Serialization Manager (OPSM) can be integrated with transactional systems to perform work order serialization. The work order serialization process will create serial generation requests in OPSM based on planned manufacturing yield from work order transactions allowing additional serials for manufacturing overages or scrapped items. In addition to the overage amount from the work order, the overage from the product detail is also applied when calculating the quantity of serials for generation. After you submit the serial generation request in OPSM, the system will create and reserve serial numbers for these work orders. The creation of the serials is loosely coupled to the external transactional system. The serials are stored in the OPSM system and linked to the work order by the order number, product, and lot identification.

Any changes to the work order that increases the output of the work order or identifies a new product will cause OPSM to evaluate the need for additional serials. If the increase to the quantity exceeds the overage amount it results in a request for additional serials to be generated in OPSM. A reduction in the output quantity does not reduce the quantity of serials or change the status of the serials. If the work order is cancelled, the serials are set to *Decommissioned* status. If the work order is terminated, serials that are at a *Reserved* status are set to *Decommissioned* status when the work order is closed. Serials are generated at either a *Reserved* or *Commissioned* status. If both the product and the lot are identified on the serial generation request, the serials are created as *Commissioned*. If either the product or lot is unknown or the lot has not been created in the transactional system and synchronized to OPSM, the serials are generated in a *Reserved* status.

For more information on the serial generation process, see Understanding Serial Generation, page 7-1.

For more information on integrating Oracle E-Business Suite with OPSM, see the *Oracle Serialization and Tracking Integration Pack for Oracle Pedigree and Serialization Manager and Oracle E-Business Suite 3.1 - Implementation Guide.*

Use these procedures to:

- Extract and process work order serialization from an external system.
- Extract work orders from an external system.
- Process work order serialization in OPSM.

Prerequisites

❒ For Extract Work Orders:

- A work order extract scenario must be defined in OPSM.

- An Oracle Data Integrator (ODI) extract application that conforms to the required specifications must exist and must be configured to communicate with OPSM.

  See the *Oracle Serialization and Tracking Integration Pack for Oracle Pedigree and Serialization Manager and Oracle E-Business Suite 3.1.*

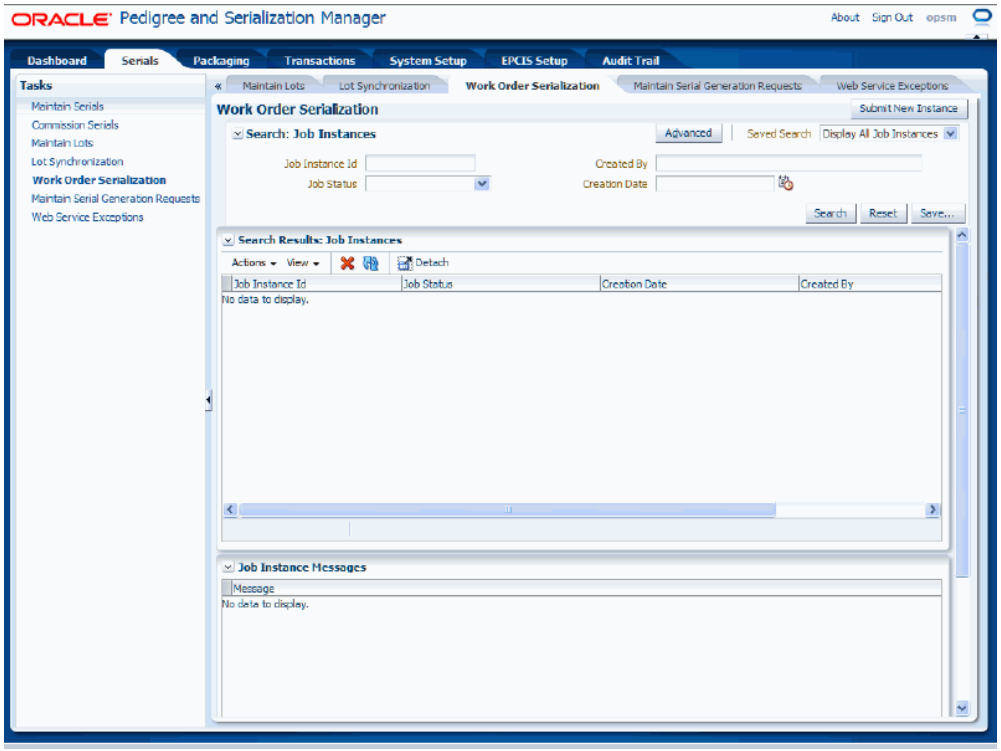
For Process Work Order Serialization:

- The Work Order interface table must be populated by the extract system or another method.

To Extract and Process Work Order Serialization from an External System:

1. Navigate to the Work Order Serialization page, page A-2.

Work Order Serialization page



2. Click the Submit New Instance button in the upper right hand corner of the Work Order Serialization page.

Work Order Serialization dialog box

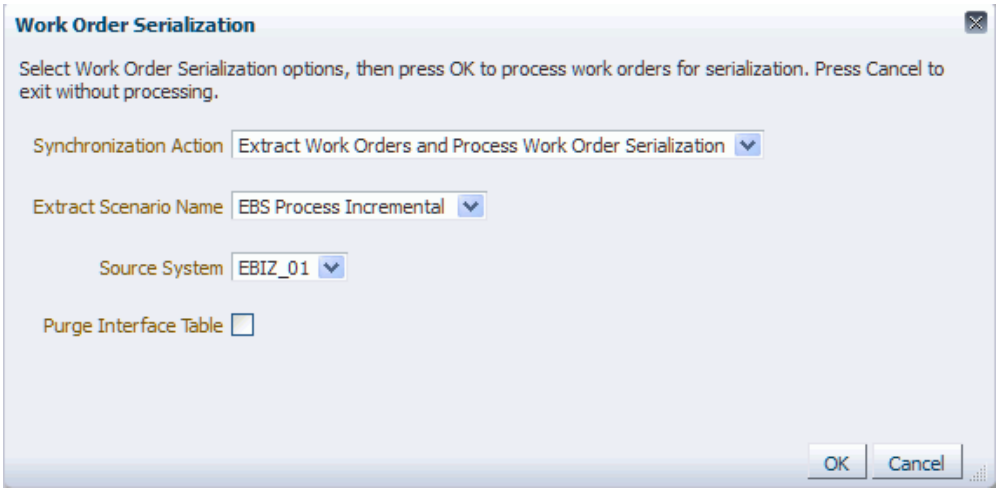
The Work Order Serialization dialog box appears.

3. Enter the following options for the Work Order Serialization process:

Field Name	Description
Synchronization Action	Select *Extract Work Orders and Process Work Order Serialization.* After you select the Synchronization Action, the Extract Scenario Name, Source System, and Purge Interface Table fields become available.

Field Name	Description
Extract Scenario Name	Select the extract scenario name. Extract Scenario Names are user defined using Lookup Type PAS_WORK_ORDER_EXTRACT. Oracle delivers four lookup codes for the Work Order Serialization between OPSM and Oracle E-Business Suite for the PAS_WORK_ORDER_EXTRACT lookup type. They are: • EBS_WO_SERIAL_DISCRETE_FULL (EBS Discrete Full) • EBS_WO_SERIAL_DISCRETE_INCR (EBS Discrete Incremental) • EBS_WO_SERIAL_PROCESS_FULL (EBS Process Full) • EBS_WO_SERIAL_PROCESS_INCR (EBS Process Incremental)
Source System	Select the source system where you are going to extract work order information from into OPSM. Source Systems are user defined using the Lookup Type PAS_SOURCE_SYSTEM.
Purge Interface Table check box	Select this check box if you want to delete existing records in the interface table for the selected source system.

Work Order Serialization dialog box



4. Click the OK button to initiate the Work Order Serialization process.

   The Work Order Serialization process runs in the background. The system assigns a job instance Id for that specific run of the process. The Work Order Serialization page reappears.

   The Work Order Serialization (Extract Work Orders) background process will invoke an Oracle Data Integrator (ODI) application to extract work order information from an external system. The work order information that is extracted from the source system will be merged into the target OPSM Work Order Interface table (PAS_S_WORK_ORDER_INTERFACE).

   The Work Order Serialization (Process Work Order Serialization) background process takes the work order information from the PAS_S_WORK_ORDER_INTERFACE table and validates the data and initiates the process to generate a serial generation request in OPSM.

5. Enter the following information in the Search: Job Instances region of the page:

Field Name	Description
Job Instance Id	(Optional) Enter a specific job instance Id.

Field Name	Description
Job Status	(Optional) Select the job status for the job instances. Job Statuses are: • Complete • Error(s) Exist • In Progress • Submitted • Abnormal Termination • Warning(s) Exist
Created By	(Optional) Enter the individual that initiated the process.
Creation Date	(Optional) Select a creation date for the job instance that is equal to the current date.

6. Click the Search button.

7. Locate the job instance Id for the process and verify that the Job Instance Id completed successfully or completed with warnings.

   The Job Status associated with job instance Id is at one of these statuses:

   - *Complete:* Job instance completed successfully with no errors or warnings.
   - *Error(s) Exist:* Job instance did not complete successfully.
   - *In Progress:* Job instance is in progress.
   - *Submitted:* Job instance has been submitted but not started.
   - *Abnormal Termination:* The job instance did not complete successfully due to a catastrophic failure (for example, the system went down during processing).
   - *Warning(s) Exist:* Job completed successfully but there are warning messages.

   Scroll to the Job Instance Messages region and view the following:

   - Informational messages (blue circle with the letter "i"): These messages display

the parameters used to initiate the process and the results of the process.

- Warning messages (A yellow triangle with an exclamation point): These messages display the warning messages for the process.

For more information on the job instances functionality, see Using Job Instances functionality, page 3-19.

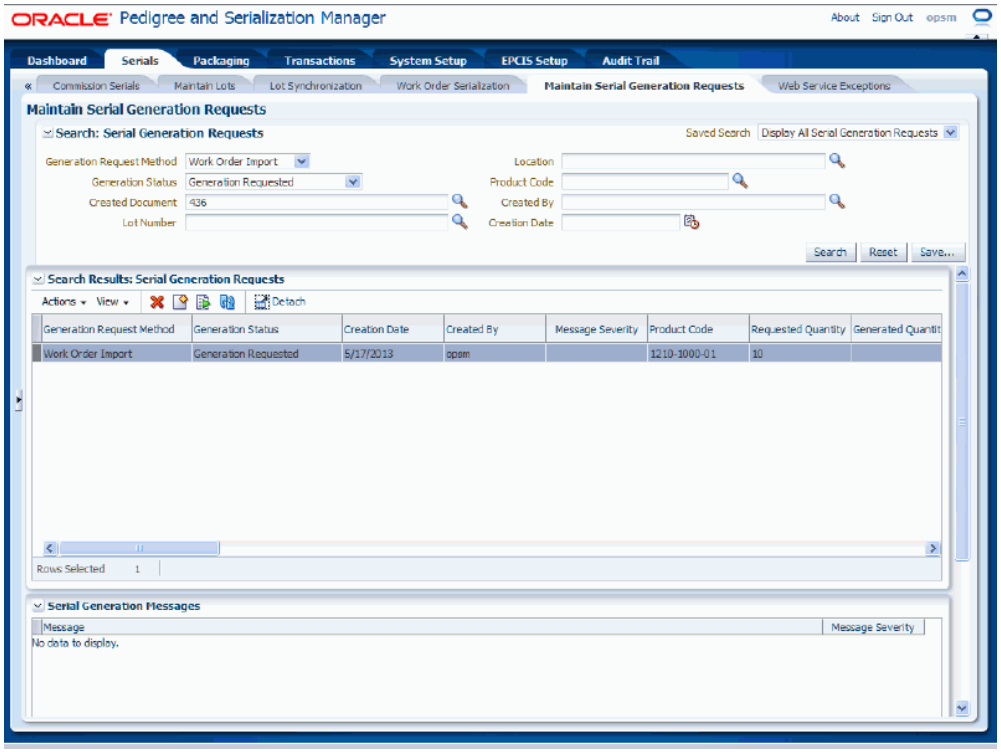
8. Navigate to the OPSM Maintain Serial Generation Requests page, page A-2.

9. Enter the following information and click the Search button:

Field Name	Description
Generation Request Method	Select a generation request method of *Work Order Import.*
Generation Status	Select a generation status of *Generation Requested.*
Created Document	Select the work order number (job or batch).

For more information on searching for serial generation requests, see Searching for Serial Generation Requests, page 7-5.

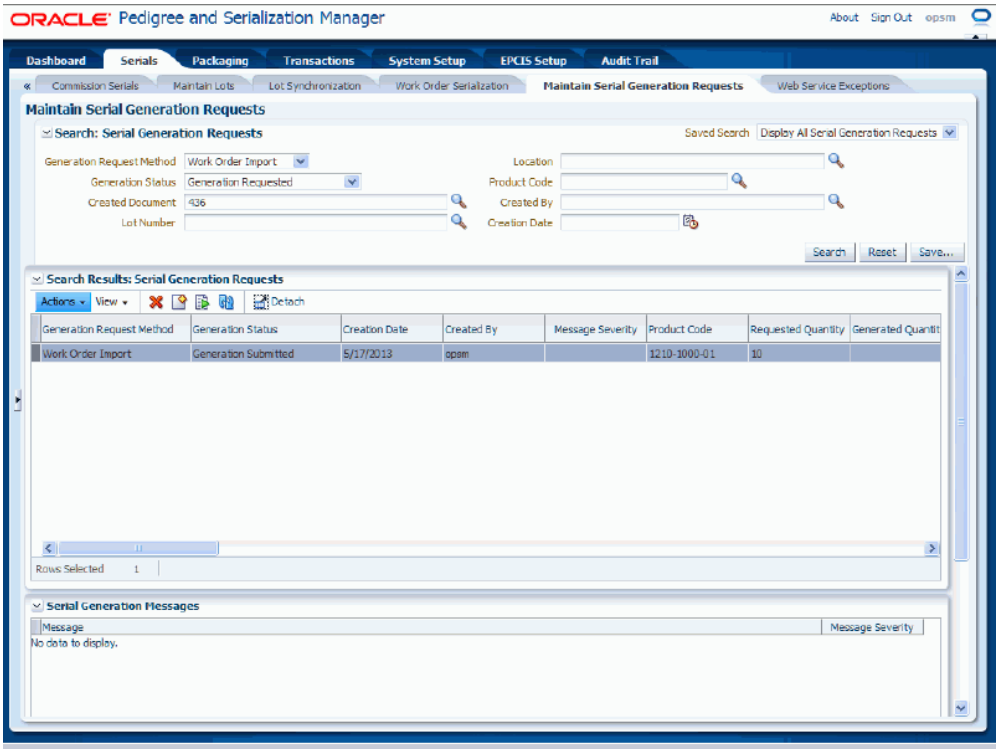
Maintain Serial Generation Requests page



10. Select the serial generation request and then select Submit from the Actions menu or click the Submit Serial Generation Request icon.

    For more information on submitting serial generation requests, see Submitting Serial Generation Requests, page 7-23.

Maintain Serial Generation Requests page

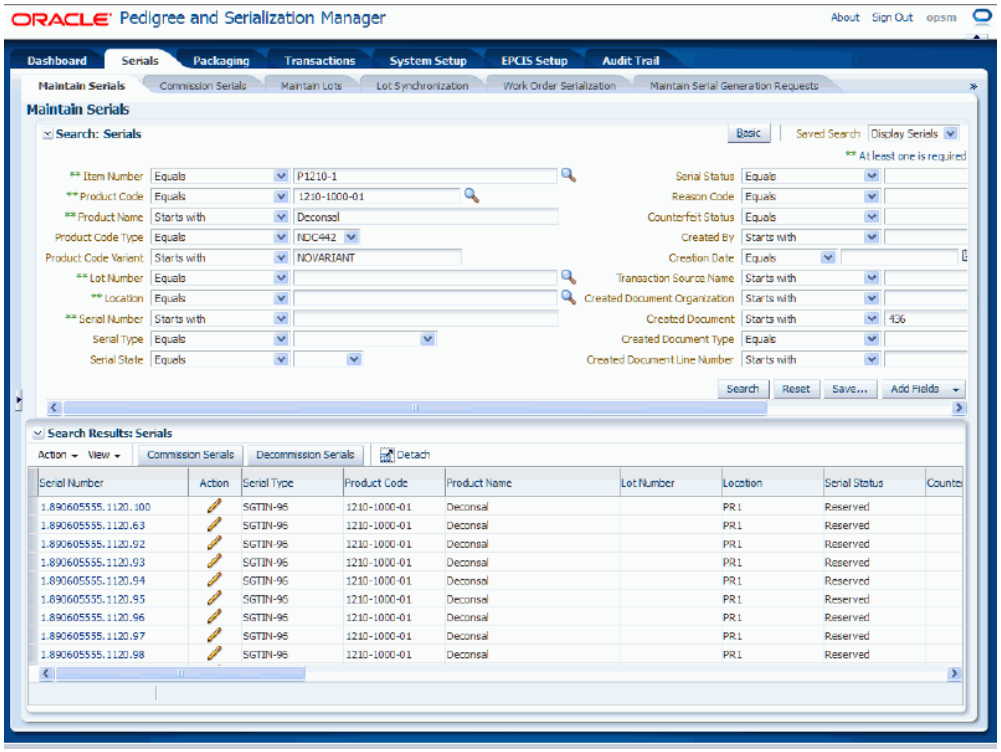


After the serial generation request is processed it creates the serial numbers for the items on the work orders.

11. Navigate to the OPSM Maintain Serials page, page A-2 and search for the serial numbers that were created for the items on the work orders.

    For more information on searching for serials, see Searching for Serials, page 7-47.

Maintain Serials page



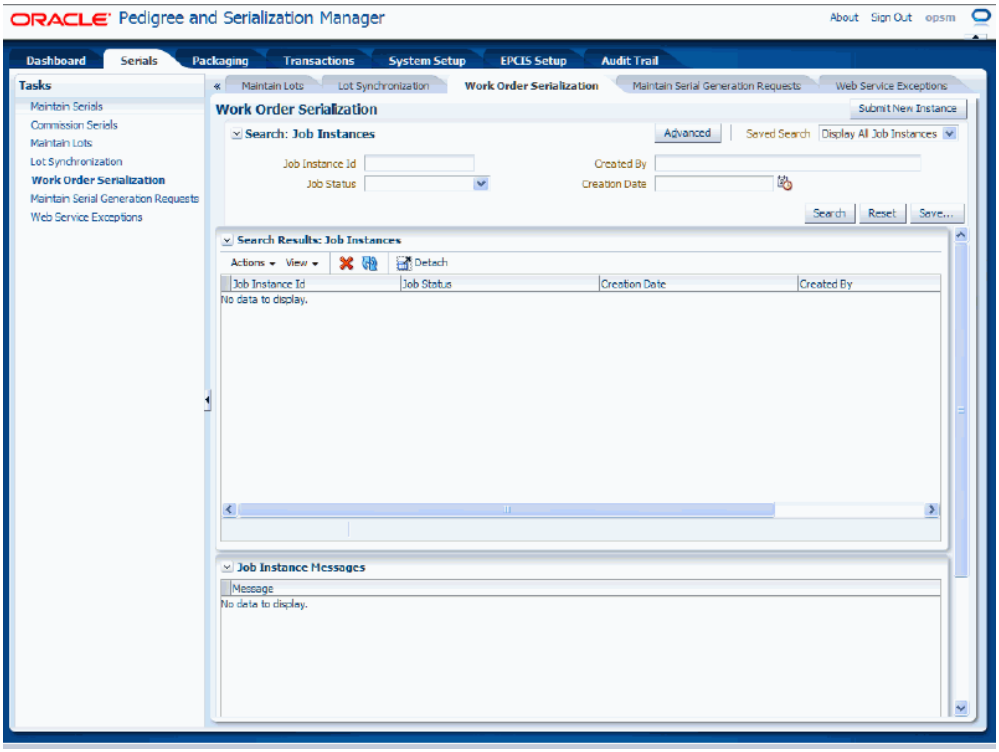
Using the Maintain Serials page you can view all of the serial numbers that were created for the items on the work orders. The serial numbers are created in OPSM in a *Reserved* status or a *Commissioned* status if product and lot were identified. If a work order was cancelled, previously generated serials are set to *Decommissioned* status. If a work order was terminated, serials in a *Reserved* status when the work order is closed are set to *Decommissioned* status. Serials at a *Commissioned* status will remain commissioned.

For information on viewing serials, see Viewing Serial Detail Information, page 7-60.

To Extract Work Orders from an External System:

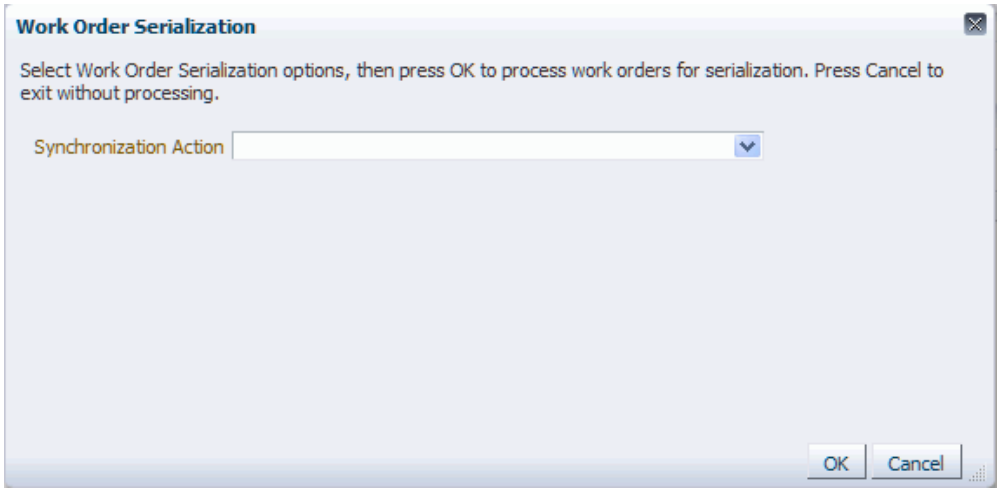
1. Navigate to the Work Order Serialization page, page A-2.

Work Order Serialization page



2. Click the Submit New Instance button in the upper right hand corner of the Work Order Serialization page.

Work Order Serialization dialog box



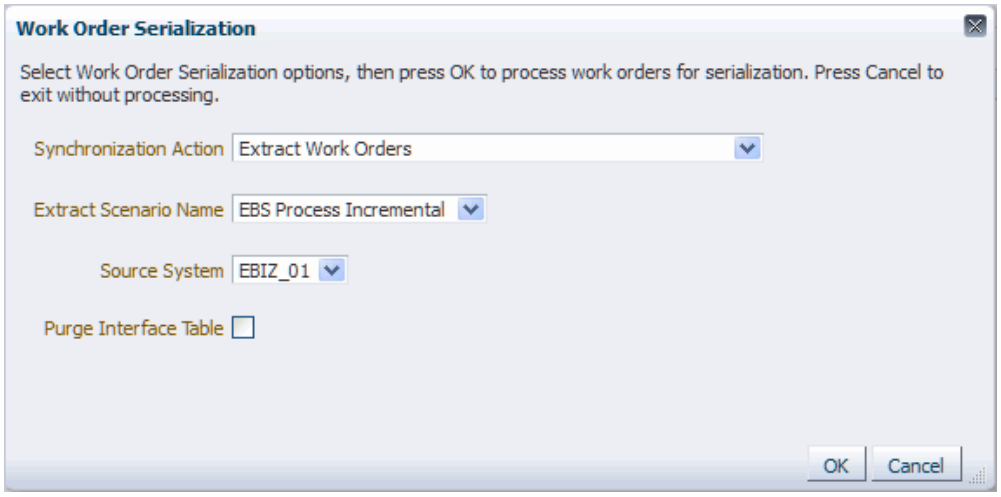
The Work Order Serialization dialog box appears.

3. Enter the following options for the Work Order Serialization process:

Field Name	Description
Synchronization Action	Select *Extract Work Orders.* After you select the Synchronization Action, the Extract Scenario Name, Source System, and Purge Interface Table fields become available.

Field Name	Description
Extract Scenario Name	Select the extract scenario name. Extract Scenario Names are user defined using Lookup Type PAS_WORK_ORDER_EXTRACT. Oracle delivers four lookup codes for the Work Order Serialization between OPSM and Oracle E-Business Suite for the PAS_WORK_ORDER_EXTRACT lookup type. They are: • EBS_WO_SERIAL_DISCRETE_FULL (EBS Discrete Full) • EBS_WO_SERIAL_DISCRETE_INCR (EBS Discrete Incremental) • EBS_WO_SERIAL_PROCESS_FULL (EBS Process Full) • EBS_WO_SERIAL_PROCESS_INCR (EBS Process Incremental)
Source System	Select the source system where you are going to extract work orders from into OPSM. Source Systems are user defined using the Lookup Type PAS_SOURCE_SYSTEM.
Purge Interface Table check box	Select this check box if you want to delete existing records in the interface table for the selected source system.

Work Order Serialization dialog box



4. Click the OK button to initiate the Work Order Serialization process.

   The Work Order Serialization process runs in the background. The system assigns a job instance Id for that specific run of the process. The Work Order Serialization page reappears.

   The Work Order Serialization (Extract Work Orders) background process will invoke an Oracle Data Integrator (ODI) application to extract work order information from an external system. The work order information that is extracted from the source system will be merged into the target OPSM Work Order Interface table (PAS_S_WORK_ORDER_INTERFACE).

5. Enter the following information in the Search: Job Instances region of the page:

Field Name	Description
Job Instance Id	(Optional) Enter a specific job instance Id.

Field Name	Description
Job Status	(Optional) Select the job status for the job instances. Job Statuses are: • Complete • Error(s) Exist • In Progress • Submitted • Abnormal Termination • Warning(s) Exist
Created By	(Optional) Enter the individual that initiated the process.
Creation Date	(Optional) Select a creation date for the job instance that is equal to the current date.

6. Click the Search button.

7. Locate the job instance Id for the process and verify that the Job Instance Id completed successfully or completed with warnings.

   The Job Status associated with job instance Id is at one of these statuses:

   - *Complete:* Job instance completed successfully with no errors or warnings.
   - *Error(s) Exist:* Job instance did not complete successfully.
   - *In Progress:* Job instance is in progress.
   - *Submitted:* Job instance has been submitted but not started.
   - *Abnormal Termination:* The job instance did not complete successfully due to a catastrophic failure (for example, the system went down during processing).
   - *Warning(s) Exist:* Job completed successfully but there are warning messages.

   Scroll to the Job Instance Messages region and view the following:

   - Informational messages (blue circle with the letter "i"): These messages display

the parameters used to initiate the process and the results of the process.

- Warning messages (A yellow triangle with an exclamation point): These messages display the warning messages for the process.

For more information on the job instances functionality, see Using Job Instances functionality, page 3-19.

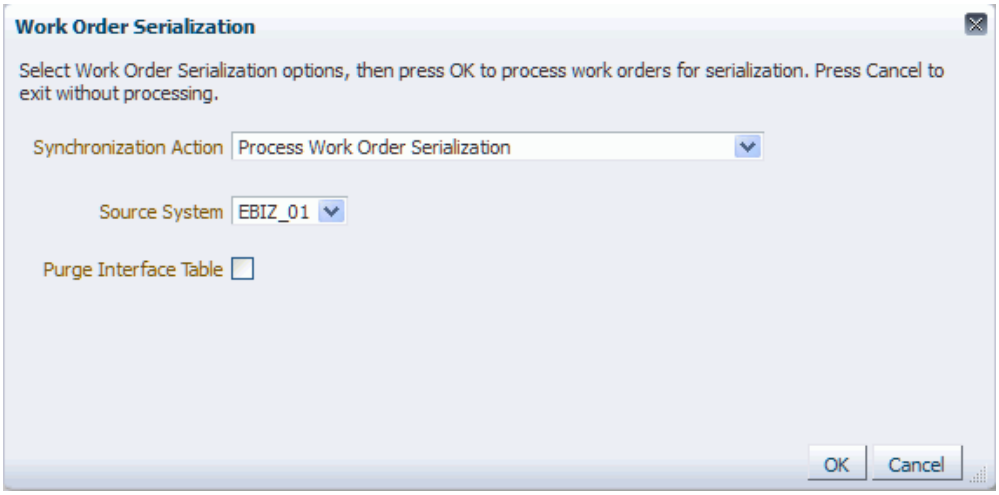
To Process Work Order Serialization in OPSM:

1. Navigate to the Work Order Serialization page, page A-2.
2. Click the Submit New Instance button in the upper right hand corner of the Work Order Serialization page.

   The Work Order Serialization dialog box appears.
3. Enter the following options for the Work Order Serialization process:

Field Name	Description
Synchronization Action	Select *Process Work Order Serialization.* After you select the Synchronization Action, the Source System, and Purge Interface Table fields become available.
Source System	Select the source system for the extracted work orders in which you want to perform the work order serialization process for in OPSM. Source Systems are user defined using the Lookup Type PAS_SOURCE_SYSTEM.
Purge Interface Table check box	Select this check box if you want to delete existing records in the interface table for the selected source system.

Work Order Serialization dialog box



4. Click the OK button to initiate the Work Order Serialization process.

   The Work Order Serialization process runs in the back ground. The system assigns a job instance Id for that specific run of the process. The Work Order Serialization page reappears.

   The Work Order Serialization (Process Work Order Serialization) background process takes work order information from the PAS_S_WORK_ORDER_INTERFACE table and initiates the process to generate the serial generation request in OPSM (PAS_S_SERIAL_GEN_REQUESTS table).

5. Enter the following information in the Search: Job Instances region of the page:

Field Name	Description
Job Instance Id	(Optional) Enter a specific job instance Id.

Field Name	Description
Job Status	(Optional) Select the job status for the job instances. Job Statuses are: • Complete • Error(s) Exist • In Progress • Submitted • Abnormal Termination • Warning(s) Exist
Created By	(Optional) Enter the individual that initiated the process.
Creation Date	(Optional) Select a creation date for the job instance that is equal to the current date.

6. Click the Search button.

7. Locate the job instance Id for the process and verify that the Job Instance Id completed successfully or completed with warnings.

   The Job Status associated with job instance Id is at one of these statuses:

   - *Complete:* Job instance completed successfully with no errors or warnings.
   - *Error(s) Exist:* Job instance did not complete successfully.
   - *In Progress:* Job instance is in progress.
   - *Submitted:* Job instance has been submitted but not started.
   - *Abnormal Termination:* The job instance did not complete successfully due to a catastrophic failure (for example, the system went down during processing).
   - *Warning(s) Exist:* Job completed successfully but there are warning messages.

   Scroll to the Job Instance Messages region and view the following:

   - Informational messages (blue circle with the letter "i"): These messages display

the parameters used to initiate the process and the results of the process.

- Warning messages (A yellow triangle with an exclamation point): These messages display the warning messages for the process.

For more information on the job instances functionality, see Using Job Instances functionality, page 3-19.

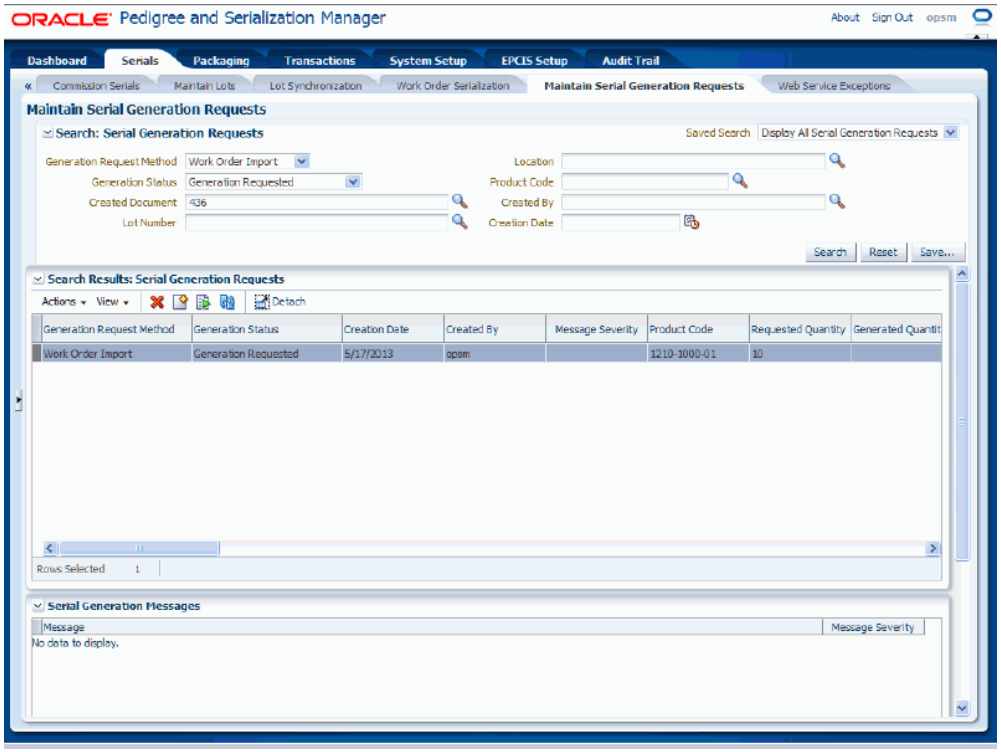
8. Navigate to the OPSM Maintain Serial Generation Requests page, page A-2.

9. Enter the following information and click the Search button:

Field Name	Description
Generation Request Method	Select a generation request method of *Work Order Import.*
Generation Status	Select a generation status of *Generation Requested.*
Created Document	Select the work order number (job or batch).

For more information on searching for serial generation requests, see Searching for Serial Generation Requests, page 7-5.

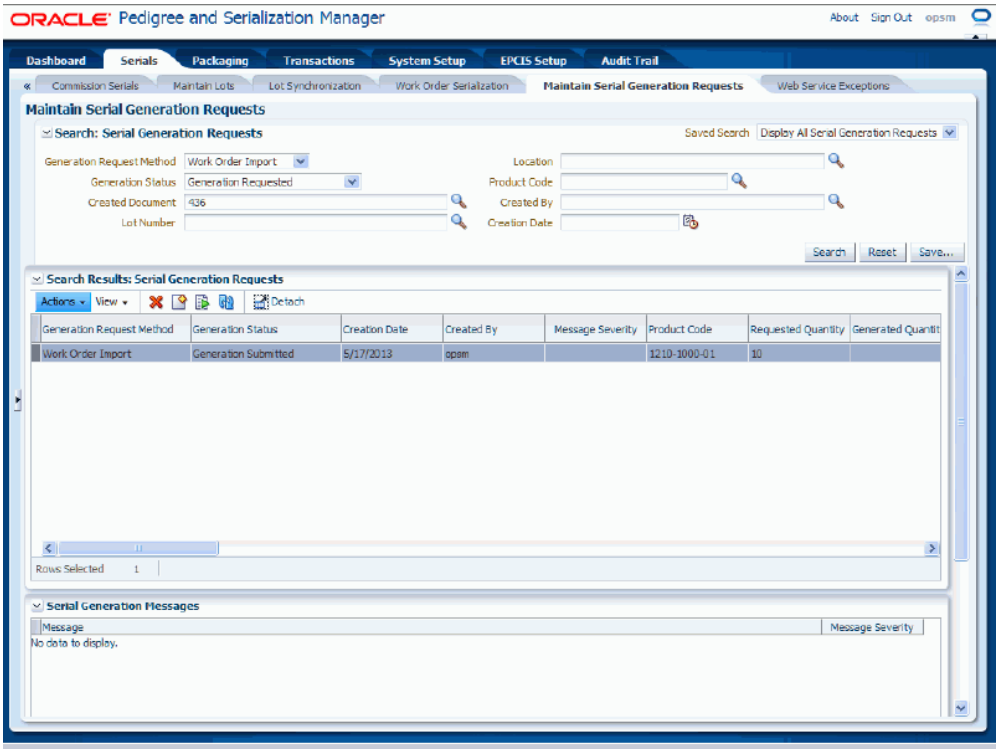
Maintain Serial Generation Requests page



10. Select the serial generation request and then select Submit from the Actions menu or click the Submit Serial Generation Request icon.

    For more information on submitting serial generation requests, see Submitting Serial Generation Requests, page 7-23.

Maintain Serial Generation Requests page

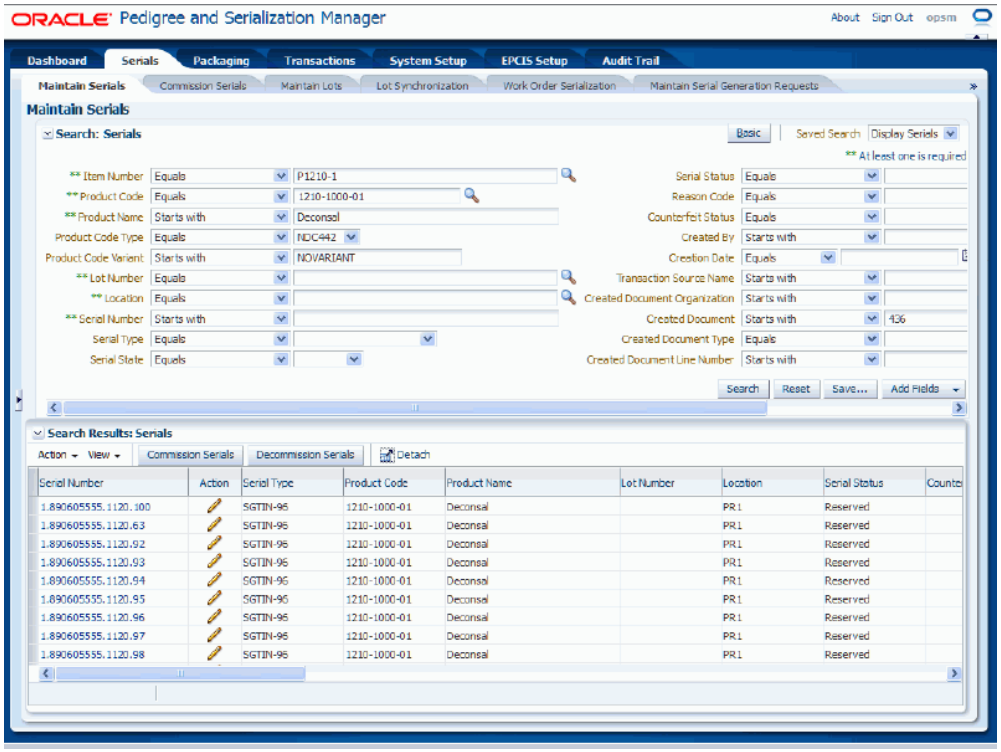


After the serial generation request is processed it creates the serial numbers for the items on the work orders.

11. Navigate to the OPSM Maintain Serials page, page A-2 and search for the serial numbers that were created for the items on the jobs or batches.

    For more information on searching for serials, see Searching for Serials, page 7-47.

Maintain Serials page



Using the Maintain Serials page you can view all of the serial numbers that were created for the items on the work orders. The serial numbers are created in OPSM in a *Reserved* status or a *Commissioned* status if product and lot were identified. If a work order was cancelled, previously generated serials are set to *Decommissioned* status. If a work order was terminated, serials in a *Reserved* status when the work order is closed are set to *Decommissioned* status. Serials at a *Commissioned* status will remain commissioned.

For information on viewing serials, see Viewing Serial Detail Information, page 7-60.

Searching for Serials

Use the Maintain Serials page in Oracle Pedigree and Serialization Manager (OPSM) to search for existing serials. You can view the serials in a multitude of ways by using the search criteria fields that include item number, product code, product name, lot number, location, serial number, and serial status.

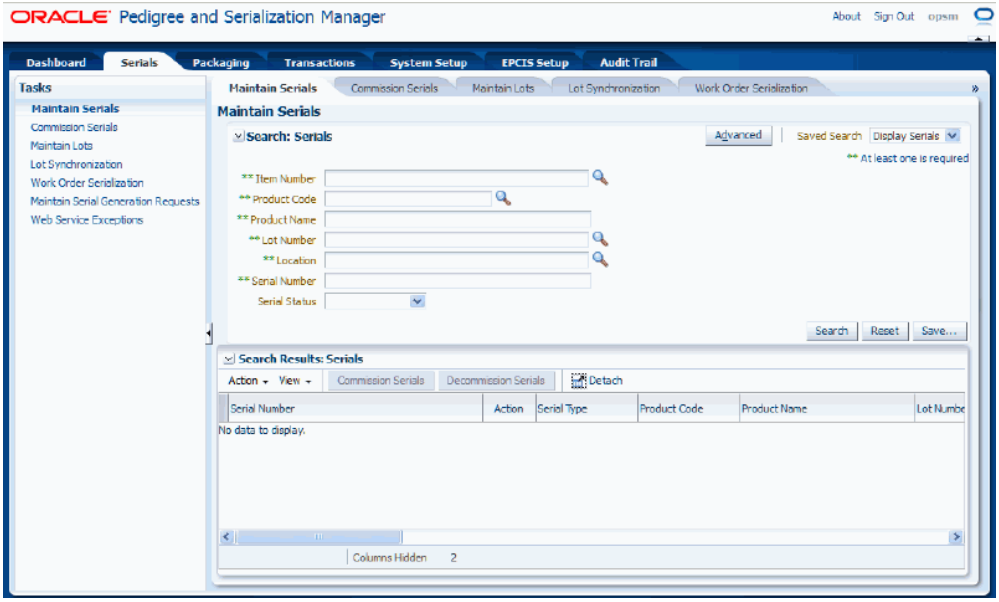
Using the advanced search functionality you can search for a range of serials by using the operator field (equal to, contains, ends with, starts with, and so on) associated with the search criteria fields.

Use these procedures to search for serials:

To Search for Serials (Basic Search):

1. Navigate to the Maintain Serials page, page A-2.

Maintain Serials page (Basic Search)



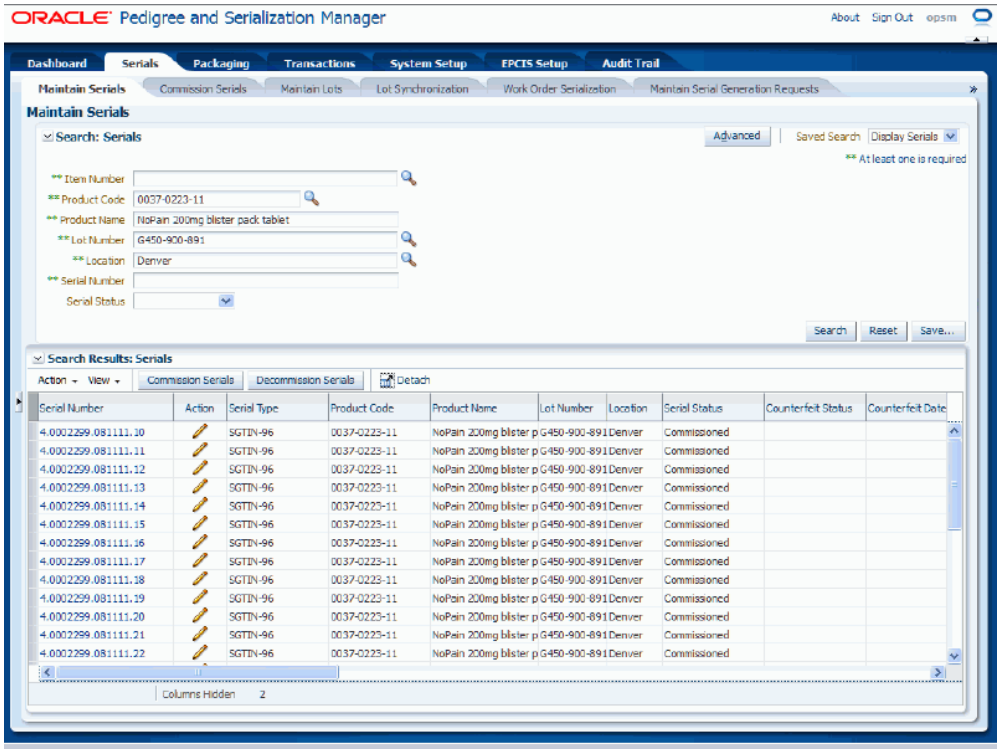
2. In the Search: Serials region, enter the search criteria for the serials using one or more of these fields:

Field Name	Description
Item Number	Select the item number associated with the serials. This is the transactional systems item number. It is used to find the Product Code to perform the search. Serials are created using product code so the item number search is merely a way for you to search for the correct product code. When you select the Item Number, the Product Code and Product Name fields are automatically populated. If you clear the item number, then the Product Code and Product Name fields get cleared as well. You cannot enter both the Item Number and the product fields (Product Code and Product Name) on the search.
Product Code	Select the product code associated with the serials.
Product Name	Enter the product name associated with the serials.
Lot Number	Select the lot number for the product associated with the serials. If you select the lot number using the Search and Select dialog box, after you select the lot number the Product Code and Product Name fields will appear by default from the lot number selected.
Location	Select the location associated with the serial number.
Serial Number	Enter the serial number.

Field Name	Description
Serial Status	(Optional) Select the serial status for the serials. Statuses are: • Blank (no value selected) • Commissioned • Decommissioned • Reserved

3. Click the Search button.

Maintain Serials page (Basic Search)



All of the serials that match the search criteria appear in the Search Results: Serials region in a table format. For each serial number the following information displays:

Field Name	Description
Serial Number	Displays the serial number.
Action	Displays the Edit icon.
Serial Type	Displays the serial type associated with the serial number.
Product Code	Displays the product code associated with the serial number.
Product Name	Displays the product name for the product.
Lot Number	Displays the lot number associated with the product.

Field Name	Description
Location	Displays the location that generated the serial number.
Serial Status	Displays the status of the serial number. Values are: Reserved, Commissioned, and Decommissioned.
Counterfeit Status	Displays the counterfeit status for the serial number. Values are: Counterfeit, Suspect Counterfeit, or Verified Not Counterfeit.
Counterfeit Date	Displays the date the serial number was detected as being counterfeit or suspect counterfeit.
Reason Code	Displays the reason code used when decommissioning a serial number. This is required if decommissioning a serial.
Serial State	Displays the state of the serial number. Values are: Shipped and Returned.
Created Document Organization	Displays the organization for the document that created the serial number.
Created Document	Displays the document number that was used to create the serial number.
Created Document Type	Displays the document type associated with the document. Document Types are user defined using Lookup Type PAS_DOCUMENT_TYPE.
Created Document Line Number	Displays the document line number.
Creation Date	Displays the date the serial number was created.
Created By	Displays the user that created the serial number.

Field Name	Description
Transaction Source Name	Displays the transactional system where the serial number was created.
Commission Document Organization	Displays the organization for the document used for commissioning the serial.
Commission Document	Displays the document number that was used to commission the serial.
Commission Document Type	Displays the document type associated with the commission document. Document types are user defined using Lookup Type PAS_DOCUMENT_TYPE.
Commission Document Line Number	Displays the commission document line number.

4. Click the Advanced button to perform an advanced search.

To Search for Serials (Advanced Search):

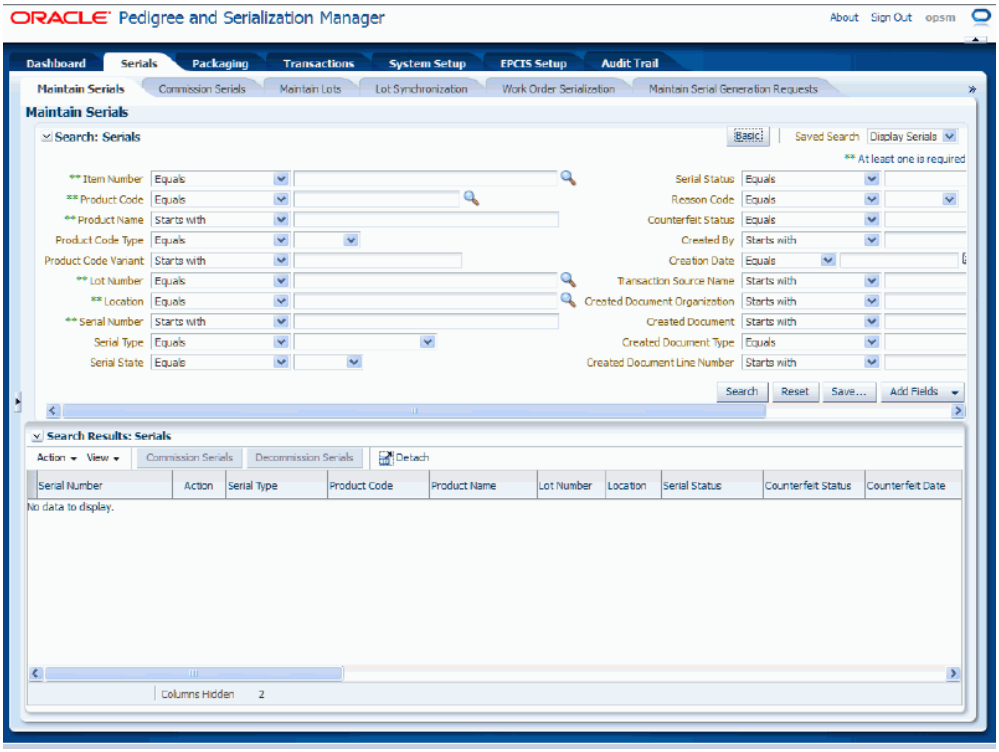
Use the Advanced Search functionality to perform a more detailed search for specific serial numbers. Field operators associated with the search criteria fields can be used during an Advanced Search so that a range of serial numbers can be easily retrieved.

1. Navigate to the Maintain Serials page, page A-2.

2. Click the Advanced button located at the top of the page.

> **Note:** Clicking the Advanced or Basic button will keep the values in the base criteria fields.

Maintain Serials page (Advanced Search)



3. In the Search: Serials region, enter the search criteria for the serials using one or more of these fields:

Field Name	Description
Item Number	Select the field operator and then select the item number for the product. Operators are: • Starts with • Ends with • Equals • Does not equal • Less than • Greater than • Less than or equal to • Greater than or equal to • Between • Not Between • Contains • Does not contain • Is blank • Is not blank This is the transactional systems item number. It is used to find the Product Code to perform the search. Serials are created using product code so the item number search is merely a way for you to search for the correct product code. When you select the Item Number, the Product Code, Product Name, Product Code Type, and Product Code Variant fields are automatically populated. If you clear the item number, then the Product Code, Product Name, Product Code Type, and Product Code Variant fields get cleared as

Field Name	Description
	well. You cannot enter both the item number and the product fields (Product Code, Product Name, Product Code Type, and Product Code Variant) on the search.
Product Code	Select the field operator and then select the product code. The field operators are the same as that for the Item Number field.
Product Name	Select the field operator and then enter the product name. The field operators are the same as that for the Item Number field.
Product Code Type	(Optional) Select the field operator and then select the product code type. For example, NDC442, NDC532, and GTIN. The field operators are the same as that for the Item Number field.
Product Code Variant	(Optional) Select the field operator and then enter the product code variant. The field operators are the same as that for the Item Number field.
Lot Number	Select the field operator and then select the lot number for the product. The field operators are the same as that for the Item Number field. If you select the lot number using the Search and Select dialog box, after you select the lot number the Product Code and Product Name fields will appear by default from the lot number selected.

Field Name	Description
Location	Select the field operator and then select the location for the serial number. The field operators are the same as that for the Item Number field.
Serial Number	Select the field operator and then enter the serial number. The field operators are the same as that for the Item Number field.
Serial Type	(Optional) Select the field operator and then select the serial type. For example, SGTIN or USN-1. The field operators are the same as that for the Item Number field.
Serial State	(Optional) Select the field operator and then select the serial state. Values are: Shipped and Returned. The field operators are the same as that for the Item Number field.
Serial Status	(Optional) Select the field operator and then select the serial status. Values are: Commissioned, Decommissioned, and Reserved. The field operators are the same as that for the Item Number field.
Reason Code	(Optional) Select the field operator and then select the reason code that was used when decommissioning the serial number. The field operators are the same as that for the Item Number field.

Field Name	Description
Counterfeit Status	(Optional) Select the field operator and then select the counterfeit status. Values are: Counterfeit, Verified Not Counterfeit, and Suspect Counterfeit. The field operators are the same as that for the Item Number field.
Created By	(Optional) Select the field operator and enter the user that created the serial number. The field operators are the same as that for the Item Number field.
Creation Date	(Optional) Select the field operator and select the date the serial number was created. Operators are: • Equals • Does not equal • Before • After • On or before • On or after • Between • Not between • Is blank • Is not blank

Field Name	Description
Transaction Source Name	(Optional) Select the field operator and then enter where (transactional system) the serial number was created. The field operators are the same as that for the Item Number field.
Created Document Organization	(Optional) Select the field operator and then enter the organization for the document that created the serial number. The field operators are the same as that for the Item Number field.
Created Document	(Optional) Select the field operator and then enter the document number that was used to create the serial number. The field operators are the same as that for the Item Number field.
Created Document Type	(Optional) Select the field operator and then enter the type of document that created the serial number. Document types are user defined using Lookup Type PAS_DOCUMENT_TYPE. The field operators are the same as that for the Item Number field.
Created Document Line Number	(Optional) Select the field operator and then enter the document line number that created the serial number. The field operators are the same as that for the Item Number field.

4. (Optional) To enter additional search criteria fields, click the Add Fields button and select the field you would like to add to the search criteria.

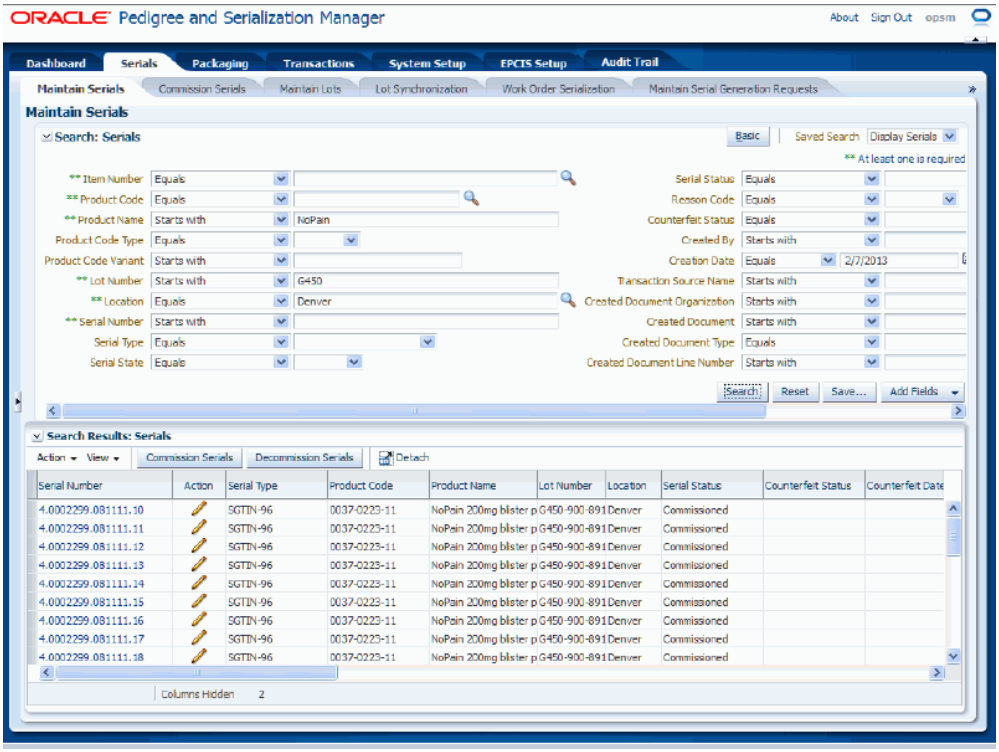
   The selected field appears as a search criteria field.

   > **Note:** To remove the additional field, click the Remove icon next to the field. The field will be removed from the search criteria.

5. (Optional) Enter search criteria for the additional fields you added.

6. Click the Search button.

Maintain Serials page (Advanced Search)



All of the serials that match the search criteria appear in the Search Results: Serials region in a table format.

For information on the fields that appear for each serial number, see Procedure: To Search for Serials (Basic Search), page 7-48.

7. Click the Basic button to have the page hide the advanced search criteria fields and re-display the basic search criteria fields.

> **Note:** Clicking the Reset button clears the values in all of the search criteria fields.

Viewing Serial Detail Information

Use the View Serial page in Oracle Pedigree and Serialization Manager (OPSM) to view all of the different types of information for serial numbers. The types of information you can view for a serial number are:

- General
- Product
- Lot
- Packaging
- Lot Details
- Generated Transaction

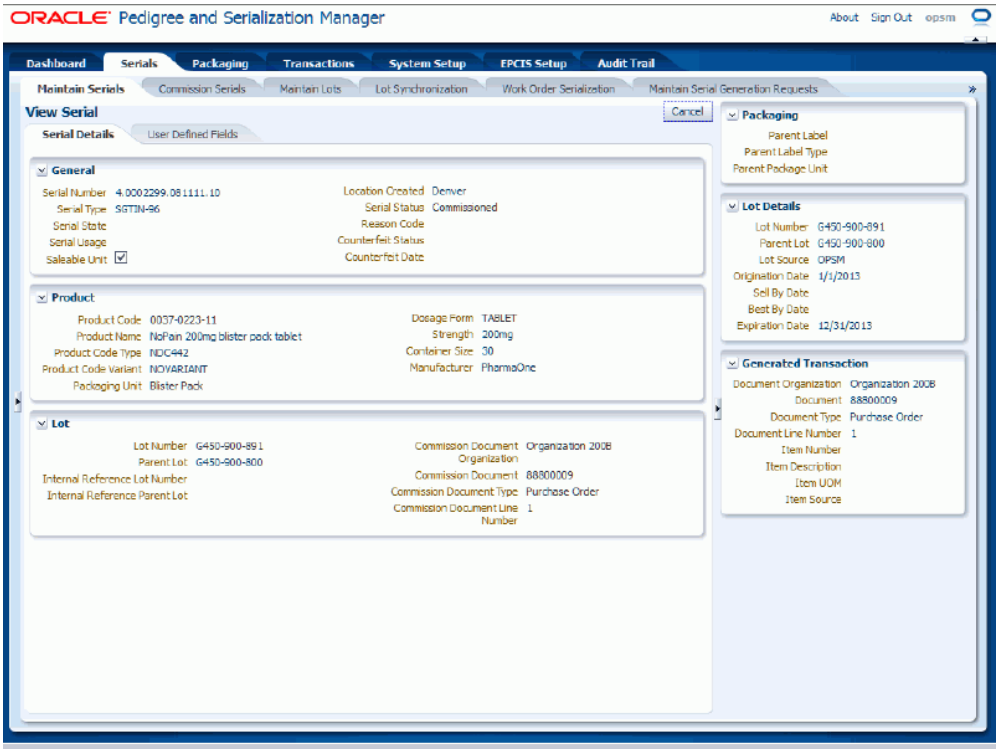
Use this procedure to view serial detail information:

To View Serial Detail Information:

1. Navigate to the Maintain Serials page, page A-2.
2. Enter search criteria for the serials you want to view and click the Search button.

   All of the serials that match the search criteria appear in the Search Results: Serials table.
3. Select the serial number in the table that you want to view.
4. Select View in the Actions menu or click the Serial Number link.

View Serial page - Serial Details sub tab



The View Serial page appears. There are two sub tabs (Serial Details and User Defined Fields) along with a contextual area on the right side of the page that can be expanded and collapsed that displays information related to the serial number.

The Serial Details sub tab displays this information:

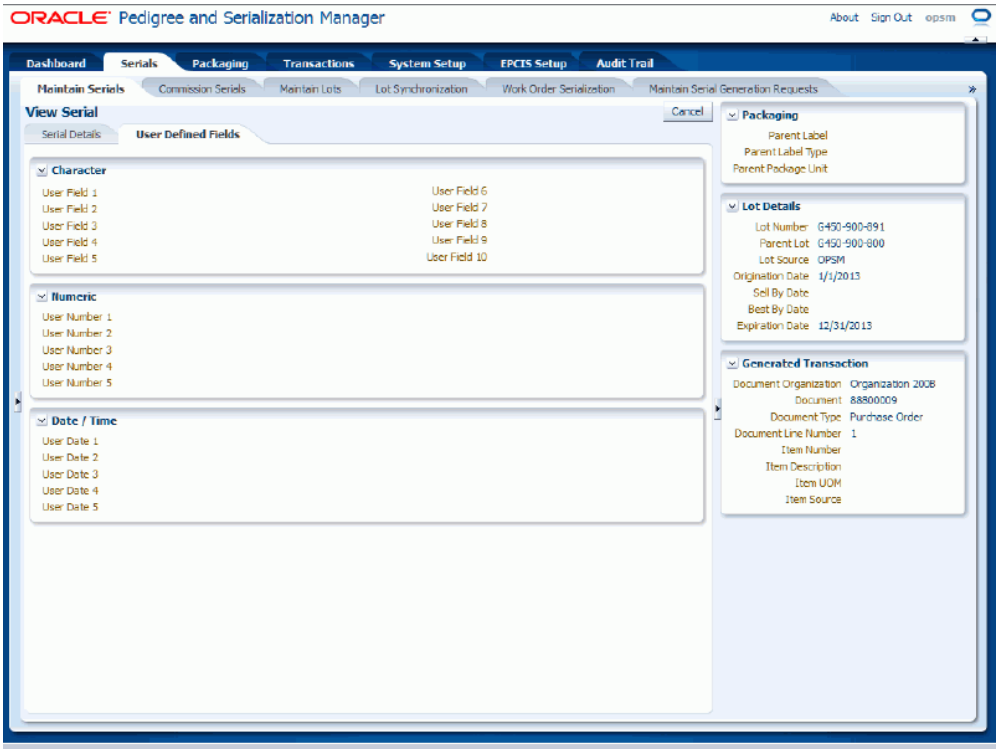
Field Name	Description
General region	
Serial Number	Displays the serial number.
Serial Type	Displays the serial type associated with the serial number. For example, SGTIN-96 or USN-1.
Serial State	Displays the state of the serial number. Values are: Shipped, Returned, or blank.

Field Name	Description
Serial Usage	Displays the serial usage. Serial Usages are user defined using Lookup Type PAS_SERIAL_USAGE.
Saleable Unit check box	If this check box is selected, it indicates this serial number is a saleable unit.
Location Created	Displays the location where the serial number was created.
Serial Status	Displays the status of the serial number. Values are: • Reserved: Serial has not been commissioned. • Commissioned: Serial has been assigned to a lot and a product. • Decommissioned: Serial is no longer considered commissioned (for example, if the serial had the lot removed or if a serial was destroyed).
Reason Code	Displays the reason code used when decommissioning a serial number. This is required if the serial is being decommissioned. Reason codes are user defined using Lookup Type PAS_REASON_CODE.
Counterfeit Status	Displays the counterfeit status for the serial number. Values are: Counterfeit, Suspect Counterfeit, Verified Not Counterfeit, and blank.
Counterfeit Date	Displays the date the serial number was detected as being Counterfeit, Suspect Counterfeit, or Verified Not Counterfeit.
Product region	

Field Name	Description
Product Code	Displays the product code associated with the serial number.
Product Name	Displays the product name.
Product Code Type	Displays the product code type associated with the product code. For example, NDC442, NDC532, and GTIN.
Product Code Variant	Displays the product code variant.
Packaging Unit	Displays the packaging unit for the product. Packaging unit is user defined using the Lookup Type PAS_PACKAGE_UNIT.
Dosage Form	Displays the dosage form for the product. Dosage form is user defined using the Lookup Type PAS_DOSAGE_FORM.
Strength	Displays the strength of the product.
Container Size	Displays the container size for the product.
Manufacturer	Displays the manufacturer for the product.
Lot region	
Lot Number	Displays the lot number associated with the product.
Parent Lot	Displays the parent lot number for the product.
Internal Reference Lot Number	Displays the internal reference lot number given upon receipt.
Internal Reference Parent Lot	Displays the internal reference parent lot number given upon receipt.

Field Name	Description
Commission Document Organization	Displays the organization for the document used for commissioning the serial.
Commission Document	Displays the document number that was used to commission the serial.
Commission Document Type	Displays the document type associated with the commission document. Document types are user defined using Lookup Type PAS_DOCUMENT_TYPE.
Commission Document Line Number	Displays the commission document line number.

View Serial page - User Defined Fields sub tab



The User Defined Fields sub tab displays this information:

Field Name	Description
Character region	
User Field 1-10	Displays the user defined field information.
Numeric region	
User Number 1-5	Displays the user defined number information.
Date/Time region	
User Date 1-5	Displays the user defined date and time information.

On the right side of the page is a contextual area that contains information related to the serial. This contextual area displays this information:

Field Name	Description
Packaging region	
Parent Label	Displays the parent label for the package.
Parent Label Type	Displays the parent label type for the package.
Parent Package Unit	Displays the parent package unit for the serial. This is the package that the serial is contained in.
Lot Details region	
Lot Number	Displays the lot number for the product.
Parent Lot	Displays the parent lot number for the product.
Lot Source	Displays the source for the lot. This is the transactional system that created the lot.
Origination Date	Displays the date the lot originated.
Sell By Date	Displays the sell by date for the lot.
Best By Date	Displays the best by date for the lot.
Expiration Date	Displays the expiration date for the lot.
Generated Transaction region	
Document Organization	Displays the organization for the document that generated the serial number.
Document	Displays the document number that was used to generate the serial number.

Field Name	Description
Document Type	Displays the document type that was used to generate the serial number. Document Types are user defined using Lookup Type PAS_DOCUMENT_TYPE.
Document Line Number	Displays the document line number.
Item Number	Displays the transactional system's item number that was used to create the serial.
Item Description	Displays the transactional system's item description.
Item UOM	Displays the transactional system's item unit of measure.
Item Source	Displays the transactional system that the item source is from.

5. Select the different sub tabs (Serial Details and User Defined Fields) to the view that particular type of information for the serial number.

6. Click the Cancel button to return back to the Maintain Serials page.

Editing Serials

Use the Edit Serial page in Oracle Pedigree and Serialization Manager (OPSM) to:

- Edit the different types of information (general, product, and lot) related to a serial number.
- Commission a serial number.
- Decommission a serial number.

For more information on commissioning and decommissioning a serial, see Commissioning Serials, page 7-75 and Decommissioning Serials, page 7-98.

Use these procedures to edit, commission, or decommission an individual serial number:

To Edit a Serial Number:

1. Navigate to the Maintain Serials page, page A-2.

2. Enter search criteria for the serials you want to edit and click the Search button.

   All of the serials that match the search criteria appear in the Search Results: Serials table.

3. Select the serial number in the table that you want to edit.

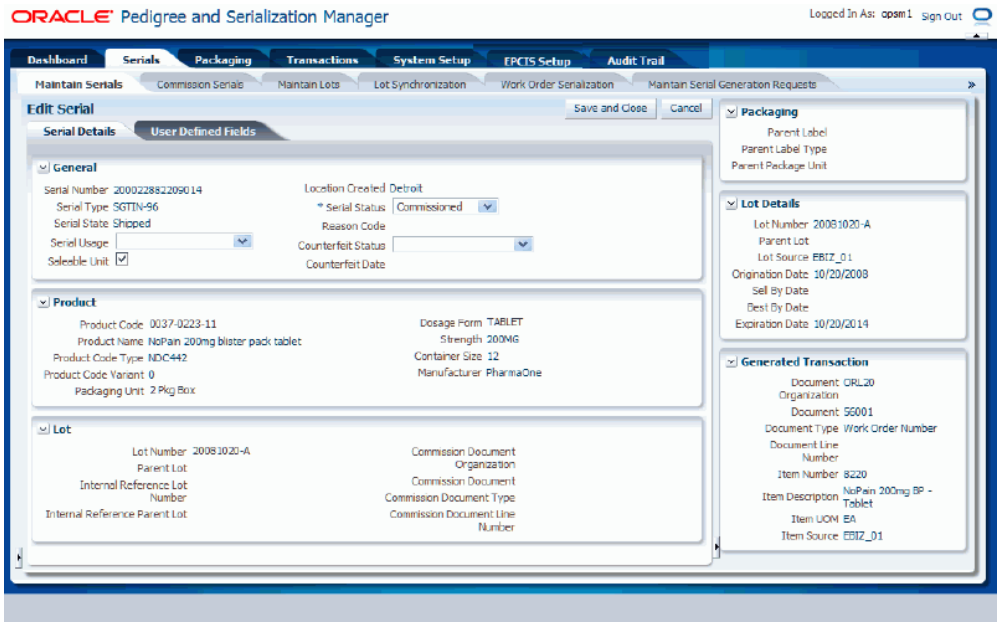
4. Select Edit in the Actions menu or click the Edit icon associated with the serial number in the Action column of the results table.

   The Edit Serial page appears displaying all of the existing information for the serial.

   For more information on all of the fields on this page, see Viewing Serial Detail Information, page 7-60.

5. Edit the serial number fields.

Edit Serial page (Serial State of Shipped)

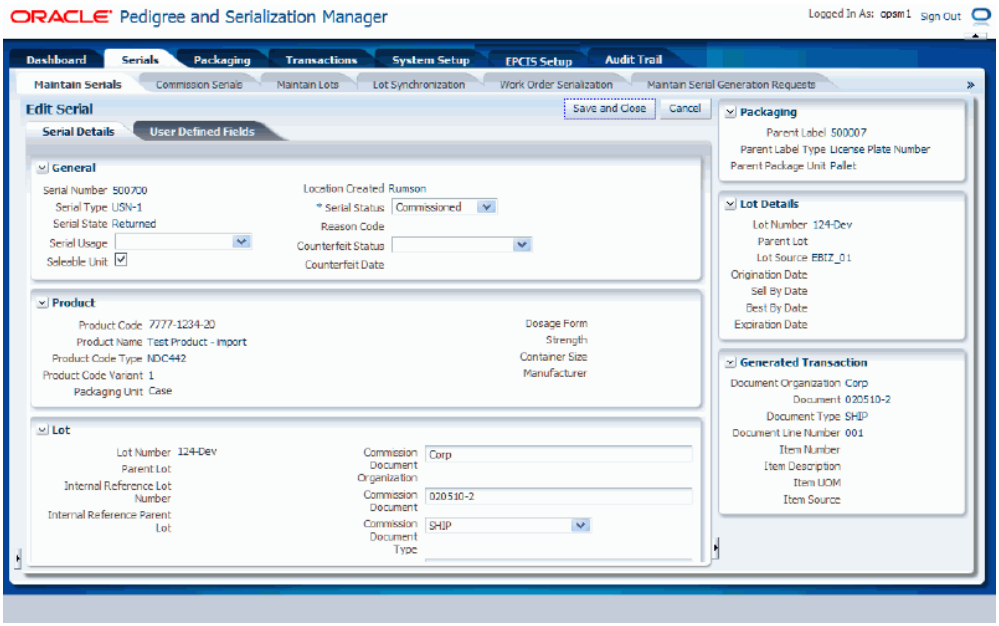


For serial numbers that have a Serial State of *Shipped*, you can edit these fields pertaining to the serial number:

- Serial Usage
- Serial Status

- Reason Code (if you select a Serial Status of *Decommissioned*)
- Counterfeit Status
- Counterfeit Date
- User Defined fields

Edit Serial page (Serial State of Returned)

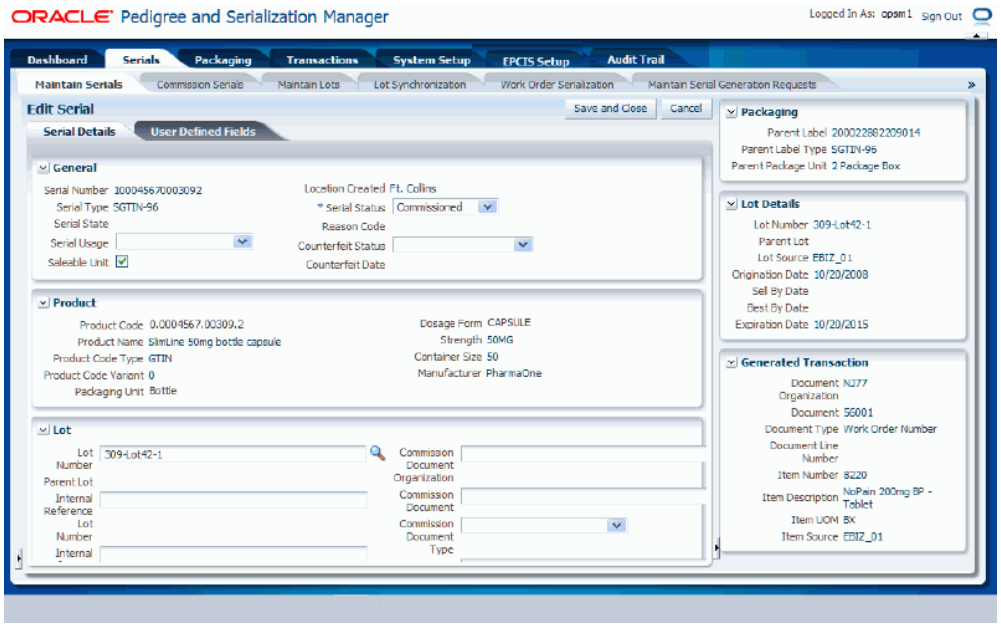


For serial numbers that have a Serial State of *Returned*, you can edit these fields pertaining to the serial number:

- Serial Usage
- Serial Status
- Reason Code (if you select a Serial Status of *Decommissioned*)
- Counterfeit Status
- Counterfeit Date (if you select a Counterfeit Status not equal to blank)
- Commission Document Organization (if you select a Serial Status of *Commissioned*)
- Commission Document (if you select a Serial Status of *Commissioned*)

- Commission Document Type (if you select a Serial Status of *Commissioned*)
- Commission Document Line Number (if you select a Serial Status of *Commissioned*)
- User Defined fields

Edit Serial page (Product Specific Serial Type Group (SGTIN))



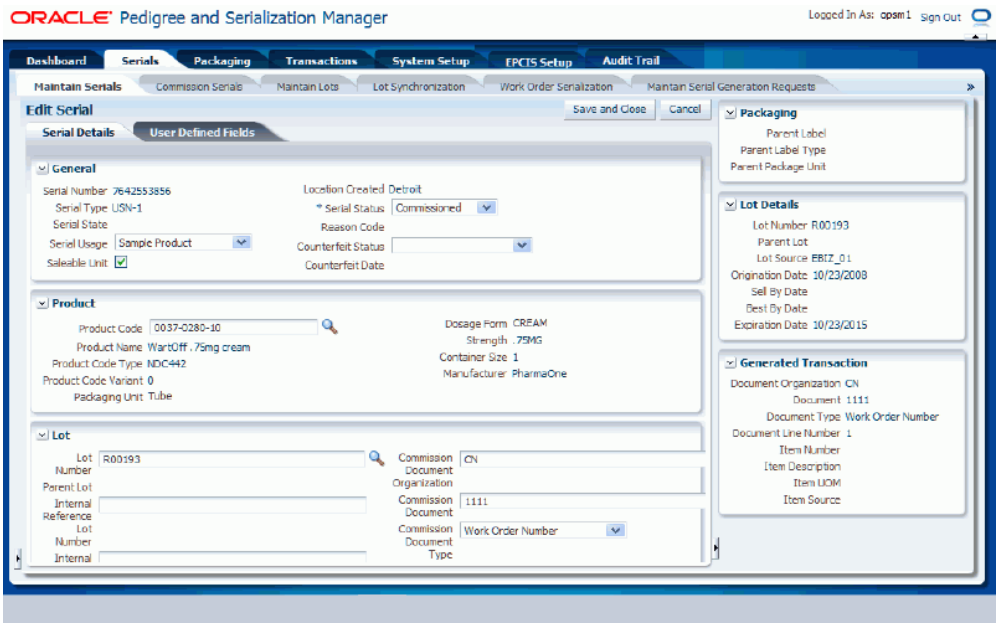
For serial numbers related to an SGTIN serial type group that have no serial state, you can edit these fields pertaining to the serial number:

- Serial Usage
- Saleable Unit check box
- Serial Status
- Reason Code (if you select a Serial Status of *Decommissioned*)
- Counterfeit Status
- Counterfeit Date (if you select a Counterfeit Status that is not blank)
- Lot Number
- Parent Lot Internal Reference

- Lot Number Internal Reference
- Commission Document Organization (if you select a Serial Status of *Commissioned*)
- Commission Document (if you select a Serial Status of *Commissioned*)
- Commission Document Type (if you select a Serial Status of *Commissioned*)
- Commission Document Line Number (if you select a Serial Status of *Commissioned*)
- User Defined fields

> **Note:** You cannot edit the product information because the product is imbedded into the serial number.

Edit Serial page (Non Product Specific Serial Type Group (USN))



For serial numbers related to a USN serial type group that have no serial state, you can edit these fields pertaining to the serial number:

- Serial Usage
- Saleable Unit check box
- Serial Status

- Reason Code (if you select a Serial Status of *Decommissioned*)
- Counterfeit Status
- Counterfeit Date (if you select a Counterfeit Status that is not blank)
- Product Code
- Lot Number
- Parent Lot Internal Reference
- Lot Number Internal Reference
- Commission Document Organization (if you select a Serial Status of *Commissioned*)
- Commission Document (if you select a Serial Status of *Commissioned*)
- Commission Document Type (if you select a Serial Status of *Commissioned*)
- Commission Document Line Number (if you select a Serial Status of *Commissioned*)
- User Defined fields

6. Click the Save and Close button to save the changes you made to the serial number information and to return back to the Maintain Serials page.

To Commission a Single Serial Number:

1. Navigate to the Maintain Serials page, page A-2.
2. Enter search criteria for the serials you want to commission and click the Search button.

   All of the serials that match the search criteria appear in the Search Results: Serials table.
3. Select the serial number in the table that you want to commission.
4. Select Edit in the Actions menu or click the Edit icon associated with the serial number in the Action column of the results table.

   The Edit Serial page appears displaying all of the existing information for the serial.

   For more information on all of the fields on this page, see Viewing Serial Detail Information, page 7-60.

5. Select a Serial Status of *Commissioned.*

   The commission document fields become available for entry in the Lot region of the page for serials related to all serial types.

   For non-product specific serials, the Product Code and Lot Number fields are available for entry.

   For product specific serials, the Lot Number field is available for entry.

6. Enter or modify product and lot information.

   For a non-product specific serial number, enter Product Code and Lot Number.

   For a product specific serial number, enter Lot Number.

7. (Optional) Enter commission document information (Commission Document Organization, Commission Document, Commission Document Type, and Commission Document Line Number.

8. Click the Save and Close button to save the changes you made to the serial number information and to return back to the Maintain Serials page.

To Decommission a Single Serial Number:

1. Navigate to the Maintain Serials page, page A-2.

2. Enter search criteria for the serials you want to decommission and click the Search button.

   All of the serials that match the search criteria appear in the Search Results: Serials table.

3. Select the serial number in the table that you want to decommission.

4. Select Edit in the Actions menu or click the Edit icon associated with the serial number in the Action column of the results table.

   The Edit Serial page appears displaying all of the existing information for the serial.

   For more information on all of the fields on this page, see Viewing Serial Detail Information, page 7-60.

5. Select a Serial Status of *Decommissioned.*

   The Reason Code field becomes available for entry.

6. Enter the Reason Code for the serial decommission.

7. Click the Save and Close button to save the changes you made to the serial number information and to return back to the Maintain Serials page.

Commissioning Serials

Use the Maintain Serials page, Edit Serial page, and the Commission Serials page in Oracle Pedigree and Serialization (OPSM) to commission serials. To commission a serial means to associate a product and lot to the serial. All serials can be commissioned unless they have a *Shipped* serial state.

OPSM can be integrated with external transactional systems to commission serials based on the lot and item cross reference information passed between the systems. From the external system you can call the Commission Serials page. If you have not previously signed into OPSM, you will be prompted for user authentication. After successful authentication, you can use the Commission Serials page to select serials within OPSM to commission.

For more information on the integration between OPSM and EBS, see the *Oracle Serialization and Tracking Integration Pack for Oracle Pedigree and Serialization Manager and Oracle E-Business Suite 3.1 - Implementation Guide.*

Using OPSM you can generate serial numbers for product specific and non-product specific serial types. When the system generates serial numbers for a product specific serial type, the serial numbers are generated with the product code as part of the actual serial number. The serial numbers are sequentially or randomly assigned (depending on the configuration of the serial type) by the system. In this case, when commissioning product specific serial numbers you cannot change the product code, as it is part of the actual serial number. During the commissioning process you will assign the lot number and optionally the commission document information to the serial numbers. You can change the lot and commission document information on these types of serial numbers until the serial is shipped (Serial State of *Shipped*).

When the system generates serial numbers for a non-product specific serial type, the serial numbers are sequentially or randomly assigned (depending on the configuration of the serial type) by the system and do not contain the product code. During the commissioning process of non-product specific serials you can change the product code that was originally assigned and you will assign the lot number and optionally the commission document information to the serial numbers. The product, lot, and commission document information can be changed on these types of serial numbers until the serial is shipped (Serial State of *Shipped*).

In addition, you can commission the same serial numbers multiple times changing the information as you wish. You can use this program to commission serials numbers to a different document for serials that have been returned (Shipped Status of *Returned*). The only information you can change for a returned serial number is the commission document information.

Use these procedures to commission serials:

To Commission Serials (Maintain Serials page):

1. Navigate to the Maintain Serials page, page A-2.

2. Enter search criteria for the serials you want to commission and click the Search button.

   You cannot commission serials that have a *Shipped* serial state.

   All of the serials that match the search criteria appear in the Search Results: Serials table.

3. Select one or more serial numbers in the table that you want to commission.

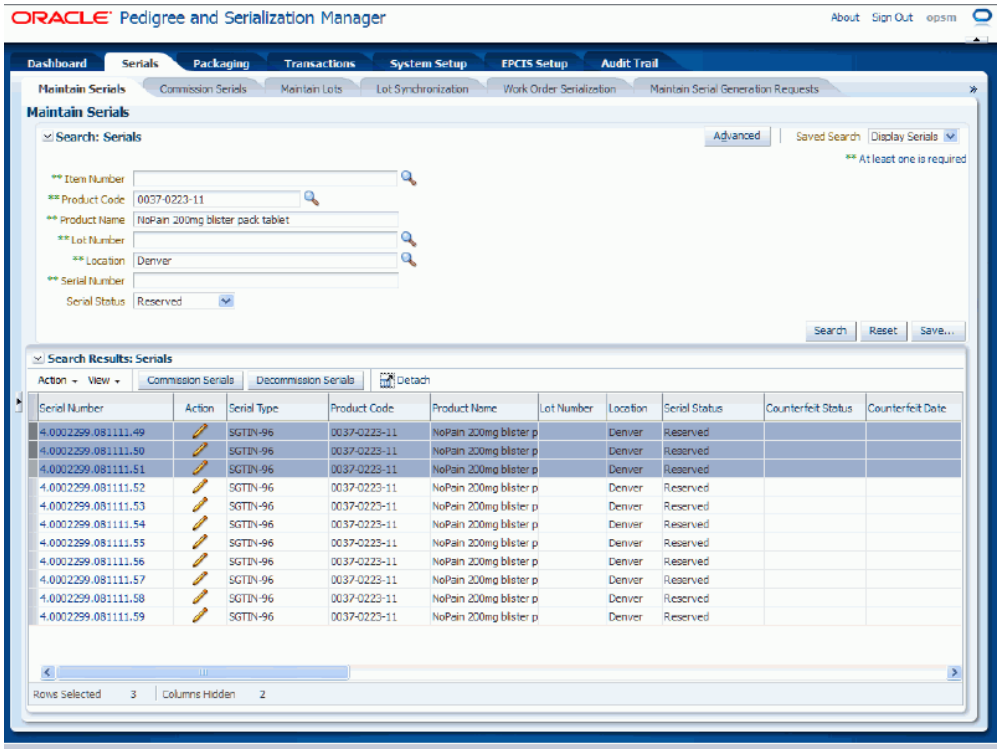
   When commissioning multiple serials at one time, select the serials with the same serial type and product code. Also, avoid selecting multiple serials where one or more of them has a *Returned* serial state.

   The system will give you a message and won't allow you to commission multiple serials in these conditions:

   - Selecting multiple serials numbers with different serial types.
   - Selecting multiple serials numbers with the same serial types but they have different product codes.
   - Selecting multiple serials numbers with the same serial type and one or more of the serials numbers has a serial state of *Returned* and the returned serial number contains a different product code or lot number.

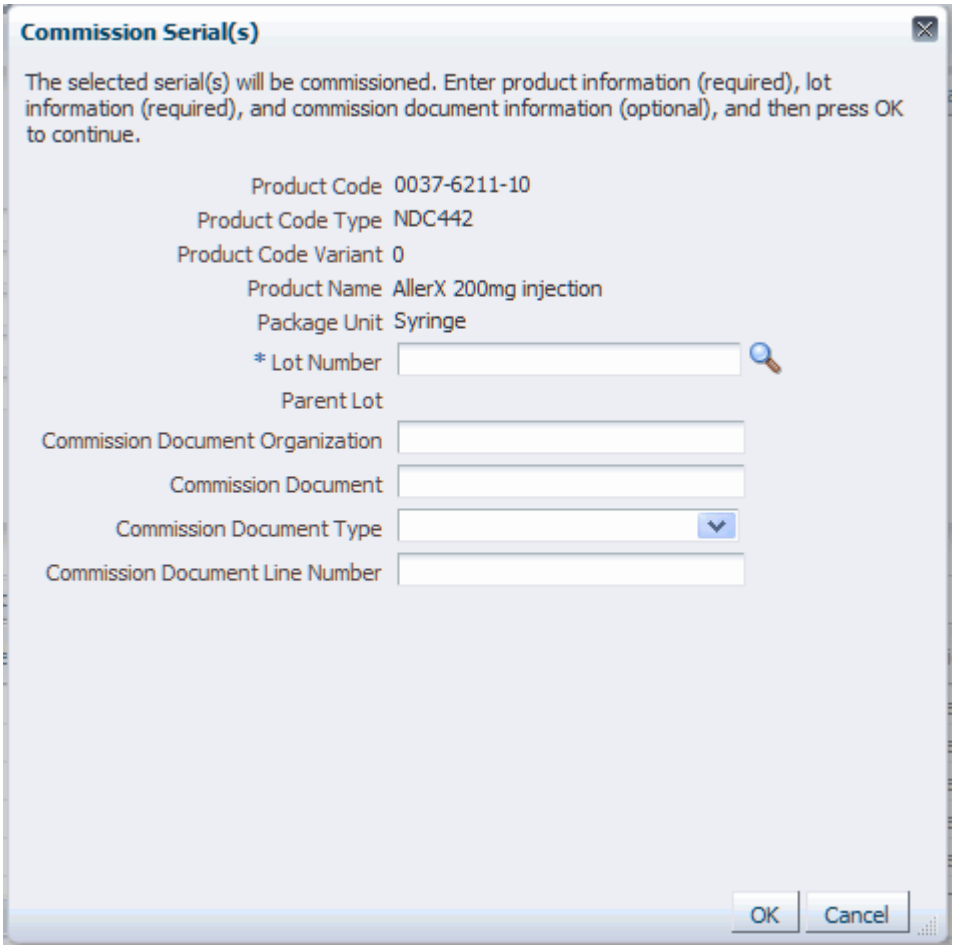
     Note: Use Ctrl or Shift buttons on your keyboard to select multiple serial numbers in the table.

Maintain Serials page

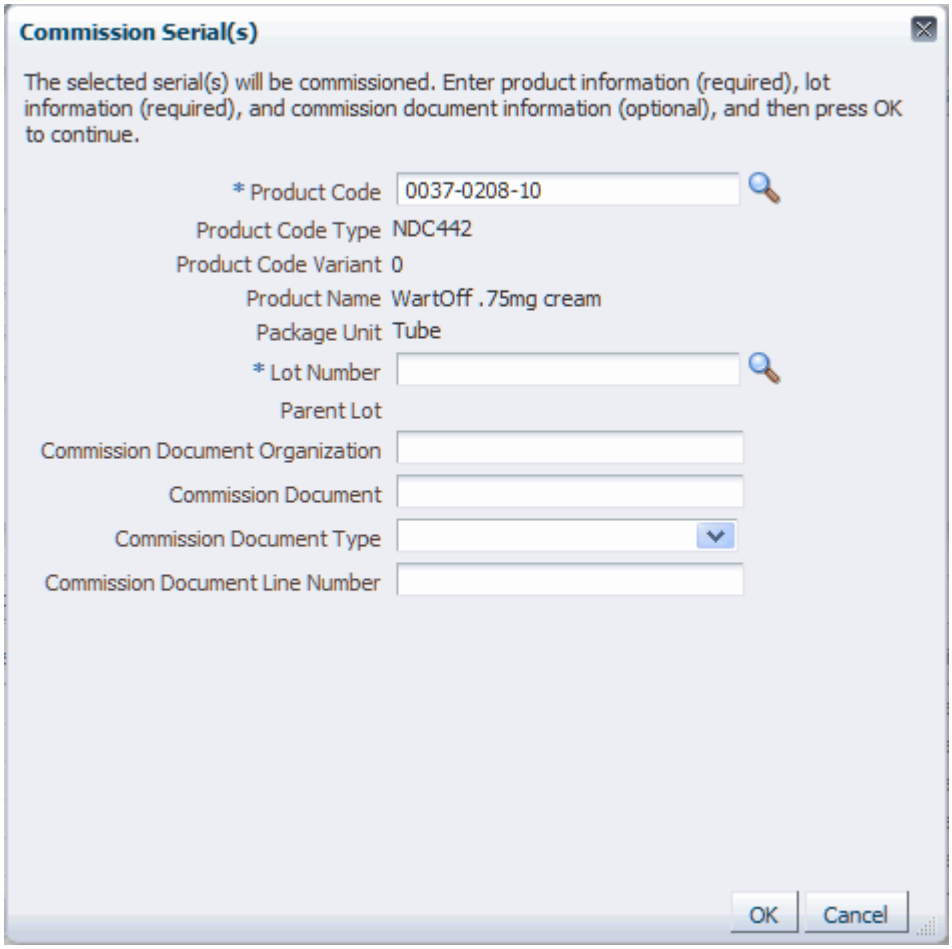


4. Select Commission Serials in the Action menu or click the Commission Serials button located at the top of the Search Results: Serials region.

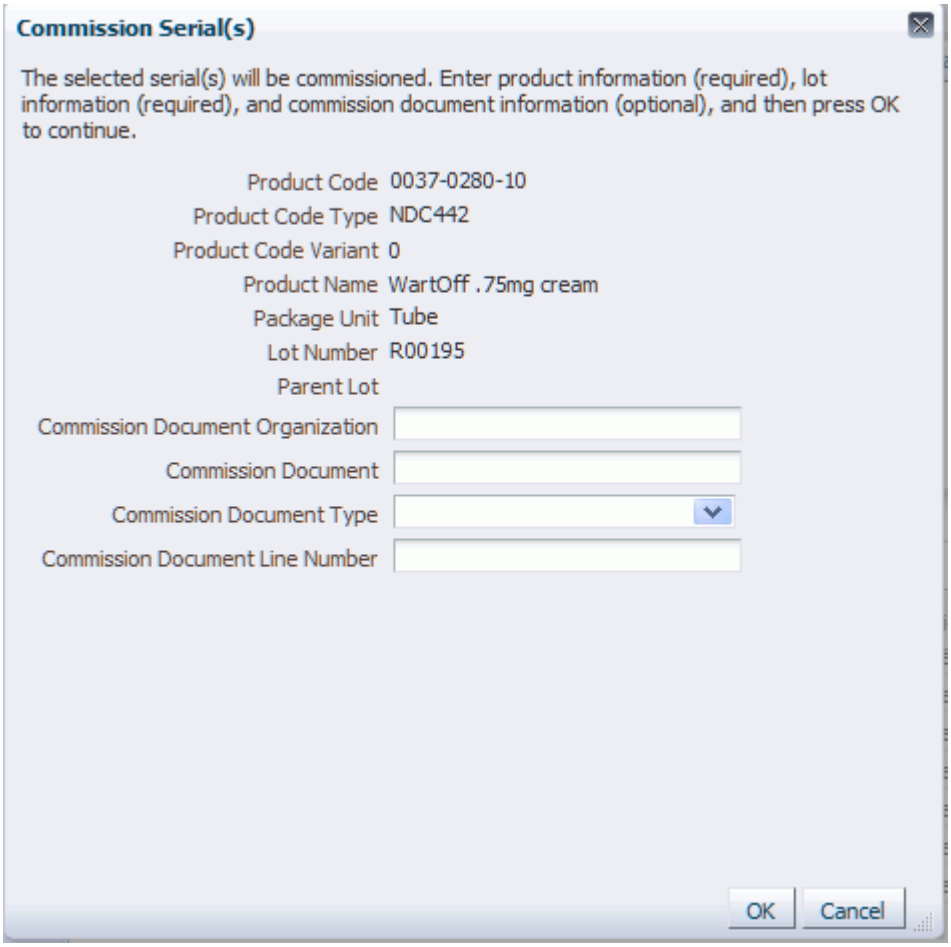
Commission Serial(s) page (Product Specific Serial Type (SGTIN))



Commission Serial(s) page (Non-Product Specific Serial Type (USN))



Commission Serial(s) page (Serial State of Returned)



The Commission Serial(s) page appears displaying the product information for the serial numbers you selected.

Depending on the Serial Type for the serials different fields will be available for entry. For product specific serial types (for example, SGTIN-96) you can enter Lot Number and commission document information but you cannot enter Product Code. For non-product specific serial types (for example, USN-1) you can enter Product Code, Lot Number, and commission document information.

For serials with a *Returned* serial state the Product Code and Lot Number fields are not available for entry.

5. (Optional) If you are commissioning non-product specific serials, select the Product Code you want to associate with the serials.

   The product codes that are available for selection in the Product Code field drop down are related to the serial's serial type.

Note: Product Code is only available for non-product specific serial types.

The Product Code Type, Product Code Variant, Product Name, and Package Unit fields appear by default from the Product Code selected.

6. Select the Lot Number to associate with the commissioning of the serials.

   The lot numbers that are available for selection in the Lot Number field drop down are related to the product code.

   For non-product specific serial types, if you enter a Lot Number and then change the Product Code, the system will clear the Lot Number field as the Lot Number may no longer be valid for the Product Code. You would then need to reenter the Lot number.

   The Parent Lot field appears by default from the Lot Number selected.

7. (Optional) Enter the following commission document information:

Field Name	Description
Commission Document Organization	Enter the organization for the commission document.
Commission Document	Enter the commission document number.
Commission Document Type	Select the type for the commission document. Document Types are user defined using the Lookup Type (PAS_DOCUMENT_TYPE).
Commission Document Line Number	Enter the document line number for the commission document.

8. Click the OK button.

   The Commission Serial(s) Result page appears displaying the number of serials that were successfully commissioned.

9. Click the OK button.

   The serial numbers that were successful are commissioned and are updated with the information entered. The Serial Status for those serial numbers changes to *Commissioned.*

To Commission Serials (Edit Serial page):

Using the Edit Serial page you can commission individual serial numbers.

For more information on commissioning serials using the Edit Serial page, see Editing Serials, page 7-68.

To Commission Serials (Commission Serials page):

1. Navigate to the Commission Serials page, page A-2.

   This page can be accessed from the Task menu in OPSM or it can be invoked from an external system.

   To Invoke the Commission Serials Page in OPSM from an External System

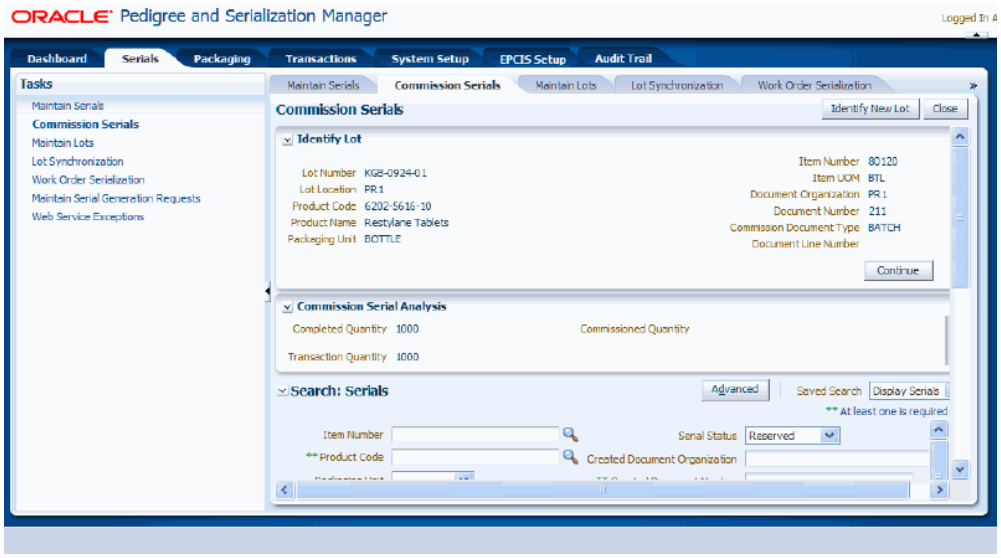
   1. Call the URL to invoke the Commission Serials page passing the parameter values:

Parameter Name	Description
page	'commissionSerials'
lot	The lot number used to commission the serials.
key	The item in the external system to be cross referenced to a product in OPSM.
unit	The unit of measure of the item to be cross referenced to a product packaging unit in OPSM.
loc	The location identifier for the item in the external system.
docOrg	The organization from which the work order document originates.
doc	The document number that will be associated with the commissioned serials.
docType	The document type that will be associated with the commissioned serials.
docLine	The document line number that will be associated with the commissioned serials.

Parameter Name	Description
comQty	The completed quantity from the work order.
qty	The transaction quantity from the work order.
src	The identifier for the external system that invoked OPSM (for example, EBIZ_01).

2. If prompted for user authentication, enter your user ID and password.

Commission Serials page (Invoked from External System)



The Commission Serials page appears.

2. Enter the following information in the Identify Lot region of the page:

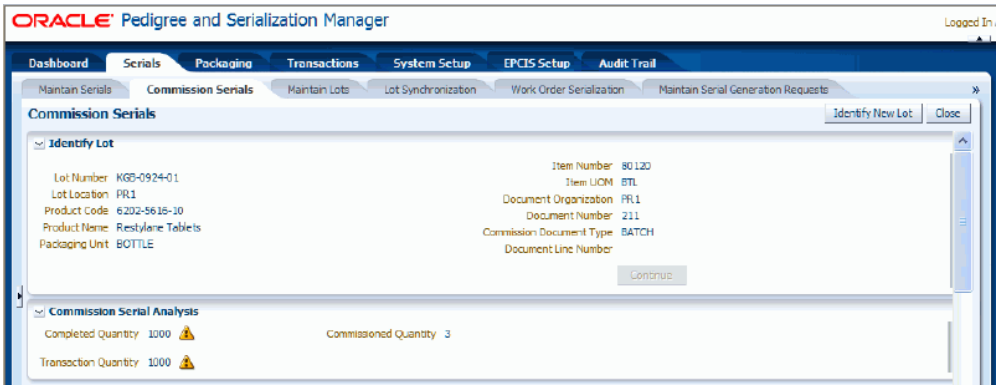
Field Name	Description
Lot Number	Select the lot number you want to commission serials to. If you invoke this page from an external system, the lot number from the work order will appear by default.
Lot Location	The lot location associated with the lot number selected displays.
Product Code	The product code associated with the lot number selected displays.
Product Name	The product name associated with the product code displays.
Packaging Unit	The packaging unit associated with the product code displays. Packaging unit is user defined using the Lookup Type PAS_PACKAGE_UNIT.
Item Number	The item number associated with the lot number and product code selected displays. If you invoke this page from an external system, the item number from the work order will appear by default. This field does not appear if you access this page directly within OPSM.
Item UOM	The item UOM associated with the item number displays. If you invoke this page from an external system, the item UOM from the work order will appear by default. This field does not appear if you access this page directly within OPSM.

Field Name	Description
Document Organization	Enter the organization for the document that will be used for the commissioning of the serials. If you invoke this page from an external system, the document organization from the work order will appear by default.
Document Number	Enter the document number for the commissioning of the serials. If you invoke this page from an external system, the document number from the work order will appear by default.
Document Type	Select the type of document used for the commissioning of the serials. Document types are user defined using Lookup Type PAS_DOCUMENT_TYPE. If you invoke this page from an external system, the document type from the work order will appear by default.
Document Line Number	Enter the document line number of the document for the commissioning of serials. If you invoke this page from an external system, the document line number from the work order will appear by default.

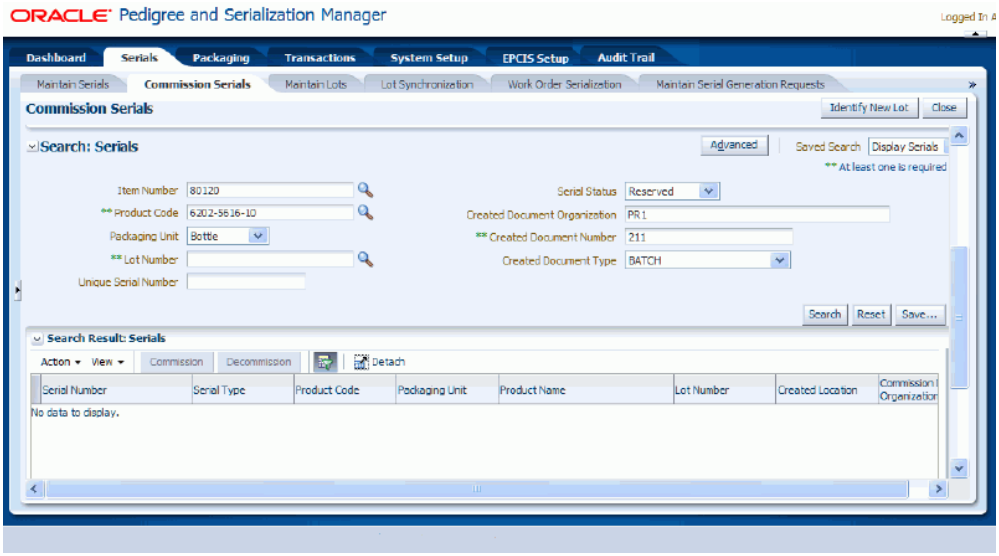
If you invoke this page from an external system, the OPSM Commission Serials page is called asynchronously. The product and lot information is passed to this page. The Completed Quantity and Transaction Quantity fields in the Commission Serial Analysis region of the page will appear by default from the work order. These fields do not appear if you access this page within OPSM directly.

3. Click the Continue button.

Commission Serials page (1 of 2)



Commission Serials page (2 of 2)



The system displays in the Commission Serial Analysis region the Commissioned Quantity for the lot and product code. It will also display a yellow triangle with an exclamation point (warning) icon next to the Completed Quantity and Transaction Quantity fields if these quantities do not equal the Commissioned Quantity.

In the Search: Serials region of the page the fields are populated with the same field values that you entered in the Identify Lot region of the page. *Reserved* appears by default in the Serial Status field. These are just default values and they can be overridden.

4. (Optional) Enter search criteria for the serials you want to commission using one of these methods:

To Search for Serials (Basic Method)

1. In the Search: Serials region, enter the search criteria for the serials using one or more of these fields:

Field Name	Description
Item Number	(Optional) Select the item number associated with the serials. This is the transactional systems item number. It is used to find the Product Code to perform the search. Serials are created using product code so the item number search is merely a way for you to search for the correct product code. When you select the Item Number, the Product Code field is automatically populated. If you clear the Item Number, then the Product Code field gets cleared as well.
Product Code	Select the product code associated with the serials.
Packaging Unit	(Optional) Select the packaging unit associated with the serials. Packaging unit is user defined using the Lookup Type PAS_PACKAGE_UNIT.
Lot Number	Select the lot number associated with the serials.
Unique Serial Number	(Optional) Enter a unique serial number.
Serial Status	(Optional) Select the serial status for the serials. Values are: Commissioned, Decommissioned, and Reserved. Reserved appears by default.
Created Document Organization	(Optional) Enter the organization for the document that created the serial number.
Created Document Number	Enter the document number that was used to create the serial number.

Field Name	Description
Created Document Type	(Optional) Select the type of document that created the serial number. Document types are user defined using Lookup Type PAS_DOCUMENT_TYPE.

To Search for Serials (Advanced Method)

1. Click the Advanced button to perform an advanced search.

   Use the Advanced Search functionality to perform a more detailed search for specific serial numbers. Field operators associated with the search criteria fields can be used during an Advanced Search so that a range of serial numbers can be easily retrieved.

2. (Optional) In the Search: Serials region, enter the search criteria for the serials using one or more of these fields:

Field Name	Description
Item Number	Select the field operator and then select the item number for the product. Operators are: • Starts with • Ends with • Equals • Does not equal • Less than • Greater than • Less than or equal to • Greater than or equal to • Between • Not Between • Contains • Does not contain • Is blank • Is not blank This is the transactional systems item number. It is used to find the Product Code to perform the search. Serials are created using product code so the item number search is merely a way for you to search for the correct product code. When you select the Item Number, the Product Code field is automatically populated. If you clear the Item Number, then the Product Code field gets cleared as well.

Field Name	Description
Product Code	Select the field operator and then select the product code. The field operators are the same as that for the Item Number field.
Packaging Unit	(Optional) Select the field operator and then select the packaging unit. Packaging unit is user defined using the Lookup Type PAS_PACKAGE_UNIT. The field operators are the same as that for the Item Number field.
Lot Number	Select the field operator and then select the lot number for the product code. The field operators are the same as that for the Item Number field.
Unique Serial Number	(Optional) Select the field operator and then enter a unique serial number. Operators are: • Equals • Does not equal • Less than • Less than or equal to • Greater than • Greater than or equal to • Between • Not Between • Is blank • Is not blank

Field Name	Description
Serial Status	(Optional) Select the field operator and then select the serial status. Values are: Commissioned, Decommissioned, and Reserved. Reserved appears by default. The field operators are the same as that for the Item Number field.
Created Document Organization	(Optional) Select the field operator and then enter the organization for the document that created the serial number. The field operators are the same as that for the Item Number field.
Created Document Number	Select the field operator and then enter the document number that was used to create the serial number. The field operators are the same as that for the Item Number field.
Created Document Type	(Optional) Select the field operator and then enter the type of document that created the serial number. Document types are user defined using Lookup Type PAS_DOCUMENT_TYPE. The field operators are the same as that for the Item Number field.

3. (Optional) To enter additional search criteria fields, click the Add Fields button and select the field you would like to add to the search criteria.

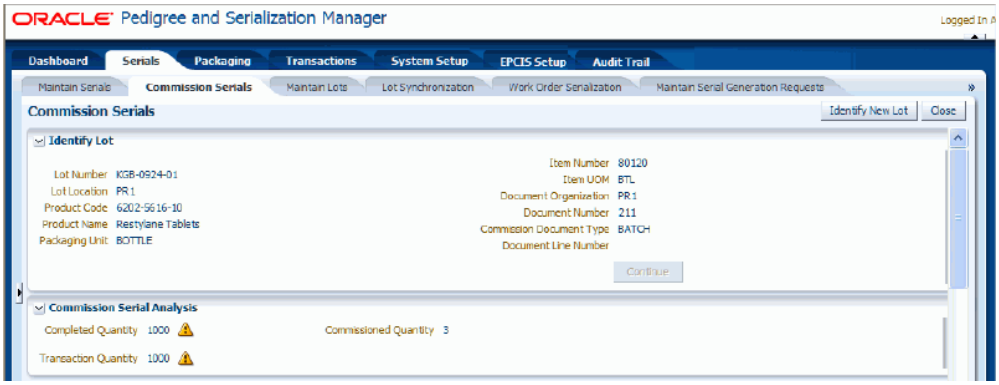
   The selected field appears as a search criteria field.

   > **Note:** To remove the additional field, click the Remove icon next to the field. The field will be removed from the search criteria.

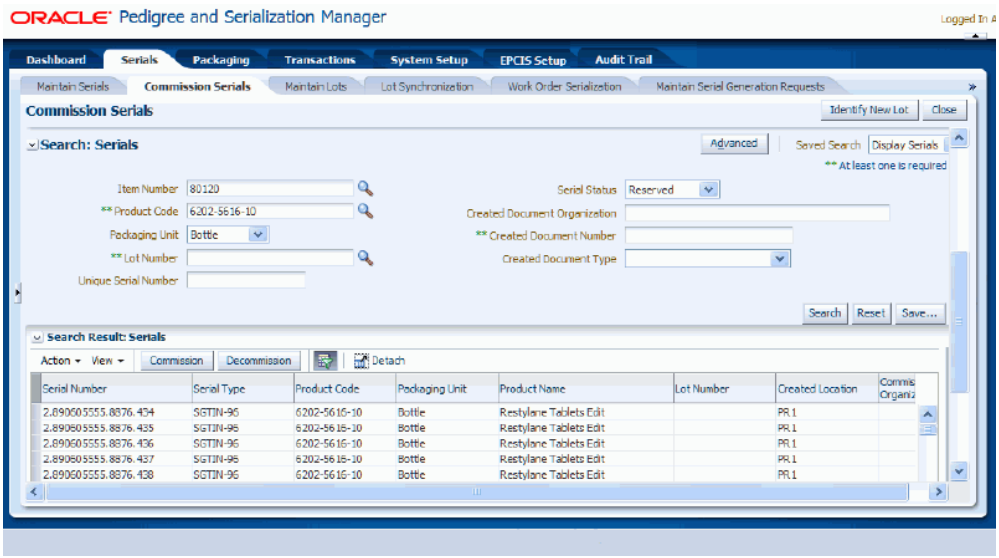
4. (Optional) Enter search criteria for the additional fields.

5. Click the Search button.

Commission Serials page (1 of 2)



Commission Serials page (2 of 2)



All of the serials that match the search criteria appear in the Search Results: Serials region in a table format. For each serial number the following information displays:

Field Name	Description
Serial Number	Displays the serial number.
Serial Type	Displays the serial type associated with the serial number.

Field Name	Description
Product Code	Displays the product code associated with the serial number.
Packaging Unit	Displays the packaging unit associated with the serial number. Packaging unit is user defined using the Lookup Type PAS_PACKAGE_UNIT.
Product Name	Displays the product name for the product.
Lot Number	Displays the lot number associated with the product.
Created Location	Displays the location that created the serial number.
Commission Document Organization	Displays the organization for the document used for commissioning the serial.
Commission Document	Displays the document number that was used to commission the serial.
Commission Document Type	Displays the document type associated with the commission document. Document types are user defined using Lookup Type PAS_DOCUMENT_TYPE.
Commission Document Line Number	Displays the commission document line number.
Serial Status	Displays the status of the serial number. Values are: Reserved, Commissioned, and Decommissioned.
Counterfeit Status	Displays the counterfeit status for the serial number. Values are: Counterfeit, Suspect Counterfeit, or Verified Not Counterfeit.
Counterfeit Date	Displays the date the serial number was detected as being Counterfeit or Suspect Counterfeit.

Field Name	Description
Reason Code	Displays the reason code used when decommissioning a serial number. This is required if decommissioning a serial.
Created Document Number	Displays the document number that was used to create the serial number.
Created Document Type	Displays the document type associated with the document. Document Types are user defined using Lookup Type PAS_DOCUMENT_TYPE.

6. Select one or more serial numbers in the table that you want to commission.

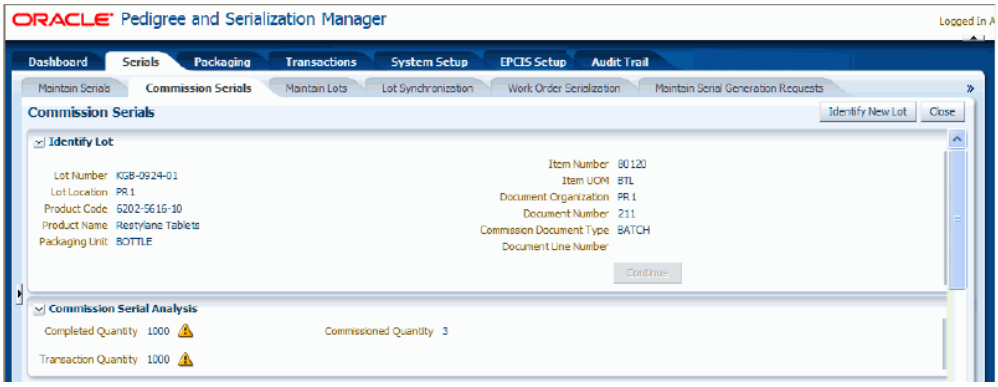
   When commissioning multiple serials at one time, select the serials with the same serial type and product code. Also, avoid selecting multiple serials where one or more of them has a Returned serial state.

   The system will give you a message and won't allow you to commission multiple serials in these conditions:

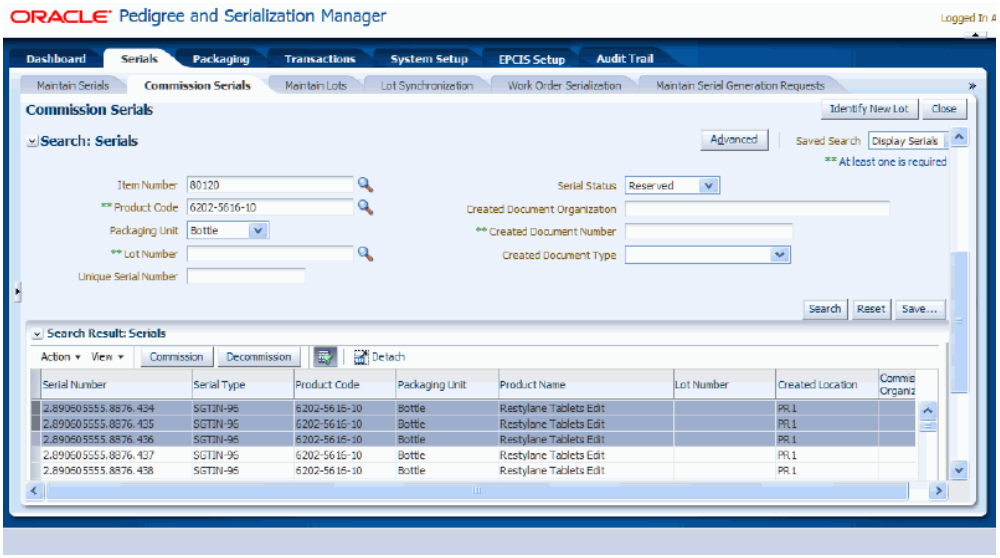
   - Selecting multiple serials numbers with different serial types.
   - Selecting multiple serials numbers with the same serial types but they have different product codes.
   - Selecting multiple serials numbers with the same serial type and one or more of the serials numbers has a serial state of *Returned* and the returned serial number contains a different product code or lot number.

     Note: Use Ctrl or Shift buttons on your keyboard to select multiple serial numbers in the table.

Commission Serials page (1 of 2)

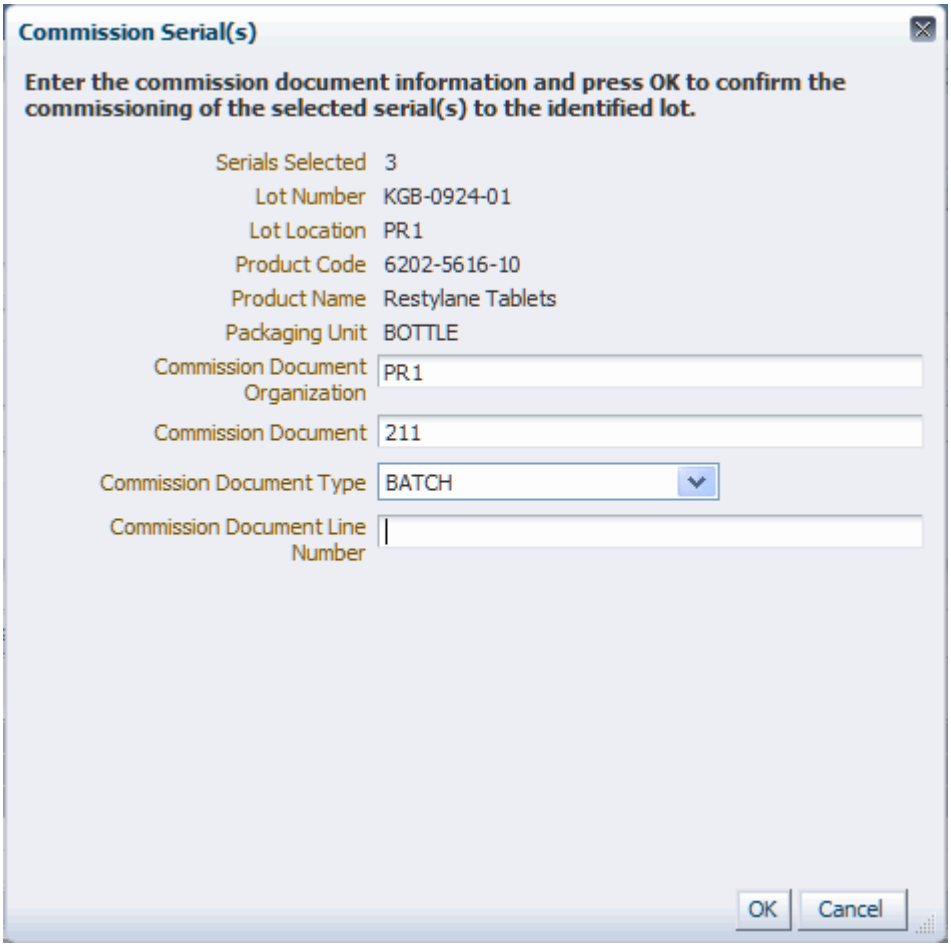


Commission Serials page (2 of 2)



7. Select Commission in the Action menu or click the Commission button located at the top of the Search Results: Serials region.

Commission Serial(s) page



The Commission Serial(s) page appears displaying the number of serials selected, lot information, product information, and packaging unit for the serial numbers you selected. If you invoke this page from an external system, the Commission Document Organization, Commission Document, Commission Document Type, and Commission Document Line Number from the work order will appear by default.

8. (Optional) Enter the following commission document information:

Field Name	Description
Commission Document Organization	Enter the organization for the commission document.

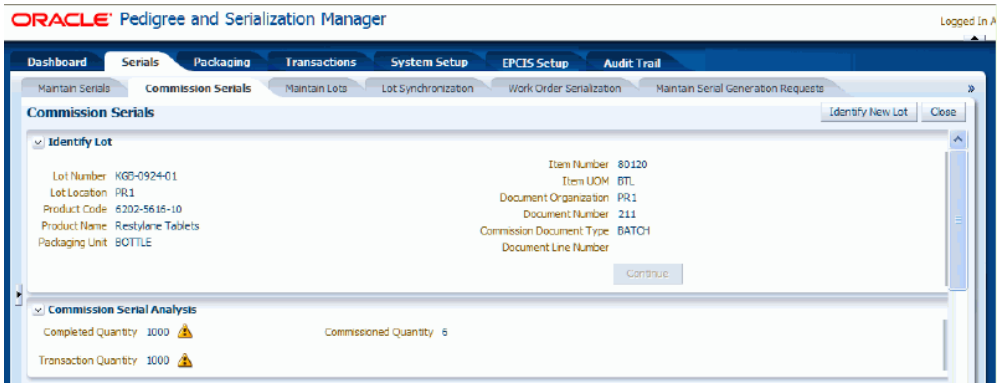
Field Name	Description
Commission Document	Enter the commission document number.
Commission Document Type	Select the type for the commission document. Document Types are user defined using the Lookup Type (PAS_DOCUMENT_TYPE).
Commission Document Line Number	Enter the document line number for the commission document.

9. Click the OK button.

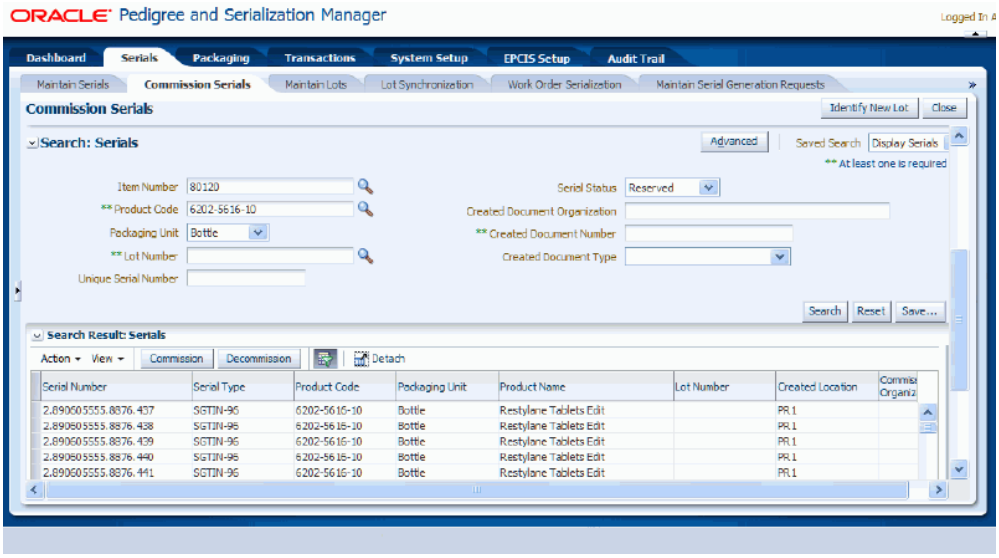
   The Commission Serial(s) Result page appears displaying the number of serials that were successfully commissioned.

10. Click the OK button.

Commission Serials page (1 of 2)



Commission Serials page (2 of 2)



The serial numbers that were successful are commissioned and are updated with the information entered. The Serial Status for those serial numbers changes to *Commissioned.* and the Commissioned Quantity in the Commission Serial Analysis region is updated with the number of serials successfully commissioned.

11. (Optional) Click Identify Lot button at the top of the page if you want to commission serials to a different lot.

12. Repeat steps 2 - 10 for the new lot and product code.

13. Click the Close button at the top of the page to close the Commission Serials page.

Decommissioning Serials

Use the Maintain Serials page, Edit Serial page, and Commission Serials page in Oracle Pedigree and Serialization Manager (OPSM) to decommission serials.

OPSM can be integrated with external transactional systems to decommission serials based on the lot and item cross reference information passed between the systems. From the external system you can call the Commission Serials page. If you have not previously signed into OPSM, you will be prompted for user authentication. After successful authentication, you can use the Commission Serials page to select serials within OPSM to decommission.

Use these procedures to decommission serials:

To Decommission Serials (Maintain Serials page):

1. Navigate to the Maintain Serials page, page A-2.

2. Enter search criteria for the serials you want to decommission and click the Search button.

   All of the serials that match the search criteria appear in the Search Results: Serials table.

3. Select one or more serial numbers in the table that you want to decommission.

   Note: Use Ctrl or Shift buttons on your keyboard to select multiple serial numbers in the table.

4. Select Decommission Serials in the Actions menu or click the Decommission Serials button located at the top of the Search Results: Serials region.

   The Decommission Serial(s) page appears displaying a message asking if you are sure you want to decommission these serials numbers and it requests that you select a Reason Code. Reason code is required for decommissioning a serial.

5. Select a Reason Code for the serial decommission and click the Yes button.

   The selected serial numbers are decommissioned. The Serial Status for the serial numbers changes to *Decommissioned* and a reason code is identified.

To Decommission Serials (Edit Serial page):

Using the Edit Serial page you can decommission individual serial numbers.

For more information on decommissioning serials using the Edit Serial page, see Editing Serials, page 7-68.

To Decommission Serials (Commission Serials page):

1. Navigate to the Commission Serials page, page A-2.

   This page can be accessed from the Task menu in OPSM or it can be invoked from an external system.

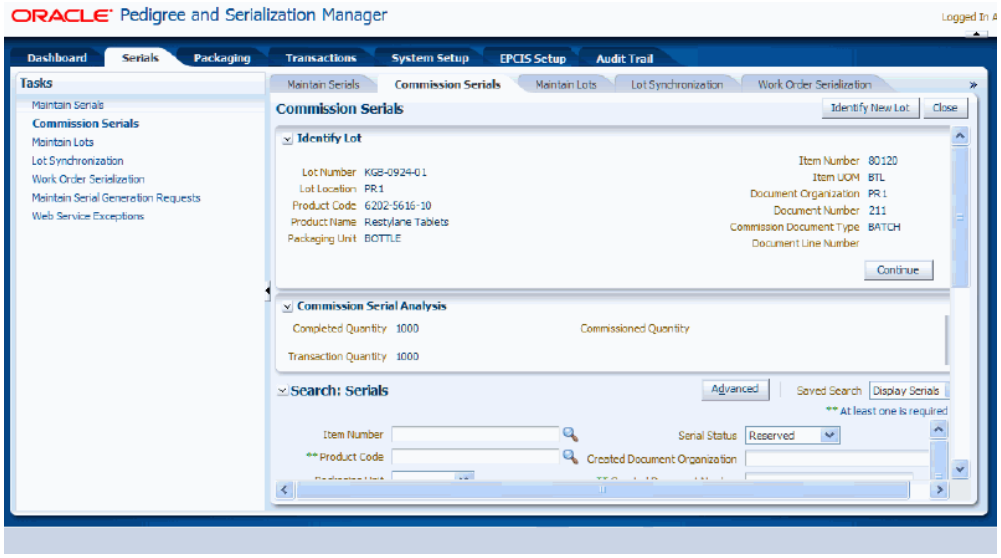
   #### To Invoke the Commission Serials Page in OPSM from an External System

   1. Call the URL to invoke the Commission Serials page passing the parameter values:

Parameter Name	Description
page	'commissionSerials'
lot	The lot number used to commission the serials.
key	The item in the external system to be cross referenced to a product in OPSM.
unit	The unit of measure of the item to be cross referenced to a product packaging unit in OPSM.
loc	The location identifier for the item in the external system.
docOrg	The organization from which the work order document originates.
doc	The document number that will be associated with the commissioned serials.
docType	The document type that will be associated with the commissioned serials.
docLine	The document line number that will be associated with the commissioned serials.
comQty	The completed quantity from the work order.
qty	The transaction quantity from the work order.
src	The identifier for the external system that invoked OPSM (for example, EBIZ_01).

2. If prompted for user authentication, enter your user ID and password.

Commission Serials page (Invoked from an External System)



The Commission Serials page appears.

2. Enter the following information in the Identify Lot region of the page:

Field Name	Description
Lot Number	Select the lot number you want to decommission serials from. If you invoke this page from an external system, the lot number from the work order will appear by default.
Lot Location	The lot location associated with the lot number selected displays.
Product Code	The product code associated with the lot number selected displays.
Product Name	The product name associated with the product code displays.

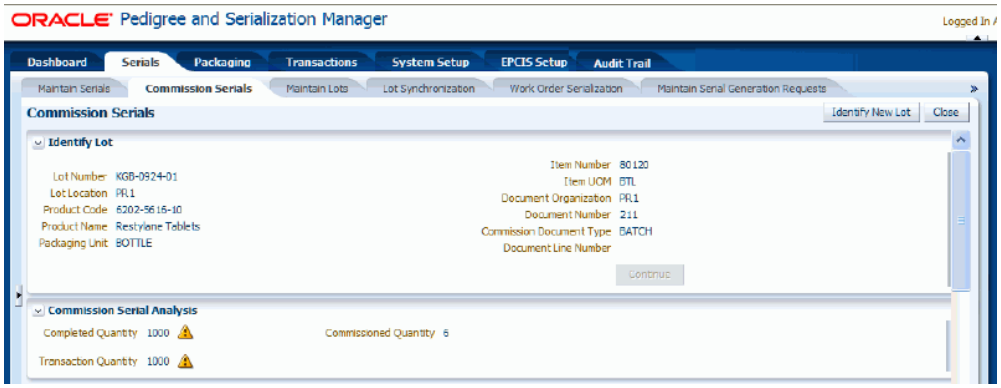
Field Name	Description
Packaging Unit	The packaging unit associated with the product code displays. Packaging unit is user defined using the Lookup Type PAS_PACKAGE_UNIT.
Item Number	The item number associated with the lot number and product code selected displays. If you invoke this page from an external system, the item number from work order will appear by default. This field does not appear if you access this page directly within OPSM.
Item UOM	The item UOM associated with the item number displays. If you invoke this page from an external system, the item UOM from the work order will appear by default. This field does not appear if you access this page directly within OPSM.
Document Organization	Enter the organization for the document that will be used for the decommissioning of the serials. If you invoke this page from an external system, the document organization from the work order will appear by default.
Document Number	Enter the document number for the decommissioning of the serials. If you invoke this page from an external system, the document number from the work order will appear by default.

Field Name	Description
Document Type	Select the type of document used for the decommissioning of the serials. Document types are user defined using Lookup Type PAS_DOCUMENT_TYPE. If you invoke this page from an external system, the document type from the work order will appear by default.
Document Line Number	Enter the document line number of the document for the decommissioning of serials. If you invoke this page from an external system, the document line number from the work order will appear by default.

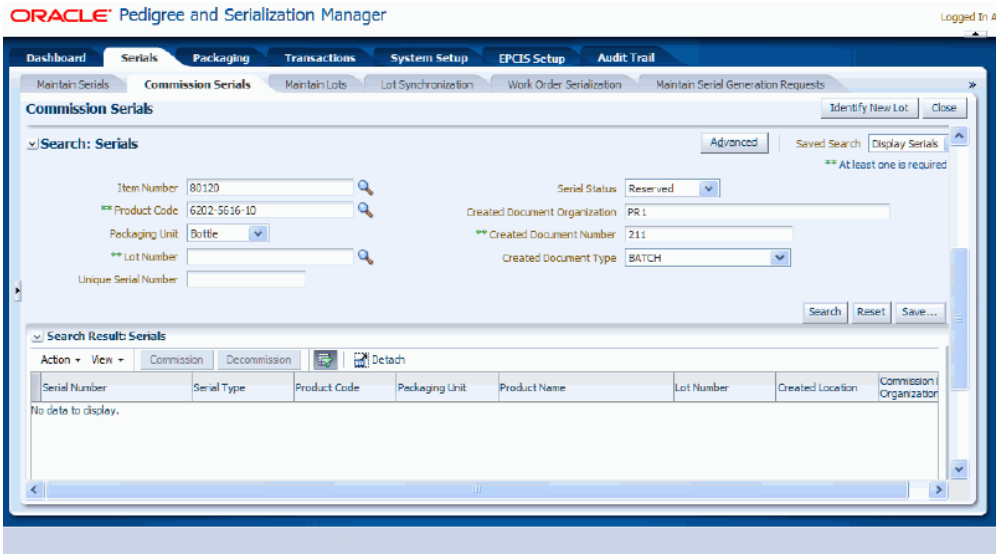
If you invoke this page from an external system, the OPSM Commission Serials page is called asynchronously. The product and lot information is passed to this page. The Completed Quantity and Transaction Quantity fields in the Commission Serial Analysis region of the page will appear by default from the work order. These fields do not appear if you access this page within OPSM directly.

3. Click the Continue button.

Commission Serials page (1 of 2)



Commission Serials page (2 of 2)



The system displays in the Commission Serial Analysis region the Commissioned Quantity for the lot and product code. It will also display a yellow triangle with an exclamation point (warning) icon next to the Completed Quantity and Transaction Quantity fields if these quantities do not equal the Commissioned Quantity.

In the Search: Serials region of the page the fields are populated with the same field values that you entered in the Identify Lot region of the page. *Reserved* appears by default in the Serial Status field. These are just default values and they can be overridden.

4. (Optional) Enter search criteria for the serials you want to decommission using one of these methods:

To Search for Serials (Basic Method)

1. In the Search: Serials region, enter the search criteria for the serials using one or more of these fields:

Field Name	Description
Item Number	(Optional) Select the item number associated with the serials. This is the transactional systems item number. It is used to find the Product Code to perform the search. Serials are created using product code so the item number search is merely a way for you to search for the correct product code. When you select the Item Number, the Product Code field is automatically populated. If you clear the Item Number, then the Product Code field gets cleared as well.
Product Code	Select the product code associated with the serials.
Packaging Unit	(Optional) Select the packaging unit associated with the serials. Packaging Unit is user defined using the Lookup Type PAS_PACKAGE_UNIT.
Lot Number	Select the lot number associated with the serials.
Unique Serial Number	(Optional) Enter a unique serial number.
Serial Status	(Optional) Select the serial status for the serials. Values are: Commissioned, Decommissioned, and Reserved. Reserved appears by default. You can only decommission serials that are in a Reserved or Commissioned Serial Status.
Created Document Organization	(Optional) Enter the organization for the document that created the serial number.
Created Document Number	Enter the document number that was used to create the serial number.

Field Name	Description
Created Document Type	(Optional) Select the type of document that created the serial number. Document types are user defined using Lookup Type PAS_DOCUMENT_TYPE.

To Search for Serials (Advanced Method)

1. Click the Advanced button to perform an advanced search.

   Use the Advanced Search functionality to perform a more detailed search for specific serial numbers. Field operators associated with the search criteria fields can be used during an Advanced Search so that a range of serial numbers can be easily retrieved.

2. (Optional) In the Search: Serials region, enter the search criteria for the serials using one or more of these fields:

Field Name	Description
Item Number	Select the field operator and then select the item number for the product. Operators are: • Starts with • Ends with • Equals • Does not equal • Less than • Greater than • Less than or equal to • Greater than or equal to • Between • Not Between • Contains • Does not contain • Is blank • Is not blank This is the transactional systems item number. It is used to find the Product Code to perform the search. Serials are created using product code so the item number search is merely a way for you to search for the correct product code. When you select the Item Number, the Product Code field is automatically populated. If you clear the Item Number, then the Product Code field gets cleared as well.

Field Name	Description
Product Code	Select the field operator and then select the product code. The field operators are the same as that for the Item Number field.
Packaging Unit	(Optional) Select the field operator and then select the packaging unit. Packaging unit is user defined using the Lookup Type PAS_PACKAGE_UNIT. The field operators are the same as that for the Item Number field.
Lot Number	Select the field operator and then select the lot number for the product code. The field operators are the same as that for the Item Number field.
Unique Serial Number	(Optional) Select the field operator and then enter a unique serial number. Operators are: • Equals • Does not equal • Less than • Less than or equal to • Greater than • Greater than or equal to • Between • Not Between • Is blank • Is not blank

Field Name	Description
Serial Status	(Optional) Select the field operator and then select the serial status. Values are: Commissioned, Decommissioned, and Reserved. Reserved appears by default. You can only decommission serials that are in a Reserved or Commissioned Serial Status. The field operators are the same as that for the Item Number field.
Created Document Organization	(Optional) Select the field operator and then enter the organization for the document that created the serial number. The field operators are the same as that for the Item Number field.
Created Document Number	Select the field operator and then enter the document number that was used to create the serial number. The field operators are the same as that for the Item Number field.
Created Document Type	(Optional) Select the field operator and then enter the type of document that created the serial number. Document types are user defined using Lookup Type PAS_DOCUMENT_TYPE. The field operators are the same as that for the Item Number field.

3. (Optional) To enter additional search criteria fields, click the Add Fields button and select the field you would like to add to the search criteria.

   The selected field appears as a search criteria field.

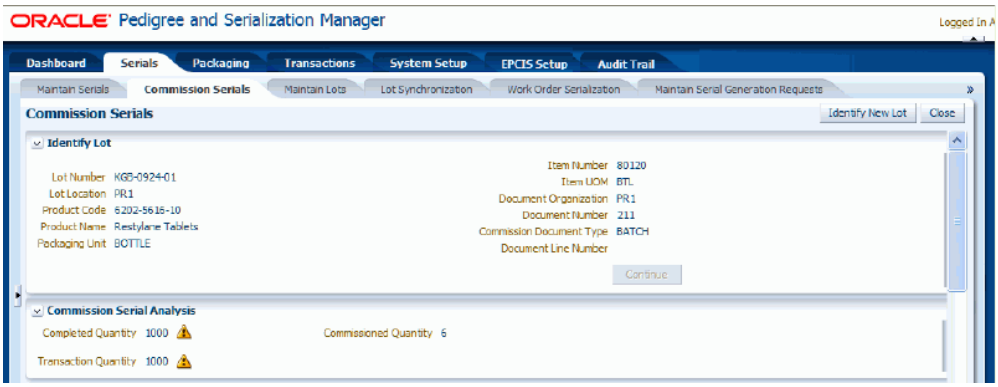
   Note: To remove the additional field, click the Remove icon next to the field. The field will be removed from the search

criteria.

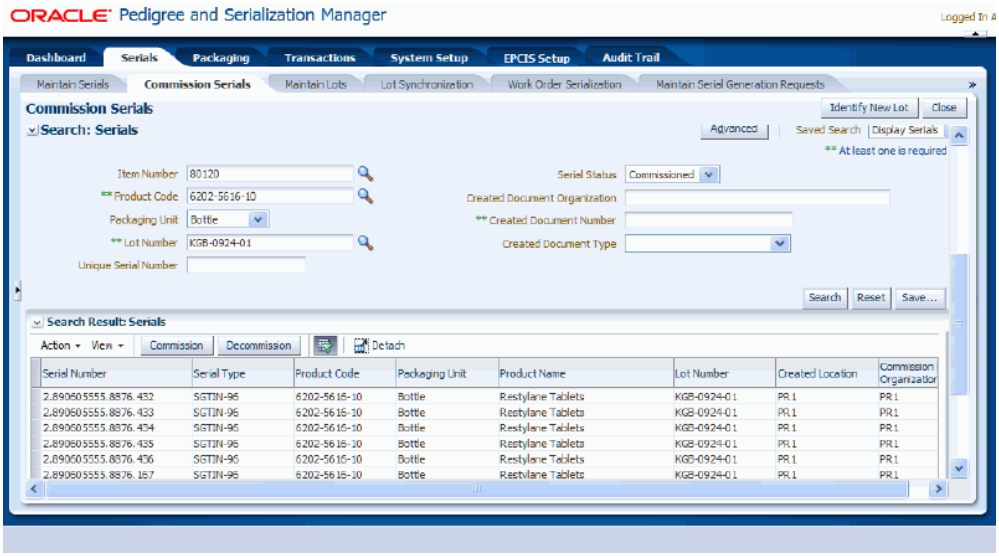
4. (Optional) Enter search criteria for the additional fields.

5. Click the Search button.

Commission Serials page (1 of 2)



Commission Serials page (2 of 2)



All of the serials that match the search criteria appear in the Search Results: Serials region in a table format. For each serial number the following information displays:

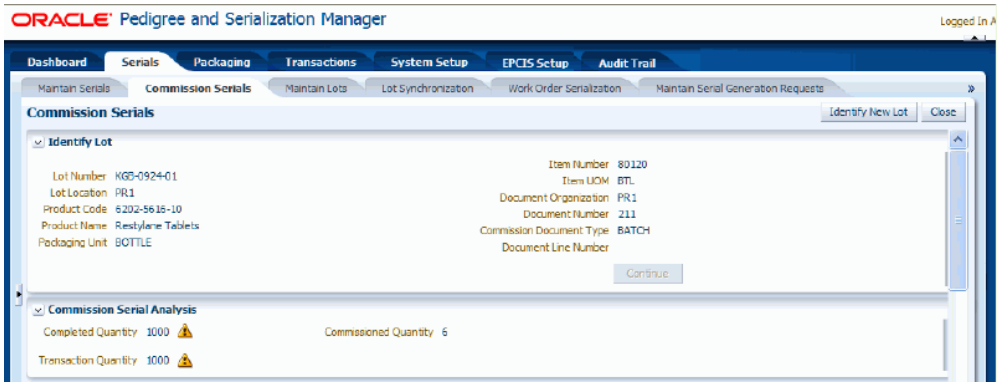
Field Name	Description
Serial Number	Displays the serial number.
Serial Type	Displays the serial type associated with the serial number.
Product Code	Displays the product code associated with the serial number.
Packaging Unit	Displays the packaging unit associated with the serial number. Packaging unit is user defined using the Lookup Type PAS_PACKAGE_UNIT.
Product Name	Displays the product name for the product.
Lot Number	Displays the lot number associated with the product.
Created Location	Displays the location that created the serial number.
Commission Document Organization	Displays the organization for the document used for commissioning the serial.
Commission Document	Displays the document number that was used to commission the serial.
Commission Document Type	Displays the document type associated with the commission document. Document types are user defined using Lookup Type PAS_DOCUMENT_TYPE.
Commission Document Line Number	Displays the commission document line number.
Serial Status	Displays the status of the serial number. Values are: Reserved, Commissioned, and Decommissioned.

Field Name	Description
Counterfeit Status	Displays the counterfeit status for the serial number. Values are: Counterfeit, Suspect Counterfeit, or Verified Not Counterfeit.
Counterfeit Date	Displays the date the serial number was detected as being Counterfeit or Suspect Counterfeit.
Reason Code	Displays the reason code used when decommissioning a serial number. This is required if decommissioning a serial.
Created Document Number	Displays the document number that was used to create the serial number.
Created Document Type	Displays the document type associated with the document. Document Types are user defined using Lookup Type PAS_DOCUMENT_TYPE.

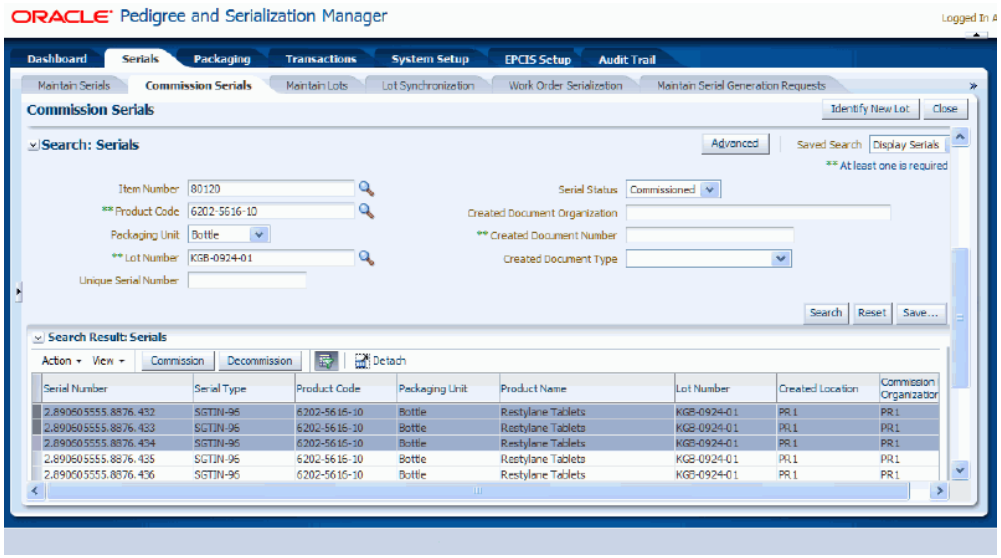
6. Select one or more serial numbers in the table that you want to decommission.

   Note: Use Ctrl or Shift buttons on your keyboard to select multiple serial numbers in the table.

Commission Serials page (1 of 2)

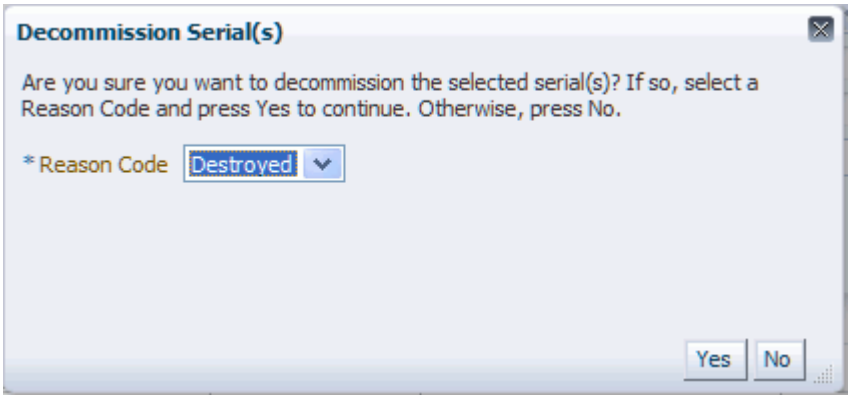


Commission Serials page (2 of 2)



7. Select Decommission in the Action menu or click the Decommission button located at the top of the Search Results: Serials region.

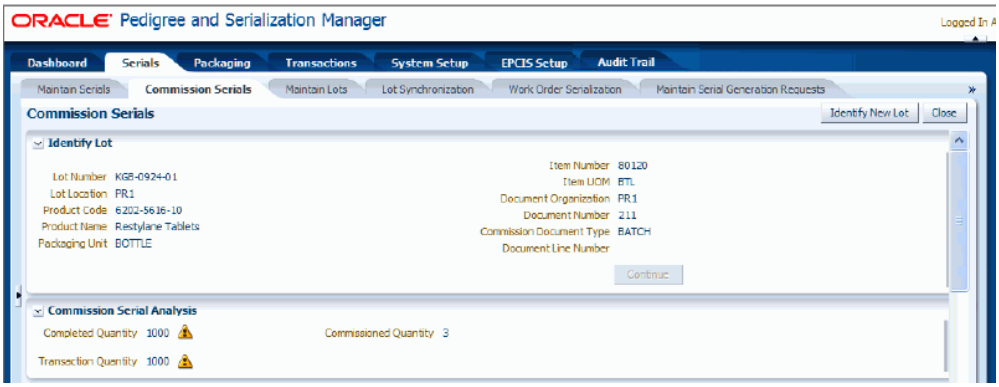
Decommission Serial(s) page



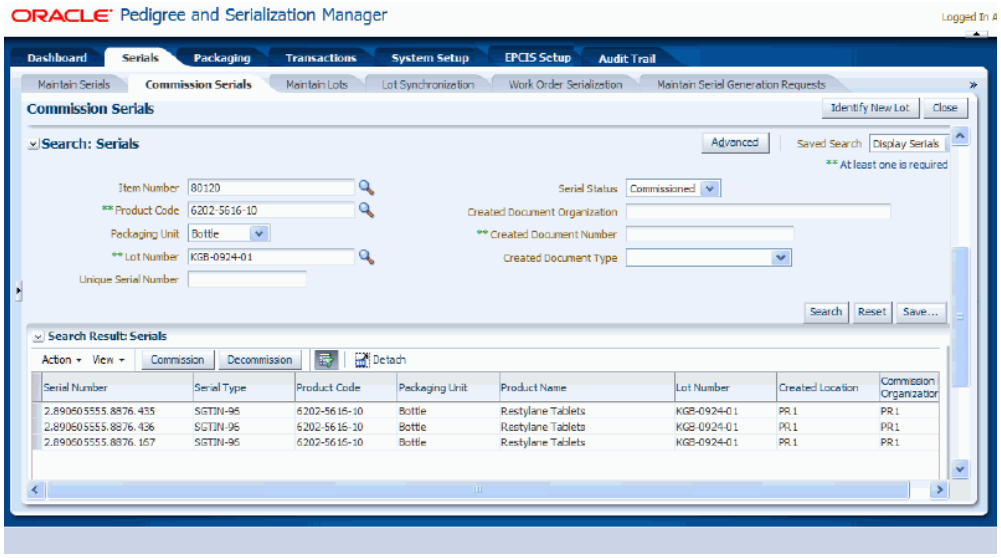
The Decommission Serial(s) page appears displaying a message asking if you are sure you want to decommission these serials numbers and it requests that you select a Reason Code. Reason code is required for decommissioning a serial.

8. Select a Reason Code for the serial decommission and click the Yes button.

Commission Serials page (1 of 2)



Commission Serials page (2 of 2)



The selected serial numbers are decommissioned. The Serial Status for those serial numbers changes to *Decommissioned* and a reason code is identified. The Commissioned Quantity in the Commission Serial Analysis region is updated to reflect the number of serials successfully decommissioned.

9. (Optional) Click Identify Lot button at the top of the page if you want to decommission serials from a different lot.

10. Repeat steps 2 - 8 for the new lot and product code.

11. Click the Close button at the top of the page to close the Commission Serials page.

Part 4

Managing Packaging Hierarchy and Packages

8

Maintaining Packages

This chapter covers the following topics:

- Understanding Packages
- Searching for Packages
- Viewing Package Detail Information
- Creating Packages
- Editing Packages
- Deleting a Complete Package
- Deleting an Alternate Identifier from a Package
- Deleting an Alternate Identifier from a Package (Alternate Method)

Understanding Packages

Packages are objects into which other objects are packed. Examples of packages are boxes, cases, totes, and so on. Packages can contain one or more of the lowest salable unit, and can contain other packages. This multilevel packing of units into packages is called the packaging hierarchy. Packages also enable you to take action on all of the serialized units within the package with a single action. For instance, if a box containing 10 salable units is destroyed, you can perform an action in Oracle Pedigree and Serialization Manager (OPSM) to decommission the box and then all of the units within the box would automatically be decommissioned. Similarly, you can ship or receive based on the unique identifier of the package, rather than needing to scan each unit within the package. This is called inference.

Searching for Packages

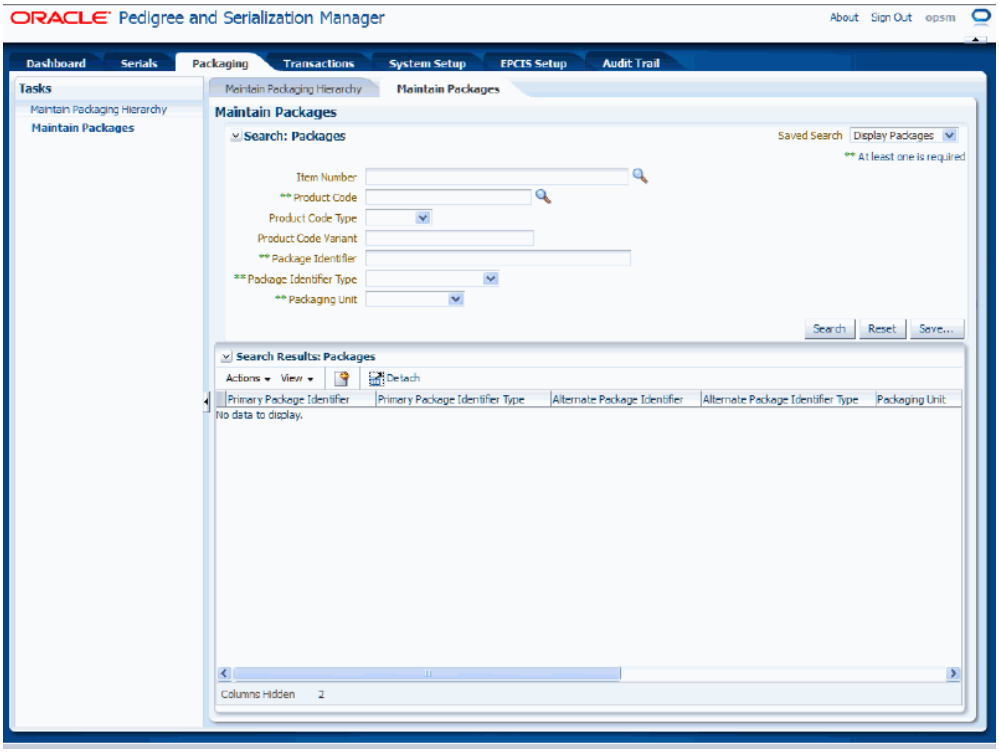
Use the Maintain Packages page in Oracle Pedigree and Serialization Manager (OPSM) to search for existing packages. You will enter search criteria and all of the packages that match the search criteria will display in the search results table for the page.

Use this procedure to search for packages:

To Search for Packages:

1. Navigate to the Maintain Packages page, page A-2.

Maintain Packages page



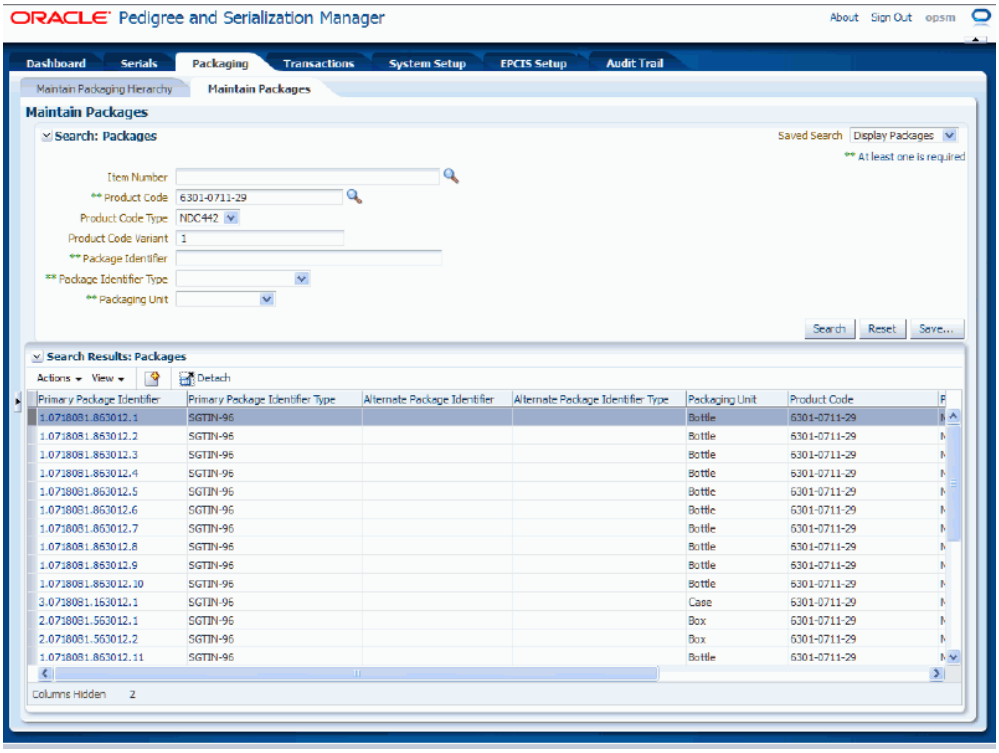
2. In the Search: Packages region, enter the search criteria for the packages using one or more of these fields:

Field Name	Description
Item Number	(Optional) Select the item number for the package. This is the transactional systems item number. It is used to find the Product Code to perform the search. The item number search is merely a way for you to search for the correct product code. When you select the Item Number, the Product Code, Product Code Type, and Product Code Variant fields are automatically populated. If you clear the Item Number, then the Product Code, Product Code Type, and Product Code Variant fields get cleared as well.
Product Code	Select the product code for the package. When you select the product code, the Product Code Type and Product Code Variant fields appear by default from the Product Code entered.
Product Code Type	(Optional) Select the product code type associated with the product.
Product Code Variant	(Optional) Enter the product code variant associated with the product.
Package Identifier	Enter the package identifier.
Package Identifier Type	Select the package identifier type. The values that display in the drop down are from the PAS_LABEL_TYPE lookup type which is extensible. For more information on lookup types, see Maintaining Lookup Types and Codes, page 4-4.

Field Name	Description
Packaging Unit	Select the packaging unit for the package. The values that display in the drop down are from the PAS_PACKAGE_UNIT lookup type which is user defined. For more information on lookup types, see Maintaining Lookup Types and Codes, page 4-4.

3. Click the Search button.

Maintain Packages page



All of the packages that match the search criteria appear in the Search Results: Packages region in a table format.

If a package has alternate package identifier information associated to it that information appears in the table. Otherwise, those fields are not populated.

If a package has been shipped, a status of *SHIPPED* appears in the Shipped Status column for the package.

Viewing Package Detail Information

Use the View Package page in Oracle Pedigree and Serialization Manager (OPSM) to view all the information associated with a package. You will be able to view the primary package identifier along with all of the alternate package identifiers if they exist. You may have an unlimited amount of alternate package identifiers.

Use this procedure to view package detail information:

To View Package Detail Information:

1. Navigate to the Maintain Packages page, page A-2.

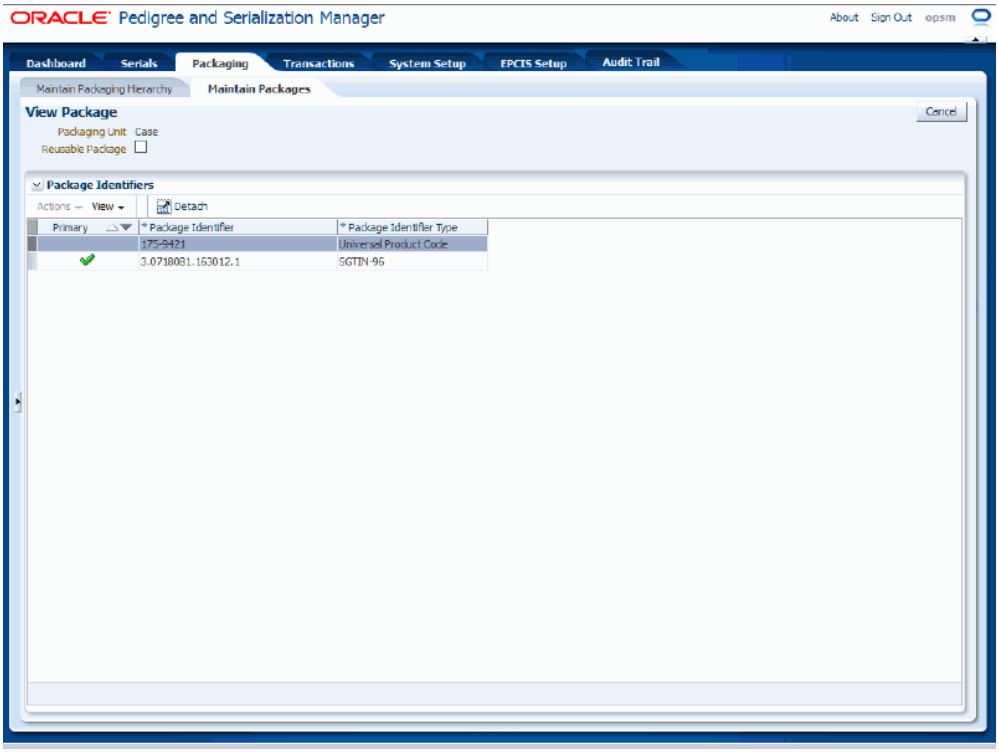
2. Enter search criteria for the package you want to view and click the Search button.

   You can search by primary or alternate package identifiers by using the Package Identifier field.

   All of the packages that match the search criteria appear in the Search Results: Packages table.

3. Click the Primary Package Identifier link in the results table that you want to view.

View Package page



The View Package page appears. Using this page you can view the primary package identifier and its associated alternate package identifiers if any exist.

> **Note:** Whether you click the Primary Package Identifier link that is associated with the row in the table that has no alternate package identifiers or you click the Primary Package Identifier link associated with a row in the table that has alternate package identifiers the View Package page appears displaying all of the information associated with the package.

4. Click the Cancel button to return back to the Maintain Packages page.

Creating Packages

Use the Create Package page in Oracle Pedigree and Serialization Manager (OPSM) to create packages. When you create a new package you can also define unlimited additional alternate package identifiers for the package and determine whether the package identifier can be reused again after the original package identifier has been shipped.

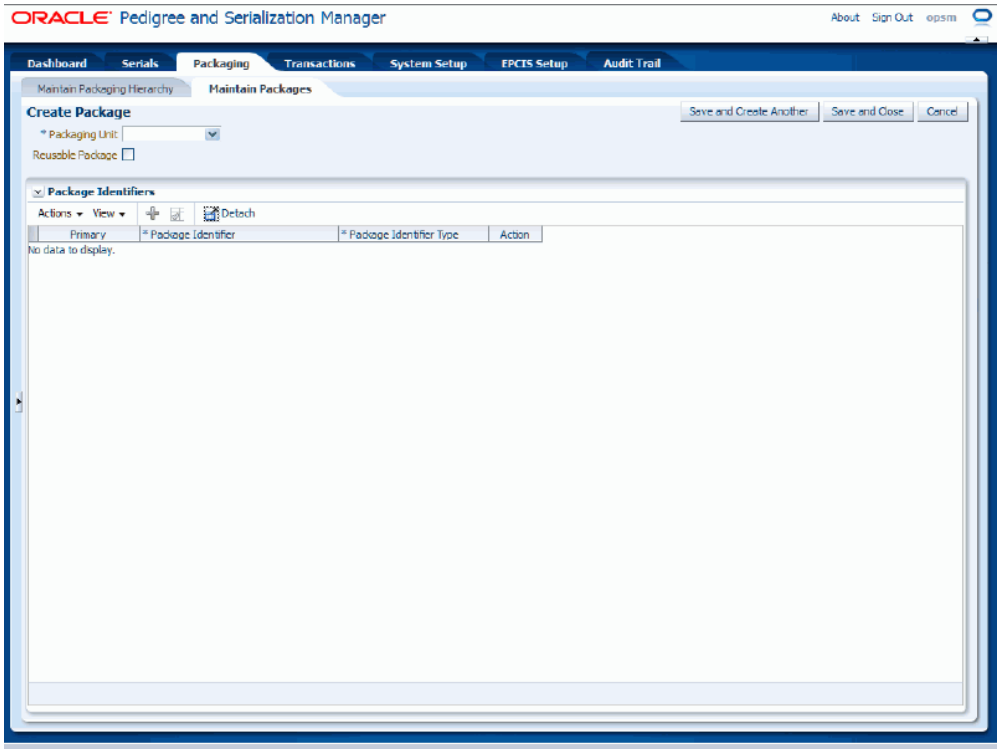
Use this procedure to create packages:

To Create Packages:

1. Navigate to the Maintain Packages page, page A-2.

2. Select Create from the Actions menu or click the Create icon located at the top of the Search Results: Packages region.

Create Package page



The Create Package page appears.

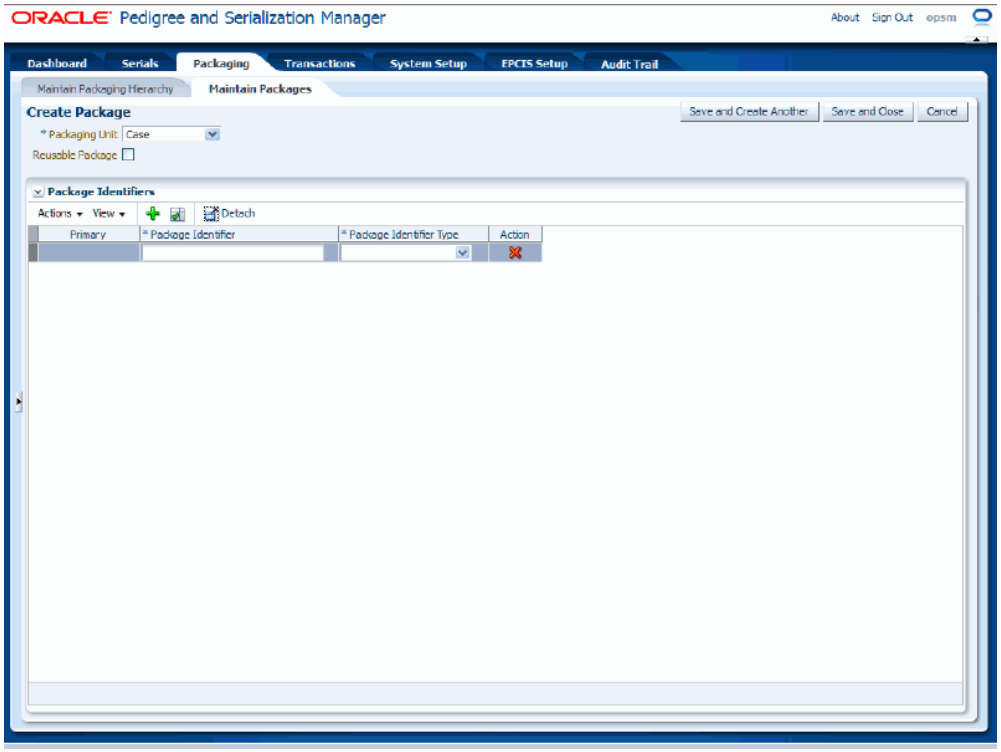
3. Enter the following information:

Field Name	Description
Packaging Unit	Select the packaging unit for the package. Packaging units are user defined using Lookup Type PAS_PACKAGE_UNIT.

Field Name	Description
Reusable Package check box	(Optional) Select this check box if the package identifier can be reused. If selected, the same package identifier can be used again after the original package identifier has been shipped. Select this check box if the package or the ID assigned to it can be used multiple times (for example, a tote or a returnable shipping pack). Leave this check box clear if the package will have a unique ID and will not get reused because the package will be shipped and not returned.

4. Select Add Package Identifier from the Action menu or click the Add Product Identifier icon located at the top of the Package Identifiers region.

Create Package page



A row appears in the table where you can add the product identifier.

5. Enter the following information:

Field Name	Description
Package Identifier	Enter the package identifier.
Package Identifier Type	Select the package identifier type for the package. Package identifier types are user defined using Lookup Type PAS_LABEL_TYPE. Only non-serialized package identifier types appear for selection.

6. Repeat Steps 4-5 until all of the package identifiers (primary and alternate) have been added for the package.

Note: You need at least one primary package identifier for a package.

7. Select the package identifier in the table that you want to set as the primary.

   Once a package identifier has been set to primary, it becomes the identifier used in creating packaging hierarchies. For instance, you can search on alternate package identifiers but you can only pack and unpack primary identifiers.

   Note: You cannot change the primary package identifier once the package has been saved.

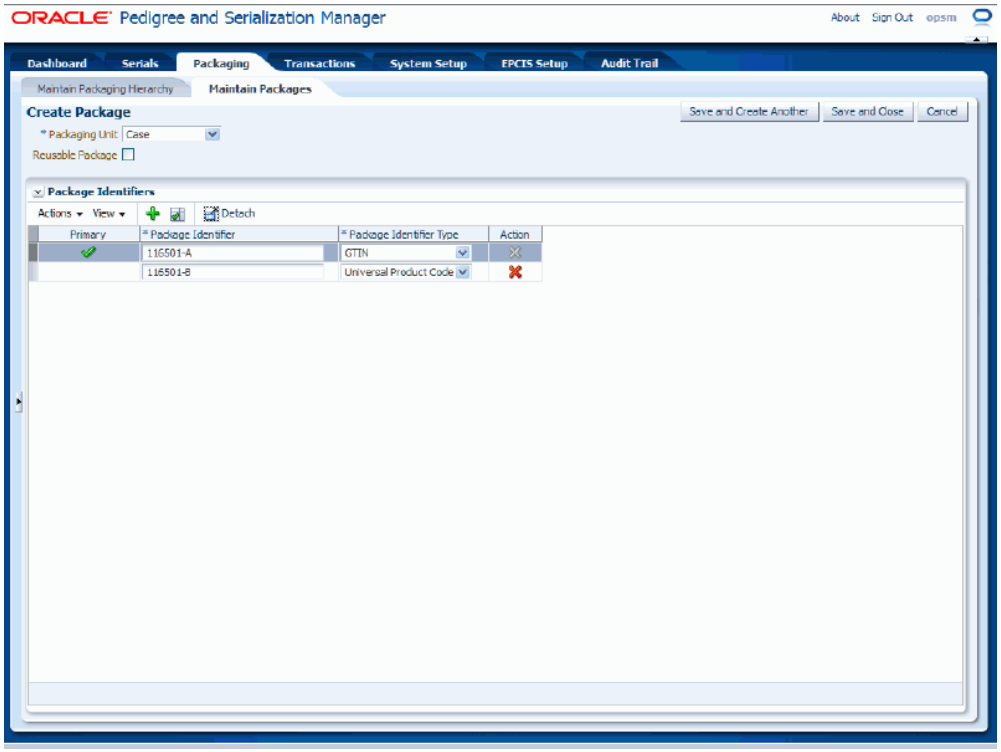
8. Select Set Primary Identifier from the Actions menu or click the Set Primary Package Identifier icon located at the top of the Package Identifiers region.

   A message appears asking if you want to set your selection as the primary package identifier.

   Note: If you are only adding one package identifier for the package you do not need to set the identifier as the primary. The system will automatically set the one package identifier as the primary when you save the package.

9. Click the OK button.

Create Package page



A green check mark appears in the Primary column of the table for the package identifier that is the primary.

10. Save your work. Choose one of these options:

    - Click the Save and Close button to save this package and return back to the Maintain Packages page.

    - Click Save and Create Another button to save this package and to stay on this page so you can create another package. The system displays a message that the package was created successfully and it clears all of the values in the fields.

Editing Packages

Use the Edit Package page in Oracle Pedigree and Serialization Manager (OPSM) to edit packages. OPSM only enables maintenance on packages that are not at a *Shipped* status. For packages with a Shipped status, the edit and delete actions for that package identifier will be inactivated and the edit and delete icons will also be disabled.

Use this procedure to edit packages:

To Edit Packages:

1. Navigate to the Maintain Packages page, page A-2.

2. Enter search criteria for the packages you want to edit and click the Search button.

   All of the packages that match the search criteria appear in the Search Results: Packages table.

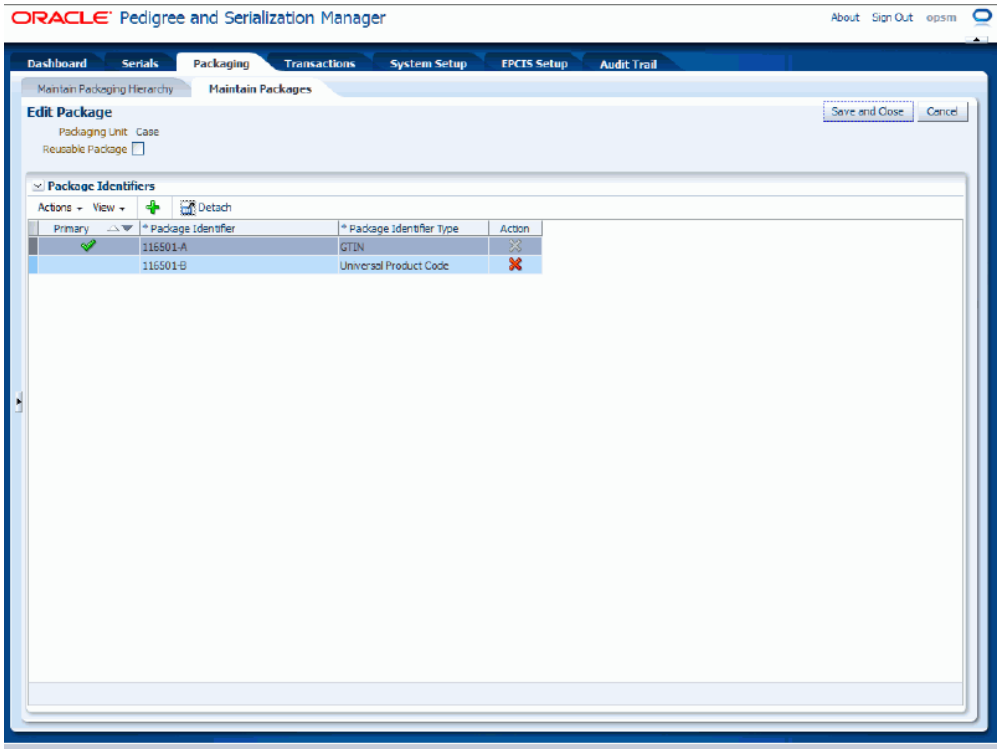
3. Select the package identifier (primary or alternate) in the table that you want to edit.

   Note: Whether you select the primary or alternate package identifier for the package the Edit Package page appears displaying all the information related to the package.

   Note: You cannot edit packages that have been shipped.

4. Select Edit in the Actions menu or click the Edit Package icon associated with the package identifier in the Actions column of the results table.

Edit Package page



The Edit Package page appears displaying all of the existing information for the package. The system displays both the primary and alternate package identifiers.

5. (Optional) Edit the Reusable Package check box field if necessary.

6. (Optional) Add additional alternate package identifiers or delete alternate package identifiers if necessary.

7. Click the Save and Close button to save the changes you made to the package information and to return back to the Maintain Packages page.

Deleting a Complete Package

Use the Maintain Packages page in Oracle Pedigree and Serialization Manager (OPSM) to delete a complete package. When you delete a complete package all of the information (primary and alternate package identifiers) for the package is deleted from the system.

OPSM only enables maintenance on packages that are not at a *Shipped* status.

Use this procedure to delete a complete package:

To Delete a Complete Package:

1. Navigate to the Maintain Packages page, page A-2.

2. Enter search criteria for the packages you want to delete and click the Search button.

   All of the packages that match the search criteria appear in the Search Results: Packages table.

3. Select the primary package identifier in the table that you want to delete.

   Note: You cannot delete packages that have been shipped.

4. Select Delete in the Actions menu or click the Delete icon in the Actions column of the results table.

   The system displays a messaging asking if you are sure you want to delete the package and that all the alternate identifiers will also be deleted.

5. Click the Yes button.

   The complete package is deleted from the system.

Deleting an Alternate Identifier from a Package

Use the Maintain Packages page in Oracle Pedigree and Serialization Manager (OPSM) to delete an alternate identifier from a package.

You can also use the Edit Package page to delete an alternate identifier.

For more information on deleting an alternate identifier using the Edit Package page, see Deleting an Alternate Identifier From a Package (Alternate Method), page 8-15.

OPSM only enables maintenance on packages that are not at a *Shipped* status.

Use this procedure to delete an alternate identifier from a package:

To Delete an Alternate Identifier from a Package:

1. Navigate to the Maintain Packages page, page A-2.

2. Enter search criteria for the packages you want to delete and click the Search button.

   All of the packages that match the search criteria appear in the Search Results: Packages table.

3. Select the alternate package identifier in the table that you want to delete.

Note: You cannot delete identifiers for packages that have been shipped.

4. Select Delete in the Actions menu or click the Delete icon in the Actions column of the results table.

   The system displays a messaging asking if you are sure to want to delete this alternate identifier for a package.

5. Click the Yes button.

   The alternate package identifier is deleted from the system.

Deleting an Alternate Identifier from a Package (Alternate Method)

Use the Edit Package page in Oracle Pedigree and Serialization Manager (OPSM) to delete an alternate identifier from a package.

You can also use the Maintain Packages page to delete an alternate identifier.

For more information on deleting an alternate identifier using the Maintain Packages page, see Deleting an Alternate Identifier From a Package, page 8-14.

OPSM only enables maintenance on packages that are not at a *Shipped* status.

Use this procedure to delete an alternate identifier from a package:

To Delete an Alternate Identifier from a Package (Alternate Method):

1. Navigate to the Maintain Packages page, page A-2.

2. Enter search criteria for the packages you want to edit and click the Search button.

   All of the packages that match the search criteria appear in the Search Results: Packages table.

3. Select the alternate package identifier in the table that you want to delete.

4. Select Edit in the Actions menu or click the Edit Package icon associated with the package identifier in the Actions column of the results table.

   The Edit Package page appears displaying all of the existing information for the package. The system displays both the primary and alternate package identifiers.

5. Select the alternate package identifier in the table that you want to delete.

   Note: You cannot delete identifiers for packages that have been shipped.

6. Select Delete Package Identifier in the Actions menu or click the Delete icon in the Actions column of the results table.

   Note: You cannot delete the primary package identifier using the Edit Package page. You must delete the complete package to delete the primary package identifier and re-create the package.

   The system displays a messaging asking if you are sure you want to delete this package identifier for a package.

7. Click the Yes button.

   The alternate package identifier is deleted from the system.

8. Click the Save and Close button to save the changes you made to the package information and to return back to the Maintain Packages page.

9

Managing Packaging Hierarchy

This chapter covers the following topics:

- Searching for Packaging Hierarchies
- Searching for Packages Using the Maintain Packaging Hierarchy Page
- Viewing Packaging Hierarchies
- Creating Packaging Hierarchies
- Removing (Unpacking) Packages from a Packaging Hierarchy
- Maintaining Packaging Hierarchies
- Editing Status and Usage of Serialized Items
- Creating Packages Using the Maintain Packaging Hierarchy Page

Searching for Packaging Hierarchies

Use the Maintain Packaging Hierarchy page in Oracle Pedigree and Serialization Manager (OPSM) to search for existing packaging hierarchies.

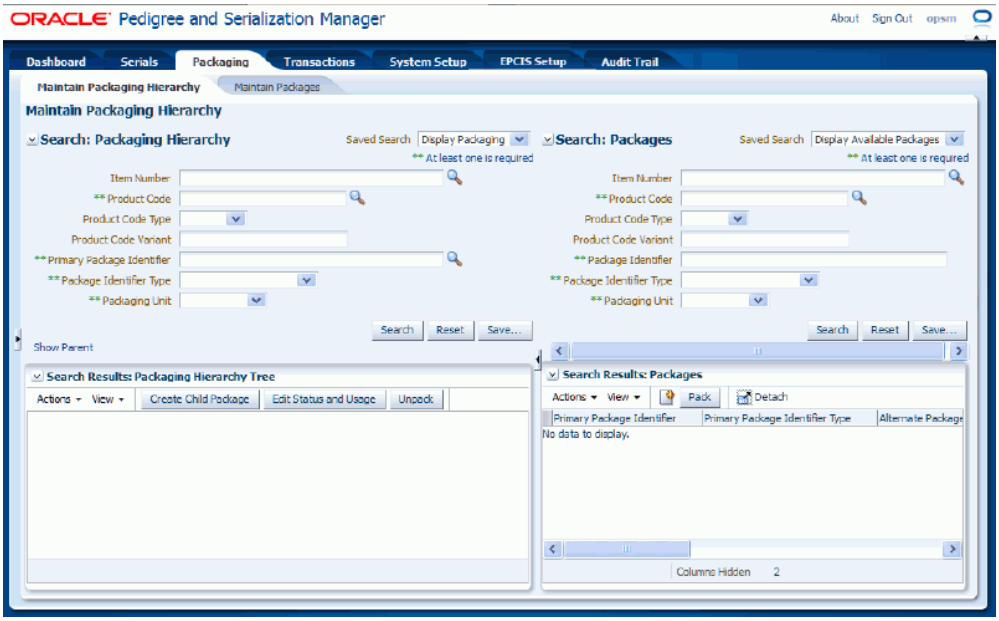
You can search for a packaging hierarchy using the primary or any alternate package identifier for the package. If you search for a packaging hierarchy using an alternate package identifier the packaging hierarchy tree will display using the primary package identifier for the package. The packaging hierarchy tree only contains primary package identifiers.

Use this procedure to search for packaging hierarchies:

To Search for Packaging Hierarchies:

1. Navigate to the Maintain Packaging Hierarchy page, page A-2.

Maintain Packaging Hierarchy page



2. In the Search: Packaging Hierarchy region, enter the search criteria for the packaging hierarchies using one or more of these fields:

Field Name	Description
Item Number	Select the item number for the packaging hierarchy. This is the transactional systems item number. It is used to find the Product Code to perform the search. The item number search is merely a way for you to search for the correct product code. When you select the Item Number, the Product Code, Product Code Type, and Product Code Variant fields are automatically populated. If you clear the Item Number, then the Product Code, Product Code Type, and Product Code Variant fields get cleared as well.

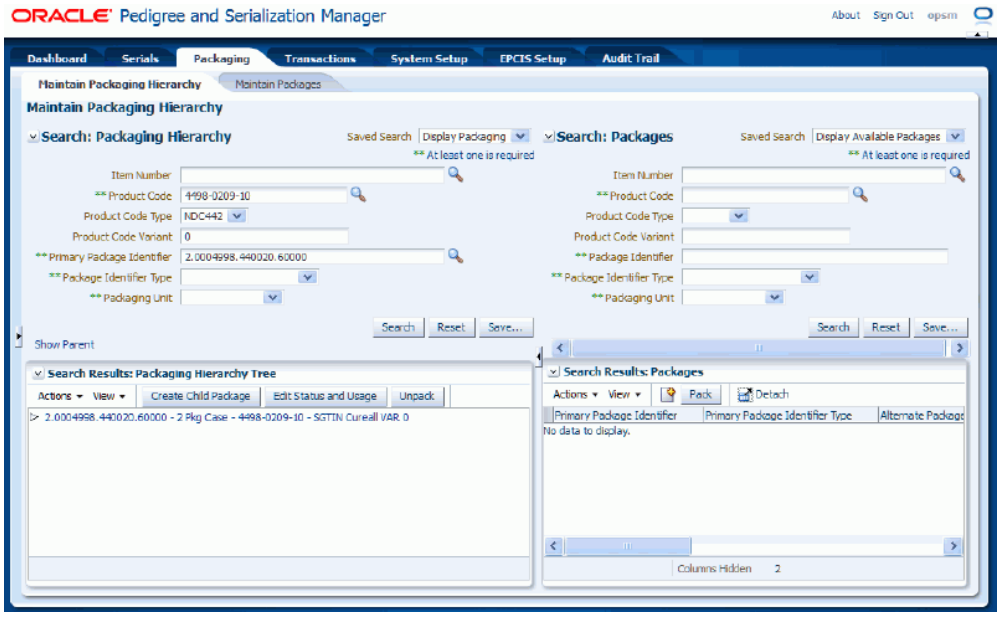
Field Name	Description
Product Code	Select the product code associated with the packaging hierarchy. When you select the product code, the Product Code Type and Product Code Variant fields appear by default from the Product Code entered.
Product Code Type	(Optional) Select the product code type associated with the product.
Product Code Variant	(Optional) Enter the product code variant associated with the product.

Field Name	Description
Primary Package Identifier	Select a primary package identifier using one of these methods: **To Enter a Primary Package Identifier (Using Primary Package Identifier)** • Enter a *primary* package identifier directly into the Primary Package Identifier field. **To Enter a Primary Package Identifier (Using Primary or Alternate Package Identifier)** 1. Click the Search: Primary Package Identifier icon next to the Primary Package Identifier field. The Search and Select: Primary Package Identifier dialog box appears. 2. Search for a primary package identifier using the Primary Package Identifier field or an alternate package identifier using the Package Identifier field. 3. Select a package identifier in the search results (primary or alternate) and click the OK button. The Primary Package Identifier field in the Search: Packaging Hierarchy region is populated with the selection. **Note:** If you selected an alternate package identifier the system will display the primary package identifier for that package in the Primary Package Identifier field. The Packaging Hierarchy Tree only uses primary package identifiers.
Package Identifier Type	Select the package identifier type for the packaging hierarchy.

Field Name	Description
Packaging Unit	Select the packaging unit for the packaging hierarchy.

3. Click the Search button.

Maintain Packaging Hierarchy page



The packaging hierarchies that match the search criteria appear in the Search Results: Packaging Hierarchy Tree region in a tree format.

Searching for Packages Using the Maintain Packaging Hierarchy Page

Use the Maintain Packaging Hierarchy page in Oracle Pedigree and Serialization Manager (OPSM) to search for packages that have not yet been packed or added to a packaging hierarchy tree.

After you retrieve the packages that you want to work with using the Search: Packages region of the page you can then drag and drop them to the correct location in the Packaging Hierarchy Tree region. Multiple searches can be performed using the right region of the page (Search: Packages side) without affecting the left region of the page (Packaging Hierarchy side).

In addition, you can use the Search: Packages region to view all the details associated with a package including alternate package identifiers.

The Search: Packages region of the Maintain Packaging Hierarchy page functions basically the same as the Maintain Packages page except for a couple of differences. The differences are:

- In the Packaging Hierarchy page the primary reason for searching for packages is to pack and unpack, thus in the Search: Packages region you will only be able to search for and retrieve packages that have not been packed. Whereas with the Maintain Packages page you can view all packages whether they have been packed or not into a packaging hierarchy tree.

- In the Search: Packages region of the Packaging Hierarchy page you cannot edit a package but you can use the Maintain Packages page to edit a package.

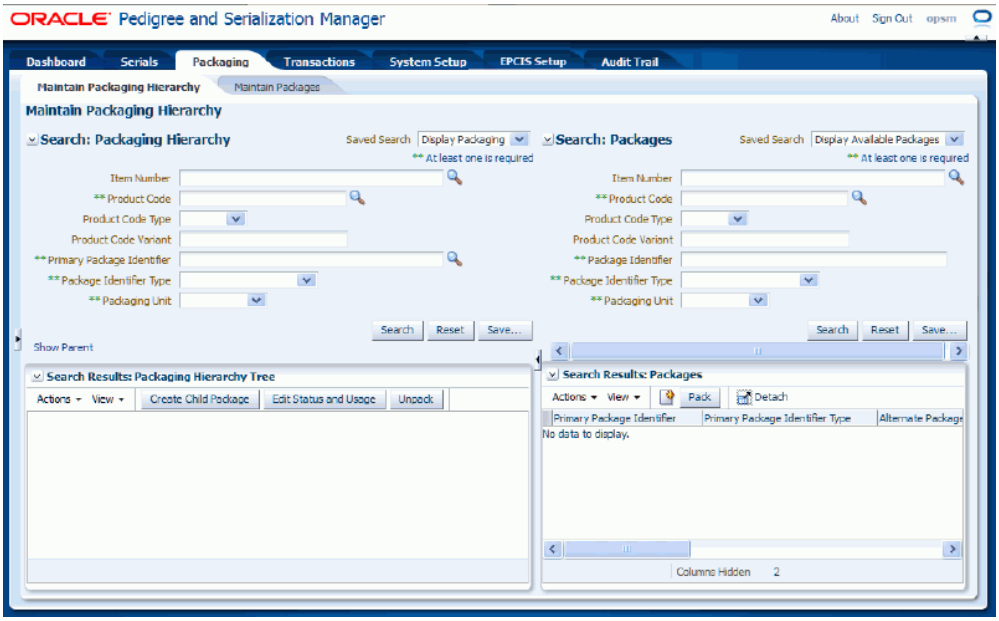
For more information on the Maintain Packages page, see Maintaining Packages, page 8-1.

Use this procedure to search for packages using the Maintain Packaging Hierarchy Page:

To Search for Packages Using the Maintain Packaging Hierarchy Page:

1. Navigate to the Maintain Packaging Hierarchy page, page A-2.

Maintain Packaging Hierarchy page

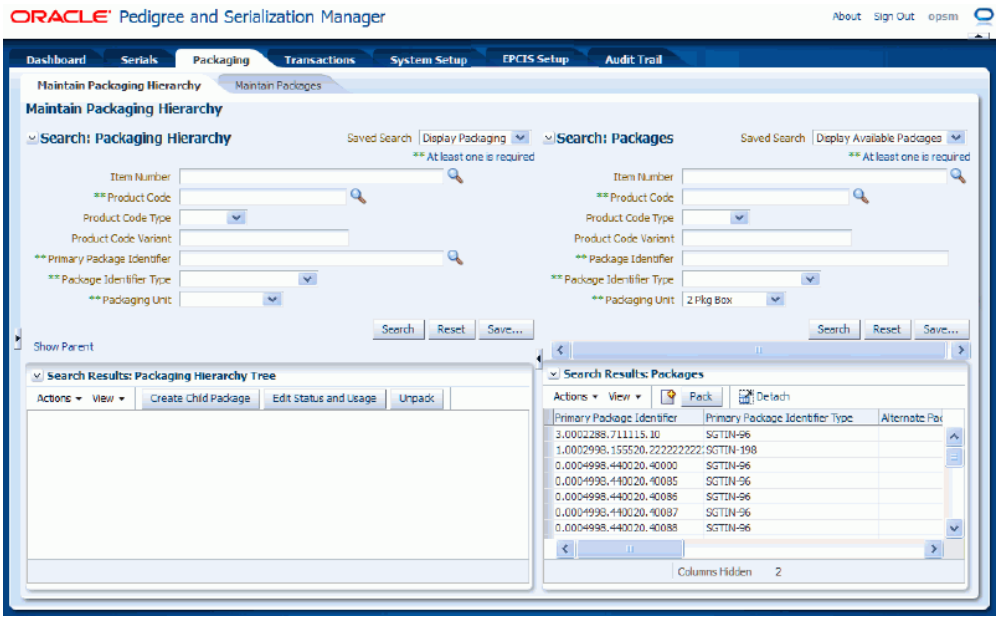


2. In the Search: Packages region, enter the search criteria for the packages using one or more of these fields:

Field Name	Description
Item Number	(Optional) Select the item number for the package. This is the transactional systems item number. It is used to find the Product Code to perform the search. The item number search is merely a way for you to search for the correct product code. When you select the Item Number, the Product Code, Product Code Type, and Product Code Variant fields are automatically populated. If you clear the Item Number, then the Product Code, Product Code Type, and Product Code Variant fields get cleared as well.
Product Code	Select the product code for the package. When you select the product code, the Product Code Type and Product Code Variant fields appear by default from the Product Code entered.
Product Code Type	(Optional) Select the product code type associated with the product.
Product Code Variant	(Optional) Enter the product code variant associated with the product.
Package Identifier	Enter the package identifier.
Package Identifier Type	Select the package identifier type.
Packaging Unit	Select the packaging unit for the package.

3. Click the Search button.

Maintain Packaging Hierarchy page



All of the packages that match the search criteria that have not been packed into a pack (packaging hierarchy tree) appear in the Search Results: Packages region in a table format.

If a package has alternate package identifier information associated to it that information appears in the table. Otherwise, those fields are not populated.

At this time, you can then pack the packages into a pack (packaging hierarchy tree). You will first retrieve the pack (packaging hierarchy tree) using the Search: Packaging Hierarchy region of the page and then select the node in the pack (packaging hierarchy tree) where you want to place the packages.

For more information on searching for a packaging hierarchy, see Searching for Packaging Hierarchies, page 9-1.

For more information on packing packages into a pack (packaging hierarchy tree), see Creating Packaging Hierarchies, page 9-12.

Viewing Packaging Hierarchies

Use the Maintain Packaging Hierarchy page in Oracle Pedigree and Serialization Manager (OPSM) to view a complete packaging hierarchy. Using the expand and collapse functionality you can view all of the lower level details for a packaging hierarchy.

Use this procedure to view packaging hierarchies:

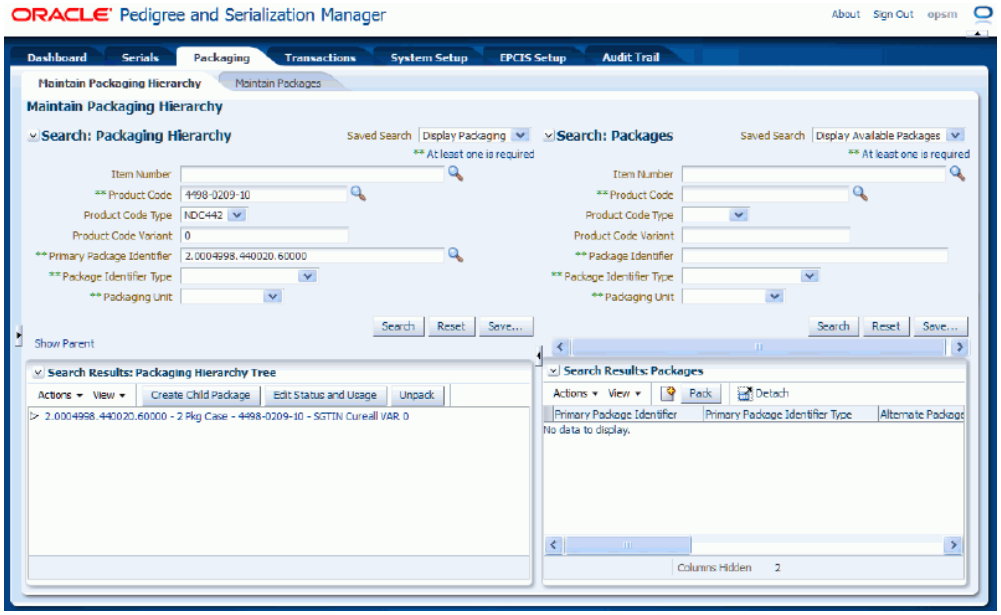
To View Packaging Hierarchies:

1. Navigate to the Maintain Packaging Hierarchy page, page A-2.

2. In the Search: Packaging Hierarchy region, enter search criteria for the packaging hierarchy.

3. Click the Search button.

Maintain Packaging Hierarchy page



The packaging hierarchy that matches the search criteria displays in the Search Results: Packaging Hierarchy Tree region in a tree format.

The packaging hierarchy tree displays with none of the child nodes expanded.

The tree nodes are represented by one of the following:

- For tree nodes that have an associated product, the tree nodes are represented by Primary Package Identifier, Packaging Unit, Product Code, and Product Name.

  For example, a tree node of 2.0002288.420901.1 - 2 Package Case - 0037-0223-11 - NoPain 200mg blister pack tablet represents the primary package identifier of 2.0002288.420901.1, packaging unit of 2 Package Case, product code of 0037-0223-11, and the product name of NoPain 200mg blister pack tablet.

- For tree nodes without a product, the tree nodes are represented by Primary Package Identifier and Packaging Unit.

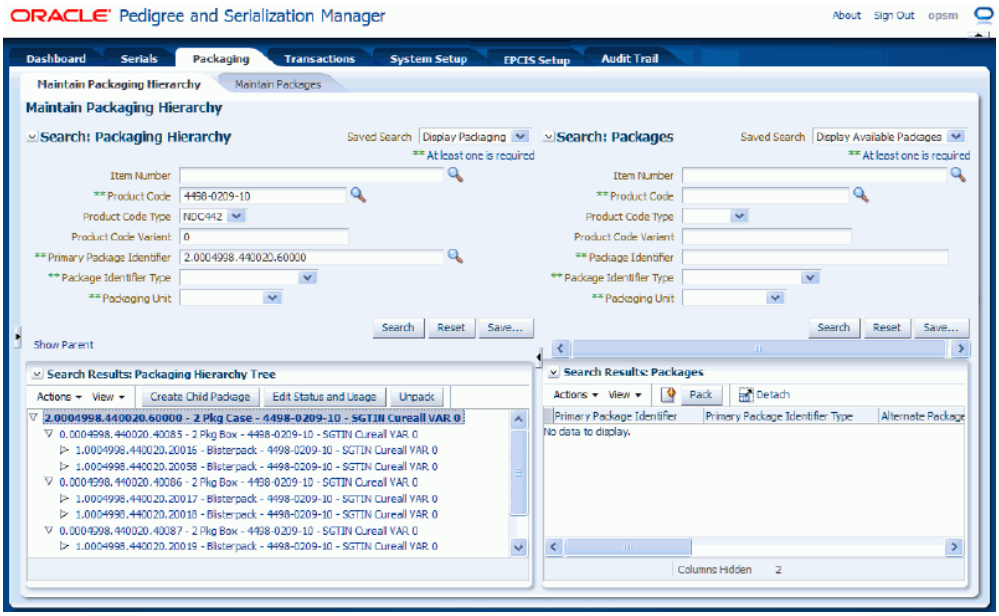
For example, a tree node of 116501-01 - Container represents a primary package identifier of 116501-01 and the packaging unit of container.

4. (Optional) Expand a node.

   To expand a node in the packaging hierarchy tree use one of these methods:

   - Click the Expand icon next to the node in the tree you want to expand.
   - Select the node in the tree you want to expand and select Expand, Expand All, or Expand All Below from the View menu.

Maintain Packaging Hierarchy page (nodes expanded)



The nodes are expanded to display the packaging information below the node selected.

5. (Optional) Collapse a node.

   To collapse a node in the packaging hierarchy tree use one of these methods:

   - Click the Collapse icon next to the node in the tree you want to collapse.
   - Select the node in the tree you want to collapse and select Collapse, Collapse All, or Collapse All Below from the View menu.

   The nodes are collapsed to hide the packaging information below the node selected.

6. (Optional) Scroll to the first node by selecting Scroll to First in the View menu.

The system displays the first node in the packaging hierarchy tree.

7. (Optional) Scroll to the last node by selecting Scroll to Last in the View menu.

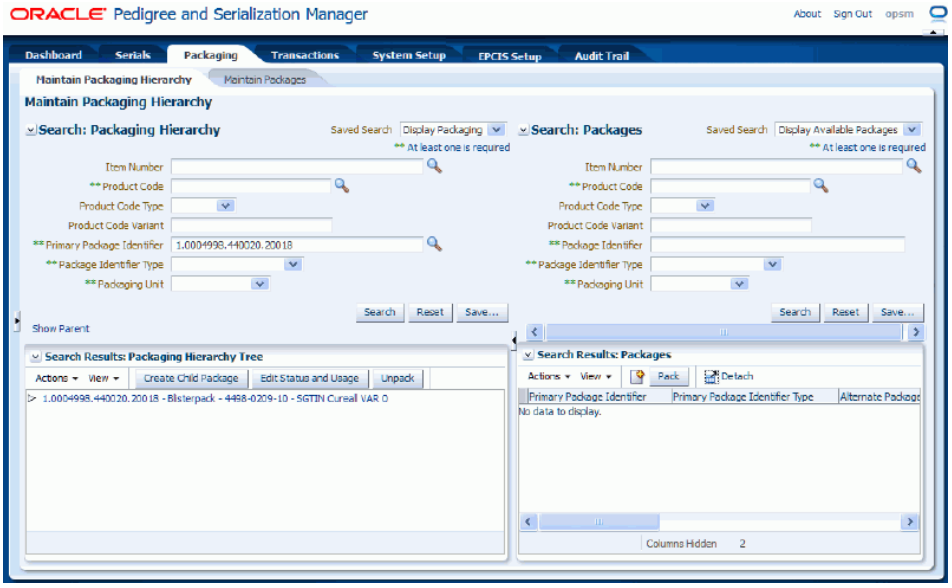
   The system displays the last node in packaging hierarchy tree.

8. (Optional) View the parent node for a child node.

   To View the Parent Node for a Child Node

   1. Search for a *child* package identifier in the Search: Package Hierarchy region of the page.

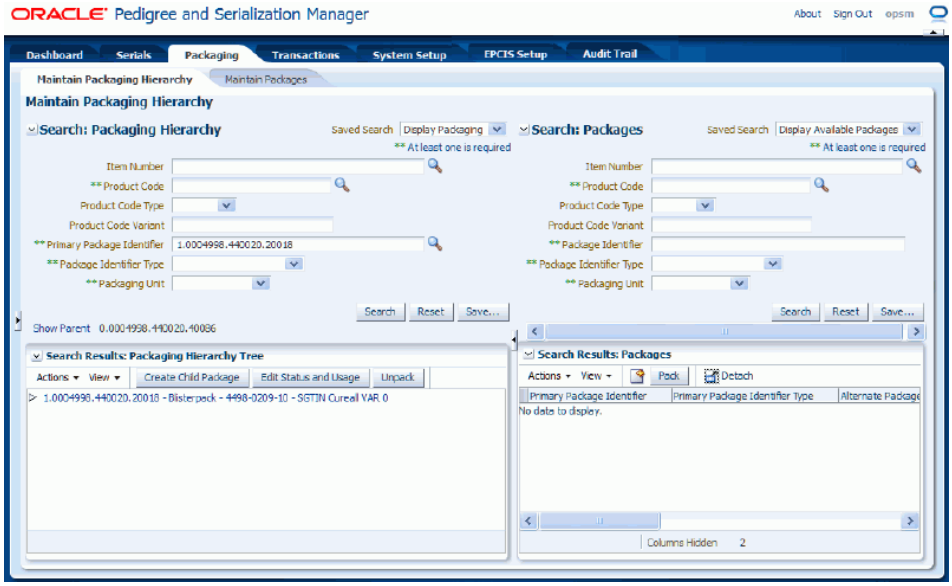
Maintain Packaging Hierarchy page (Child Node Search)



   The packaging hierarchy for the child node appears in the Search Results: Packaging Hierarchy Tree region in a tree format.

   2. Click the Show Parent link located in the Search: Packaging Hierarchy region (lower left hand corner).

Maintain Packaging Hierarchy page (Show Parent link)



The parent node displays next to the link. N/A displays if you are working with a parent node in the tree.

3. Perform a search for the parent node. You can copy and paste from the Show Parent link display into the Primary Package Identifier field.

   You will be able to view the complete packaging hierarchy tree for the parent node all the way down to the lower child nodes.

Creating Packaging Hierarchies

Use the Maintain Packaging Hierarchy page in Oracle Pedigree and Serialization Manager (OPSM) to create packaging hierarchies. Using this page you will build the packaging hierarchy in a tree format starting from the top of the packaging hierarchy (parent node) and working down to the lower levels of the packaging hierarchy (child nodes). The tree must be built from the top down to the lower levels.

The package identifiers that are used to create a packaging hierarchy are the *primary* identifiers for a package for all nodes within the tree. You can search for packages using the alternate identifiers for the packages but the system will always change them to the primary identifier for the package when they are used in the packaging hierarchy tree.

To create a packaging hierarchy you will first select and retrieve the package identifier (package) that represents the parent node. When that node appears in the packaging hierarchy tree for the first time there will be no children nodes associated with it. Then you will add or pack package identifiers (packages) that represent children nodes to the appropriate place under the parent node.

When adding (packing) the children nodes to the packaging hierarchy tree the page contains a Packages region where you can retrieve and select existing packages that have not been packed yet. Then you can drag and drop those packages from the Packages region to the packaging hierarchy tree to pack or you can add them to the packaging hierarchy tree using the Pack functionality contained within the page.

In addition, if a package does not already exist you can create a child package directly within the packaging hierarchy tree or you can create a new package using the Packages region of the page and then drag and drop it to the correct location in the packaging hierarchy tree.

Use this procedure to create packaging hierarchies:

To Create Packaging Hierarchies:

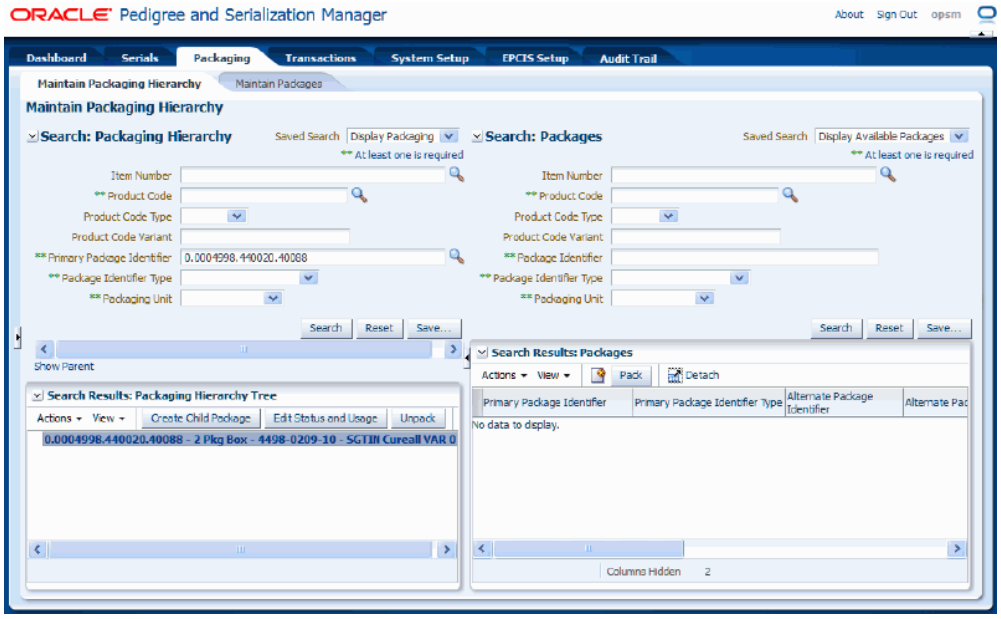
1. Navigate to the Maintain Packaging Hierarchy page, page A-2.

2. In the Search: Packaging Hierarchy region, enter search criteria for the package identifier that you want to create the packaging hierarchy for.

   This should be the top or parent node package identifier information.

3. Click the Search button.

Maintain Packaging Hierarchy page



The Package Identifier displays in the Search Results: Packaging Hierarchy Tree region as the top node (parent package) of the tree for the packaging hierarchy.

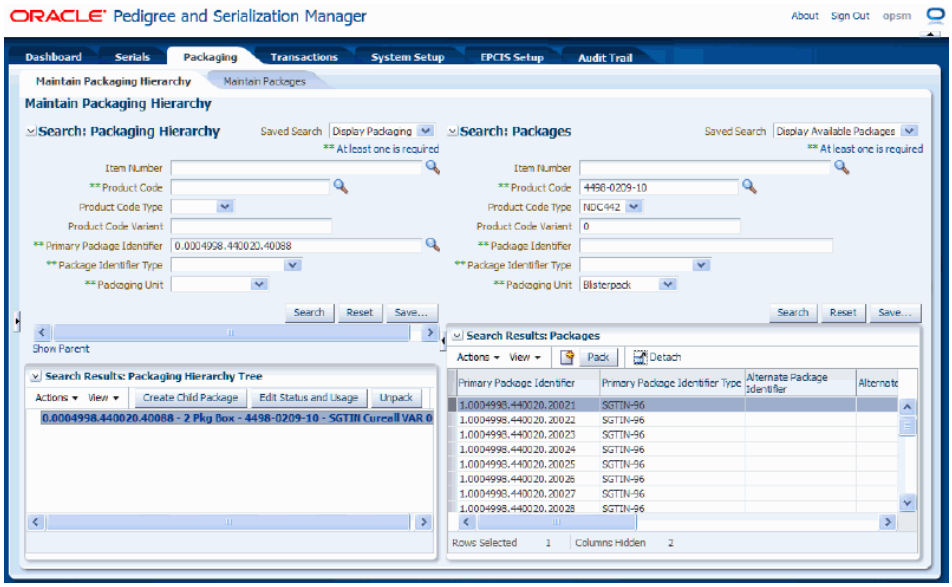
If this is the first time you are creating the packaging hierarchy only the parent node displays and is available for selection.

4. Add lower nodes (child packages) to the packaging hierarchy using one of these methods:

To Add a Child Package (Using Pack Icon)

1. In the Search: Packages region (right side of the page), enter search criteria for the package identifiers (packages) you want to add to the packaging hierarchy and click the Search button.

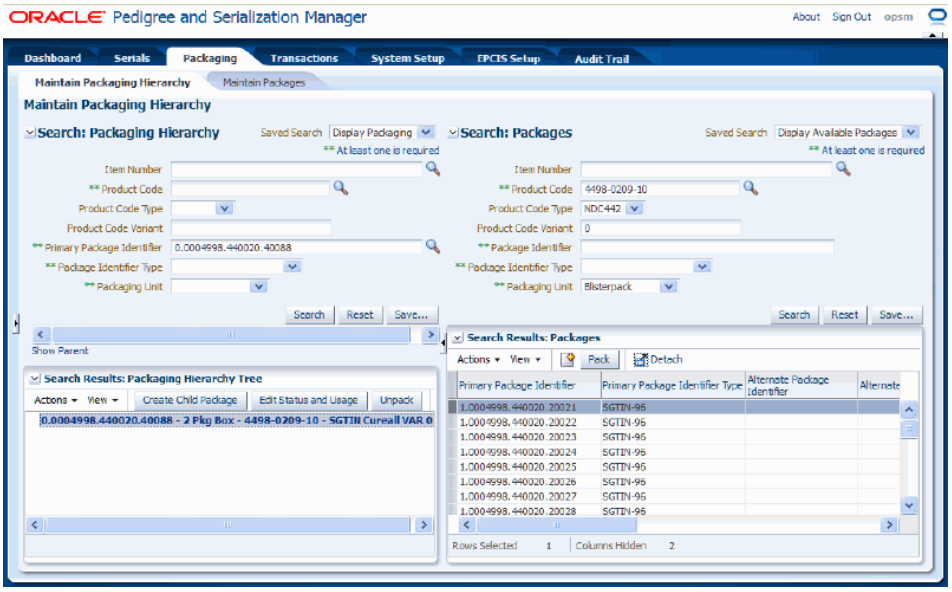
Maintain Packaging Hierarchy page



The package identifiers (packages) that match the search criteria display in the Search Results: Packages region in a table format.

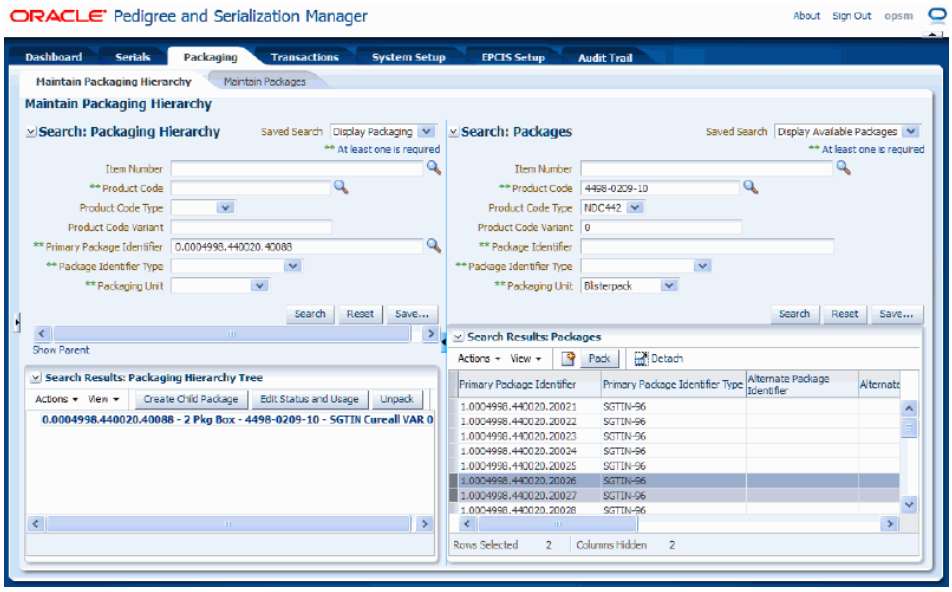
2. Select the node in the packaging hierarchy tree (left side of page) where you want to add the child packages.

Maintain Packaging Hierarchy page



3. Select one or more package identifiers (packages) that you want to add to the tree under the selected node from the Search Results: Packages table (right side of page).

Maintain Packaging Hierarchy page

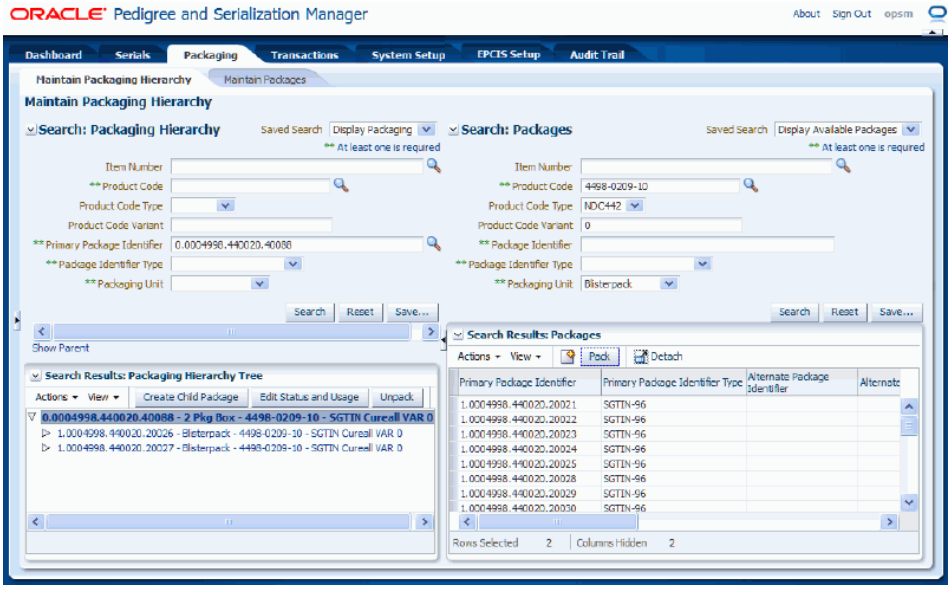


4. Select Pack in the Actions menu or click the Pack button located at the top of the Search Results: Packages table.

   The package identifiers (packages) are added under the node of the tree that was selected.

5. Expand the parent node to view the child nodes that were added.

Maintain Packaging Hierarchy page



To Add a Child Package (Drag and Drop)

1. In the Search: Packages region (right side of the page), enter search criteria for the package identifiers (packages) you want to add to the packaging hierarchy and click the Search button.

   The package identifiers (packages) that match the search criteria display in the Search Results: Packages region in a table format.

   > **Note:** You can also create a new package using the Packages side of the page. For more information, see Creating Packages Using the Maintain Packaging Hierarchy Page, page 9-29.

2. Select the node in the packaging hierarchy tree (left side of page) where you want to add the child packages.

3. Select one or more package identifiers (packages) that you want to add to the tree from the Search Results: Packages table (right side of page).

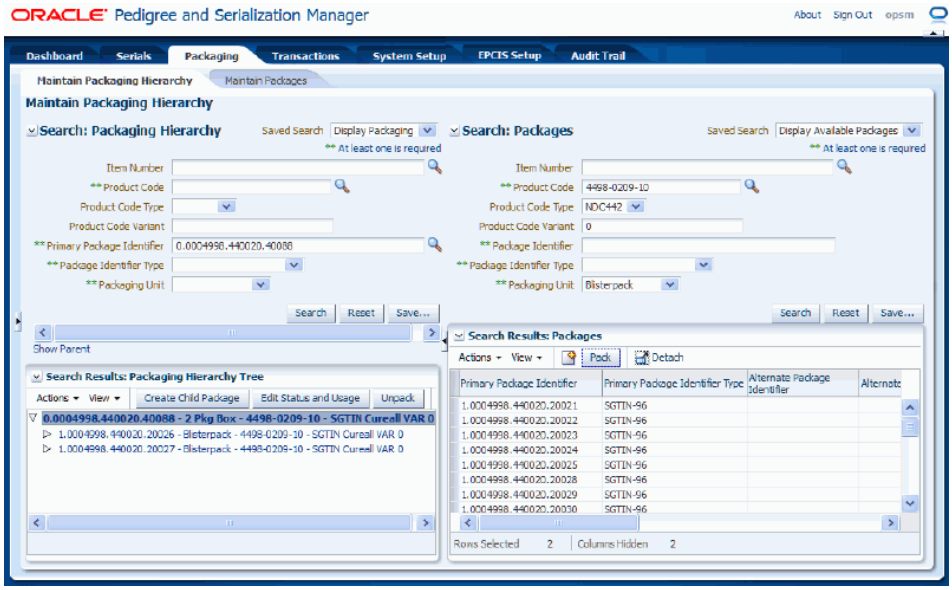
4. Drag and drop the selected package identifiers (packages) to the correct location (node) in the packaging hierarchy tree (left side of page).

   The package identifiers (packages) display under the node of the tree where they were dropped. If you fail to select a node in which to pack into, the system will generate an error indicating that you must first select a node to pack into.

To Add a Child Package (Create Child Package Action or Button)

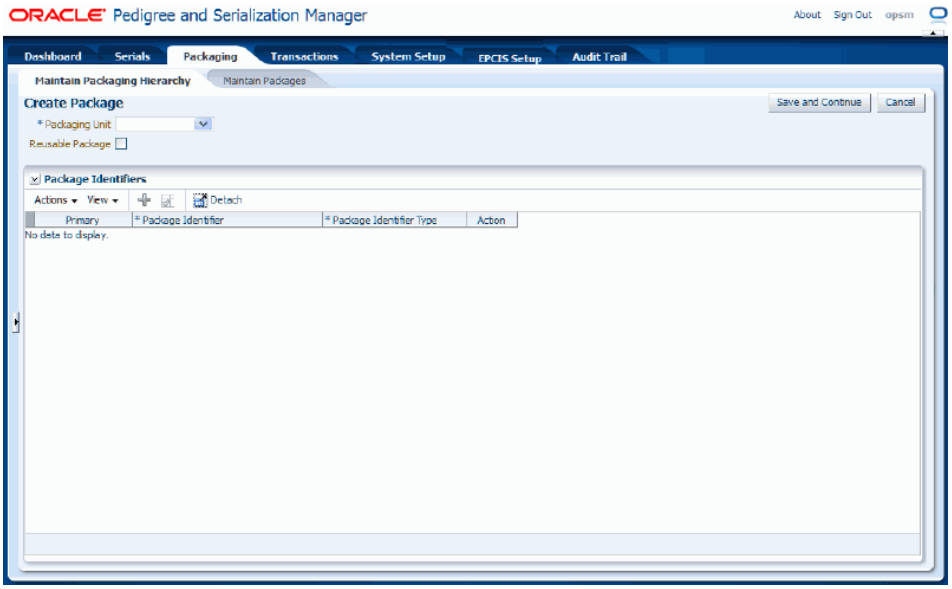
1. Select the node in the Packaging Hierarchy Tree (left side of page) where you want to add a child package.

Maintain Packaging Hierarchy page



2. Select Create Child Package from the Actions menu or click the Create Child Package button located at the top of the Packaging Hierarchy Tree.

Create Package page

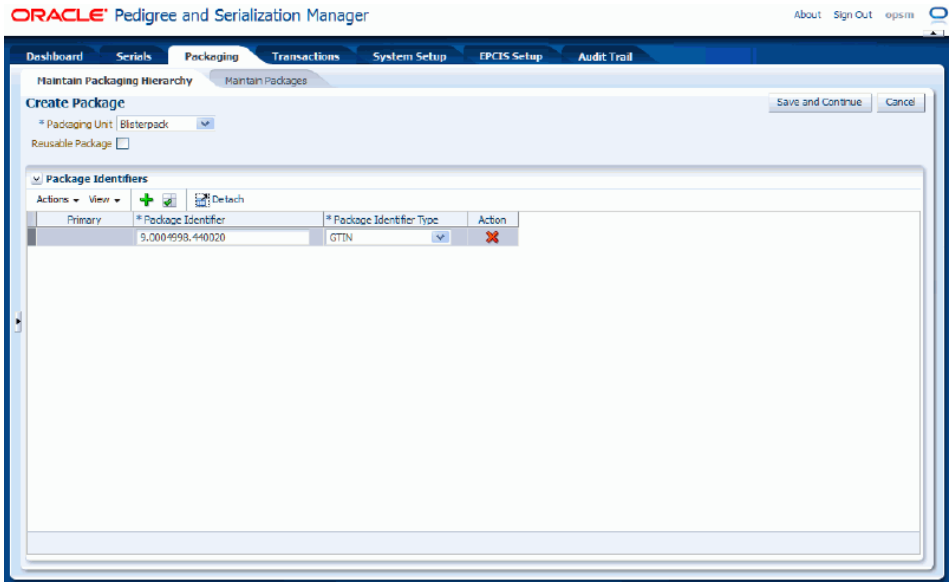


The Create Package page appears where you can create a child package.

For more information on creating a new package using the Maintain Packages region, see Creating Packages Using the Maintain Packaging Hierarchy Page, page 9-29.

3. Enter the package information.

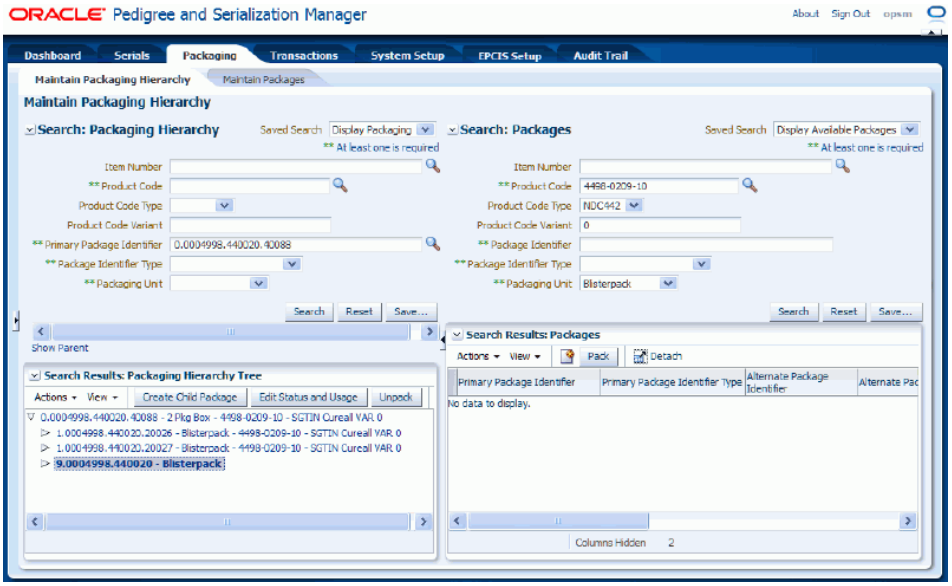
Create Package page



For information on creating a package, see Creating Packages, page 8-6.

4. Click the Save and Continue button.

Maintain Packaging Hierarchy page



The newly created package identifier displays under the selected node of the packaging hierarchy tree.

5. Repeat Step 4 using one of the methods to add child packages until all the child packages have been added to the packaging hierarchy in the correct location in the tree structure. The packaging hierarchy is complete when all the child packages have been added to the tree structure.

Removing (Unpacking) Packages from a Packaging Hierarchy

Use the Maintain Packaging Hierarchy page in Oracle Pedigree and Serialization Manager (OPSM) to remove or unpack child packages from the packaging hierarchy tree.

Use this procedure to remove (unpack) packages from a packaging hierarchy:

Prerequisites

❒ A packaging hierarchy has already been created.

To Remove (Unpack) Packages from a Packaging Hierarchy:

1. Navigate to the Maintain Packaging Hierarchy page, page A-2.

2. In the Search: Packaging Hierarchy region, enter search criteria for the package

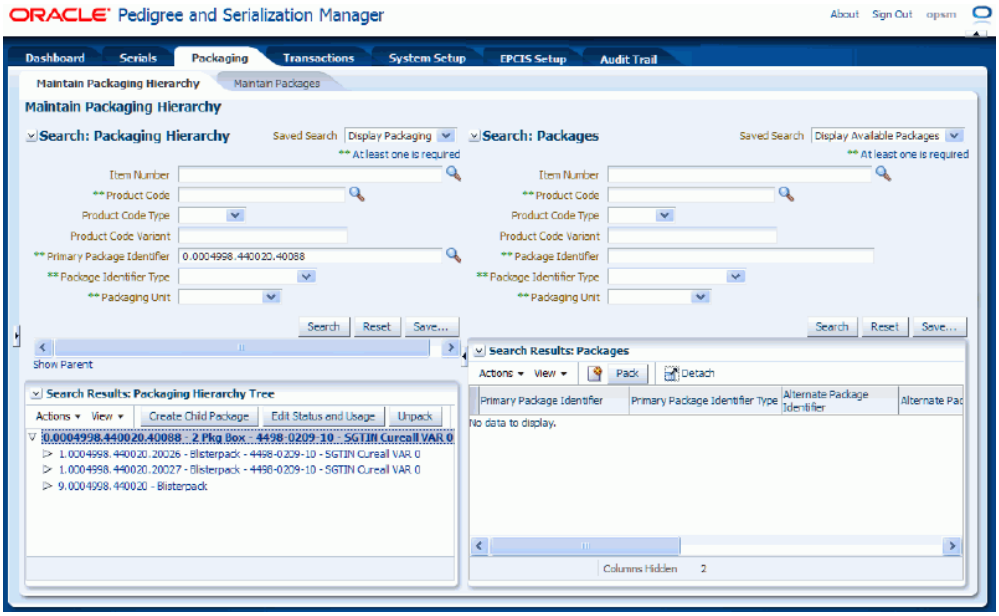
identifier that you want to delete packages from.

3. Click the Search button.

   The Package Identifier displays in the Search Results: Packaging Hierarchy Tree region as the top node (parent package) of the tree for the packaging hierarchy.

4. Expand or collapse the nodes in the tree until you locate the packages you want to remove or unpack from the packaging hierarchy tree.

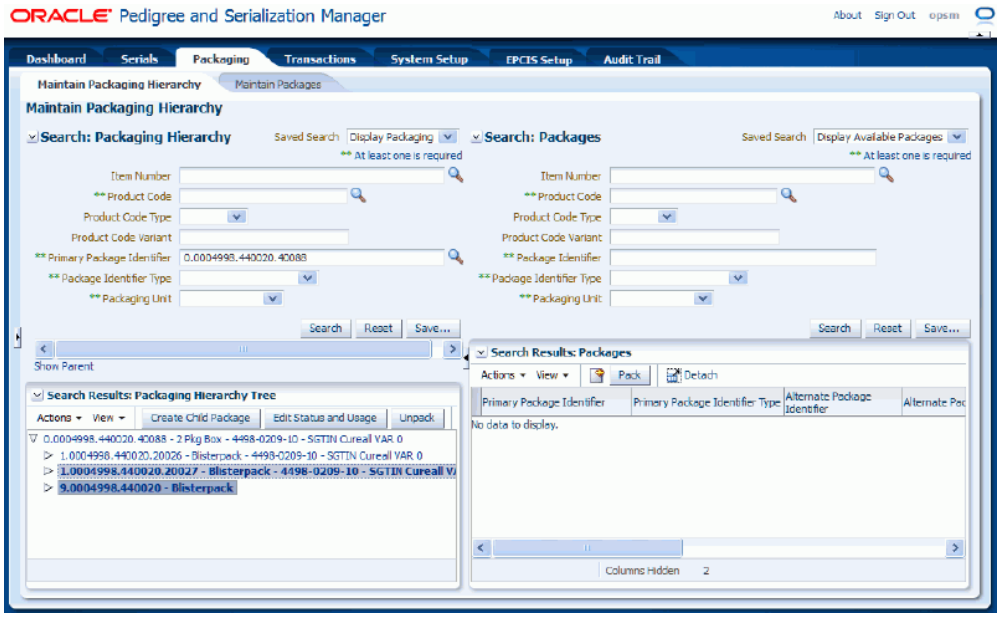
Maintain Packaging Hierarchy page



5. Select the nodes you want to remove or unpack in the tree.

   Note: You can select one or more nodes to remove or unpack at one time.

Maintain Packaging Hierarchy page

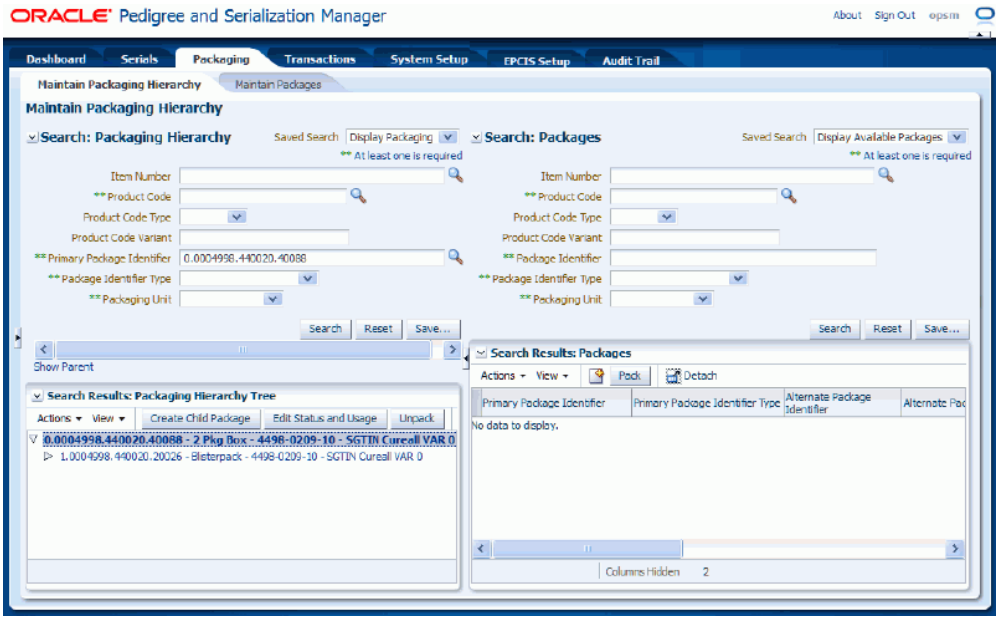


6. Select Unpack from the Actions menu or click the Unpack button located at the top of the Search Results: Packaging Hierarchy Tree region.

   A message appears asking if you are sure you want to unpack the selected items.

7. Click the OK button.

Maintain Packaging Hierarchy page



The packages are removed or unpacked from the packaging hierarchy.

Maintaining Packaging Hierarchies

Use the Maintain Packaging Hierarchy page in Oracle Pedigree and Serialization Manager (OPSM) to maintain packaging hierarchies. After a packaging hierarchy is initially created, you can then use the Maintain Packaging Hierarchy page to add additional packages (child nodes) to a packaging hierarchy or to remove child packages (child nodes) from the packaging hierarchy.

Use this procedure to maintain packaging hierarchies:

To Maintain Packaging Hierarchies:

1. Navigate to the Maintain Packaging Hierarchy page, page A-2.

2. In the Search: Packaging Hierarchy region, enter search criteria for the package identifier that you want to maintain the packaging hierarchy for.

3. Click the Search button.

   The Package Identifier displays in the Search Results: Packaging Hierarchy Tree region as the top node (parent package) of the tree for the packaging hierarchy.

4. (Optional) Expand and collapse the nodes until you locate where in the tree you want to add additional child nodes to or where you want to remove child nodes

from in an existing packaging hierarchy.

5. (Optional) Add additional nodes to the packaging hierarchy tree.

   For information on how to add additional nodes to a packaging hierarchy, see Creating Packaging Hierarchies, page 9-12.

6. (Optional) Remove nodes from the packaging hierarchy tree.

   For information on how to remove packages from a packaging hierarchy, see Removing (Unpacking) Packages from a Packaging Hierarchy, page 9-21.

Editing Status and Usage of Serialized Items

Using the Maintain Packaging Hierarchy page in Oracle Pedigree and Serialization (OPSM) you can edit the status and usage of serialized items that are associated with nodes in the packaging hierarchy tree. You can update the counterfeit status (Counterfeit, Verified Not Counterfeit, or Suspect Counterfeit), the serial status (Decommissioned), and the serial usage for those items. You can update the statuses and usage for the serialized items all at one time or you can update them individually. Please note that the system will update the statuses and usage for all children of the selected node.

Use this procedure to edit status and usage for serialized items:

To Edit Status and Usage of Serialized Items:

1. Navigate to the Maintain Packaging Hierarchy page, page A-2.

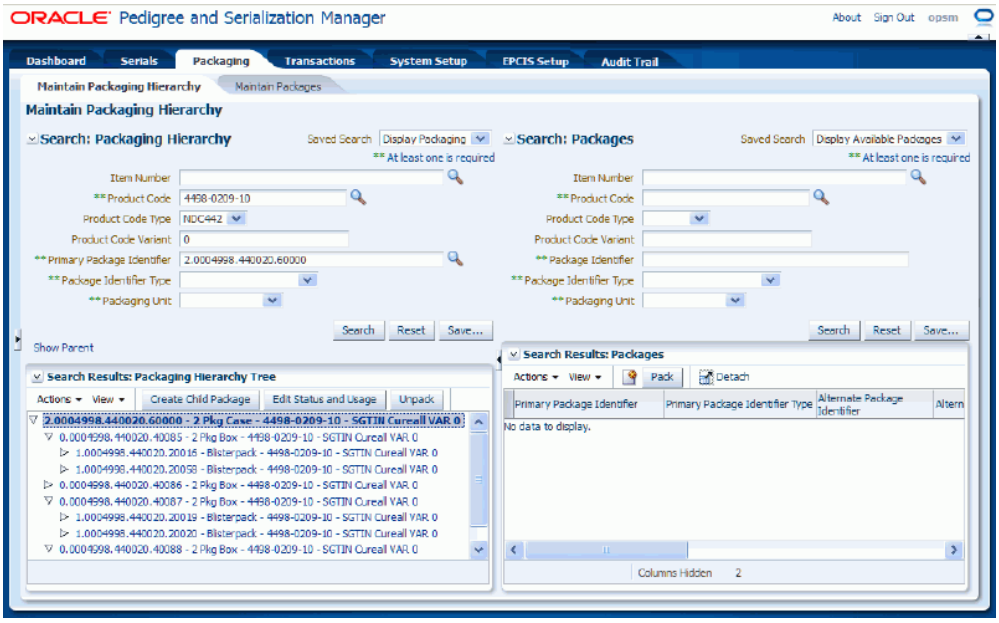
2. In the Search: Packaging Hierarchy region, enter search criteria for the package identifier that you want to edit the status and usage of serialized items for.

3. Click the Search button.

   The Package Identifier displays in the Search Results: Packaging Hierarchy Tree region as the top node (parent package) of the tree for the packaging hierarchy.

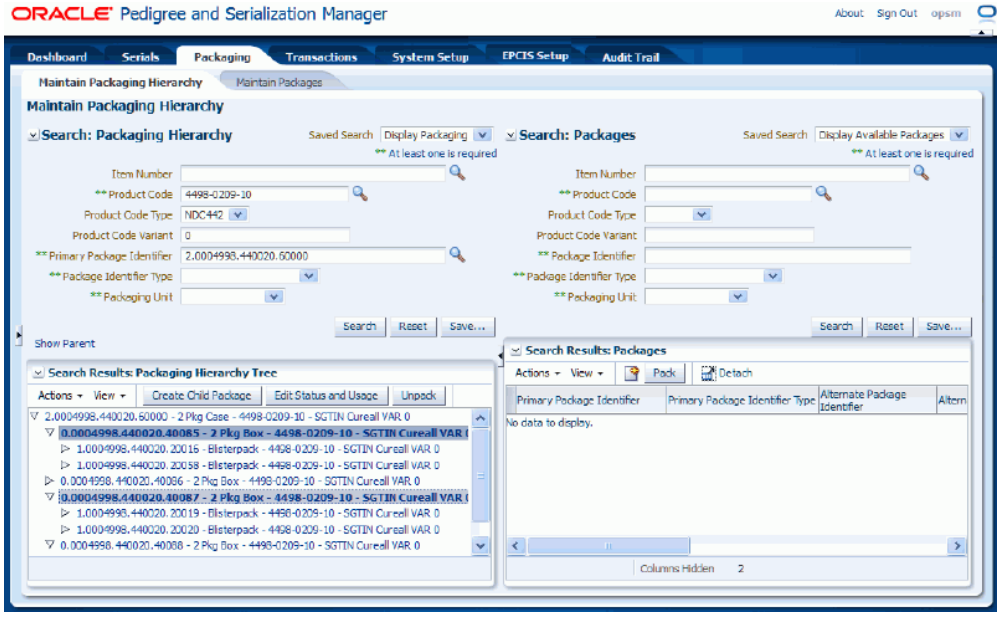
4. Expand or collapse the nodes in the tree until you locate where you want to edit the status and usage for serialized items within the packaging hierarchy tree.

Maintain Packaging Hierarchy page



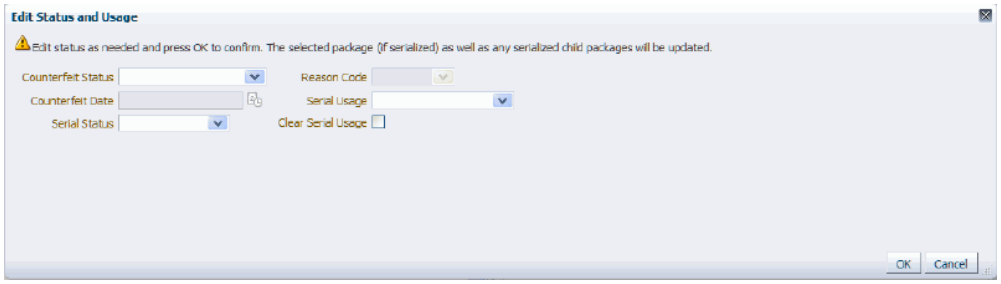
5. Select one or more nodes in the Packaging Hierarchy Tree where you want to edit the status and usage for serialized items. For the selected node and all lower level nodes.

Maintain Packaging Hierarchy page



6. Select Edit Status and Usage from the Actions menu or click the Edit Status and Usage button located at the top of the packaging hierarchy tree.

Edit Status and Usage page



The Edit Status and Usage page appears.

7. Edit the existing statuses and usage.

> **Note:** The statuses and usage fields can be updated individually or all at one time.

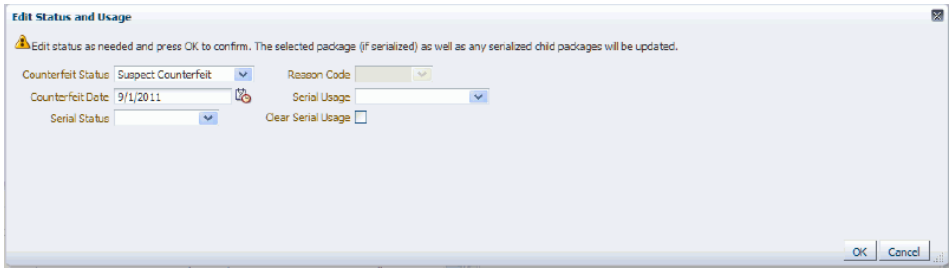
To Edit Counterfeit Status

1. Select the new Counterfeit Status. Statuses are: Counterfeit, Suspect Counterfeit, and Verified Not Counterfeit.

After you select a counterfeit status the Counterfeit Date field becomes available.

2. (Optional) Select the date you would like to associate with the new counterfeit status in the Counterfeit Date field.

Edit Status and Usage page



> **Note:** You can no longer clear the counterfeit status. When a serial is created in OPSM the counterfeit status is null. After a duplicate serial is created, both serials have the counterfeit status of *Suspect.* If one of the serials is changed to *Verified Not Counterfeit,* a popup is displayed warning the user that the other duplicate serials are being updated as *Counterfeit.*

To Edit Serial Status

1. Select the new Serial Status. Statuses are: Commissioned, Decommissioned, and Reserved.

2. If you selected a *Decommissioned* serial status, enter the reason why the serialized items were decommissioned using the Reason Code field.

> **Note:** You need to enter a Reason Code when you are decommissioning serialized items.

To Edit Serial Usage

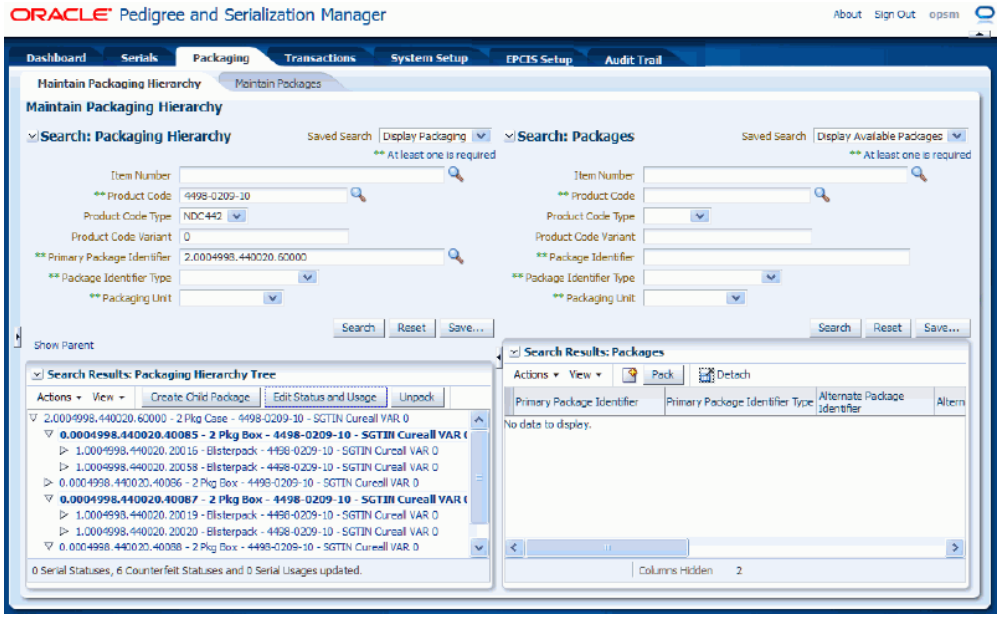
1. Select the new Serial Usage.

To Clear Serial Usage

1. (Optional) Click the Clear Serial Usage check box if you want the system to clear the Serial Usage for the serialized items.

8. Click the OK button.

Maintain Packaging Hierarchy page



The Maintain Packaging Hierarchy page reappears with a message at the bottom of the page indicating the number of serialized items where the serial status, counterfeit status, and serial usage were updated.

The serialized items from the node selected down to the lowest serialized item will be updated with the new information. You can view the updates using the Maintain Serials page.

Creating Packages Using the Maintain Packaging Hierarchy Page

Using the Maintain Packaging Hierarchy page in Oracle Pedigree and Serialization Manager (OPSM) you can create new packages. There are two ways to create new packages using this page. One way is from within the Packaging Hierarchy Tree itself and the other way is using the Packages region (right side) within the page. In both cases, the Create Package page appears where you can enter the new package information. The Create Package page functions the same in both instances and works the same as the Create Package page that can be accessed from the Maintain Packages page.

For more information on the Create Package page that you can access from the Maintain Packages page, see Creating Packages, page 8-6.

Use these procedures to create packages using the Maintain Packaging Hierarchy page:

To Create Packages Using the Maintain Packaging Hierarchy Page (Within Packaging Hierarchy Tree):

1. Navigate to the Maintain Packaging Hierarchy page, page A-2.

2. In the Search: Packaging Hierarchy region, enter search criteria for the package identifier that you want to create child packages for.

3. Click the Search button.

   The Package Identifier displays in the Search Results: Packaging Hierarchy Tree region as the top node (parent package) of the tree for the packaging hierarchy.

4. Expand or collapse the nodes in the tree until you locate where you want to create a child package within the packaging hierarchy tree.

5. Select the node in the Packaging Hierarchy Tree where you want to add a child package.

6. Select Create Child Package from the Actions menu or click the Create Child Package button located at the top of the packaging hierarchy tree.

   The Create Package page appears where you can create a child package.

7. Enter the package information.

   For information on creating a package, see Creating Packages, page 8-6.

8. Click the Save and Continue button.

   The newly created package identifier displays under the selected node of the packaging hierarchy tree.

To Create Packages Using the Maintain Packaging Hierarchy Page (Packages region):

1. Navigate to the Maintain Packaging Hierarchy page, page A-2.

2. In the Packages region (right side of the page), at the top of the Search Results: Packages region, select Create Package from the Actions menu or click the Create Package icon.

   The Create Package page appears where you can create a child package.

3. Enter the package information.

   For information on creating a package, see Creating Packages, page 8-6.

4. Save your work. Select one of these options:

- Click Save and Create Another button to save this package and to stay on this page so you can create another package. The system displays a message that the package was created successfully and it clears all of the values in the fields.

- Click the Save and Close button to save this package and return back to the Maintain Packaging Hierarchy page.

After the new package is created, you can search for and retrieve the new package using the Packages region of the page and then you can add it to a packaging hierarchy tree if you wish.

For more information on adding packages to a packaging hierarchy, see Creating Packaging Hierarchies, page 9-12.

Part 5

Managing Transactions

10

Managing Transactions

This chapter covers the following topics:

- Understanding Transactions
- Searching for Transactions
- Searching for Transactions from Integrated Transactional Systems
- Viewing Transaction Detail Information
- Viewing Transaction Exception Information
- Viewing Initiating Transaction Detail Information
- Processing Transactions
- Disregarding Transactions
- Adding Containers and/or Product Serials to a Transaction
- Viewing Containers and/or Product Serials for a Transaction
- Deleting Containers and/or Product Serials from a Transaction
- Updating Containers and/or Product Serials for a Transaction
- Transmitting Serials
- Creating Transactions Using JMS Queue

Understanding Transactions

Oracle Pedigree and Serialization Manager (OPSM) enables you to manage and maintain transactions that have occurred for a product. Transactions provide visibility into the events that occur for a serial number. OPSM supports these types of transactions:

- Commission Serials
- Decommission Serials

- Edit Serials
- Import Serials
- Reserve Serials
- Return
- Serial Generation
- Shipment
- Serials Transmission

Commission Serials Transactions

Records the commission of serials into the OPSM application through the Serials Service (editSerialStatusAndUsageByPrimaryDocument, editSerialStatusAndUsageByLabel, and editSerialStatusAndUsageByList operations) web service from an external transactional system.

The Serials Service web service uses the system parameter (Serial Batch Processing Size) value you specify to determine the batch processing size for the serials on the edit serial and usage transactions. As the edit serial and usage records are processed, they are counted. When the count reaches the size you specified for the Serial Batch Processing Size the processed records are posted to the database and the cache is cleared. When these records are posted to the database (they go from the cache to the database) they still are not committed and can be rolled back. Once all the records are processed and no errors are found, the records are committed to the database. If errors are found, the changes are rolled back and the errors are inserted into the transactions errors table and committed.

For more information on the OPSM Web Services, see the Web Services Overview, page 14-1.

For more information on defining the system parameters, see Maintaining System Parameters, page 4-23.

Decommission Serials Transactions

Records the decommission of serials into the OPSM application through the Serials Service (editSerialStatusAndUsageByPrimaryDocument, editSerialStatusAndUsageByLabel, and editSerialStatusAndUsageByList operations) web service from an external transactional system.

The Serials Service web service uses the system parameter (Serial Batch Processing Size) value you specify to determine the batch processing size for the serials on the edit serial and usage transactions. As the edit serial and usage records are processed, they are

counted. When the count reaches the size you specified for the Serial Batch Processing Size the processed records are posted to the database and the cache is cleared. When these records are posted to the database (they go from the cache to the database) they still are not committed and can be rolled back. Once all the records are processed and no errors are found, the records are committed to the database. If errors are found, the changes are rolled back and the errors are inserted into the transactions errors table and committed.

For more information on the OPSM Web Services, see the Web Services Overview, page 14-1.

For more information on defining the system parameters, see Maintaining System Parameters, page 4-23.

Edit Serials Transactions

Records the modification of attributes on serials coming into the OPSM application through the Serials Service (editSerialStatusAndUsageByPrimaryDocument, editSerialStatusAndUsageByLabel, and editSerialStatusAndUsageByList operations) web service from an external transactional system. These transactions occur when attributes are updated on serials but these updates do not cause the serial status to be updated. For example, counterfeit status.

The Serials Service web service uses the system parameter (Serial Batch Processing Size) value you specify to determine the batch processing size for the serials on the edit serial and usage transactions. As the edit serial and usage records are processed, they are counted. When the count reaches the size you specified for the Serial Batch Processing Size the processed records are posted to the database and the cache is cleared. When these records are posted to the database (they go from the cache to the database) they still are not committed and can be rolled back. Once all the records are processed and no errors are found, the records are committed to the database. If errors are found, the changes are rolled back and the errors are inserted into the transactions errors table and committed.

For more information on the OPSM Web Services, see the Web Services Overview, page 14-1.

For more information on defining the system parameters, see Maintaining System Parameters, page 4-23.

Import Serials Transactions

Records the import of serials into the OPSM application through the Transaction (createTransaction operation) web service from an external transactional system.

The Transaction (createTransaction operation) web service uses the system parameter (Serial Commit Size) value you specify to determine the database commit size. For example, let's say the Serial Commit Size is 1,000. Serial import requests that result in more than 1,000 serials will be processed in groups. A serial import request for 10,000

serials will be processed in 10 groups assuming the value has not been changed. When the first 1,000 serials are imported, the system will create the Import Serial transaction and commit those serials to the database. The remaining serials will be imported in groups of 1,000 and the Import Serials transaction will be updated as each group successfully completes.

For more information on the OPSM Web Services, see the Web Services Overview, page 14-1.

For more information on defining the system parameters, see Maintaining System Parameters, page 4-23.

Reserve Serials Transactions

Records the reservation of serials into the OPSM application through the Serials Service (editSerialStatusAndUsageByPrimaryDocument, editSerialStatusAndUsageByLabel, and editSerialStatusAndUsageByList operations) web service from an external transactional system.

The Serials Service web service uses the system parameter (Serial Batch Processing Size) value you specify to determine the batch processing size for the serials on the edit serial and usage transactions. As the edit serial and usage records are processed, they are counted. When the count reaches the size you specified for the Serial Batch Processing Size the processed records are posted to the database and the cache is cleared. When these records are posted to the database (they go from the cache to the database) they still are not committed and can be rolled back. Once all the records are processed and no errors are found, the records are committed to the database. If errors are found, the changes are rolled back and the errors are inserted into the transactions errors table and committed.

For more information on the OPSM Web Services, see the Web Services Overview, page 14-1.

For more information on defining the system parameters, see Maintaining System Parameters, page 4-23.

Return Transactions

Records the return transaction into the OPSM application through the Transaction (createTransaction operation) web service from an external transactional system.

The Transaction web service uses the system parameter (Serial Batch Processing Size) value you specify to determine the batch processing size for serials on the return transactions. As the return records are processed, they are counted. When the count reaches the size you specified for the Serial Batch Processing Size the processed records are posted to the database and the cache is cleared. When these records are posted to the database (they go from the cache to the database) they still are not committed and can be rolled back. Once all the records are processed and no errors are found, the records are committed to the database. If errors are found, the changes are rolled back

and the errors are inserted into the transactions errors table and committed.

For more information on the OPSM Web Services, see the Web Services Overview, page 14-1.

For more information on defining the system parameters, see Maintaining System Parameters, page 4-23.

Serial Generation Transactions

Records the generation of serials by the OPSM application. Serial Generation transactions are created from the Serial Generation Request program. Serial Generation Requests can be created in OPSM in these ways:

- Using the Maintain Serial Generation Requests page in OPSM.
- Through the Work Order Serialization process work order information can be merged from the Work Order Interface table.

  For more information on the Work Order Serialization process, see Performing Work Order Serialization with an Integrated Transactional System, page 7-26.
- Through the Transaction (createTransaction operation) web service from an external transactional system.

  For more information on the OPSM Web Services, see the Web Services Overview, page 14-1.

When the serial generation request is submitted, a business event triggers the processing of your request and a background process is executed to generate the serials and create the Serial Generation transaction. The background process uses the system parameter (Serial Commit Size) value you specify to determine the database commit size. For example, let's say the Serial Commit Size is 1,000. Serial generation requests that result in more than 1,000 serials will be processed in groups. A serial generation request for 10,000 serials will be processed in 10 groups assuming the value has not been changed. When the first 1,000 serials are generated, the system will create the Serial Generation transaction and commit those serials to the database. The remaining serials will be created in groups of 1,000 and the Serial Generation transaction will be updated as each group successfully completes.

For more information on defining the system parameters, see Maintaining System Parameters, page 4-23.

Serial Transmission Transactions

Records the transmission of serials to an external transactional system. Serial Transmission transactions can be created from serial generation, import of serials, a shipment of serials, or from the return of serials. The information you define on the Maintain Serial Destinations page drives the processing of the Serial Transmission transactions for the serial generation, import serials, shipment, and return transactions.

Serial transmission transactions can be created using a couple of different methods. The methods are:

- You can manually create the serial transmission transaction by using the Maintain Transactions page in OPSM. Select the Transmit Serials action or the Transmit Serials icon for a transaction in the search results table of the Maintain Transactions page.

- The system automatically creates the serial transmission transaction when a transaction (shipment, return, import serial, and serial generation) is successfully processed and destination rules exist in OPSM to transmit the transaction information.

The serial transmission processing supplies an outbound XML message that uses the Electronic Product Code Information System (EPCIS) standard schema (Version EPC 1.0) that can be used to transmit the details of the transaction and its associated serials. Optionally, you can create your own XML message format to meet your own business needs.

The web service uses the system parameter (Serial Batch Processing Size) value you specify to determine the batch processing size for the serials on the serial transmission transactions. As the serial transmission records are processed, they are counted. When the count reaches the size you specified for the Serial Batch Processing Size the processed records are posted to the database and the cache is cleared. When these records are posted to the database (they go from the cache to the database) they still are not committed and can be rolled back. Once all the records are processed and no errors are found, the records are committed to the database. If errors are found, the changes are rolled back and the errors are inserted into the transactions errors table and committed.

For information on defining serial destinations and destination rules, see Maintaining Serial Destinations and Destination Rules, page 4-191 and Setting Up WebLogic Components for Serial Destinations in the *Oracle Pedigree and Serialization Manager Installation Guide.*

For information on manually creating serial transmission transactions, see Transmitting Serials, page 10-67.

For more information on defining the system parameters, see Maintaining System Parameters, page 4-23.

Shipment Transactions

Records the shipment transaction into the OPSM application through the Transaction (createTransaction operation) web service from an external transactional system.

The Transaction web service uses the system parameter (Serial Batch Processing Size) value you specify to determine the batch processing size for serials on the shipment transactions. As the shipment records are processed, they are counted. When the count reaches the size you specified for the Serial Batch Processing Size the processed records

are posted to the database and the cache is cleared. When these records are posted to the database (they go from the cache to the database) they still are not committed and can be rolled back. Once all the records are processed and no errors are found, the records are committed to the database. If errors are found, the changes are rolled back and the errors are inserted into the transactions errors table and committed.

For more information on the OPSM Web Services, see the Web Services Overview, page 14-1.

For more information on defining the system parameters, see Maintaining System Parameters, page 4-23.

OPSM Integration with Oracle E-Business Suite

The Oracle Serialization and Tracking Integration Pack for Oracle Pedigree and Serialization Manager and Oracle E-Business Suite 3.1 can be used to synchronize shipment and return transaction information from Oracle E-Business Suite to OPSM using one of the following methods:

Return Transactions

Captures and records return transactions from Oracle E-Business Suite. Return transactions can be created from receipts from external customers as well as returns from internal customers.

Return transactions can be created in OPSM through the integration with Oracle E-Business Suite. When the shipping receipt (return) transaction is processed in Oracle E-Business Suite, the returned product information is transmitted to OPSM through the Shipment Receipt. The return receipt transaction records the details of the return in OPSM including the returned items, serials, product information, reference documents, transaction quantity, date, and trading partners. If the shipment receipt contains the returned serials, the serials validation is performed to verify the serials were previously shipped, have not been decommissioned, and have not been flagged as counterfeit. If the shipment receipt is from a customer where a change of ownership occurs, the serials states are updated to indicate they have been returned. Optionally, returns with no change of ownership can be recorded in OPSM. If no change of ownership occurs, the serials will remain in their current state.

When an OPSM integrated item is returned in Oracle E-Business Suite, the transaction information for the receipt along with the serials are sent to the OPSM system. This integration is achieved through the Serialized Item Tracking Process Integration (business events and AIA integration).

For more information on the integration between OPSM and Oracle E-Business Suite, see the *Oracle Serialization and Tracking Integration Pack for Oracle Pedigree and Serialization Manager and Oracle E-Business Suite 3.1 - Implementation Guide.*

Shipment Transactions

Captures and records shipment transactions from Oracle E-Business Suite. External

(and internal) customer shipment transactions can be associated with serial data in OPSM for the products on those shipments. A shipment will also import externally generated serials for the transaction if configured to allow serials to be created at shipment. The system will also record the lot in OPSM if configured to allow lot creation at shipment.

Shipment transactions can be created in OPSM through the integration with Oracle E-Business Suite. When a delivery is ship confirmed in Oracle E-Business Suite, the outbound Advance Shipment Notice (ASN) is published from Oracle E-Business Suite to OPSM. The ASN contains the transaction details including the transaction date, transaction quantity, shipped item, lot, trading partners (sold to, shipped by, shipped to, and sold by), and supporting document information. It may also include the shipped item serials, component serials (genealogy), and the container packaging hierarchy. Based on the shipped to customer, the shipment transaction may be flagged to indicate whether a change of ownership has occurred or not.

OPSM processes the ASN recording the details of the shipment along with the serials, packaging hierarchy, and item genealogy. If OPSM has been configured to create serials at shipment, the shipped item serials and component serials created in Oracle E-Business Suite are uploaded into OPSM at the time of shipment. The packaging hierarchy from Oracle E-Business Suite is also updated in OPSM at the time of shipment. Optionally, the lot can be created as part of the shipment transaction as well. OPSM validates the serials associated with the transaction to verify the status, state, lot expiration date, existence of the serial, along with other edits. If the shipment is to a customer where a change of ownership occurs, the serials states are updated to indicate they have been shipped. Optionally, shipments with no change of ownership can be recorded in OPSM. If no change of ownership occurs, the serials will remain in their current state.

When the transaction has been successfully processed, it contains the details of the transaction including transaction details, shipped items, serials, reference documents, trading partners, lot information and product information, container packaging hierarchy, and the shipped item genealogy.

For more information on the integration between OPSM and Oracle E-Business Suite, see the *Oracle Serialization and Tracking Integration Pack for Oracle Pedigree and Serialization Manager and Oracle E-Business Suite 3.1 - Implementation Guide.*

Maintain Transactions Page Functionality

Using the Maintain Transactions page in OPSM you can:

- Search for the different types (Serial Generation, Import Serials, Shipment, Return, Serial Transmission, Commission Serials, Decommission Serials, Reserve Serials, and Edit Serials) of transactions.

  For information, see Searching for Transactions, page 10-10.

- View transaction detail information for the different types of transactions.

For information, see Viewing Transaction Detail Information, page 10-32.

- View transaction exception information for a transaction that did not process successfully.

  For information, see Viewing Transaction Exception Information, page 10-39.

- View initiating transaction detail information for a serial transmission transaction.

  For information, see Viewing Initiating Transaction Detail Information, page 10-41.

- Process Shipment, Return, Commission, Decommission, Reserve, Edit Serials, and Import Serials transactions that have previously failed processing.

  For information, see Processing Transactions, page 10-43.

- Disregard transactions that have an Exception Status of *Errors.*

  For more information, see Disregarding Transactions, page 10-44.

- Maintain transaction serials for shipment and return type transactions coming from Oracle E-Business Suite.

  For more information, see Adding Containers and/or Product Serials to a Transaction, page 10-45, Viewing Containers and/or Product Serials for a Transaction, page 10-61, Deleting Containers and/or Product Serials from a Transaction, page 10-64, and Updating Containers and/or Product Serials for a Transaction, page 10-66.

- Transmit serials or retransmit serials for a transaction.

  For information, see Transmitting Serials, page 10-67.

- Create, digitally sign, view, and print a Pedigree document for a non-internal shipment transaction.

  For more information, see:

  - Understanding Pedigree, page 11-1
  - Creating a Pedigree, page 11-6
  - Digitally Signing a Pedigree Using the Maintain Transactions Page, page 11-9
  - Viewing a Pedigree Using the Maintain Transactions Page, page 11-26
  - Printing a Pedigree Using the Maintain Transactions Page, page 11-21

Searching for Transactions

Use the Maintain Transactions page in Oracle Pedigree and Serialization Manager (OPSM) to search for transactions. You can view the transactions in a multitude of ways by using the search criteria fields that include exception status, transaction type, transaction date, transaction status, transaction location, lot number, item number, product code, Pedigree number, document, source name, destination name, and serial number.

Using the advanced search functionality you can search for transactions by using the operator field (equals, contains, ends with, starts with, and so on) associated with the search criteria fields.

Transactions provide visibility into the events that occur for a serial number. The types of transactions are:

- Commission Serials (Serials that have been commissioned using the Serials Service (SerialsServiceAMService) web service)
- Decommission Serials (Serials that have been decommissioned using the Serials Service (SerialsServiceAMService) web service)
- Edit Serials (Serials that have been edited using the Serials Service (SerialsServiceAMService) web service)
- Import Serials
- Reserve Serials (Serials that have been reserved using the Serials Service (SerialsServiceAMService) web service)
- Return
- Serial Generation
- Serial Transmission
- Shipment

For more information on the different types of transactions, see Understanding Transactions, page 10-1.

Using the Maintain Transactions page you can view:

- Transaction history for one or more serials, lots, or products.
- Transaction document information including Document Type, Number, Date, and more.
- Transactions with and without exceptions requiring attention, as well as resolved

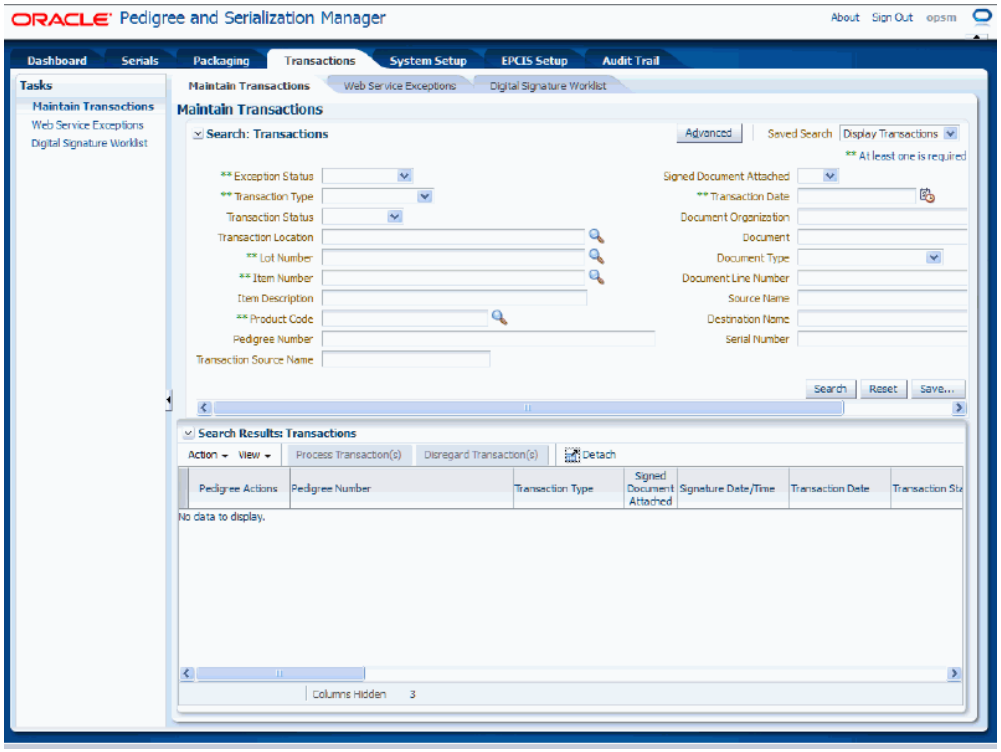
exceptions.

Use these procedures to search for transactions:

To Search for Transactions (Basic Search):

1. Navigate to the Maintain Transactions page, page A-2.

Maintain Transactions page (Basic Search)



2. In the Search: Transactions region enter one or more of these fields:

Field Name	Description
Exception Status	Select the exception status for the transactions. Statuses are: • Errors • No Exceptions • Warnings

Field Name	Description
Transaction Type	Select the type of transaction. Types are: • Commission Serials • Decommission Serials • Edit Serials • Import Serials • Reserve Serials • Return • Serial Generation • Serial Transmission • Shipment
Lot Number	Select the lot number associated with the transactions. If you select the lot number using the Search and Select dialog box, after you select the lot number the Product Code field will appear by default from the lot number selected.
Item Number	Select the item number associated with the transactions.
Product Code	Select the product code associated with the transactions.
Transaction Date	Select the date for the transactions.

3. (Optional) In the Search Transactions region enter one or more of these fields to further specify the search criteria:

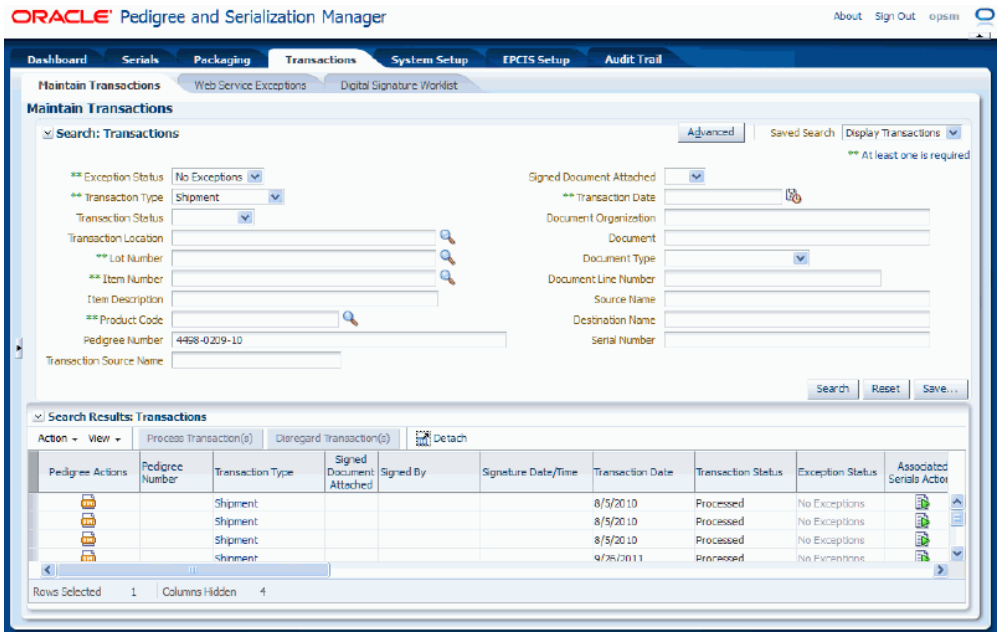
Field Name	Description
Transaction Status	Select the transaction status associated with the transaction. Transaction Statuses are: • Disregarded • In Progress • Pending • Processed • Submitted **Note:** Pending status is only used when doing an upgrade of the software. If the old status is UNPROCESSED it is changed to PENDING. Transactions with a Pending transaction status can be processed using the Process Transaction(s) button. The transaction statuses progress in this fashion. When a transaction is created the transaction status is *Submitted.* Once the transaction starts to process the transaction status changes to *In Progress,* and finally after the process completes to *Processed.* The transaction status can be manually changed to *Disregarded* by using the Disregarding Transaction process. For more information on disregarding transactions, see Disregarding Transactions, page 10-44. For more information on processing transactions, see Processing Transactions, page 10-43.
Transaction Location	Select the location associated with the transactions.

Field Name	Description
Item Description	Enter the item description for the item associated with the transactions.
Pedigree Number	Enter the Pedigree number associated with the transactions.
Transaction Source Name	Enter the source for the transactions. This is the system from which the transaction originated.
Signed Document Attached	Select whether you want to search for transactions where the associated Pedigree document is digitally signed or not signed. Values are: • No • Yes • Blank
Document Organization	Enter the organization for the document that is associated with the transactions.
Document	Enter the document associated with the transactions.
Document Type	Enter the document type for the document associated with the transactions. Document Types are user defined using Lookup Type PAS_DOCUMENT_TYPE.
Document Line Number	Enter the document line number for the document associated with the transaction.
Source Name	Enter the name of the source associated with the transactions. For example, a Shipment transaction will have a source address and a destination address. This Source Name is the identifier for that address.

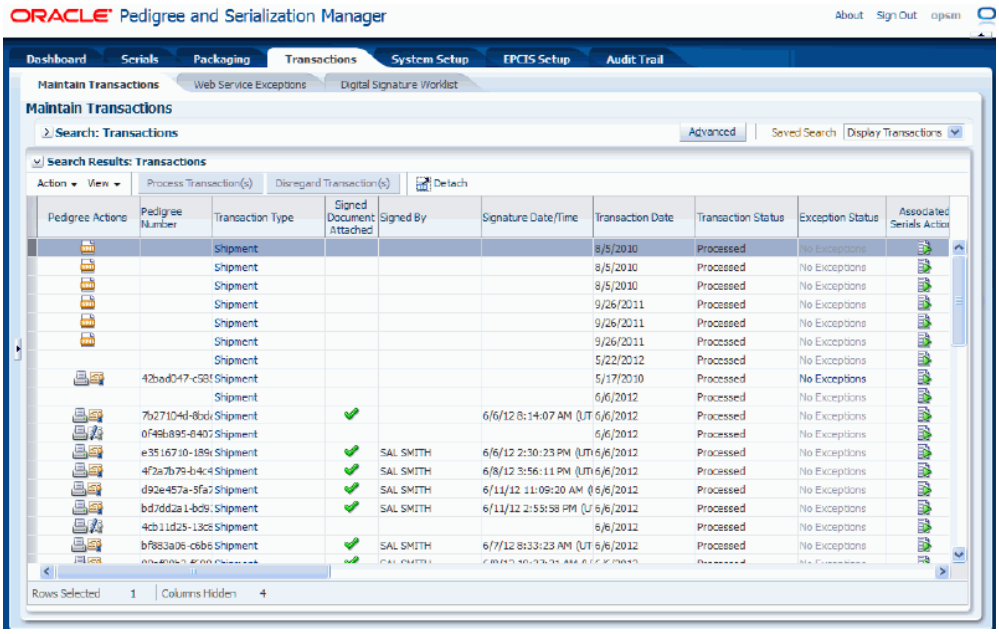
Field Name	Description
Destination Name	Enter the name of the destination associated with the transactions. For example, a Shipment transaction will have a source address and a destination address. This Source Name is the identifier for that address.
Serial Number	Enter the serial number associated with the transaction.

4. Click the Search button.

Maintain Transactions page (Basic Search) (1 of 2)



Maintain Transactions page (Basic Search) (2 of 2)



All of the transactions that match the search criteria appear in the Search Results: Transactions region in a table format. For each transaction the following information displays:

Field Name	Description
Pedigree Actions	Displays the available Pedigree Actions. Actions are: • Create Pedigree XML icon: This icon is available for transactions that can create a Pedigree. • Print Pedigree XML icon: This icon is available for transactions where a Pedigree has already been created for the transaction. • Unsigned icon: This icon is available for transactions where a Pedigree has already been created for the transaction but the Pedigree document requires a digital signature. • Signed icon: This icon is available for transactions where a Pedigree has already been created for the transaction and the Pedigree document has already been digitally signed.
Pedigree Number	Displays the Pedigree number associated with the transaction.
Transaction Type	Displays the type of transaction. This field contains a link for all transactions.
Signed Document Attached	Displays a green check mark icon if the Pedigree document for the transactions has been digitally signed.
Signed By	Displays the individual that digitally signed the Pedigree document.
Signature Date/Time	Displays the date and time the Pedigree document was digitally signed.
Transaction Date	Displays the transaction date.

Field Name	Description
Transaction Status	Displays the transaction status. Transaction Statuses are: • Disregarded • In Progress • Pending • Processed • Submitted
Exception Status	Displays the exception status for the transaction. This field contains a link when the exception status for the transaction is *Errors* or *Warnings*. It will also have a link to previous exceptions if the status is *No Exceptions* but errors existed when the transaction was previously processed.
Reprocessable	Displays a green check mark icon when a transaction is available to be processed.
Associated Serials Actions	Displays the Transmit Serials icon. This icon is available for transactions that have a *No Exceptions* or *Warnings* exception status. Displays the Maintain Transaction Serials icon. This icon is available for Shipment and Return type transactions that have an *Errors* exception status.
Primary Document Type	Displays the primary document type for the document associated with the transaction. Document Types are user defined using Lookup Type PAS_DOCUMENT_TYPE.
Primary Document	Displays the primary document for the transaction.

Field Name	Description
Transaction Quantity	Displays the quantity for the transaction.
Item Number	Displays the item number for the transaction.
Product Code	Displays the product code for the transaction.
Transaction Location	Displays the location for the transaction.
Primary Document Line Number	Displays the primary document line number for the document associated with the transaction.
Initiating Transaction	Displays the transaction that initiated the transaction. This field contains a link when there is an initiating transaction for the transaction.
Serial Destination	Displays the serial destination for the transaction.
Transaction Unit of Measure	Displays the unit of measure for the quantity associated with the transaction.
Item Description	Displays the description of the item associated with the transaction.
Lot Number	Displays the lot number for the transaction.
Parent Lot	Displays the parent lot for the lot associated with the transaction.
Transaction Source Name	Displays the transactional source name for the transaction.

Field Name	Description
Message Severity	Displays an icon to represent the severity of the messages that were generated for the transaction. A red circle with an X indicates the transaction was unsuccessful and contains error messages and may also contain warning messages. A yellow triangle with an exclamation point indicates the transaction was successful but it contains warning messages. A blue circle with an i in it indicates an informational message for the transaction.

5. Click the Advanced button to perform an advanced search.

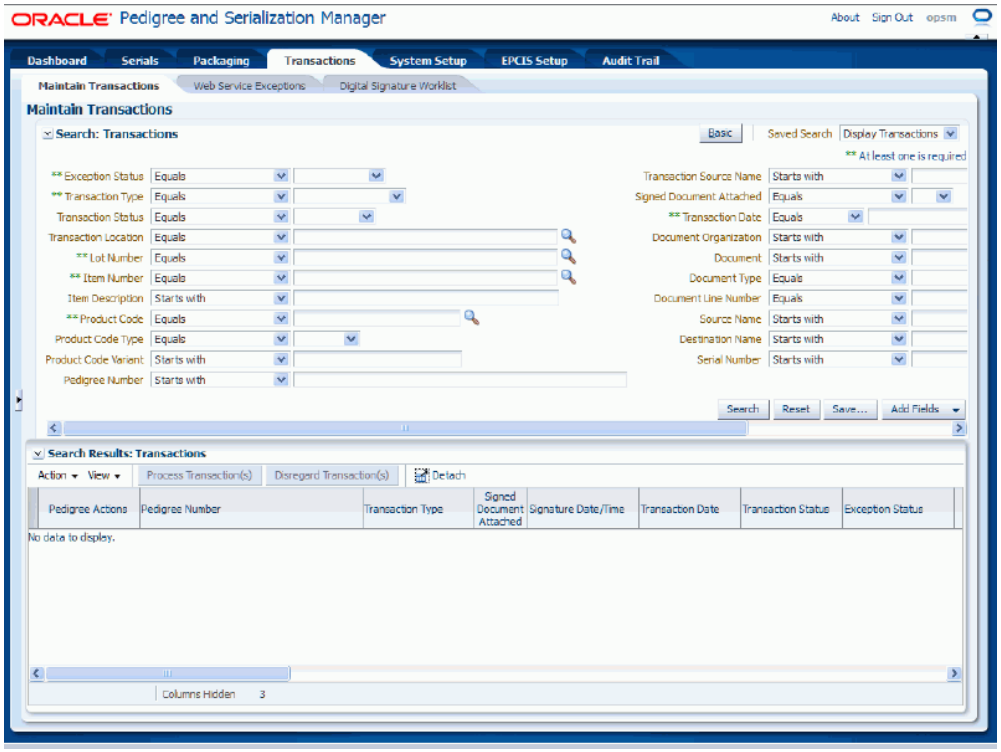
To Search for Transactions (Advanced Search):

Use the Advanced Search functionality to perform a more detailed search for specific transactions. Field operators associated with the search criteria fields can be used during an Advanced Search so that a range of transactions can be easily retrieved.

1. Navigate to the Maintain Transactions page, page A-2.
2. Click the Advanced button located at the top of the page.

> **Note:** Clicking the Advanced or Basic button will keep the values in the base criteria fields.

Maintain Transactions page (Advanced Search)



3. In the Search: Transactions region enter one or more of these fields:

Field Name	Description
Exception Status	Select the field operator and then select the exception status for the transactions. Exception Statuses are: • Errors • No Exceptions • Warnings Operators are: • Starts with • Ends with • Equals • Does not equal • Less than • Greater than • Less than or equal to • Greater than or equal to • Between • Not between • Contains • Does not contain • Is blank • Is not blank

Field Name	Description
Transaction Type	Select the field operator and then select the type of transaction. Types are: • Commission Serials • Decommission Serials • Edit Serials • Import Serials • Reserve Serials • Return • Serial Generation • Serial Transmission • Shipment The field operators are the same as that for the Exception Status field.
Lot Number	Select the field operator and then select the lot number associated with the transactions. The field operators are the same as that for the Exception Status field. If you select the lot number using the Search and Select dialog box, after you select the lot number the Product Code, Product Code Type, and Product Code Variant fields will appear by default from the lot number selected.

Field Name	Description
Item Number	Select the field operator and then select the item number associated with the transactions. When you select an item number, the Item Description appears by default from the item you selected. The field operators are the same as that for the Exception Status field.
Product Code	Select the field operator and then select the product code associated with the transactions. When you select the product code, the Product Code Type and Product Code Variant appear by default from the product code you selected. The field operators are the same as that for the Exception Status field.
Transaction Date	Select the field operator and then select the date for the transactions. Operators are: • Equals • Does not equal • Before • After • On or before • On or after • Between • Not between • Is blank • Is not blank

4. (Optional) In the Search Transactions region enter one or more of these fields to further specify the search criteria:

Field Name	Description
Transaction Status	Select the field operator and then select the transaction status. Transaction Statuses are: • Disregarded • In Progress • Pending • Processed • Submitted The field operators are the same as that for the Exception Status field.
Transaction Location	Select the field operator and then select the location associated with the transactions. The field operators are the same as that for the Exception Status field.
Item Description	Select the field operator and then enter the item description for the item associated with the transactions. If you select an item number this field appears by default from the item number selected. The field operators are the same as that for the Exception Status field.

Field Name	Description
Product Code Type	Select the field operator and then select the product code type for the product associated with the transactions. If you select a product code this field appears by default from the product code selected. The field operators are the same as that for the Exception Status field.
Product Code Variant	Select the field operator and then enter the product code variant for the product associated with the transactions. If you select a product code this field appears by default from the product code selected. The field operators are the same as that for the Exception Status field.
Pedigree Number	Select the field operator and then enter the Pedigree number associated with the transactions. The field operators are the same as that for the Exception Status field.
Transaction Source Name	Select the field operator and then enter the source for the transactions. The field operators are the same as that for the Exception Status field.

Field Name	Description
Signed Document Attached	Select the field operator and then select whether you want to search for transactions where the associated Pedigree document is digitally signed or not signed. Values are: • No • Yes • Blank The field operators are the same as that for the Exception Status field.
Document Organization	Select the field operator and then enter the organization for the document that is associated with the transactions. The field operators are the same as that for the Exception Status field.
Document	Select the field operator and then enter the document associated with the transactions. The field operators are the same as that for the Exception Status field.
Document Type	Select the field operator and then enter the document type for the document associated with the transactions. Document Types are user defined using Lookup Type PAS_DOCUMENT_TYPE. The field operators are the same as that for the Exception Status field.
Document Line Number	Select the field operator and then enter the document line number for the document associated with the transactions. The field operators are the same as that for the Exception Status field.

Field Name	Description
Source Name	Select the field operator and then enter the name of the source associated with the transactions. The field operators are the same as that for the Exception Status field.
Destination Name	Select the field operator and then enter the name of the destination associated with the transactions. The field operators are the same as that for the Exception Status field.
Serial Number	Select the field operator and then enter the serial number associated with the transactions. The field operators are the same as that for the Exception Status field.

5. (Optional) To enter additional search criteria fields, click the Add Fields button and select the field you would like to add to the search criteria.

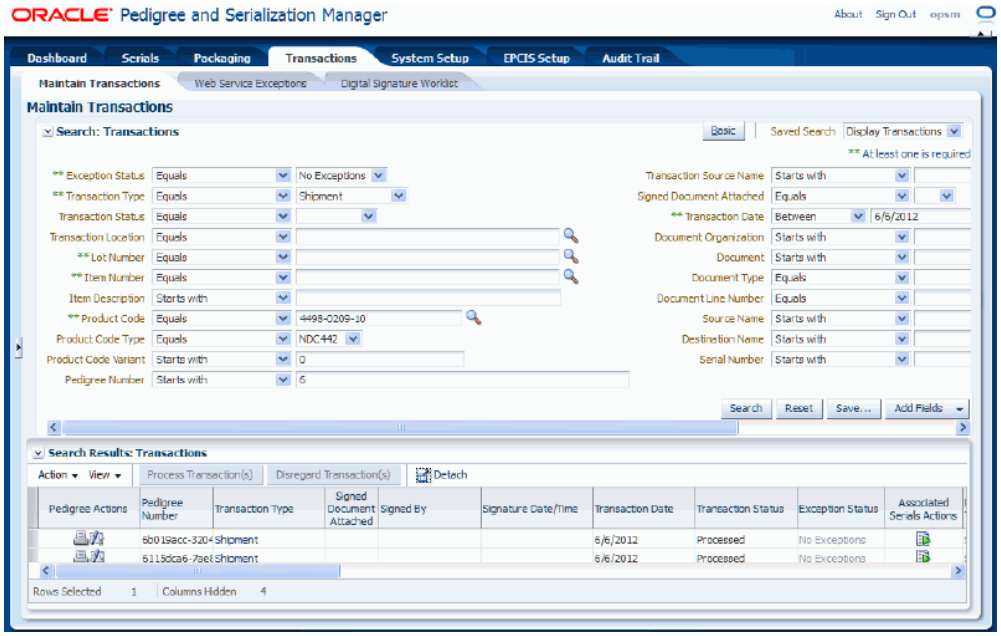
   The selected field appears as a search criteria field.

   > **Note:** To remove the additional field, click the Remove icon next to the field. The field will be removed from the search criteria.

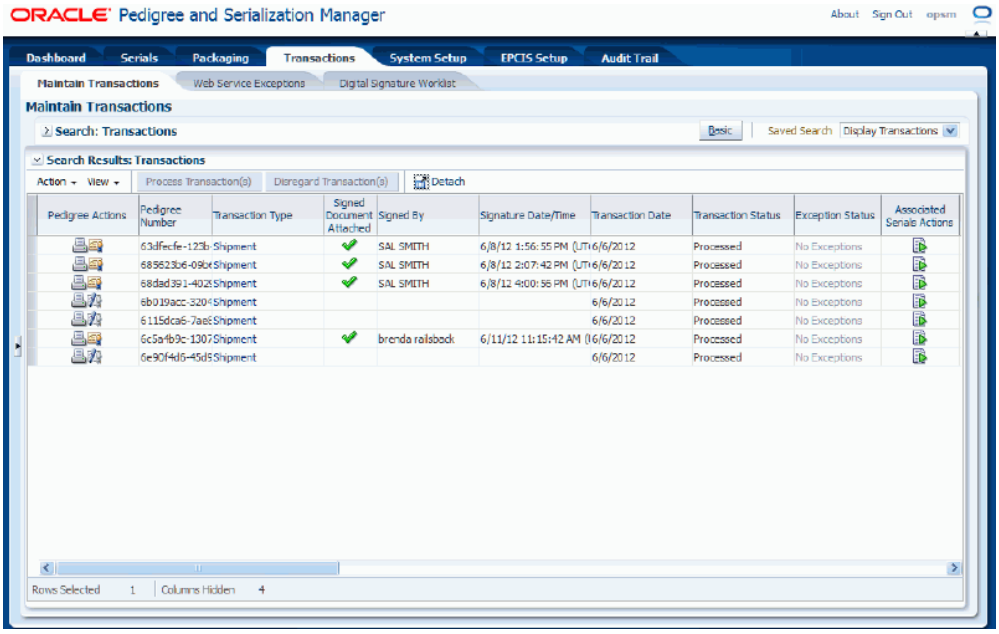
6. (Optional) Enter search criteria for the additional fields.

7. Click the Search button.

Maintain Transactions page (Advanced Search) (1 of 2)



Maintain Transactions page (Advanced Search) (2 of 2)



All of the transactions that match the search criteria appear in the Search Results: Transactions region in a table format.

For information on the fields that appear for each transaction, see Procedure: To Search for Transactions (Basic Search), page 10-11.

8. Click the Basic button to have the page hide the advanced search criteria fields and re-display the basic search criteria fields.

> **Note:** Clicking the Reset button clears the values in all of the search criteria fields.

Searching for Transactions from Integrated Transactional Systems

Oracle Pedigree and Serialization Manager (OPSM) can be integrated with transactional systems to search for transactions based on the transaction type and the primary document reference information from the transactional system.

From the external system, you can call the OPSM Maintain Transactions page. If you have not previously signed in to OPSM, you will be prompted for user authentication. After successful authentication, you can use the Maintain Transactions page to view your transaction, maintain transaction serials, process exception transactions, and other actions.

For more information on the transaction search process, see Searching for Transactions,

page 10-10.

For more information on integrating Oracle E-Business Suite with OPSM, see the *Oracle Serialization and Tracking Integration Pack for Oracle Pedigree and Serialization Manager and Oracle E-Business Suite 3.1 - Implementation Guide.*

Use this procedure to search for transactions from integrated transactional systems:

To Search for Transactions from Integrated Transactional Systems:

To Invoke the Maintain Transactions page in OPSM

1. Call the URL to invoke the Maintain Transactions page passing the parameter values:

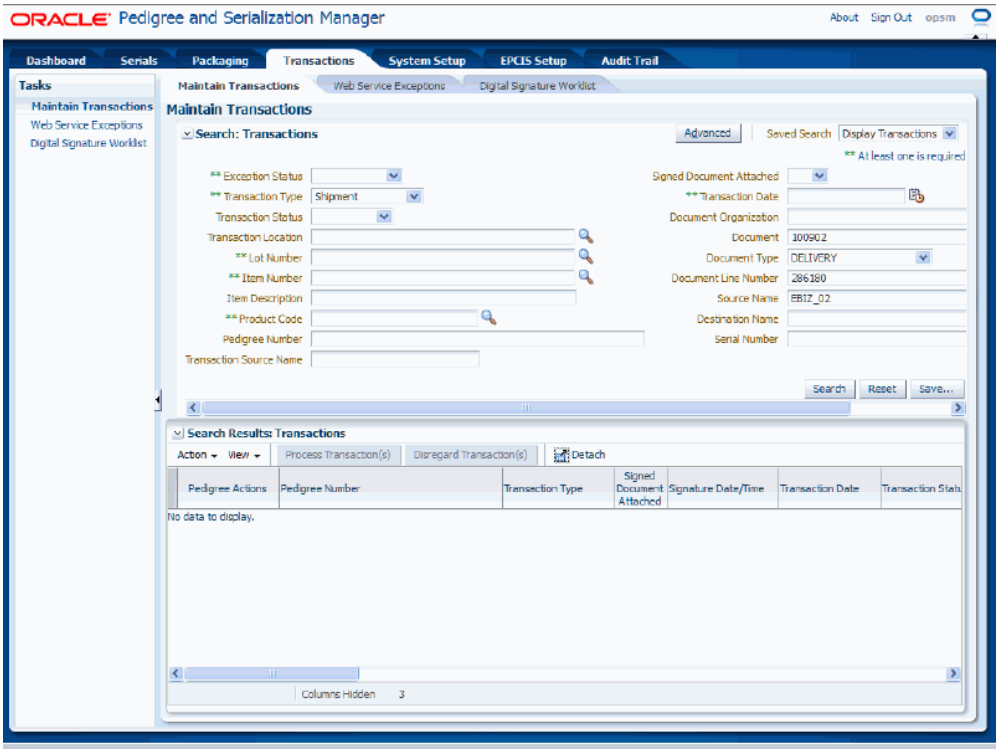
Parameter Name	Description
page	'shipmentTxn' or 'returnTxn'
docOrg	The organizational identifier for the document in the external system that is the document organization on the primary reference document on the transaction in OPSM.
doc	The document identifier for the document in the external system that is the document identifier on the primary reference document on the transaction in OPSM.
docType	The document type for the document in the external system that is the document type on the primary reference document on the transaction in OPSM.
docLine	The document line number for the document in the external system that is the document line number on the primary reference document on the transaction in OPSM.
src	The identifier for the external system that invoked OPSM (for example, EBIZ_01).

2. If prompted for user authentication, enter your user ID and password.

To Complete the Transaction Search in OPSM

3. Upon entry, the Maintain Transactions page will be displayed.

Maintain Transactions page



The Maintain Transactions page is called asynchronously. The Maintain Transactions page appears displaying the Transaction Type, Document, Document Type, Document Line Number, and Source Name in the Search: Transactions region of the page.

4. Click the Search button to display the transactions based on the search criteria.

Viewing Transaction Detail Information

Use the View Transaction page in Oracle Pedigree and Serialization Manager (OPSM) to view all the detailed information for a transaction. The type of transaction you are viewing determines the type of information that will display on the View Transaction page.

Use this procedure to view transaction detail information:

Prerequisites

❒ Transactions have been previously created.

To View Transaction Detail Information:

1. Navigate to the Maintain Transactions page, page A-2.

2. Enter search criteria for the transactions you want to view the details for and click the Search button.

   All of the transactions that match the search criteria appear in the Search Results: Transactions region in a table format.

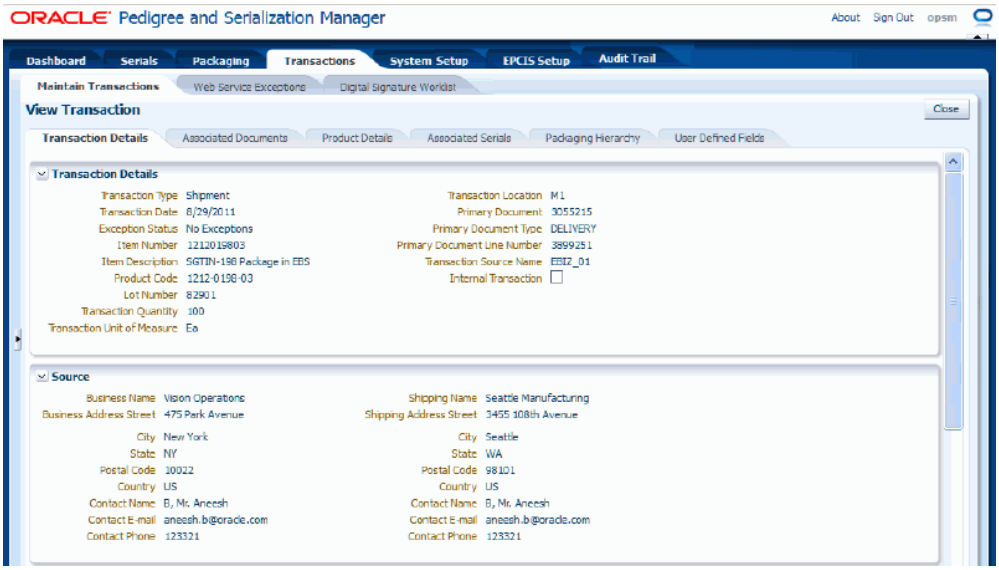
3. Select the transaction in the table you want to view.

4. Select View Transaction Detail in the Actions menu or click the Transaction Type link.

   The View Transaction page appears displaying information for the transaction. There are six tabs (Transaction Details, Associated Documents, Product Details, Associated Serials, Packaging Hierarchy, and User Defined Fields).

5. Select the Transaction Details tab to the view transaction details for the transaction.

View Transaction page - Transaction Details tab (1 of 2)



View Transaction page - Transaction Details tab (2 of 2)

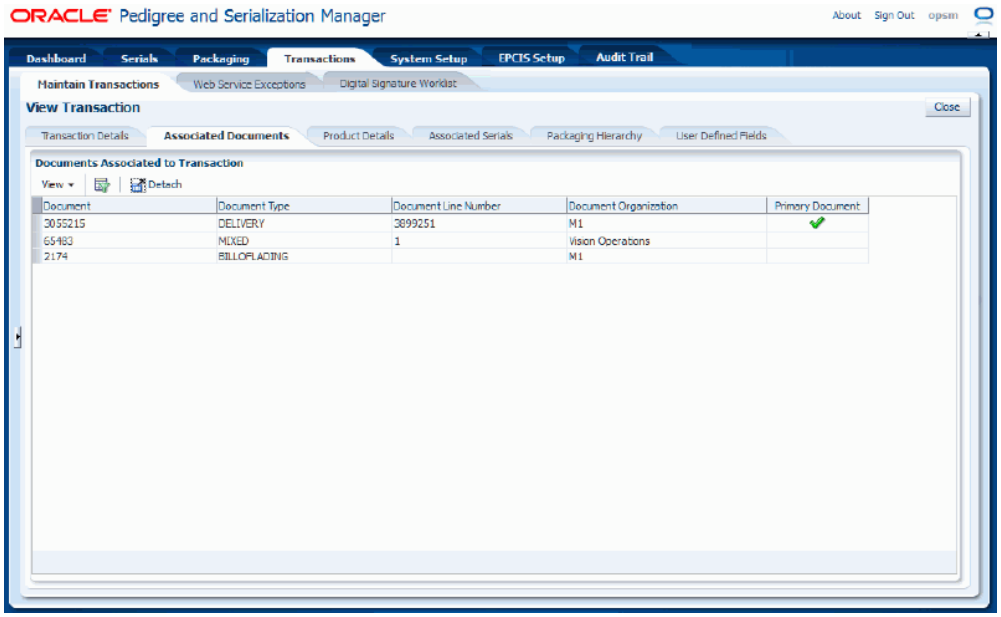
The Transaction Details tab appears displaying the transaction details for the transaction.

In the Transaction Details region of the page the transaction detail information displays for the transaction.

For Shipment and Return transactions, the Source and Destination regions display on the page. The Source region displays the source details for the business and shipping information (name, address, and contact information). The Destination region displays the destination details (name, address, and contact information).

6. Select the Associated Documents tab to view the documents associated with the transaction.

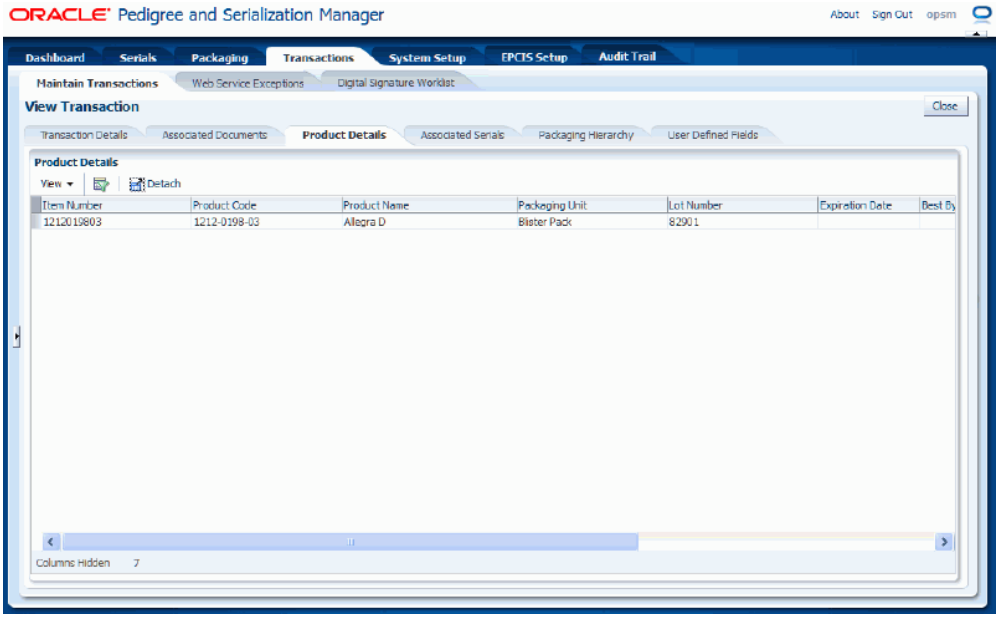
View Transaction page - Associated Documents tab



The Associated Documents tab appears displaying the associated documents for the transaction in a table format.

7. Select the Product Details tab to view the product and lot details associated with the transaction.

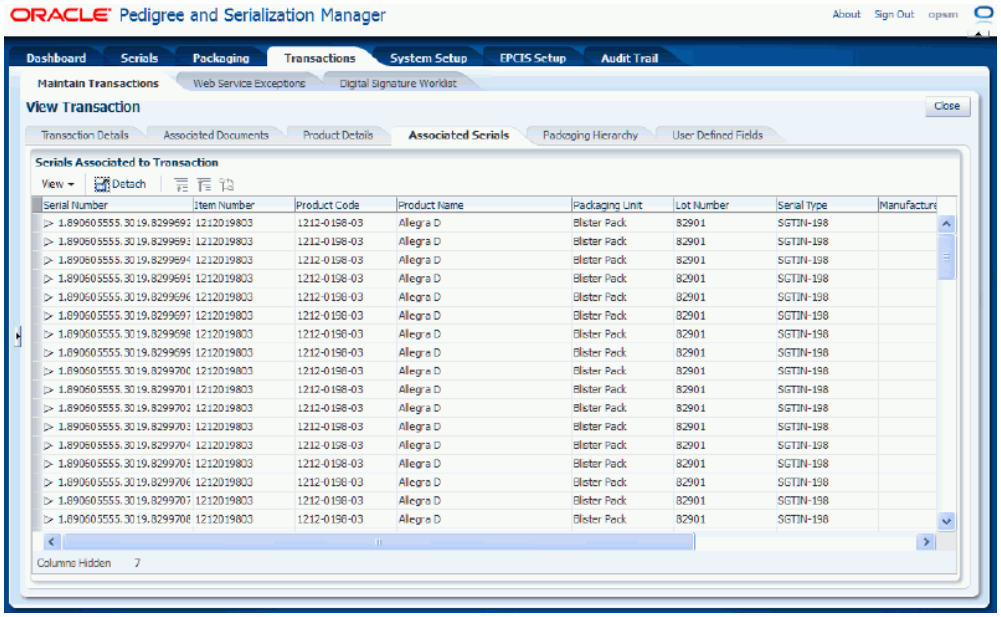
View Transaction page - Product Details tab



The Product Details tab appears displaying the product and lot information associated with the transaction in a table format. This tab may show multiple products that are associated with the transaction. For example, Shipment transactions may have multiple products.

8. Select the Associated Serials tab to view the serials associated with the transaction.

View Transaction page - Associated Serials tab

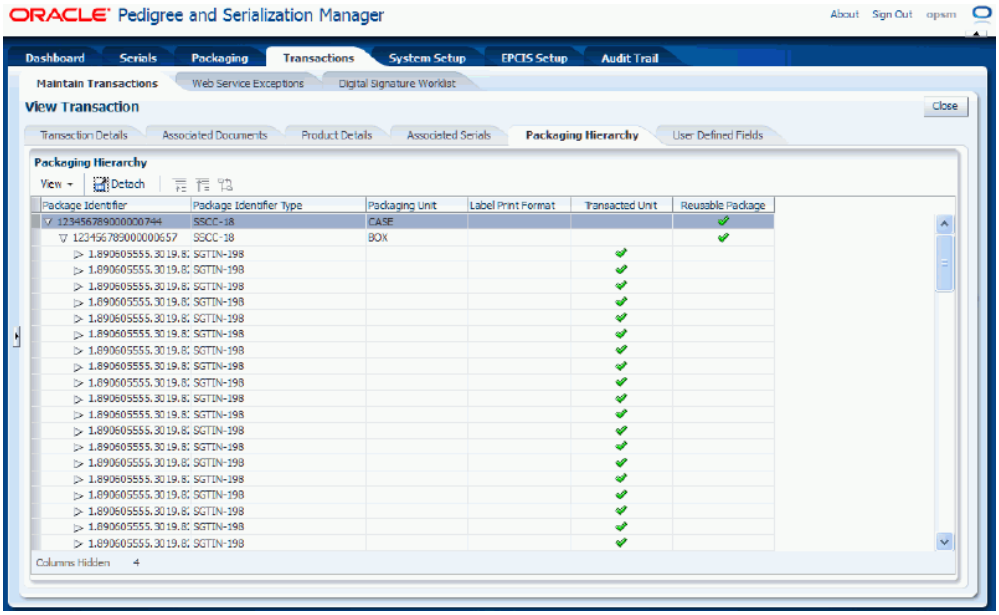


The Associated Serials tab appears displaying the associated serials for the transaction in a tree and table format.

Expand the Serial Number field to view the lower level serial numbers in the tree.

9. Select the Packaging Hierarchy tab to view the packaging hierarchy associated with the transaction.

View Transaction page - Packaging Hierarchy tab

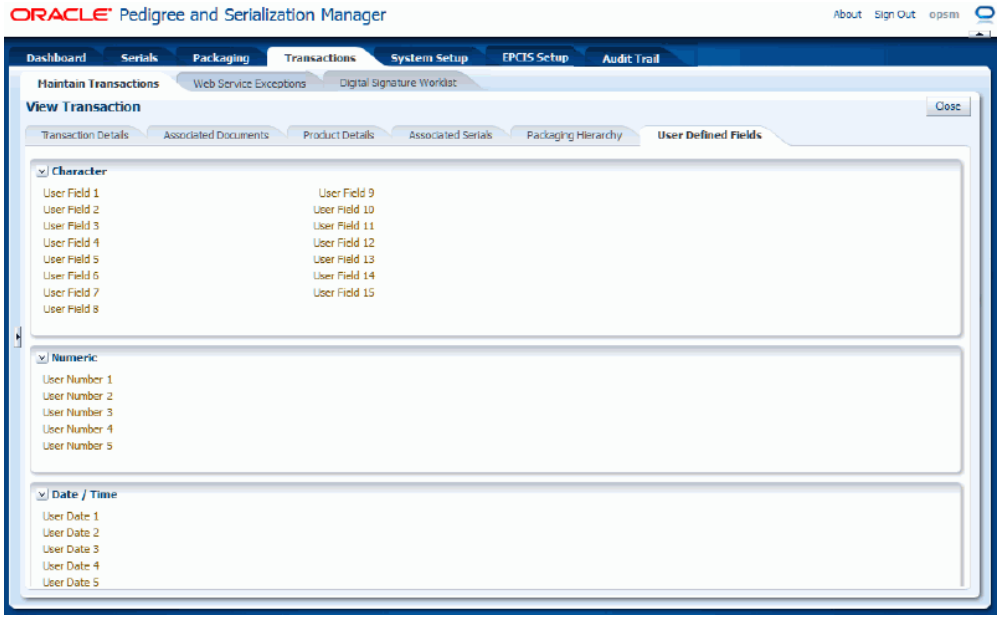


The Packaging Hierarchy tab appears displaying the packaging hierarchy for the transaction in a tree and table format. The packaging hierarchy displays the transacted item and any higher level packaging levels in a parent/child structure which illustrates the relationship of the packaging levels.

Expand the Package Identifier field to view the lower level packaging units in the tree.

10. Select the User Defined Fields tab to view the user-defined fields associated with the transaction.

View Transaction page - User Defined Fields tab



The User Defined Fields tab appears displaying the character, numeric, and date and time user defined fields for the transaction.

11. Click the Close button to return back to the Maintain Transactions page.

Viewing Transaction Exception Information

Use the View Transaction Exceptions page in Oracle Pedigree and Serialization Manager (OPSM) to view the exceptions (errors and warnings) for a transaction.

For transactions that have an exception status of *Errors* or *Warnings* you can access this page to view all the exceptions (errors or warnings) that occurred in processing the transaction and whether the exceptions have been resolved.

The View Transaction Exceptions page is only available for transactions that have exceptions.

Use this procedure to view transaction exception information:

Prerequisites

❒ You have created transactions and exceptions (errors or warnings) occurred in the processing of those transactions.

To View Transaction Exception Information:

1. Navigate to the Maintain Transactions page, page A-2.

2. Enter search criteria for the transactions you want to view the exception information for and click the Search button.

   All of the transactions that match the search criteria appear in the Search Results: Transactions region in a table format.

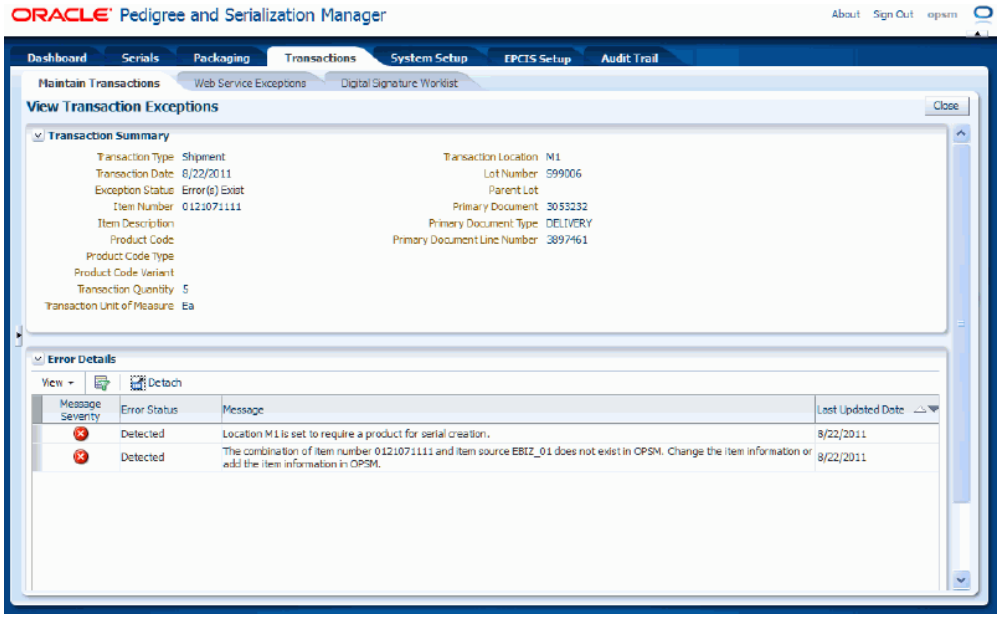
3. Select the transaction in the table you want to view the exception information for.

   Transactions that have an Exception Status of *Errors* or *Warnings* can access the View Transaction Exceptions page.

   Transactions that have an Exception Status of *No Exceptions* can access the View Transactions Exceptions page if the transactions have informational messages or if the transactions previously processed with errors and warnings and have been corrected and reprocessed. You will still be able to view the exception information that occurred for the transactions when they had errors or warnings.

4. Select View Transaction Exceptions in the Actions menu or click the Exception Status link.

View Transaction Exceptions page



The View Transaction Exceptions page appears. In the Transaction Summary region of the page, transaction summary details display for the transaction. In the Error Details region, all the error messages and associated error statuses that occurred in processing the transaction display in a table format.

The error messages that display in the table state the reason for the error and then give some instruction on how to correct the error. Messages with an Error Status of *Cleared* have been previously corrected. Messages with an Error Status of *Detected* still exist.

5. Click the Close button to return back to the Maintain Transactions page.

Viewing Initiating Transaction Detail Information

Use the View Transaction page in Oracle Pedigree and Serialization Manager (OPSM) to view the initiating transaction detailed information for a Serial Transmission transaction. This is the source transaction that initiated the transmission. For example, if destination rules are set up to transmit serial data upon shipment, a serial transmit transaction will automatically occur. The Serial Transmissions transaction will have the Shipment transaction as its initiating transaction.

Use this procedure to view initiating transaction detail information:

To View Initiating Transaction Detail Information:

1. Navigate to the Maintain Transactions page, page A-2.

2. Enter search criteria for the Serial Transmission transactions you want to view the initiating transaction details for and click the Search button.

   All of the transactions that match the search criteria appear in the Search Results: Transactions region in a table format.

3. Select the transaction in the table you want to view the initiating transaction for.

4. Select View Initiating Transaction's Detail in the Actions menu or click the Initiating Transaction link.

   The View Transaction page appears displaying the information for the initiating transaction. There are six tabs (Transaction Details, Associated Documents, Product Details, Associated Serials, Packaging Hierarchy, and User Defined Fields).

5. Select the Transaction Details tab to the view transaction details for the transaction.

   The Transaction Details tab appears displaying the transaction details for the transaction.

   In the Transaction Details region of the page the transaction detail information displays for the transaction.

   For Shipment and Return type of transactions the Source and Destination regions display on the page. The Source region displays the source details for the business and shipping information (name, address, and contact information). The Destination region displays the destination details (name, address, and contact information).

6. Select the Associated Documents tab to view the documents associated with the transaction.

   The Associated Documents tab appears displaying the associated documents for the transaction in a table format.

7. Select the Product Details tab to view the product and lot details associated with the transaction.

   The Product Details tab appears displaying the product and lot information associated with the transaction in a table format.

8. Select the Associated Serials tab to view the serials associated with the transaction.

   The Associated Serials tab appears displaying the associated serials for the transaction in a tree and table format.

9. Select the Packaging Hierarchy tab to view the packaging hierarchy associated with the transaction.

   The Packaging Hierarchy tab appears displaying the packaging hierarchy for the transaction in a tree and table format. The packaging hierarchy displays the transacted item and any higher level packaging levels in a parent/child structure

which illustrates the relationship of the packaging levels.

10. Select the User Defined Fields tab to view the user-defined fields associated with the transaction.

    The User Defined Fields tab appears displaying the character, numeric, and date and time user defined fields for the transaction.

11. Click the Close button to return back to the Maintain Transactions page.

Processing Transactions

Use the Maintain Transactions page in Oracle Pedigree and Serialization Manager (OPSM) to process transactions that have previously failed processing or to process transactions with a *Pending* transaction status.

> **Note:** Pending status is only used when doing an upgrade of the software. If the old status is UNPROCESSED it is changed to PENDING.

When exceptions occur on a transaction, in some cases, you can manually correct the data in OPSM and then process the transaction again. After the processing is complete, you can search for the processed transactions and verify the exception statuses of those transactions.

The system processes Shipment, Return, Commission Serials, Decommission Serials, Reserve Serials, Edit Serials, and Import Serials transactions that have an *Errors* exception status or transactions with a *Pending* transaction status. The system will not process Serial Transmission transactions or transactions that have no exceptions. There are no Serial Generation transactions with exceptions because the transaction itself will not be created for this transaction type when the system encounters problems.

> **Note:** Serial Transmission transactions can be "retransmitted" instead of processed.

Use this procedure to process transactions:

Prerequisites

❒ You have manually corrected the exceptions that occurred against transactions that were previously processed.

To Process Transactions:

1. Navigate to the Maintain Transactions page, page A-2.

2. Enter search criteria for the transactions you want to process and click the Search button.

   All of the transactions that match the search criteria appear in the Search Results: Transactions region in a table format.

3. Select one or more transactions in the table you want to process.

   Note: When selecting multiple transactions in the table they must all be available for processing or the system will not provide you with the capability to process the transactions. The Process Transaction(s) button and the Process Transaction(s) Action menu option will be grayed and unavailable until you have selected only transactions that can be processed. Transactions eligible for processing will have a green check mark in the table under the Reprocessable heading.

4. Select Process Transaction(s) in the Action menu or click the Process Transaction(s) button located at the top of the Search Results: Transaction region.

   A message appears asking if you are sure you want to process these transactions.

5. Click the Yes button.

   The system starts to process the transactions again.

   After the processing is complete, you can search for the processed transactions using the *No Exceptions* exception status (assuming that all of the processing errors were corrected) and verify the new exception statuses for those transactions.

Disregarding Transactions

Use the Maintain Transactions page in Oracle Pedigree and Serialization Manager (OPSM) to disregard transactions.

When you no longer need to pay attention to a transaction with exceptions you may elect to disregard the transaction. This action does not clear the exception. Only transactions with an exception status of *Errors* can be disregarded. After a transaction has been disregarded you cannot change it back to have an exception status of *Errors.*

Use this procedure to disregard transactions:

To Disregard Transactions:

1. Navigate to the Maintain Transactions page, page A-2.

2. Enter search criteria for the transactions you want to disregard and click the Search button.

All of the transactions that match the search criteria appear in the Search Results: Transactions region in a table format.

3. Select one or more of the transactions in the table you want to disregard.

   You can only disregard transactions that have an exception status of *Errors.*

   > **Note:** When selecting multiple transactions in the table to disregard they must all have an exception status of *Errors.* The Disregard Transaction(s) button and the Disregard Transaction(s) Action menu option will be grayed and unavailable until you have selected only transactions that have an *Errors* exception status.

4. Select Disregard Transaction(s) in the Action menu or click the Disregard Transaction(s) button located at the top of the Search Results: Transactions region.

   A message appears asking if you are sure you want to disregard these transactions.

   > **Note:** After a transaction has been disregarded you cannot change it back to an *Errors* exception status.

5. Click the Yes button.

   The system updates the transaction statuses for each transaction selected to *Disregarded.* The system will not process these transactions again.

Adding Containers and/or Product Serials to a Transaction

Use the Maintain Transaction Serials page in Oracle Pedigree and Serialization Manager (OPSM) to add containers and/or product serials to a shipment or return transaction that was created in an external transactional system.

The serials numbers associated with the transacted item can be identified directly or by use of inference. When the transacted items serials are identified, you can enter the serial number of the item directly in the Maintain Transaction Serials page. When inference is used, the serial number for an outer container is identified for the transaction using the Maintain Transaction Serials page. The system uses the packaging hierarchy to identify the transacted item serials. In either case, when entering the serials for a transaction the quantity of serials associated to the transaction must match the quantity of transacted item serials associated to the transaction.

If a transacted item contains serialized components or lower level packaging units, the serials associated to those items will also be associated to the transaction unless the Include Packed Transacted Units check box is clear in the Select and Add dialog box. When the lower level serials are associated, they will retain their association with the higher level component or packaging unit. This parent/child relationship will display in

the Maintain Transaction Serials page.

Use this procedure to add containers and/or product serials to a transaction:

Prerequisites

- ❒ A shipment or return transaction has been created in OPSM using the createTransaction Web Service and the transaction has an Exception Status of *Errors.*

  For more information on Shipment and Return type transactions, see Understanding Transactions, page 10-1.

  For more information on the integration between OPSM and EBS, see the *Oracle Serialization and Tracking Integration Pack for Oracle Pedigree and Serialization Manager and Oracle E-Business Suite 3.1 - Implementation Guide.*

To Add Containers and/or Product Serials to a Transaction:

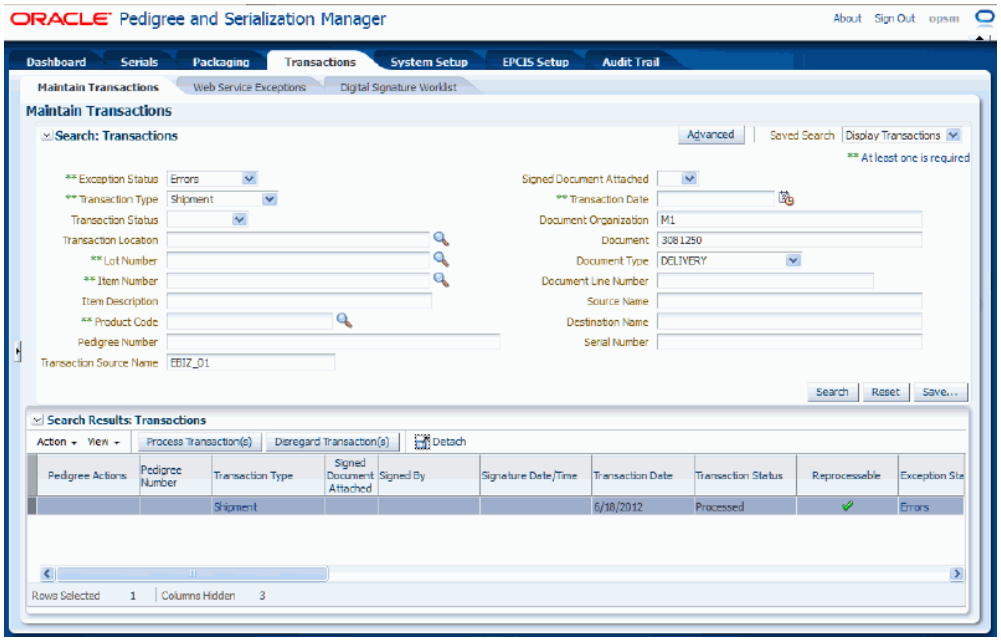
1. Navigate to the Maintain Transactions page, page A-2.

2. Enter search criteria for the transactions you want to maintain serials for and click the Search button.

   Enter at least an Exception Status of *Errors* and a Transaction Type of *Shipment* or *Return.*

   For transactions that are coming from an external transactional system, you may optionally select a value for the Transaction Source Name field and enter a value for the Document field.

Maintain Transactions page

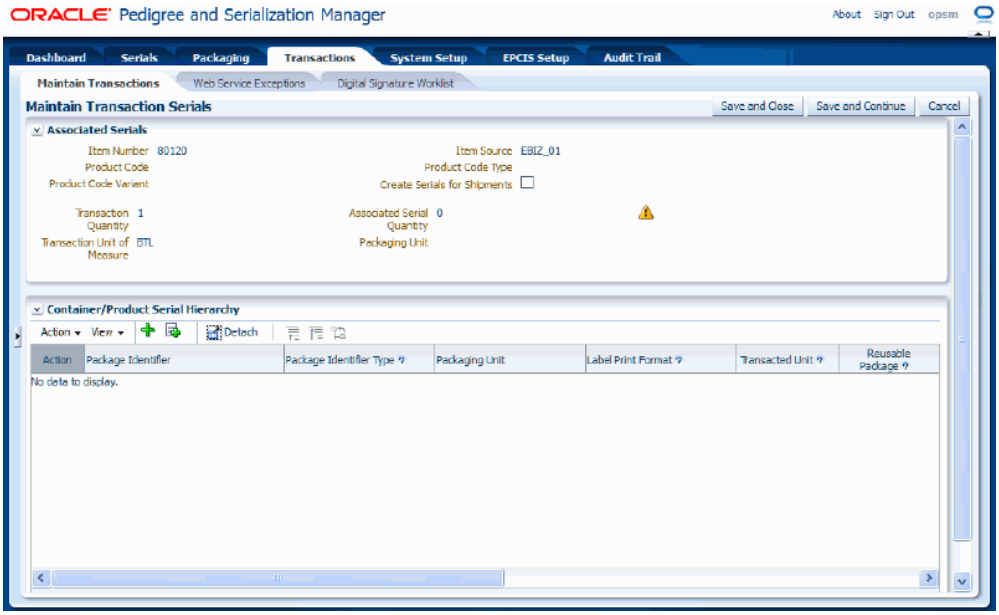


All of the transactions that match the search criteria appear in the Search Results: Transactions region in a table format.

3. Select the transaction in the results table that you want to add containers and/or product serials to.

4. Select Maintain Transaction Serials in the Actions menu or click the Maintain Transaction Serials icon in the Associated Serials Actions column of the table.

Maintain Transaction Serials page



The Maintain Transaction Serials page appears. In the Associated Serials region of the page, information displays related to the transaction including the Create Serials for Shipments check box setting (if the transacted product is set to Create Serials for Shipments, then the Create Serials for Shipments check box will be selected), Transaction Quantity, and Associated Serial Quantity. If these two quantity fields do not match a yellow warning icon displays indicating that they do not match.

In the Container/Product Serial Hierarchy region of the page, all of the package identifiers representing the container and product serial hierarchy details display in a tree format for the transaction. The Container and Product Serial Hierarchy tree displays with none of the child nodes expanded. The tree nodes can represent a container or a product serial. If this is the first time you are adding containers or product details to a transaction no data will display in this region.

> **Note:** If the product on the transaction cannot be identified in OPSM, you will not be able to maintain the transaction serials. If an item is identified, but the product is not shown, verify that the item is cross referenced to a product in OPSM.

5. Add containers and/or product serials (nodes) to the transaction using one of these methods:

To Add a Container/Product Serial to a Transaction

1. Select a node where you want to add a container or product serial.

   If this is the first time you are adding containers or product details to a

transaction no data will display in the Container/Product Serial Hierarchy region.

2. Select Add a Container/Product Serial from the Action menu or click the Add a Container/Product Serial icon located at the top of the Container/Product Serial Hierarchy region.

   If no node is selected, the system will add a blank row as a sibling to the top level of the tree in the Container/Product Serial Hierarchy region.

   If a node is selected, the system adds a blank row as a child to the selected node. However, if the selected node has the Transacted Unit check box selected, the Add a Container/Product Detail icon or action will not be available. You will not be able to enter another container or product serial under a Transacted Unit.

3. Enter the following information:

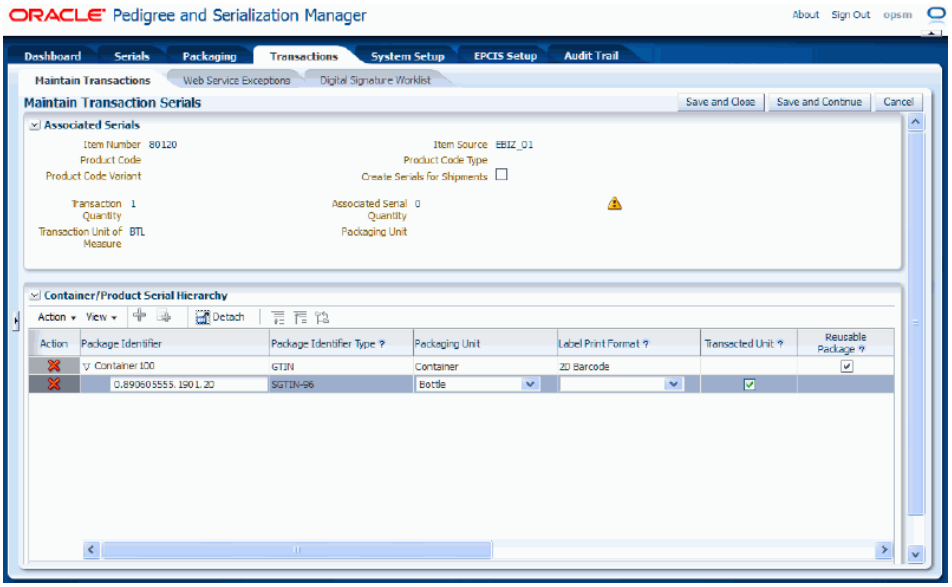
Field Name	Description
Package Identifier	Enter the package identifier for the container or the product serial. A package identifier can represent a container or a product serial. When the Package Identifier represents a container, the following applies: • The Transacted Unit check box should be clear. • It can be either an existing package or a new package. • Child Package Identifiers can be added below it. When the Package Identifier represents a product serial, the following applies: • The Transacted Unit check box should be selected. • If the Create Serials for Shipments check box is selected, the product serial should be a new product serial. • If the Create Serials for Shipments check box is clear, the product serial should be an existing serial. • The product associated with the serial should be the same as the transacted product. • Child Package Identifiers cannot be added below the transacted unit. The Package Identifier will become read-only after update.

Field Name	Description
Package Identifier Type	Enter the Package Identifier Type associated with the Package Identifier. Package Identifier Types are user defined using extensible Lookup Type PAS_LABEL_TYPE. Only a subset of the values from PAS_LABEL_TYPE are available for selection. Label Types that are also Serial Types are omitted. If the Transacted Unit check box is selected, the Package Identifier Type will default from the Serial Type on the Product Detail record that is identified on the transaction and the Package Identifier Type field will be disabled. The Package Identifier Type will become read-only after update.
Packaging Unit	Select a packaging unit. A packaging unit can represent a container or a specific product serial. Packaging Units are user defined using Lookup Type PAS_PACKAGE_UNIT.
Label Print Format	Select the label print format for the packaging unit. The value entered for the Label Print Format will be used for creation of new containers and product serials when the transaction is processed. The value of an existing container or product serial will not be updated when the transaction is processed. The Label Print Format will become read-only after update. Label Print Formats are user defined using Lookup Type PAS_LABEL_PRINT_FORMAT.

Field Name	Description
Transacted Unit check box	Select this check box if this packaging identifier represents the transacted unit on the transaction. The item being shipped or returned. This check box appears clear by default.
Reusable Package check box	Select this check box if this package is reusable. The value entered for the Reusable Package check box will be used for creation of new containers when the transaction is processed. The value of an existing container will not be updated when the transaction is processed. This check box appears clear by default.
Serial Usage	This field becomes available if you select the Transacted Unit check box. Select the serial usage for the product serial. If a value is entered for Serial Usage, the serial will be created or updated when the transaction is processed. If no value is entered, the serial will not be updated. Serial Usages are user defined using Lookup Type PAS_SERIAL_USAGE.
Saleable Unit check box	This field becomes available if you select the Transacted Unit check box. If Saleable Unit is selected, the serial will be created or updated when the transaction is processed. If it is clear, the serial will not be updated. Select the Saleable Unit check box for the product serial if this is a saleable product. This check box appears selected by default.

Field Name	Description
Created By	The system displays the individual that added the container or product serial.
Creation Date	The system displays the date that a container or product serial was added.
Last Updated By	The system displays the individual that last updated the container or product serial.
Last Updated By Date	The system displays the date that a container or product serial was last updated.

Maintain Transaction Serials page



For a Shipment transaction, if the Create Serials for Shipments check box is clear (meaning that the serials must already exist in OPSM), the system will issue a warning message that the product serial entered does not exist in OPSM when you enter a product serial in a new row and the serial record does not exist in OPSM. You will still be able to save the new row. When the transaction is reprocessed, it will fail with exceptions unless the serial is created in OPSM by the time of reprocessing. This validation is performed when the Transacted Unit check box is selected or the Package Identifier is changed while the

Transacted Unit check box is already selected.

To Select and Add Existing Container/Product Serial to a Transaction

1. Select Select and Add Containers/Product Serials from the Action menu or click the Select and Add Containers/Product Serials icon located at the top of the Container/Product Serial Hierarchy region.

Select and Add dialog box

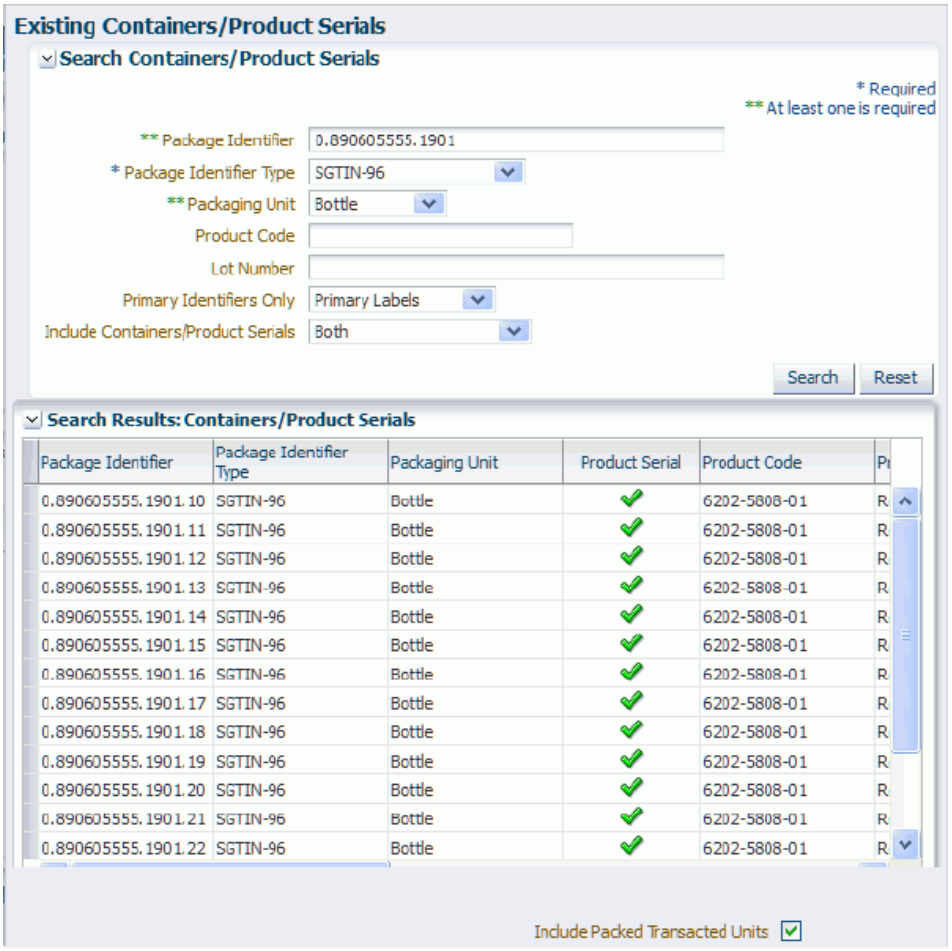
The Select and Add dialog box appears.

2. Enter the following search criteria and then click the Search button:

Field Name	Description
Package Identifier	Enter the package identifier for the container or the product serial. A package identifier can represent a container or a product serial.
Package Identifier Type	Select the package identifier type. Package Identifier Types are user defined using extensible Lookup Type PAS_LABEL_TYPE.
Packaging Unit	Select a packaging unit. A packaging unit can represent a container or a specific product serial. Packaging Units are user defined using Lookup Type PAS_PACKAGE_UNIT.
Product Code	(Optional) Enter the product code associated with the package identifier.
Lot Number	(Optional) Enter the lot number associated with the package identifier.
Primary Identifiers Only	Select Primary Labels if you only want to view the primary identifiers for a packaging unit. Select Non-Primary Labels if you want to view all identifiers for a packaging unit (primary and alternate). Primary Labels appears by default.

Field Name	Description
Include Containers/Product Serials	Select if you want to view package identifiers for containers, product serials, or both containers and product serials. Options are: • Both • Labels for Container • Labels for Product Serial For Shipment transactions, if the Create Serials for Shipment check box is selected, *Labels for Containers* appears by default. If the Create Serials for Shipment check box is clear, *Both* appears by default. For Return transactions, *Labels for Product Serials* appears by default.

Select and Add dialog box



All available package identifiers that match the search criteria appear in the Search Results: Containers/Product Serials table.

3. Select the container or product serial package identifier in the Search Results: Containers/Product Serials table.

4. (Optional) Select Include Packed Transacted Units check box at the bottom of the table if you want to automatically select the lower level containers and product serials contained in the selected container. This check box only applies if you are selecting a container packaging unit.

> **Note:** Lower level product serials (item genealogy) associated to the transacted item serials will be associated to the transaction when the transaction is processed assuming this information has already been established in OPSM through the

packaging hierarchy.

For shipment transactions, if the Create Serials for Shipment check box is selected, the Include Packed Transacted Unit check box is clear by default. If the Create Serials for Shipment check box is selected, then the Include Packed Transacted Unit check box is selected by default.

For return transactions, the Include Packed Transacted Unit check box will be selected by default.

5. Click the OK button.

After you click the OK button, the system will perform several validations on the product serial or container you selected related to the transaction. These validations include the following:

Product Serial Validation

If you select a product serial and click the OK button, the system validates the following:

- The selected product serial must be the transacted items product serial.
- If a lot number is assigned to the product serial, then the lot number must match the lot number for the transaction.
- For Shipment transactions, the serials Serial State must not be *Shipped.* However, if the Create Serials for Shipment check box is selected, then the Serial State must be *Returned.*
- For Return transactions (not internal), the serials Serial State must be *Shipped.*
- For Return transactions (internal), the serials Serial State must not be *Shipped.*
- The serials Serial Status must be *Commissioned.*
- The serials Counterfeit Status must not be *Counterfeit.*
- The serial cannot already be associated to the transaction (for example, in a lower level).

Container (Include Transacted Unit check box Not Selected) Validations

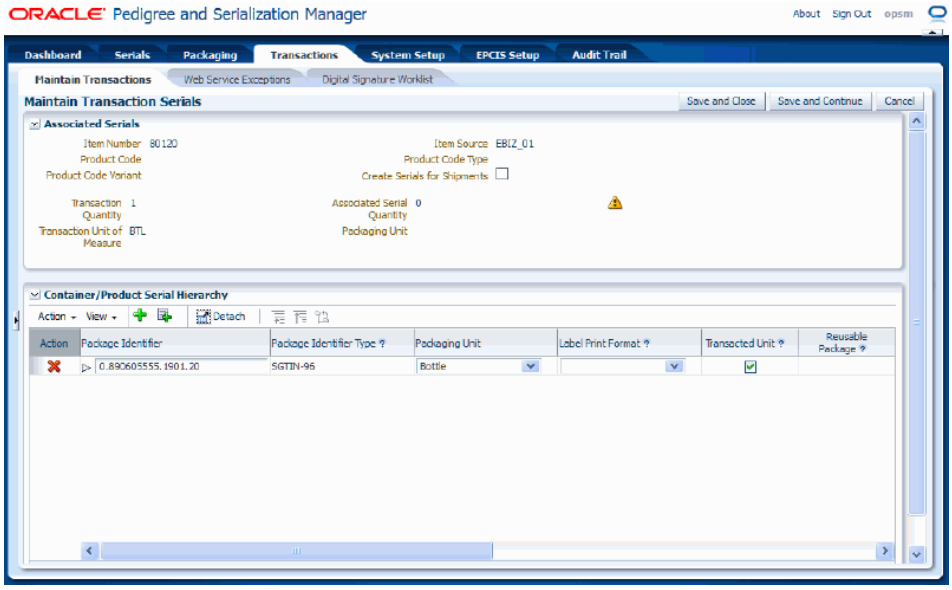
If you select a container and do not select the Include Transacted Unit check box and click the OK button, the system will perform no validations. The container will be added to the Containers/Product Serials Hierarchy Tree.

Container (Include Transacted Unit check box Selected) Validations

If you select a container and select the Include Transacted Unit check box and click the OK button, the system validates the following against the packaging hierarchy of the branch (the top node of the branch is the selected container):

- The branch must include the transacted items product serials.
- The direct container of a transacted items product serial must not be serialized.
- If lot numbers are assigned to the included transacted items serials, then the lot numbers must match the lot number of the transaction.
- For Shipment transactions, the included transacted items serials Serial State must not be *Shipped.* However, if the Create Serials for Shipment check box is selected, then the Serial State must be *Returned.*
- For Return transactions (not internal), the included transacted items serials Serial State must be *Shipped.*
- For Return transactions (internal), the included transacted items serials Serial State must not be *Shipped.*
- The included transacted items serials Serial Status must be *Commissioned.*
- The included transacted items serials Counterfeit Status must not be *Counterfeit.*
- Any package identifier included in the branch shall not already exist in the transaction.

Maintain Transaction Serials page



If the selected product serial and/or container that you selected passes all of the validation checks, then the Maintain Transaction Serials page reappears with the information you selected added to the Containers/Product Serials Hierarchy tree. If any validation fails, the system will issue an error message and you will not be able to add the product serial or container to the transaction.

6. Repeat Step 5 using one or both of the methods to add a container and/or product serial to the transaction until all of the serials are associated to the transaction.

7. Save your work. Choose one of these options:

   - Click the Save and Close button to save the information and return back to the Maintain Transactions page.

   - Click the Save and Continue button to save the information and to stay on this page so you can continue to edit the information.

   In the Associated Serial region of the page, the Associated Serial Quantity field is updated with the quantity that was transacted and the yellow warning icon is removed if the Transaction Quantity equals the Associated Serial Quantity. The yellow warning icon will display as long as the quantities do not match.

   The serials are associated to the transaction. If the Create Serials for Shipment check box is selected for the transaction and you enter a brand new container or product serial package identifier the system will also created the package identifier and packaging hierarchy in OPSM.

   For more information, see Searching for Packages, page 8-1 and Searching for

Packaging Hierarchies, page 9-1.

8. Process the transaction again.

   For information on how to process a transaction, see Processing Transactions, page 10-43.

Viewing Containers and/or Product Serials for a Transaction

Use the Maintain Transaction Serials page in Oracle Pedigree and Serialization Manager (OPSM) to view the containers and/or product serials associated with a shipment or return transaction created in an external transactional system.

Use this procedure to view containers and/or product serials for a transaction:

Prerequisites

❒ A shipment or return transaction for an OPSM Integrated item was created in an external transactional system and the containers and/or product serials have already been added or partially added for the transaction in OPSM and the Exception Status of the transaction is *Errors.*

For information, see Adding Containers and/or Product Serials to a Transaction, page 10-45.

To View Containers and/or Product Serials for a Transaction:

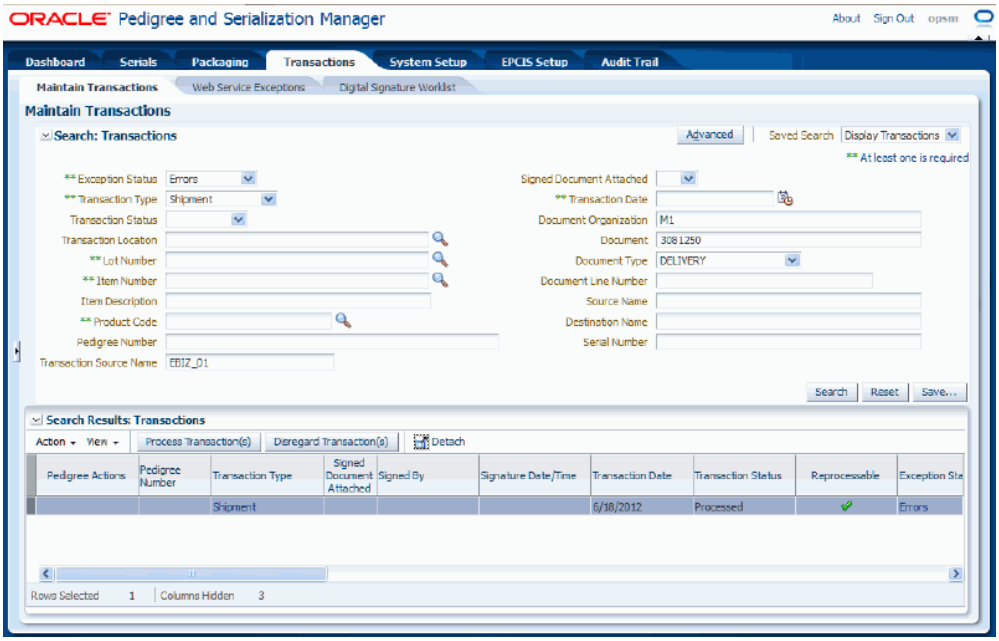
1. Navigate to the Maintain Transactions page, page A-2.

2. Enter search criteria for the transactions you want to view containers and/or product serials for and click the Search button.

   Enter at least an Exception Status of *Errors* and a Transaction Type of *Shipment* or *Return.*

   For transactions that are coming from an external transactional system, you may optionally select a value for the Transaction Source Name field and enter a value for the Document field.

Maintain Transactions page

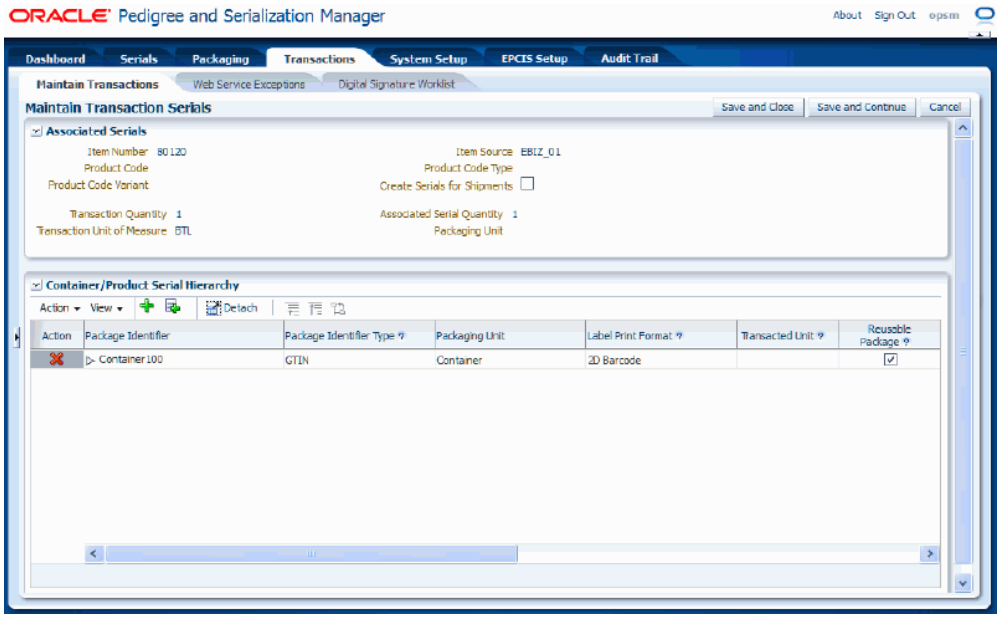


All of the transactions that match the search criteria appear in the Search Results: Transactions region in a table format.

3. Select the transaction in the table that you want to view the containers and/or product serials for.

4. Select Maintain Transaction Serials in the Actions menu or click the Maintain Transaction Serials icon in the Associated Serials Action column of the table.

Maintain Transaction Serials page



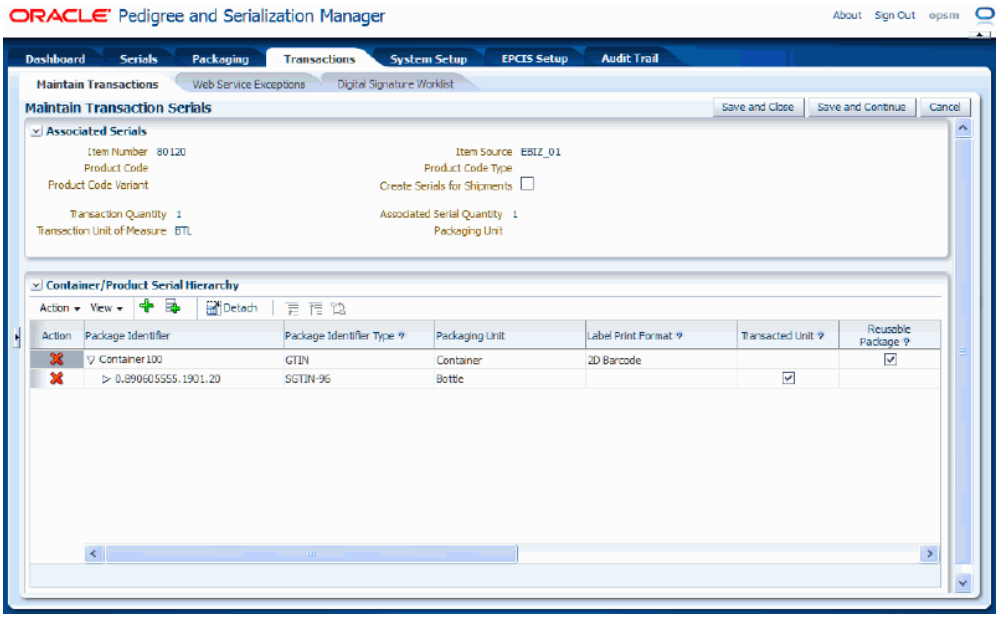
The Maintain Transaction Serials page appears displaying all of the package identifiers representing the container and product serial hierarchy details in a tree format for the transaction.

The Container and Product Serial Hierarchy tree displays with none of the child nodes expanded.

The tree nodes can represent a container or a product serial.

5. Expand or collapse the nodes in the tree to view the all the package identifiers in the Container and Product Serial Hierarchy tree.

Maintain Transaction Serials page



Deleting Containers and/or Product Serials from a Transaction

Use the Maintain Serial Transactions page in Oracle Pedigree and Serialization Manager (OPSM) to delete containers and/or product serials from a shipment or return type of transaction that was created in an external transactional system.

Use this procedure to delete containers and/or product serials from a transaction:

Prerequisites

❒ A shipment or return transaction for an OPSM Integrated item was created in an external transactional system and the containers and/or product serials have already been added or partially added for the transaction in OPSM and the Exception Status of the transaction is *Errors.*

For information, see Adding Containers and/or Product Serials to a Transaction, page 10-45.

To Delete Containers and/or Product Serials from a Transaction:

1. Navigate to the Maintain Transactions page, page A-2.

2. Enter search criteria for the transactions you want to delete associated serials from and click the Search button.

Enter at least an Exception Status of *Errors* and a Transaction Type of *Shipment* or *Return.*

If you are working with transactions that are coming from an external transactional system, you may optionally enter a value for the Transaction Source Name field and the Document field.

All of the transactions that match the search criteria appear in the Search Results: Transactions region in a table format.

3. Select the transaction in the table that you want to delete the container or product serials from.

4. Select Maintain Transaction Serials in the Actions menu or click the Maintain Transaction Serials icon in the Associated Serials Action column of the table.

   The Maintain Transaction Serials page appears displaying all of the package identifiers representing the container and product serial hierarchy details in a tree format for the transaction.

   The Container and Product Serial Hierarchy tree displays with none of the child nodes expanded.

   The tree nodes can represent a container or a product serial.

5. Expand the nodes in the tree until you locate the node you want to delete.

   To expand a node in the Container and Product Serial Hierarchy tree use one of these methods:

   - Click the Expand icon next to the node in the tree you want to expand.
   - Select the node in the tree you want to expand and select Expand, Expand All, or Expand All Below from the View menu.

   The nodes are expanded to display the container or product serial information below the node selected.

6. Select the node (package identifier) representing the container or product serial in the Container and Product Serial Hierarchy tree that you want to delete.

7. Select Delete a Container/Product Serial from the Action menu or click the Delete a Container/Product Serial in the Action column of the results table.

   A message appears asking if you are sure you want to delete the container or product serial.

8. Click the Yes button.

   The node (package unit identifier) is deleted from the tree. If you select a container node all nodes below that container will also be deleted.

Note: The containers or product serials are deleted from the transaction; they are not removed from OPSM.

Updating Containers and/or Product Serials for a Transaction

Use the Maintain Transaction Serials page in Oracle Pedigree and Serialization Manager (OPSM) to update containers and/or product serials associated with a shipment or return transaction created in an external transactional system. After containers and/or products serials have been associated to a transaction, you can use the Maintain Transaction Serials page to edit associated product serial information, add additional containers and/or product serials (child nodes) to the transaction, or delete containers and/or product serials (child nodes) from the transaction.

Use this procedure to update containers and/or product serials for a transaction:

Prerequisites

- ❒ A shipment or return transaction for an OPSM Integrated item was created in an external transactional system and the containers and/or product serials have already been added or partially added for the transaction in OPSM and the Exception Status of the transaction is *Errors.*

  For information, see Adding Containers and/or Product Serials to a Transaction, page 10-45.

To Update Containers and/or Product Serials for a Transaction:

1. Navigate to the Maintain Transactions page, page A-2.

2. Enter search criteria for the transactions you want to update containers and/or product serials for and click the Search button.

   Enter at least an Exception Status of *Errors* and a Transaction Type of *Shipment* or *Return.*

   For transactions that are coming from an external transactional system, you may optionally enter a value for the Transaction Source Name field and the Document field.

   All of the transactions that match the search criteria appear in the Search Results: Transactions region in a table format.

3. Select the transaction in the table that you want to update the containers and/or product serials for.

4. Select Maintain Transaction Serials in the Actions menu or click the Maintain

Transaction Serials icon in the Associated Serials Action column of the results table.

The Maintain Transaction Serials page appears displaying all of the package identifiers representing the container and product serial hierarchy details in a tree format for the transaction.

The Container and Product Serial Hierarchy tree displays with none of the child nodes expanded.

The tree nodes can represent a container or a product serial.

5. (Optional) Expand and collapse the nodes (containers or product serials) until you locate where in the tree you want to update child nodes, add additional child nodes to, or where you want to remove child nodes from in an existing Container and Product Serial Hierarchy tree.

6. (Optional) Update the Serial Usage and Saleable Unit check box fields associated with a transacted unit packaging identifier node.

   You can only update the Serial Usage and Saleable Unit fields for a transacted unit package identifier node that was created using the Add a Container/Product Serial action or icon. No fields can be updated for a node that was created using the Select and Add Containers/Product Serials action or icon.

7. (Optional) Add additional containers and/or product serials (nodes) to the Container and Product Serial Hierarchy tree.

   For information on how to add additional containers and/or product serials (nodes) to a Container and Product Serial Hierarchy tree, see Adding Containers and/or Product Serials to a Transaction, page 10-45.

8. (Optional) Delete containers and/or product serials (nodes) from the Container and Product Serial Hierarchy tree.

   For information on how to remove containers and/or product serials (nodes) from a Container and Product Serial Hierarchy tree, see Deleting Containers and/or Product Serials from a Transaction, page 10-64.

Transmitting Serials

Use the Maintain Transactions page in Oracle Pedigree and Serialization Manager (OPSM) to transmit serials.

Use this procedure to transmit serials:

Prerequisites

❒ • Serial destination and destination rules have been set up.

For more information on serial destinations and destination rules, see Maintaining Serial Destinations and Destination Rules, page 4-191.

- Transactions (Shipment, Return, Serial Generation, or Import Serials) have been created that require the transmitting of serials.

To Transmit Serials:

1. Navigate to the Maintain Transactions page, page A-2.

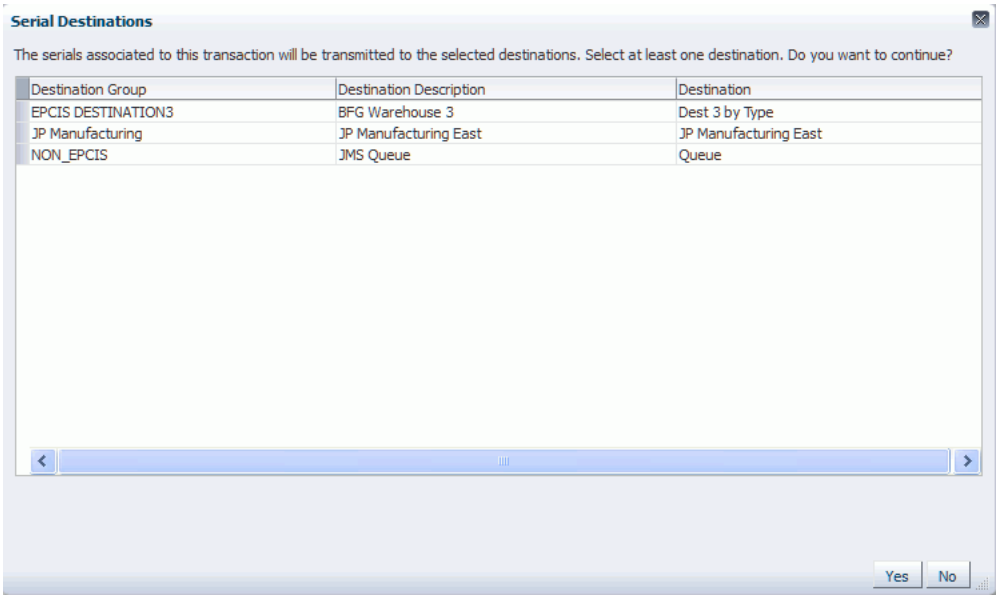
2. Enter search criteria for the transactions you want to transmit serials for and click the Search button.

   All of the transactions that match the search criteria appear in the Search Results: Transactions region in a table format.

3. Select the transaction in the table you want to transmit serials for.

4. Select Transmit Serials in the Action menu or click the Transmit Serials icon for the transaction in the table.

Serial Destinations page



   If the transaction type selected is Shipment, Return, Serial Generation, or Import Serials, the Serial Destinations page will appear displaying the serial destinations.

   If the transaction type selected is Serial Transmission, a popup page will appear confirming that you wish to transmit these serials.

5. If the transaction type is Shipment, Return, Serial Generation, or Import Serials then

select one or more destinations in the table that you want to transmit the serials to.

For more information on creating serial destinations, see Maintaining Serial Destinations and Destination Rules, page 4-191.

6. Click the Yes button on the Serial Destinations page for Shipment, Return, Serial Generation, or Import Serials transactions or click the Yes button on the popup page for Serial Transmission transactions.

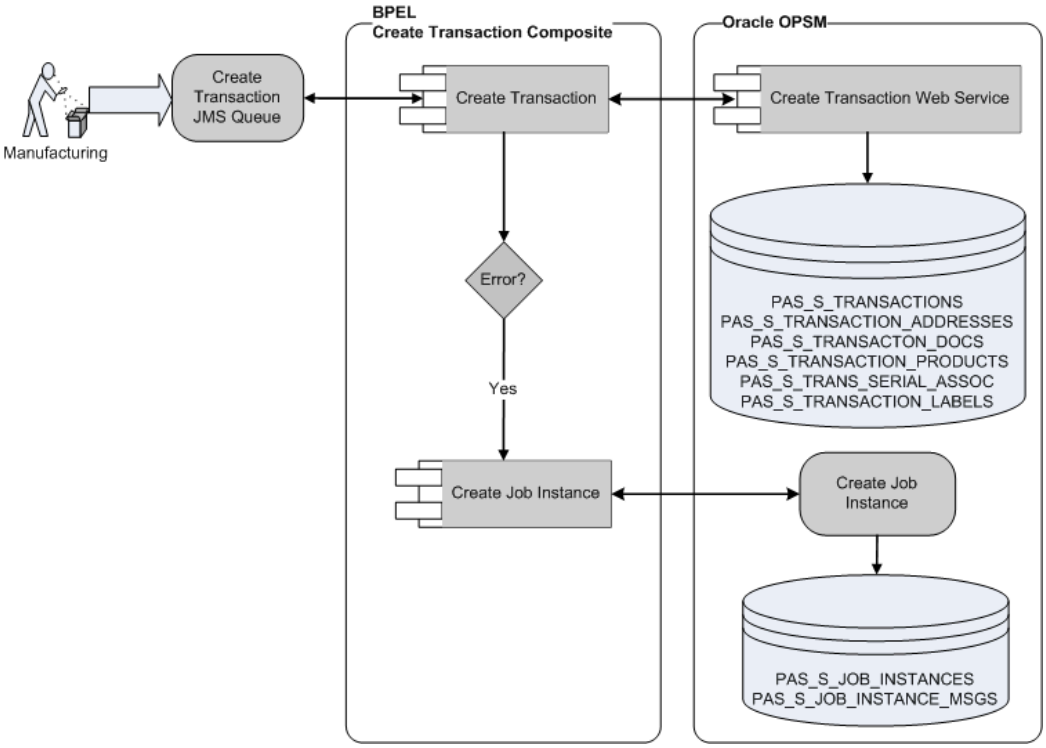
   The system will transmit the serials to the selected destinations. New Serial Transmission transactions will be created for each destination.

Creating Transactions Using JMS Queue

Oracle Pedigree and Serialization Manager (OPSM) uses a JMS Queue for asynchronous processing of inbound createTransaction messages. When a message is placed into the JMS Queue by the producer, the message is picked up and processed by the OPSM BPEL composite (consumer). The BPEL composite calls the createTransaction web service. If the web service call fails or returns an error, a Job Instance along with a Job Instance Message is created in OPSM. Errors related to createTransaction messages that fail to process successfully can be viewed in the Web Service Exceptions page.

This diagram illustrates the createTransaction Web Service process flow:

createTransaction Web Service Process Flow



You will use the Web Service Exceptions page to view exception messages that are generated when messages are processed by the mergeLot, createTransaction, captureEpcisDoc, Edit Serial by Primary Doc, Edit Serial By Label, Edit Serial By List, and HTTP Post web services. Exception messages are only created for exceptions or errors that are detected by the web service. If the web service processes successfully during the integration process no message is recorded.

The Web Service Exceptions page is located under the Serials section and the Transactions section of the Task menu. The page is the same in both locations.

> **Important:** If you call the OPSM Web Services directly without using the JMS Queue you are not able to view exception messages using the OPSM Web Service Exceptions page.

For more information on integrating Oracle E-Business Suite with OPSM, see the *Oracle Serialization and Tracking Integration Pack for Oracle Pedigree and Serialization Manager and Oracle E-Business Suite 3.1 - Implementation Guide.*

Use this procedure to view web service exceptions:

Prerequisites

- ❒ A JMS Producer must be created for enqueueing the messages into the JMS Queue for createTransaction messages.

  The Oracle Serialization and Tracking Integration Pack for Oracle Pedigree and Serialization Manager and Oracle E-Business Suite 3.1 provides the JMS Producer as part of the integration pack.

To View Web Service Exceptions:

1. Navigate to the Web Service Exceptions page, page A-2.

   For more information on how to view web service exceptions, see Merging Lots Using JMS Queue, page 6-36.

11

Managing Pedigrees

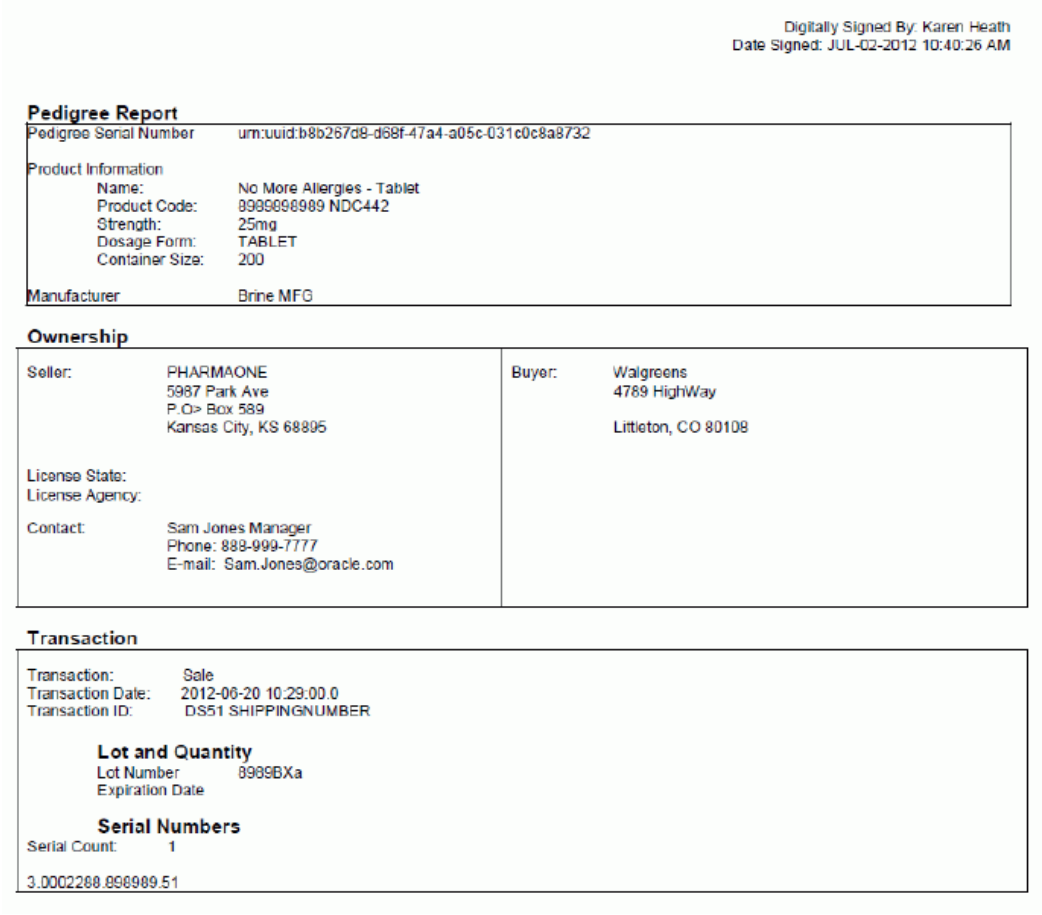
This chapter covers the following topics:

- Understanding Pedigree
- Creating a Pedigree
- Digitally Signing a Pedigree Using the Maintain Transactions Page
- Searching for Signed or Unsigned Pedigree Documents Using the Digital Signature Worklist Page
- Digitally Signing a Pedigree Using the Digital Signature Worklist Page
- Printing a Pedigree Using the Maintain Transactions Page
- Printing a Pedigree Using the Digital Signature Worklist Page
- Viewing Transaction Detail Information Using the Digital Signature Worklist Page
- Viewing a Pedigree Using the Maintain Transactions Page
- Viewing a Pedigree Using the Digital Signature Worklist Page

Understanding Pedigree

Oracle Pedigree and Serialization Manager (OPSM) enables you to create, digitally sign, and print a pedigree document. The pedigree document is a record that contains information about each owner of the product as it moves through the supply chain. The pedigree document records the sale of a single product initiated by the manufacturer when it is shipped to a downstream trading partner through a shipment transaction.

Example of a Pedigree Report



Digitally Signed By: Karen Heath
Date Signed: JUL-02-2012 10:40:26 AM

Pedigree Report

Pedigree Serial Number	urn:uuid:b8b267d8-d68f-47a4-a05c-031c0c8a8732
Product Information	
Name:	No More Allergies - Tablet
Product Code:	9999999999 NDC442
Strength:	25mg
Dosage Form:	TABLET
Container Size:	200
Manufacturer	Brine MFG

Ownership

Seller:	PHARMAONE 5987 Park Ave P.O> Box 589 Kansas City, KS 68895	Buyer:	Walgreens 4789 HighWay Littleton, CO 80108
License State: License Agency:			
Contact:	Sam Jones Manager Phone: 888-999-7777 E-mail: Sam.Jones@oracle.com		

Transaction

Transaction: Sale
Transaction Date: 2012-06-20 10:29:00.0
Transaction ID: DS51 SHIPPINGNUMBER

Lot and Quantity

Lot Number 8989BXa
Expiration Date

Serial Numbers

Serial Count: 1

3.0002288.896989.51

A pedigree document contains the following information:

- Document Information: Pedigree Serial Number.
- Product Information: Product Name, Product Code, Product Code Type, Strength, Dosage Form, Container Size, and Manufacturer.
- Ownership Information: Seller Information:
  - Seller Name and Address
  - State License Number
  - License State
  - License Agency
  - DEA Number

    - Contact Information (Name, Phone Number, E-mail and so on)

- Ownership Information: Buyer Information:
    - Buyer Name and Address

- Transaction Information: Transaction Type (Sale), Transaction Date, Transaction ID (Invoice or Shipping number), and Transaction Quantity.

- Lot and Quantity Information: Lot Number, Expiration Date, Quantity, Date Manufactured.

- Serial Information: Serial Count, and Serial Numbers.

- Digital Signature (top right side of document): Digitally Signed By, Date Signed

  These two fields (including field labels) will only appear on the Pedigree document if it is digitally signed. Otherwise, these fields will not appear.

Using OPSM you can automatically create a pedigree document from a shipment transaction or you can manually create one using the Maintain Transactions page in OPSM. The printing of the pedigree document is a manual step in OPSM. A pedigree document will automatically be created in OPSM, if OPSM receives a shipment transaction from a transactional system and it processes successfully, is not a shipment to an internal customer, has the product flagged as Pedigree Required, and has all the required pedigree fields populated. If the shipment transaction fails then the pedigree document is not created. If the shipment transaction is successfully reprocessed, then OPSM will again try to automatically create the pedigree document.

The pedigree document can be manually created in OPSM using the Maintain Transaction page if a shipment transaction completes successfully, but some of the required pedigree fields are missing such as, Location Contact information or Product information. In this case, the pedigree document was not automatically created. You will have to enter the missing pedigree information in OPSM and then access the Maintain Transactions page and manually create the pedigree document by clicking the Create Pedigree XML icon or selecting the Create Pedigree XML option from the Action menu for the shipment transaction.

For more information on pedigree setup, see the Pedigree Setup Process Flow, page 11-4 in this section.

For more information on manually creating a pedigree, see Creating a Pedigree, page 11-6.

To digitally sign a pedigree document you will access the Maintain Transactions page or the Digital Signature Worklist page. From the Maintain Transactions page you will click the Unsigned icon or select the Sign option from the Action menu for a shipment transaction where the pedigree document has already been created. From the Digital Signature Worklist page you will click the Sign button or select the Sign option from the

Action menu for a shipment transaction where the pedigree document has already been created. Digitally signing a pedigree is an optional process.

For more information on digitally signing a pedigree, see Digitally Signing a Pedigree Using the Maintain Transactions Page, page 11-9 and Digitally Signing a Pedigree Using the Digital Signature Worklist, page 11-18.

To print a pedigree document you will access the Maintain Transactions page or the Digital Signature Worklist page and click the Print Pedigree XML icon or select the Print Pedigree XML option from the Action menu for a shipment transaction where the pedigree document has already been created. OPSM integrates with the Oracle Business Intelligence Publisher application so that you can print a pedigree document. When you print a pedigree document using the Maintain Transactions page or the Digital Signature Worklist page, OPSM calls the Oracle BI Publisher API to launch the Oracle Business Intelligence Publisher application. You will then select a template and print the pedigree document if required. OPSM provides a generic pedigree template as well as a template for the Florida pedigree but you can create your own template using the Oracle Business Intelligence Publisher application. You can select the template you want to use for printing. You can also set up a default template that will automatically populate when you choose to print a pedigree.

For more information on printing and viewing a pedigree, see:

- Printing a Pedigree Using the Maintain Transactions page, page 11-21
- Printing a Pedigree Using the Digital Signature Worklist, page 11-23
- Viewing a Pedigree Using the Maintain Transactions page, page 11-26
- Viewing a Pedigree Using the Digital Signature Worklist, page 11-27

For more information on using the Oracle Business Intelligence Publisher application, see *Oracle Business Intelligence Publisher Report Designer's Guide.*

Pedigree Setup Process Flow

Before a pedigree document can be successfully created, digitally signed, and printed in OPSM for a shipment transaction certain information must be set up in OPSM. This process flow depicts the required pedigree setup steps:

To Set Up Pedigree:

1. (Optional) Enter fields pertaining to pedigree for the locations you are working with.

   Enter the License State / Region and the License Agency fields for the locations on the Create Location or Edit Location pages.

   For information, see Maintaining Locations, page 4-42.

2. Define Location Contacts for the locations you are working with.

   For information, see Maintaining Locations, page 4-42.

3. (Optional) If you would like to digitally sign the pedigree document after a shipment transactions is created, perform these steps:

   - Install and implement a digital signature keystore.

     For information, see the *Oracle Pedigree and Serialization Manager Security Guide.*

   - Define the Digital Signature Keystore parameters and the Digital Signature Method parameter in System Parameters.

     For information, see Maintaining System Parameters, page 4-23.

   - Enter the certificate alias from the keystore into the Contact User Id field for each location contact.

     Note: Existing users that are upgrading to OPSM Release 1.2 need to add a valid contact user ID to every location contact that will be digitally signing pedigrees. This information should be entered before they actually digitally sign a pedigree document. Otherwise, they will receive an error message and will not be able to digitally sign a pedigree.

     For information, see Maintaining Locations, page 4-42.

   - Mark the location as digital signature required by clicking the Digital Signature Required check box on the Create Location or Edit Location pages.

     For information, see Maintaining Locations, page 4-42.

4. Indicate that the product codes you are working with require a pedigree.

   Select the Pedigree Required check box for the Product Codes on the Create Product or the Edit Product pages under the Regulatory Information tab.

   For information, see Maintaining Products, page 4-78.

5. Create shipment transactions that process successfully in OPSM for the products and locations that you have set up with pedigree information.

6. If you would like to print the pedigree document, install and implement the Oracle Business Intelligence Publisher application.

   For information, see:

   - *Oracle Business Intelligence Publisher Report Designer's Guide.*

- *Oracle Business Intelligence Publisher Administrator's and Developer's Guide.*
- *Oracle Business Intelligence Enterprise Edition Deployment Guide.*
- *Oracle Business Intelligence Infrastructure Installation and Configuration Guide.*

Creating a Pedigree

Oracle Pedigree and Serialization Manager (OPSM) will automatically create a pedigree XML document when it receives a non-internal shipment transaction (product on the transaction is marked as Pedigree Required) from a transactional system that processes successfully and where all the other required pedigree fields are populated with information. If the shipment transaction does not contain all of the required pedigree fields the pedigree XML document will not be created. In this case, you will need to enter the required pedigree information and then manually create the pedigree XML document using the Maintain Transactions page.

Using the Maintain Transactions page in OPSM you can manually create a pedigree XML document for a non-internal shipment transaction. A pedigree XML document can only be created for Shipment transactions with an exception status of *No Exceptions.*

For more information on pedigree, see Understanding Pedigree, page 11-1.

Use this procedure to manually create a pedigree:

Prerequisites

❒ Pedigree setup information has been defined in the OPSM application.

For more information on pedigree setup, see the Pedigree Setup Process Flow, page 11-4.

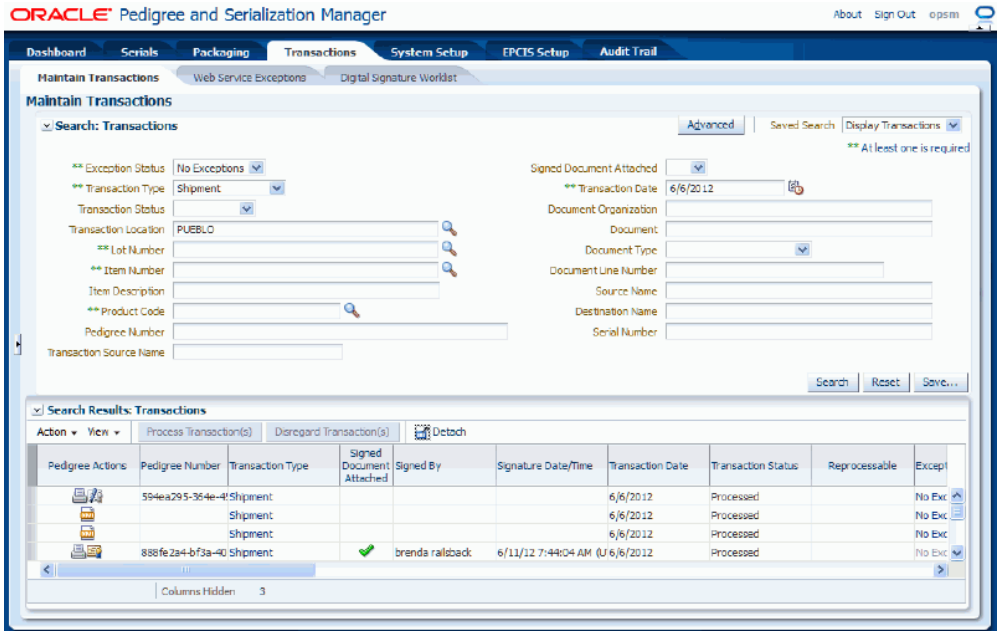
❒ A shipment transaction exists with an exception status of *No Exceptions.*

To Manually Create a Pedigree:

1. Navigate to the Maintain Transactions page, page A-2.
2. Enter search criteria for the transactions you want to create a pedigree for and click the Search button.

   You'll want to search for transactions with a Transaction Type of *Shipment* and an Exception Status of *No Exceptions.*

Maintain Transactions page

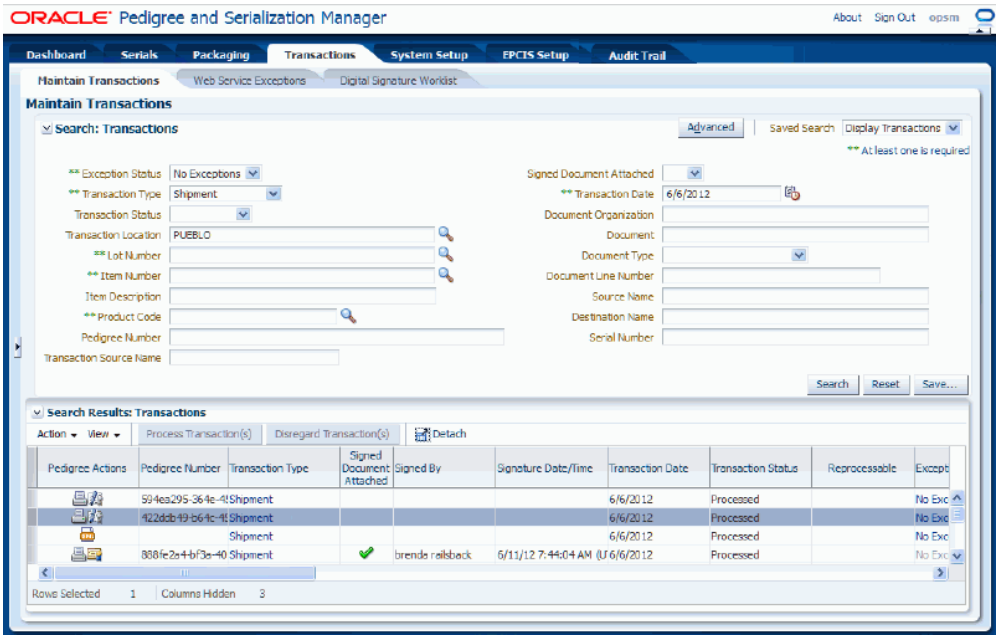


All of the transactions that match the search criteria appear in the Search Results: Transactions region in a table format.

3. Select the transaction in the table you want to create a pedigree for.

4. Select Create Pedigree XML in the Action menu or click the Create Pedigree XML icon for the transaction in the Pedigree Actions column of the results table.

Maintain Transactions page



The system initiates a process that will create the pedigree XML document. If the process is successful, the system will create the pedigree XML document and it will randomly assign a unique pedigree number to the document that displays in the Pedigree Number column of the results table for the shipment transaction. Plus, the Unsigned icon will appear in the Pedigree Actions column of the results table for the pedigree if a digital signature is required.

The pedigree unique ID is a universally unique identifier for the pedigree document using the UUID 128-bit identifier standard per RFC 4122, including the "urn:uuid" namespace prefix. The pedigree unique ID is 45 characters in length when the namespace prefix is included. For example, urn:uuid:7ca6dd60-0fc4-11dd-a41d-0002a5d5c51b

If the process fails, a message appears stating that the pedigree document failed to be created and to go to transaction exceptions to view the errors that occurred during the creation of the pedigree document. A message severity icon will display in the Message Severity column of the results table for the shipment transaction. You will need to correct the individual errors and warnings that occurred for this process and then re-initiate the Create Pedigree XML process.

5. (Optional) If the Create Pedigree XML process fails, view the errors, correct the errors, and then re-initiate the Create Pedigree XML process.

To View and Correct Errors and to Re-Initiate the Create Pedigree XML Process

1. Click the Exception Status link or the Message Severity icon for the shipment transaction in the Search Results: Transactions table.

Note: In this case, the Exception Status column link becomes available even for transactions that were successful. For example, the *No Exceptions* status may contain a link if the Create Pedigree XML process was unsuccessful. The exceptions that display at this time are for the Create Pedigree XML process.

The View Transaction Exceptions page appears displaying the errors and warnings that occurred during the Create Pedigree XML process.

2. Correct the warning and error conditions mentioned in the messages listed on the View Transaction Exceptions page.

3. Navigate back to the Maintain Transactions page and search for the transaction where the pedigree document failed to be created. Then select Create Pedigree XML in the Action menu or click the Create Pedigree XML icon for the transaction in the Pedigree Actions column of the results table.

Digitally Signing a Pedigree Using the Maintain Transactions Page

Use the Maintain Transactions page in Oracle Pedigree and Serialization Manager (OPSM) to digitally sign a pedigree document for a shipment transaction.

You can also digitally sign one or more pedigree documents for shipment transactions using the Digital Signature Worklist page.

For information, see Digitally Signing a Pedigree Using the Digital Signature Worklist page, page 11-18.

Use this procedure to digitally sign a pedigree using the Maintain Transactions page:

Prerequisites

❒ Pedigree documents have already been created for shipment transactions and they require a digital signature.

To Digitally Sign a Pedigree Using the Maintain Transactions Page:

1. Navigate to the Maintain Transactions page, page A-2.

2. Enter search criteria for the transactions you want to digitally sign a pedigree for and click the Search button.

   You'll want to search for transactions with:

   - Transaction Type of *Shipment.*

- Exception Status of *No Exceptions.*
- Pedigree Number if known.
- Signed Document Attached field set to *No.*

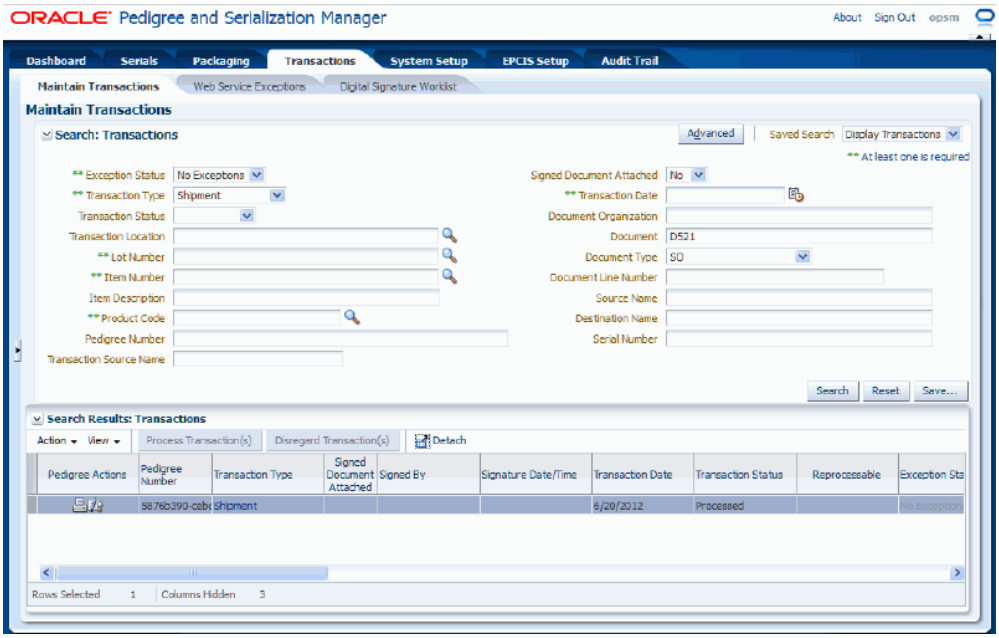
If an actual Pedigree Number is not entered, all pedigree numbers will appear that match the search criteria.

For more information on all of the search criteria fields, see Searching for Transactions, page 10-10.

All of the transactions that match the search criteria appear in the Search Results: Transactions region in a table format.

3. Select the transaction in the table you want to digitally sign the pedigree for. The transaction will have an associated Pedigree Number that displays in the Pedigree Number column of the Search Results: Transactions table.

Maintain Transactions page



4. Select Sign in the Action menu or click the Unsigned icon for the transaction in the Pedigree Actions column of the results table.

   A message appears stating that the selected pedigree will be signed. Do you wish to continue?

5. Click the Yes button.

6. Enter the digital signature credentials by entering the Username and Password fields and then click the OK button.

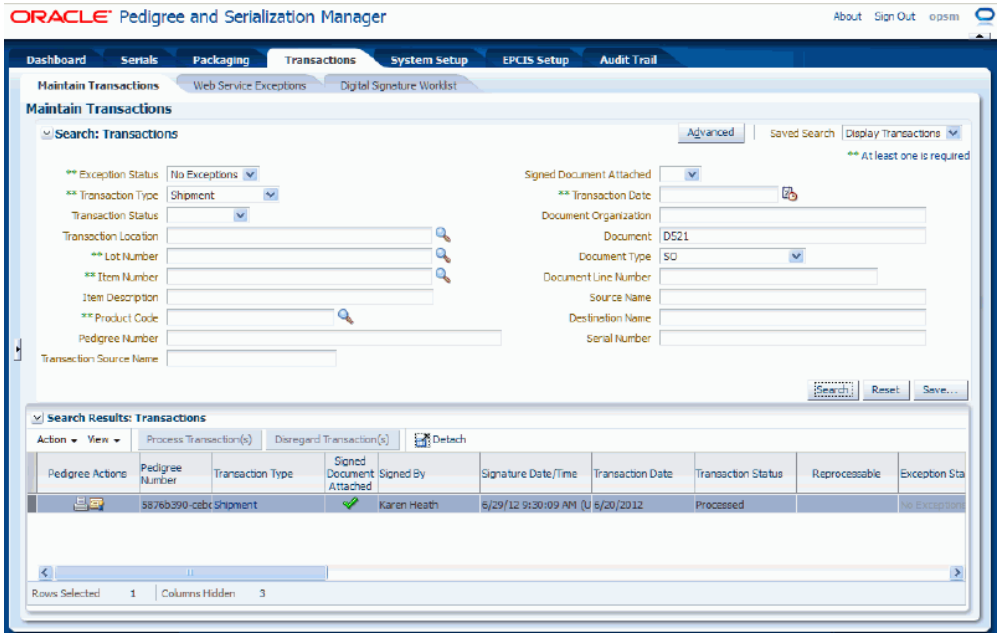
   Because the Digital Signature Method system parameter is set to *Session* for shipment transactions, you will only need to enter the digital signature credentials when you come to the Maintain Transactions page and sign a pedigree document for the first time. Each subsequent pedigree you sign during the same session will not require you to enter the credentials. The credentials entered for the first pedigree will be used until you leave the OPSM application. Opening the OPSM application and then leaving the OPSM application is considered one session.

7. Click the OK button.

   An information message appears stating the document is Digitally Signed.

8. Click the OK button.

Maintain Transactions page



The pedigree document is now digitally signed. You will see the following changes for a shipment transaction where the pedigree document is signed:

- Unsigned icon in the Pedigree Actions column for the pedigree changes to a Signed icon.
- A green check mark displays in the Signed Document Attached column of the results table for the shipment transaction.
- Location contact name associated with the digital signature credential displays

in the Signed By column of the results table for the shipment transaction.

- Date and time the pedigree was signed displays in the Signature Date/Time column of the results table for the shipment transaction.

You can view the user that digitally signed the pedigree when you view or print the pedigree.

For more information on viewing or printing a pedigree, see:

- Printing a Pedigree Using the Maintain Transactions page, page 11-21
- Printing a Pedigree Using the Digital Signature Worklist page, page 11-23
- Viewing a Pedigree Using the Digital Signature Worklist Page, page 11-27
- Viewing a Pedigree Using the Maintain Transactions Page, page 11-26

Searching for Signed or Unsigned Pedigree Documents Using the Digital Signature Worklist Page

Use the Digital Signature Worklist page in Oracle Pedigree and Serialization Manager (OPSM) to search for signed or unsigned pedigree documents associated to shipment transactions.

Using the advanced search functionality you can search for transactions by using the operator field (equals, contains, ends with, starts with, and so on) associated with the search criteria field.

Use these procedures to search for signed or unsigned pedigree documents using the Digital Signature Worklist page:

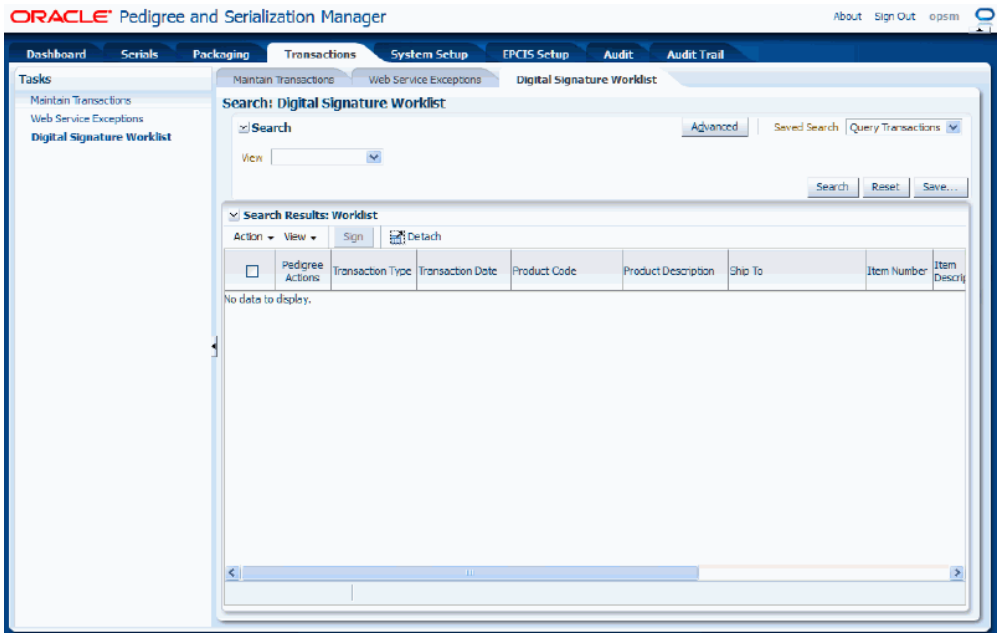
Prerequisites

❒ Pedigree documents have already been created for shipment transactions that require a digital signature.

To Search for Signed or Unsigned Pedigree Documents (Basic Search):

1. Navigate to the Digital Signature Worklist page, page A-2.

Digital Signature Worklist page



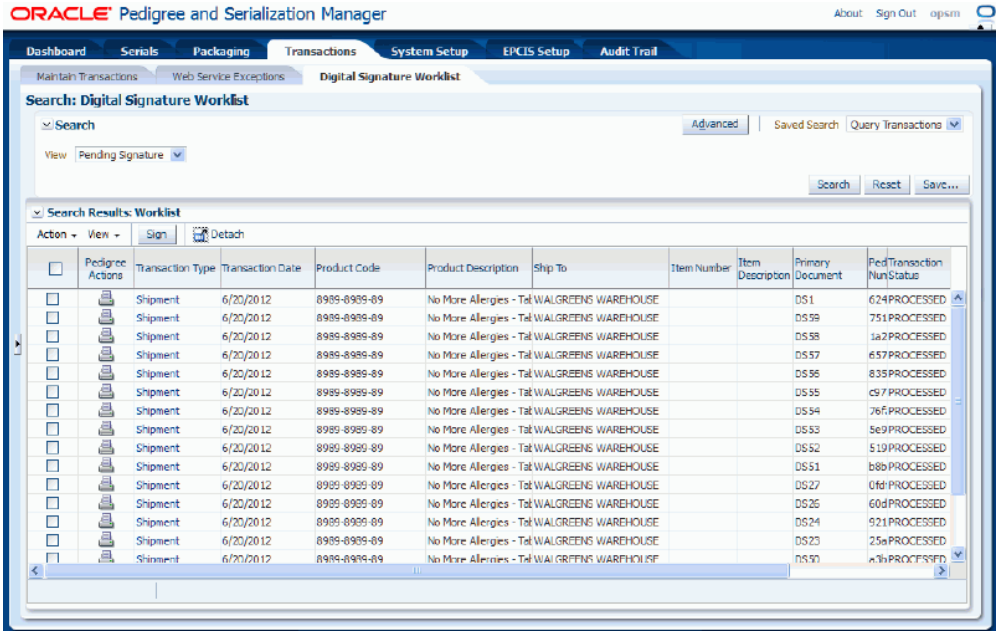
2. In the Search region enter this field:

Field Name	Description
View	(Optional) Select whether you want to view shipments transactions where the associated pedigree document is signed or pending a signature. Values are: • Pending Signature • Signed Documents

Otherwise, you can click the Search button without entering any search criteria and all available shipment transactions that your are authorized to sign (your userID is associated to the location for the pedigree) where the associated pedigree documents are signed or are pending a signature display.

3. Click the Search button.

Digital Signature Worklist page



All of the shipment transactions that match the search criteria appear in the Search Results: Worklist region in a table format. For each shipment transaction the following information displays:

Field Name	Description
Pedigree Actions	Displays the available Pedigree Actions. Action is: • Print Pedigree XML icon: This icon is available for transactions where a pedigree has already been created for the transaction.
Transaction Type	Displays the type of transaction. Only *Shipment* will display since this is the only transaction for which pedigrees are currently available.
Transaction Date	Displays the transaction date.
Product Code	Displays the product code for the transaction.

Field Name	Description
Product Code Description	Displays the product code description for the transaction.
Ship To	Displays the ship to location for the transaction.
Item Number	Displays the item number for the transaction.
Item Description	Displays the description of the item associated with the transaction.
Primary Document	Displays the primary document for the transaction.
Pedigree Number	Displays the pedigree number associated with the transaction.
Transaction Status	Displays the transaction status. Only transactions that have processed successfully will be displayed.
Product Code Type	Displays the product code type for the product associated with the transaction.
Product Code Variant	Displays the product code variant for the product associated with the transaction.

4. Click the Advanced button to perform an advanced search.

To Search for Signed or Unsigned Pedigree Documents (Advanced Search):

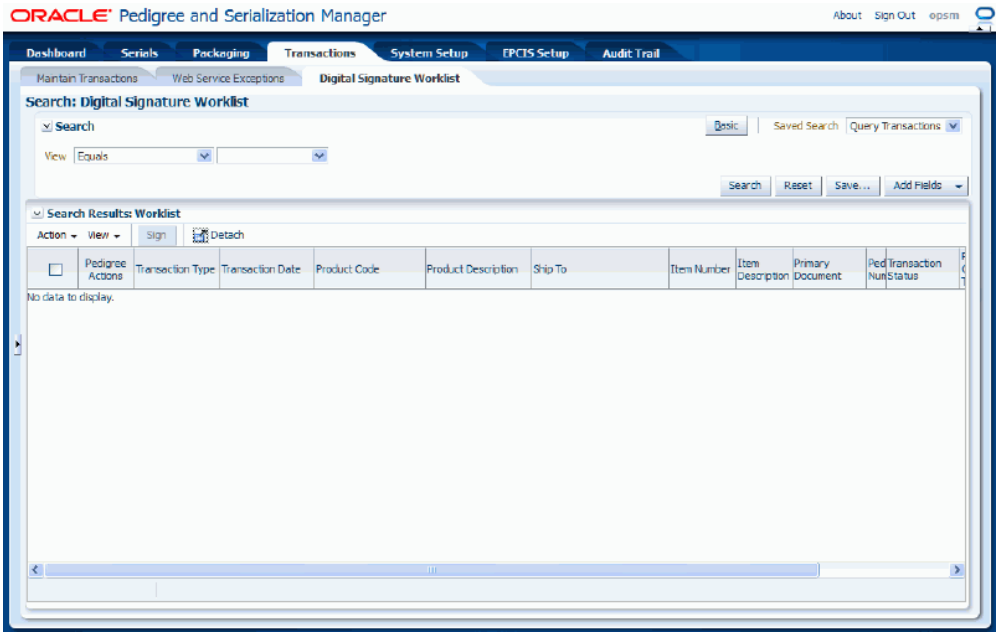
Use the Advanced Search functionality to perform a more detailed search for specific transactions. Field operators associated with the search criteria fields can be used during an Advanced Search so that a range of transactions can be easily retrieved.

1. Navigate to the Digital Signature Worklist page, page A-2.

2. Click the Advanced button located at the top of the page.

Note: Clicking the Advanced or Basic button will keep the values in the base criteria fields.

Digital Signature Worklist page



3. In the Search region enter this field:

Field Name	Description
View	(Optional) Select the field operator and then select whether you want to view shipments transactions where the associated pedigree document is signed or pending a signature. Values are: • Pending Signature • Signed Documents Operators are: • Starts with • Ends with • Equals • Does not equal • Less than • Greater than • Less than or equal to • Greater than or equal to • Between • Not between • Contains • Does not contain • Is blank • Is not blank

4. (Optional) To enter additional search criteria fields, click the Add Fields button and select the field you would like to add to the search criteria.

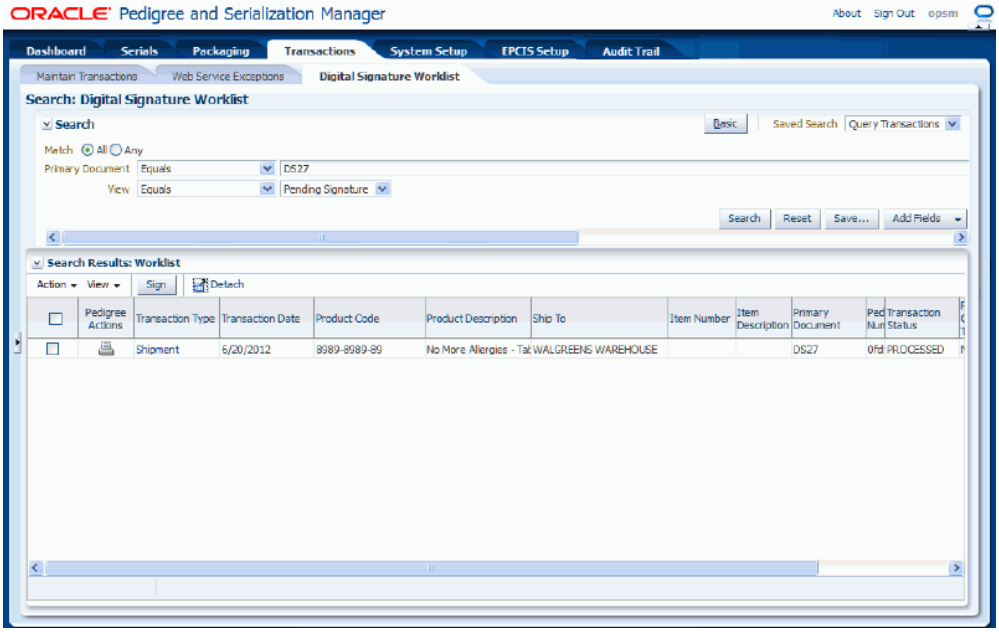
   The selected field appears as a search criteria field.

Note: To remove the additional field, click the Remove icon next to the field. The field will be removed from the search criteria.

5. (Optional) Enter search criteria for the additional fields. Plus, enter the Match option of All or Any.

6. Click the Search button.

Digital Signature Worklist page



All of the transactions that match the search criteria appear in the Search Results: Worklist region in a table format.

For information on the fields that appear for each transaction, see Procedure: To Search for Signed or Unsigned Pedigree Documents (Basic Search), page 11-12.

7. Click the Basic button to have the page hide the advanced search criteria fields and re-display the basic search criteria fields.

Note: Clicking the Reset button clears the values in all of the search criteria fields.

Digitally Signing a Pedigree Using the Digital Signature Worklist Page

Use the Digital Signature Worklist page in Oracle Pedigree and Serialization Manager

(OPSM) to digitally sign one or more pedigree documents associated with shipment transactions.

You can also digitally sign pedigree documents for shipment transactions using the Maintain Transactions page.

For information, see Digitally Signing a Pedigree Using the Maintain Transactions page, page 11-9.

Use this procedure to digitally sign a pedigree using the Digital Signature Worklist page:

Prerequisites

- ❒ Pedigree documents have already been created for shipment transactions and they require a digital signature.

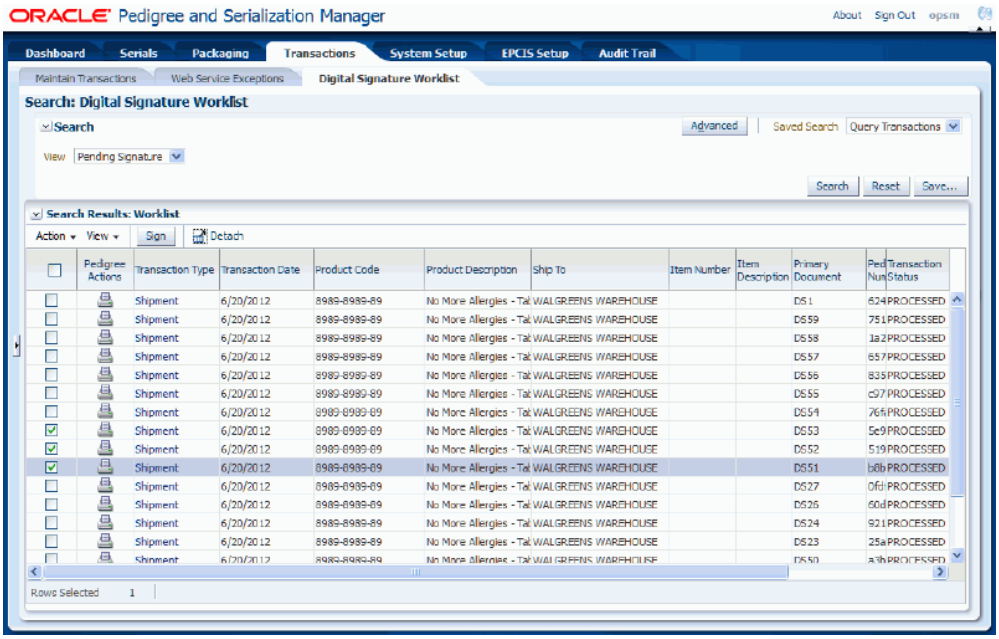
To Digitally Sign a Pedigree Using the Digital Signature Worklist Page:

1. Navigate to the Digital Signature Worklist, page A-2.
2. Enter search criteria for the transactions you want to digitally sign a pedigree for and click the Search button.

   You'll want to search for transactions that are pending a signature (View = Pending Signature).
3. Select one or more shipment transactions and their associated pedigrees that you want to digitally sign.

   If you select the very top check box in the check box column all shipments transactions will be selected.

Digital Signature Worklist page



4. Select Sign in the Actions menu or click the Sign button at the top of the results table.

   A message appears stating that the selected pedigree will be signed. Do you wish to continue?

5. Click the Yes button.

6. Enter the digital signature credentials by entering the Username and Password fields and then click the OK button.

   Because the Digital Signature Method system parameter is set to *Session* for shipment transactions, you will only need to enter the digital signature credentials when you come to the Digital Signature Worklist page and sign a pedigree document for the first time. Each subsequent pedigree you sign during this session will not require you to enter the credentials. The credentials entered for the first pedigree will be used until you leave the OPSM application. Opening the OPSM application and then leaving the OPSM application is considered one session.

7. Click the OK button.

   An information message appears stating the number of documents that were digitally signed

8. Click the OK button.

   The pedigree documents are now digitally signed.

You can view the user that signed the pedigree when you view or print the pedigree.

For more information on viewing or printing a pedigree, see:

- Printing a Pedigree Using the Digital Signature Worklist Page, page 11-23
- Printing a Pedigree Using the Maintain Transactions Page, page 11-21
- Viewing a Pedigree Using the Digital Signature Worklist Page, page 11-27
- Viewing a Pedigree Using the Maintain Transactions Page, page 11-26

Printing a Pedigree Using the Maintain Transactions Page

Use the Maintain Transactions page in Oracle Pedigree and Serialization Manager (OPSM) to print a pedigree document for a shipment transaction. You can print a pedigree document before or after it is digitally signed. OPSM integrates with the Oracle Business Intelligence Publisher application to print the pedigree document.

You can also print a pedigree document from the Digital Signature Worklist page.

For more information on printing a pedigree from the Digital Signature Worklist, see Printing a Pedigree Using the Digital Signature Worklist, page 11-23.

Use this procedure to print a pedigree using the Maintain Transactions page:

Prerequisites

- ❒ The Oracle Business Intelligence Publisher application is installed and implemented in the environment.
- ❒ Oracle Business Intelligence Publisher templates have been defined. OPSM provides a generic pedigree template as well as a template for the Florida pedigree.

  For more information, see *Oracle Business Intelligence Publisher Report Designer's Guide.*
- ❒ A pedigree document has already been created for a shipment transaction.

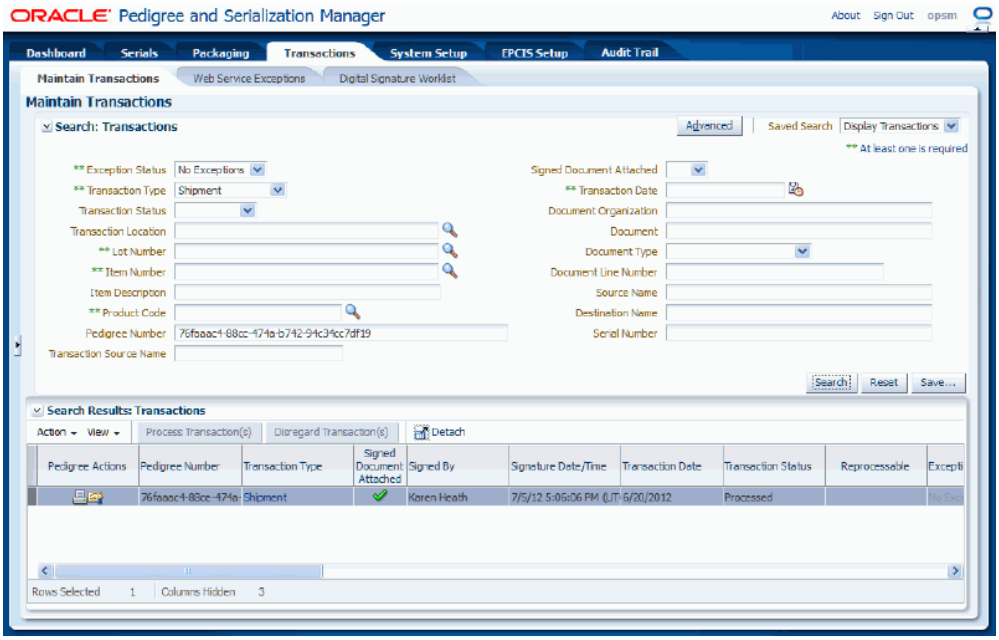
To Print a Pedigree Using the Maintain Transactions Page:

1. Navigate to the Maintain Transactions page, page A-2.
2. Enter search criteria for the transactions you want to print a pedigree for and click the Search button.

   You'll want to search for transactions with a Transaction Type of *Shipment* and an Exception Status of *No Exceptions* and the actual Pedigree Number if known.

Otherwise, all pedigree numbers will appear that match the search criteria.

Maintain Transactions page



All of the transactions that match the search criteria appear in the Search Results: Transactions region in a table format.

3. Select the transaction in the table you want to print a pedigree for. The transaction will have an associated Pedigree Number that displays in the Pedigree Number column of the Search Results: Transactions table.

4. Select Print Pedigree XML in the Action menu or click the Print Pedigree XML icon for the transaction in the Pedigree Actions column of the results table.

   The system will call the BI Publisher API to launch the Oracle Business Intelligence Publisher application.

5. Log in to Oracle Business Intelligence Publisher.

Oracle BI Publisher application - OPSM Generic Pedigree Report

The pedigree document appears for the shipment transaction. Using Oracle Business Intelligence Publisher you can print the pedigree document using different templates and different formats (for example, HTML, PDF, and so on).

For more information, see *Oracle Business Intelligence Publisher Report Designer's Guide.*

Printing a Pedigree Using the Digital Signature Worklist Page

Use the Digital Signature Worklist page in Oracle Pedigree and Serialization Manager (OPSM) to print a pedigree document for a shipment transaction. You can print a pedigree document before or after it is digitally signed. OPSM integrates with the Oracle Business Intelligence Publisher application to print the pedigree document.

For information on printing a pedigree from the Maintain Transactions page, see Printing a Pedigree Using the Maintain Transactions Page, page 11-21.

Use this procedure to print a pedigree using the Digital Signature Worklist page:

Prerequisites

- ❒ The Oracle Business Intelligence Publisher application is installed and implemented in the environment.
- ❒ Oracle Business Intelligence Publisher templates have been defined. OPSM provides a generic pedigree template as well as a template for the Florida pedigree.

For more information, see *Oracle Business Intelligence Publisher Report Designer's Guide.*

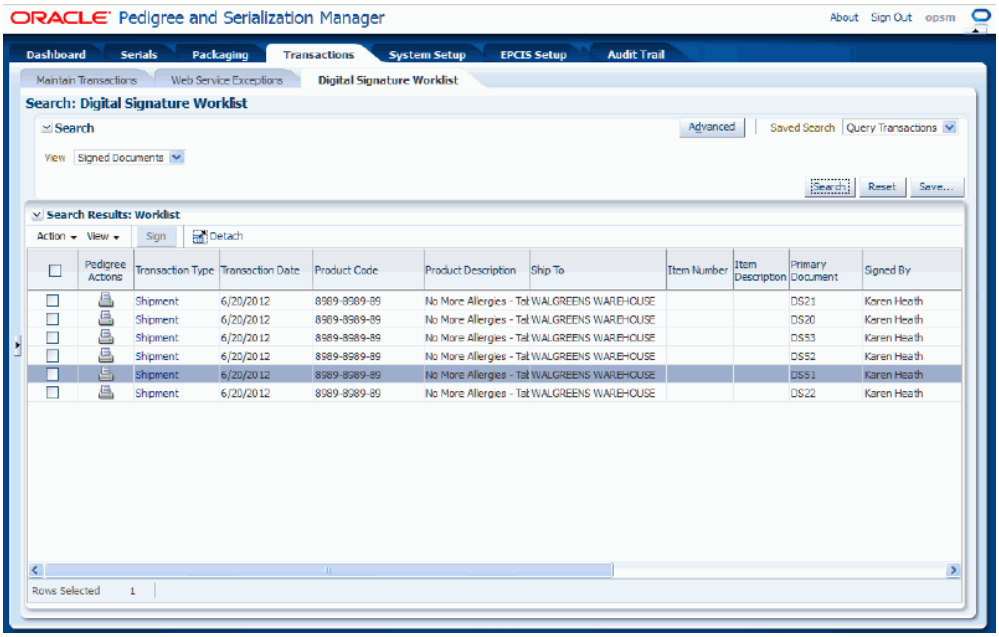
❒ A pedigree document has already been created for a shipment transaction.

To Print a Pedigree Using the Digital Signature Worklist Page:

1. Navigate to the Digital Signature Worklist, page A-2.

2. Enter search criteria for the transactions you want to print a pedigree for and click the Search button.

Digital Signature Worklist page



All of the transactions that match the search criteria appear in the Search Results: Worklist region in a table format.

3. Select the transaction in the table you want to print a pedigree for.

   The transaction will have an associated Pedigree Number that displays in the Pedigree Number column of the Search Results: Worklist table.

4. Select Print Pedigree XML in the Action menu or click the Print Pedigree XML icon for the transaction in the Pedigree Actions column of the results table.

   The system will call the BI Publisher API to launch the Oracle Business Intelligence Publisher application.

5. Log in to Oracle Business Intelligence Publisher.

Oracle BI Publisher application - OPSM Generic Pedigree Report

The pedigree document appears for the shipment transaction. Using Oracle Business Intelligence Publisher you can print the pedigree document using different templates and different formats (for example, HTML, PDF, and so on).

For more information, see *Oracle Business Intelligence Publisher Report Designer's Guide.*

Viewing Transaction Detail Information Using the Digital Signature Worklist Page

Use the View Transaction page in Oracle Pedigree and Serialization Manager (OPSM) to view all the detailed information for a shipment transaction.

Use this procedure to view transaction detail information using the Digital Signature Worklist page:

Prerequisites

❒ Shipment transactions have been previously created and there associated pedigrees require a digital signature.

To View Transaction Detail Information Using the Digital Signature Worklist Page:

1. Navigate to the Digital Signature Worklist page, page A-2.

2. Enter search criteria for the shipment transactions where the associated pedigrees are signed or pending a signature and click the Search button.

   All of the transactions that match the search criteria appear in the Search Results: Worklist region in a table format.

3. Select the transaction in the table you want to view.

4. Select View Transaction Detail in the Actions menu or click the Transaction Type link.

   The View Transaction page appears displaying information for the transaction. There are six tabs (Transaction Details, Associated Documents, Product Details, Associated Serials, Packaging Hierarchy, and User Defined Fields).

5. Select the different tabs to view the transaction details for the transaction.

   For more information on viewing transaction detail information, see Viewing Transaction Detail Information, page 10-32.

6. Click the Close button to return back to the Digital Signature Worklist page.

Viewing a Pedigree Using the Maintain Transactions Page

Use the Maintain Transactions page in Oracle Pedigree and Serialization Manager (OPSM) to view a pedigree document for a shipment transaction. You can view a pedigree document before or after it is digitally signed. OPSM integrates with the Oracle Business Intelligence Publisher application where you can view the pedigree document.

You can also view a pedigree document from the Digital Signature Worklist page.

For more information on viewing a pedigree from the Digital Signature Worklist page, see Viewing a Pedigree Using the Digital Signature Worklist Page, page 11-27.

Use this procedure to view a pedigree using the Maintain Transactions page:

Prerequisites

- ❒ The Oracle Business Intelligence Publisher application is installed and implemented in the environment.

- ❒ Oracle Business Intelligence Publisher templates have been defined. OPSM provides a generic pedigree template as well as a template for the Florida pedigree.

For more information, see *Oracle Business Intelligence Publisher Report Designer's Guide.*

❒ A pedigree document has already been created for a shipment transaction.

To View a Pedigree Using the Maintain Transactions Page:

1. Navigate to the Maintain Transactions page, page A-2.

2. Enter search criteria for the transactions you want to view a pedigree for and click the Search button.

   You'll want to search for transactions with a Transaction Type of *Shipment* and an Exception Status of *No Exceptions* and the actual Pedigree Number if known. Otherwise, all pedigree numbers will appear that match the search criteria.

   All of the transactions that match the search criteria appear in the Search Results: Transactions region in a table format.

3. Select the transaction in the table you want to view a pedigree for. The transaction will have an associated Pedigree Number that displays in the Pedigree Number column of the Search Results: Transactions table.

4. Select Print Pedigree XML in the Action menu or click the Print Pedigree XML icon for the transaction in the Pedigree Actions column of the results table.

   The system will call the BI Publisher API to launch the Oracle Business Intelligence Publisher application.

5. Log in to Oracle Business Intelligence Publisher.

   The pedigree document appears for the shipment transaction. Using Oracle BI Publisher you can view the pedigree document using different templates and different formats (for example, HTML, PDF, and so on).

   For more information, see *Oracle Business Intelligence Publisher Report Designer's Guide.*

Viewing a Pedigree Using the Digital Signature Worklist Page

Use the Digital Signature Worklist page in Oracle Pedigree and Serialization Manager (OPSM) to view a pedigree document for a shipment transaction. You can view a pedigree document before or after it is digitally signed. OPSM integrates with the Oracle Business Intelligence Publisher application where you can view the pedigree document.

You can also view a pedigree document from the Maintain Transactions page.

For more information on viewing a pedigree from the Maintain Transactions page, see Viewing a Pedigree Using the Maintain Transactions Page, page 11-26.

Use this procedure to view a pedigree using the Digital Signature Worklist page:

Prerequisites

- ❒ The Oracle Business Intelligence Publisher application is installed and implemented in the environment.
- ❒ Oracle Business Intelligence Publisher templates have been defined. OPSM provides a generic pedigree template as well as a template for the Florida pedigree.

  For more information, see *Oracle Business Intelligence Publisher Report Designer's Guide.*
- ❒ A pedigree document has already been created for a shipment transaction.

To View a Pedigree Using the Digital Signature Worklist Page:

1. Navigate to the Digital Signature Worklist page, page A-2.
2. Enter search criteria for the transactions you want to view a pedigree for and click the Search button.

   All of the transactions that match the search criteria appear in the Search Results: Worklist region in a table format.
3. Select the transaction in the table you want to view a pedigree for. The transaction will have an associated Pedigree Number that displays in the Pedigree Number column of the Search Results: Worklist table.
4. Select Print Pedigree XML in the Action menu or click the Print Pedigree XML icon for the transaction in the Pedigree Actions column of the results table.

   The system will call the BI Publisher API to launch the Oracle Business Intelligence Publisher application.
5. Log in to Oracle Business Intelligence Publisher.

   The pedigree document appears for the shipment transaction. Using Oracle Business Intelligence Publisher you can view the pedigree document using different templates and different formats (for example, HTML, PDF, and so on).

   For more information, see *Oracle Business Intelligence Publisher Report Designer's Guide.*

Part 6

Using the Operations Dashboard

12

Using the Operations Dashboard

The Operations Dashboard in Oracle Pedigree and Serialization Manager (OPSM) provides you with information to support your day-to-day activities that occur in OPSM. The Operations Dashboard contains four different components. These components are:

- Location Details

  Displays a summary view of how many serials have been imported, generated, shipped, and returned by location for a given date range.

- Transaction Exceptions

  Displays a summary view of transaction exceptions by location and transaction type for a given date range.

- Counterfeit Serials Analysis

  Displays a summary view of the total number of suspect counterfeit, verified not counterfeit, or counterfeit serials by either product or location for a given date range.

- Serial Range Management

  Displays a summary view of serial ranges with a count showing how many ranges by location are within their critical or at-risk thresholds. These serial ranges also include ranges nearing exhaustion, as well as, ranges that are nearing their effective end date expiration.

This chapter covers the following topics:

- Using the Location Details Component
- Using the Transaction Exceptions Component
- Using the Counterfeit Serials Analysis Component
- Using the Serial Range Management Component

- Adding Custom URLs to the Operations Dashboard
- Refreshing the Information that Displays on the Operations Dashboard

Using the Location Details Component

Use the Location Details component of the Operations Dashboard to view a summary of the total number of serials that were imported, generated, shipped, returned, reserved, commissioned, decommissioned, and edited by location within Oracle Pedigree and Serialization Manager (OPSM) for a given date range.

From the Location Details component you can access the Location Details page where you can view:

- More detailed information for each location.
- Shipments and returns transaction metric for each location.

  Pie graphs displaying the breakdown of shipments and returns by ship to (for shipments) and ship from (for returns).
- Location details in a geographic map format using the Location Details Map page.

Use these procedures to view location details:

Prerequisites

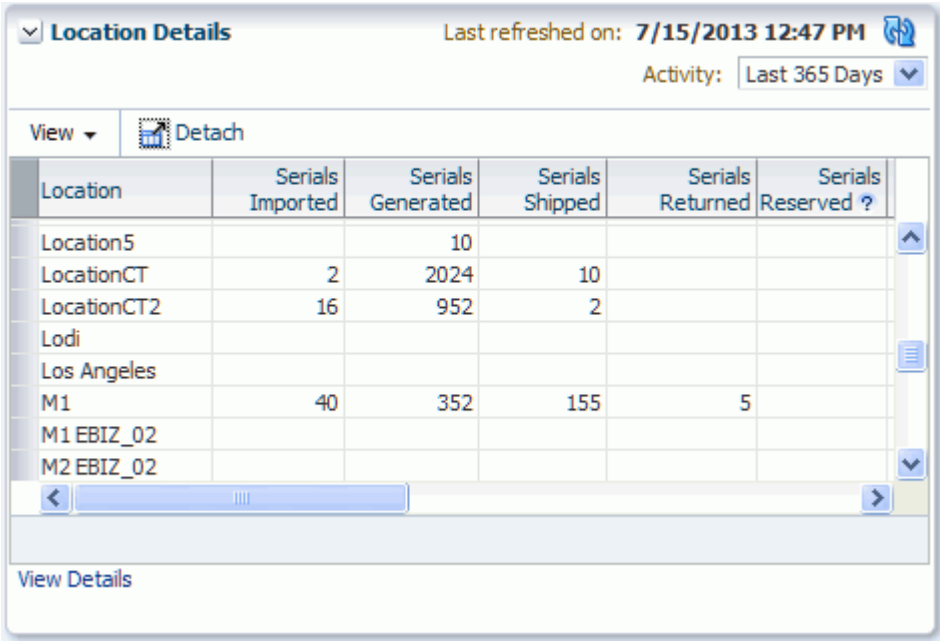
❒ For the geographic map functionality to work correctly you must have specified the longitude and latitude for each location using the Maintain Locations page.

For information on setting up locations, see Maintaining Locations, page 4-42.

To View Location Detail Summary Information:

1. Navigate to the Operations Dashboard, page A-2.
2. Navigate to the Location Details component.

Location Details component (Transaction Activity of Last 365 Days Selected)



The Location Details component appears displaying in a table format each location and the total number of Serials Imported, Serials Generated, Serials Shipped, Serials Returned, Serials Reserved, Serials Commissioned, Serials Decommissioned, and Serials Edited for those locations within the last thirty days.

Last 30 Days appears in the Transactions Activity field by default.

At the top of the Location Details component appears the date and time the component was last refreshed and the Refresh Dashboard Component icon.

At the bottom of the Location Details component appears the View Details link, which is used to access the Location Details page.

3. (Optional) Refresh the information that appears in the Location Details component by clicking the Refresh Dashboard Component icon.

   The Location Details component is refreshed and displays the most current information. The "Last refreshed on" field is updated with the current date and time.

4. (Optional) Change the transaction date range for the Location Details component by selecting another date range using the Transactions Activity field. Transaction Activities are:

   - Last 7 Days
   - Last 30 Days

Appears by default.

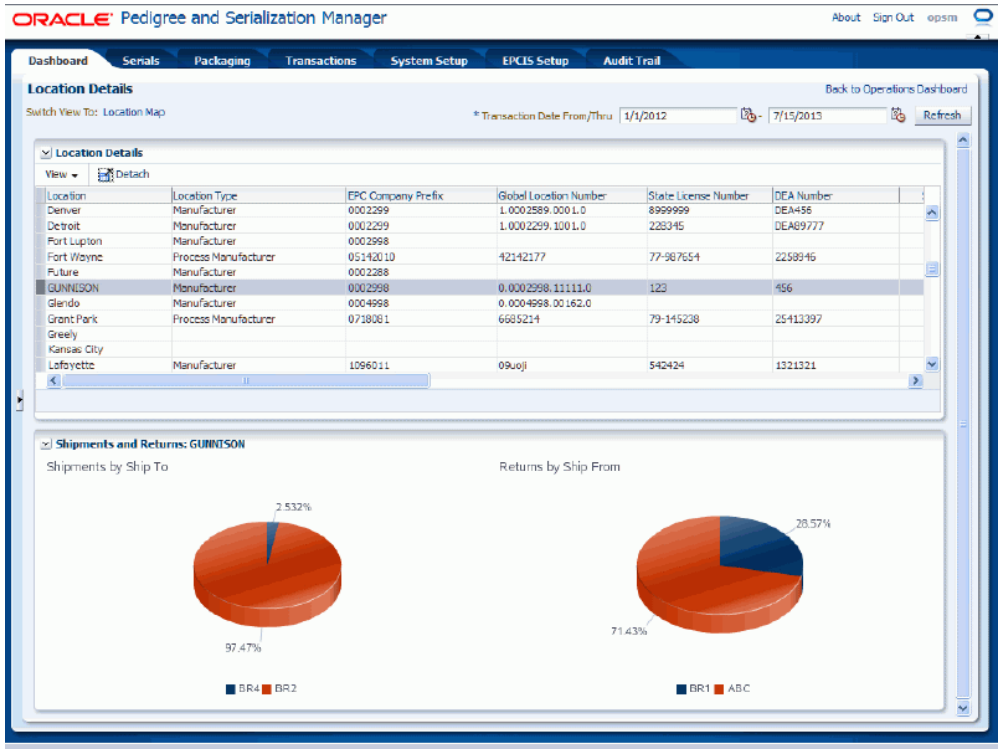
- Last 60 Days
- Last 90 Days
- Last 365 Days

The Location Details component is refreshed and displays the location details for the date range selected.

To View Location Details (Table View):

1. Navigate to the Location Details component within the Operations Dashboard.
2. Click the View Details link at the bottom of the Location Details component.

Location Details page



The Location Details page appears displaying two regions. The Location Details region and the Shipments and Returns region. Plus, the system populates the actual dates in the Transaction Date From and Thru fields from the Transactions Activity value entered previously.

The Location Details region displays each location and the total number of Serials

Imported, Serials Generated, Serials Shipped, Serials Returned, Serials Reserved, Serials Commissioned, Serials Decommissioned, and Serials Edited for those locations in a table format. In addition, this table provides a few more details (Location Type, EPC Company Prefix, Global Location Number, State License Number, and DEA Number) for each location.

The Shipments and Returns region displays pie graphs that depict the shipment and return transaction activity for the location that is selected in the Location Details region. If no shipment or return transaction activity exists a blank circle appears in the region stating "No Data to Display".

3. (Optional) Hover over the different sections in the pie graph to view details for that location.

   A text box appears displaying the name (ship from or ship to) and the total number of shipment and returns.

4. (Optional) View the Shipments and Returns pie graphs for another location by selecting a different location in the Location Details region.

   The Shipment and Returns region is refreshed and displays the pie graphs for the location selected in the Location Details region.

5. (Optional) Change the transaction date range by selecting a different date range using the Transaction Date From and Transaction Date Thru fields and then click the Refresh button.

   The Location Details page is refreshed and displays the information for the new date range.

6. To return to the main Operations Dashboard page, click the Back to Operations Dashboard link in the upper right corner of the Location Details page.

To View Location Details (Map View):

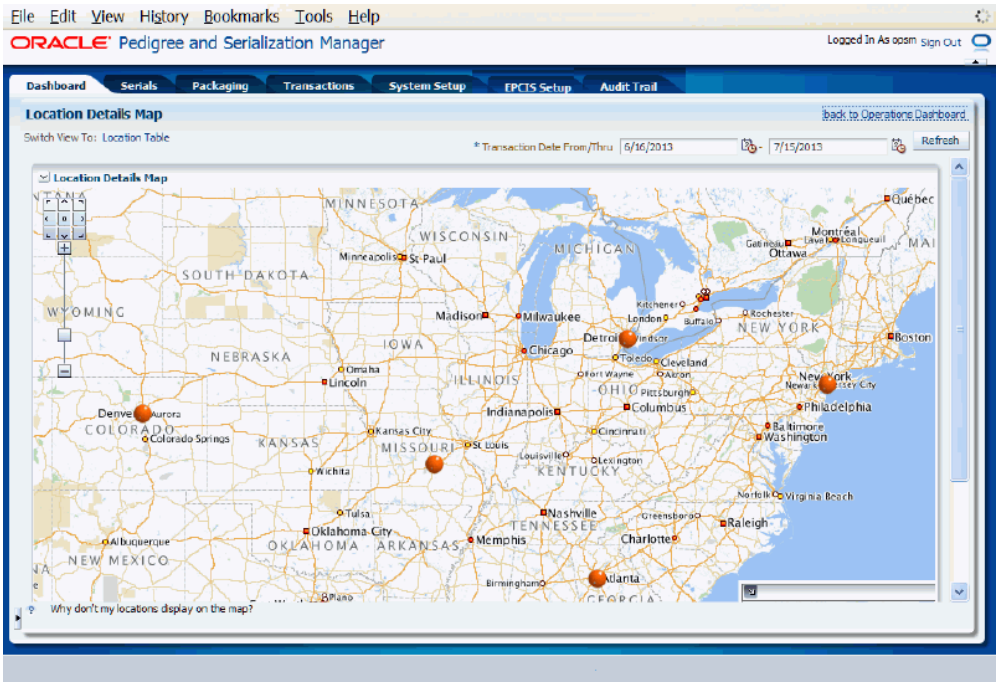
1. Navigate to the Location Details component within the Operations Dashboard.

2. Click the View Details link at the bottom of the Location Details component.

   The Location Details page appears.

3. Click the Location Map link in the Switch View To field at the top of the page.

Location Details Map page



The Location Details Map page appears displaying location data points in a geographic map.

> **Note:** For the geographic map functionality to work correctly you must have specified the longitude and latitude for each location using the Maintain Locations page.
>
> For information on setting up locations, see Maintaining Locations, page 4-42.

4. (Optional) View basic location information by clicking a location data point on the map.

   The Location Details dialog box appears displaying basic information including total number of serials that were imported, generated, shipped, returned, reserved, commissioned, decommissioned, and edited.

   Click the OK button to close the dialog box.

5. (Optional) Navigate within the map by using the Pan and Zoom In and Out buttons provided in the map. You can also use the drag and drop functionality to move around the map view.

6. Return to the Location table view by clicking the Location Table link in the Switch

View To field or you can return to the main Operations Dashboard page by clicking the Back to Operations Dashboard link in the upper right corner of the Location Details Map page.

7. To return to the main Operations Dashboard page, click the Back to Operations Dashboard link in the upper right corner of the Location Details page.

Using the Transaction Exceptions Component

Use the Transaction Exceptions component of the Operations Dashboard to view a summary of the total number of transaction exceptions for each location and transaction type for a given date range.

From the Transaction Exceptions component you can access the Transaction Exceptions detail page where you can view:

- More detailed information for each transaction exception.
- Transaction Exceptions metric by location and transaction type.

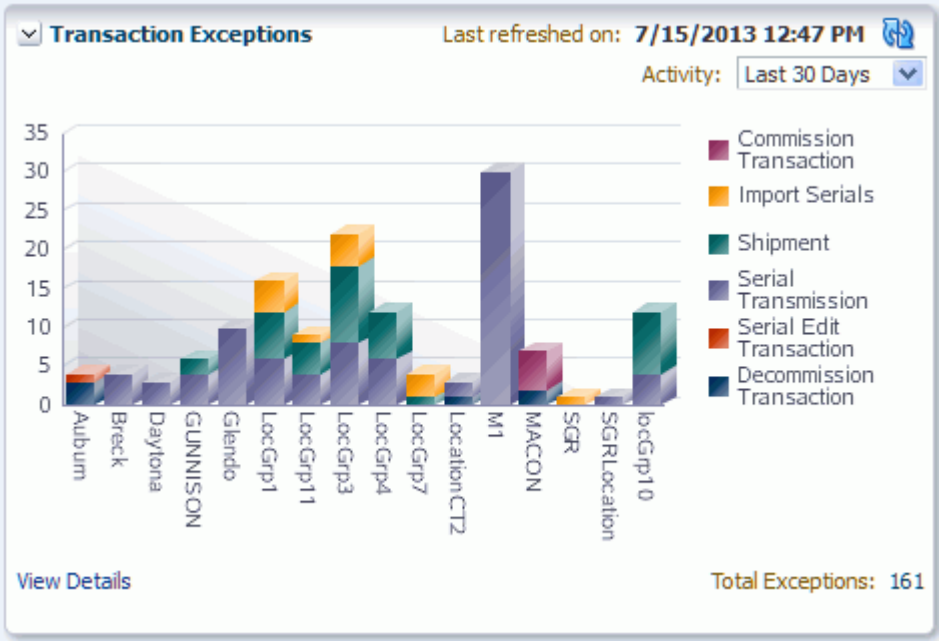
  Stacked bar graphs displaying the total number of transaction exceptions by location and transaction type.
- Open (detected) exception messages associated with the transaction exception.

Use these procedures to view transaction exceptions:

To View Transaction Exceptions Summary Information:

1. Navigate to the Operations Dashboard, page A-2.
2. Navigate to the Transaction Exceptions component.

Transaction Exceptions component



The Transaction Exceptions component appears displaying stacked bar graphs for each location and the total number of exceptions within the last thirty days for each type of transaction within those locations in a different color.

Last 30 Days appears in the Transaction Exceptions Activity field by default.

At the top of the Transaction Exceptions component appears the date and time the component was last refreshed and the Refresh Dashboard Component icon.

At the bottom of the component appears the View Details link and the total number of exception transactions for all locations. The View Details link is used to access the Transaction Exceptions detail page.

3. (Optional) Hover over the different colors in the bar graphs to view exception details for that location and type of transaction.

   A text box appears displaying transaction type, location, and total number of transaction exceptions for that type.

4. (Optional) Refresh the information that appears in the Transaction Exceptions component by clicking the Refresh Dashboard Component icon.

   The Transaction Exceptions component is refreshed and displays the most current information. The "Last refreshed on" field is updated with the current date and time.

5. (Optional) Change the transaction exception date range for the Transaction

Exceptions component by selecting another date range using the Activity field. Activities are:

- Last 7 Days
- Last 30 Days

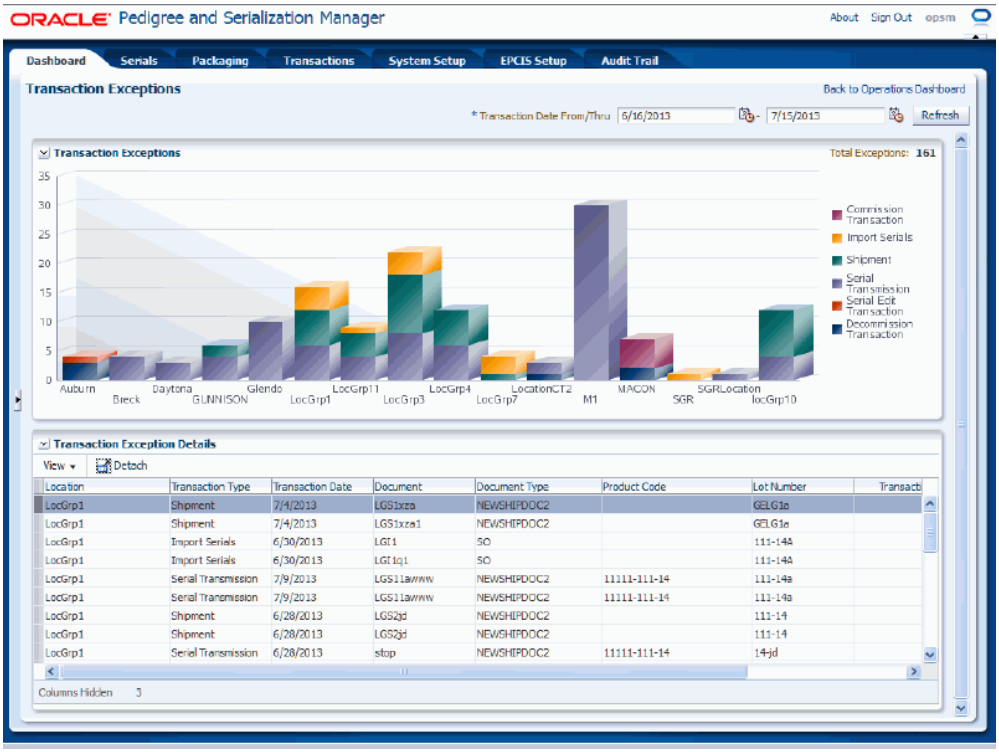
  Appears by default.
- Last 60 Days
- Last 90 Days
- Last 365 Days

The Transaction Exceptions component is refreshed and displays the transaction exceptions for the date range selected.

To View Transaction Exceptions Detail Information:

1. Navigate to the Transaction Exceptions component within the Operations Dashboard.
2. Click the View Details link at the bottom of the Transaction Exceptions component.

Transaction Exceptions detail page



The Transaction Exceptions detail page appears displaying the Transaction Exceptions region and the Transaction Exception Details region for the first location. In the Transactions Exception region of the page, the system displays a summary of the total number of transaction exceptions for each location and transaction type in a stacked bar graph format. Each bar graph represents a different location. In the upper right hand side of the region the total number of exceptions for all locations appears in the Total Exceptions field.

In the Transaction Exception Details region, the system displays in a table format the individual transaction records that make up those transaction exceptions. An "Exception Details" column appears in the table displaying an Exception Details icon. Click the icon to access the Exception Details page where you can view the actual open messages for the exception transaction.

Plus, the system populates the actual dates in the Transaction Date From and Thru fields from the Transaction Exception Activity value entered previously.

3. (Optional) Hover over the different colors in the bar graphs to view exception details for that location and type of transaction.

   A text box appears displaying transaction type, location, and total number of transaction exceptions for that type.

4. (Optional) View the transaction exception record details for another location by clicking an individual bar graph in the Transaction Exceptions region of the page.

   The Transaction Exceptions Detail region is refreshed and displays in table format the detailed transaction exception records for the location selected in the bar graph.

5. (Optional) View the exception messages for a transaction by clicking the Exception Details icon in the Exception Details column in the table in the Transaction region of the page.

   The Exception Details dialog box appears displaying the actual open (detected) exception messages for the transaction. Click the OK button to close the dialog box.

6. (Optional) Change the transaction exception date range by selecting a different date range using the Transaction Date From and Transaction Date Thru fields and then click the Refresh button.

   The Transaction Exceptions page is refreshed and displays the information for the new date range.

7. To return to the main Operations Dashboard page, click the Back to Operations Dashboard link in the upper right corner of the Transaction Exceptions page.

Using the Counterfeit Serials Analysis Component

Use the Counterfeit Serials Analysis component of the Operations Dashboard to view a summary of the total number of suspect counterfeit, verified not counterfeit, or counterfeit serials in Oracle Pedigree and Serialization Manager (OPSM) by either product or location for a given date range.

From the Counterfeit Serials Analysis component you can access the Counterfeit Serials Analysis by Product or the Counterfeit Serials Analysis by Location pages where you can view:

- More detailed information for each suspect counterfeit, verified not counterfeit, or counterfeit serial by product or location.

- Counterfeit serials analysis metric by product or location.

  Bar graphs displaying the total number of suspect counterfeit, verified not counterfeit, or counterfeit serials by product or location.

- Duplicate serial information for the suspect counterfeit, verified not counterfeit, or counterfeit serial.

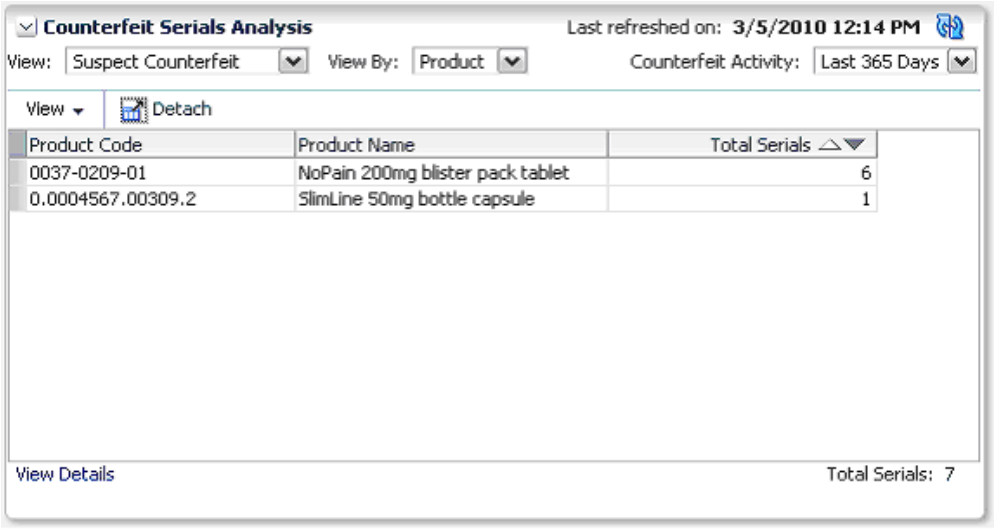
Use these procedures to view counterfeit serial analysis information:

To View Counterfeit Serials Analysis Summary Information:

1. Navigate to the Operations Dashboard, page A-2.

2. Navigate to the Counterfeit Serials Analysis component.

Counterfeit Serials Analysis component (Product View By)



The Counterfeit Serials Analysis component appears displaying in a table format each product and the total number of suspect counterfeit serials for those products within the last thirty days.

Suspect Counterfeit appears in the View field by default.

Product appears in the View By field by default.

Last 30 Days appears in the Counterfeit Activity field by default.

At the top of the Counterfeit Serials Analysis component appears the date and time the component was last refreshed and the Refresh Dashboard Component icon.

At the bottom of the component appear the View Details link and the total number of suspect counterfeit serials for all products. The View Details link is used to access the Counterfeit Serials Analysis by Product or the Counterfeit Serials Analysis by Location pages.

3. (Optional) Refresh the information that appears in the Counterfeit Serials Analysis component by clicking the Refresh Dashboard Component icon.

   The Counterfeit Serials Analysis component is refreshed and displays the most current information. The "Last refreshed on" field is updated with the current date and time.

4. (Optional) View a different counterfeit type analysis by selecting a different view using the View field. Values are:

   - Counterfeit
   - Verified Not Counterfeit
   - Suspect Counterfeit

     Appears by default.

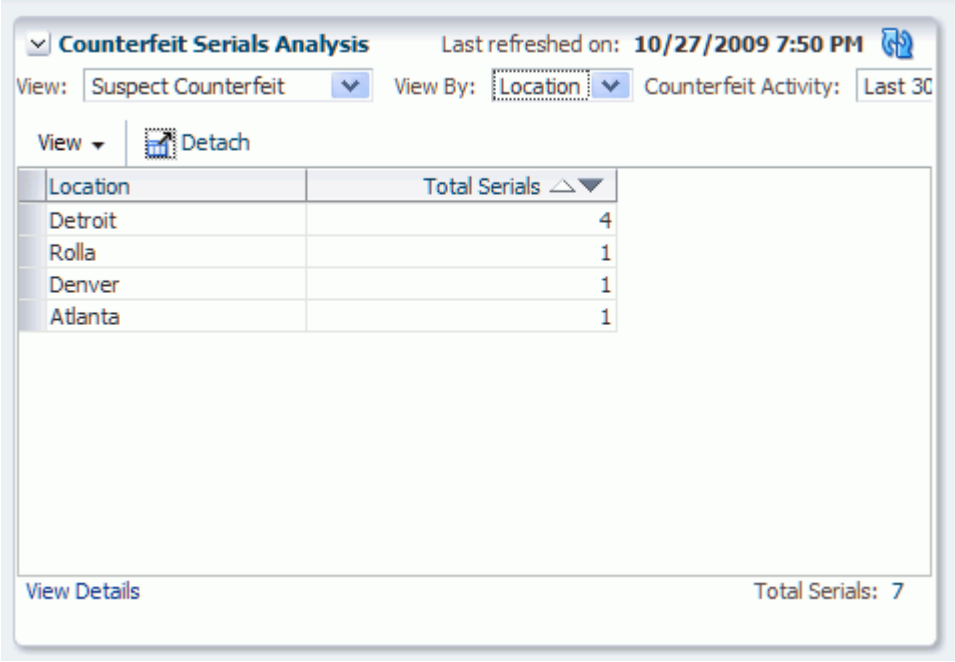
   The Counterfeit Serials Analysis component is refreshed and displays the serial information pertaining to that counterfeit type. For example, you can change from viewing suspect counterfeit serials by product to viewing counterfeit serials by product.

5. (Optional) View a different counterfeit serial analysis breakdown by selecting a value in the View By field. Values are:

   - Location
   - Product

     Appears by default.

Counterfeit Serials Analysis component (Location View By)



The Counterfeit Serials Analysis component is refreshed and displays in a table format the total number of suspect counterfeit, verified not counterfeit, or

counterfeit serials by product or location.

6. (Optional) Change the counterfeit activity date range for the Counterfeit Serials Analysis component by selecting another date range using the Counterfeit Activity field. Counterfeit Activities are:

   - Last 7 Days
   - Last 30 Days

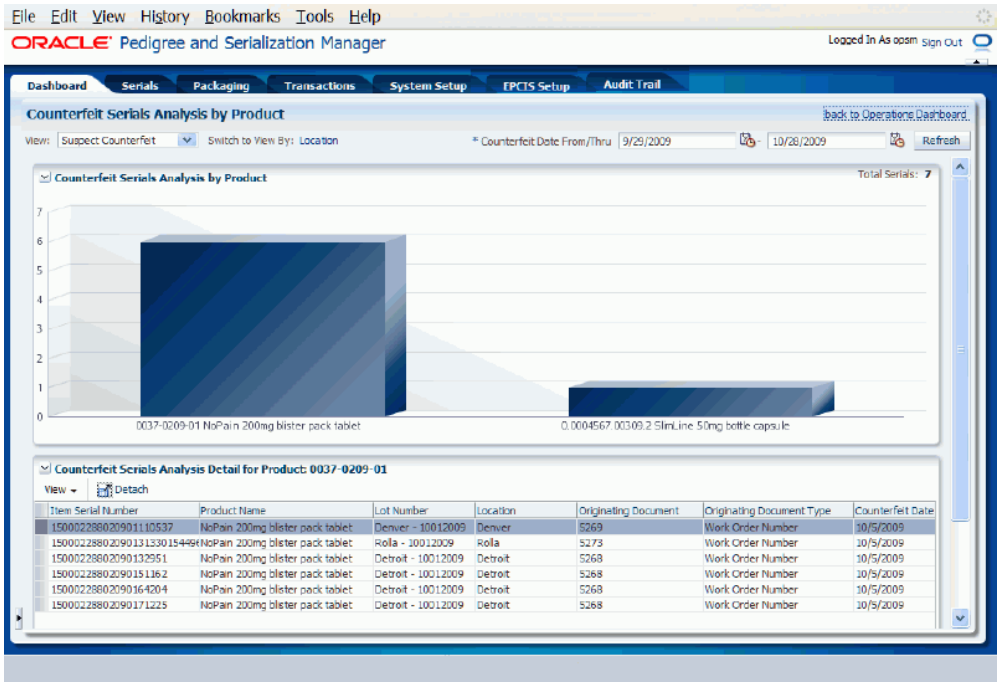
     Appears by default.
   - Last 60 Days
   - Last 90 Days
   - Last 365 Days

   The Counterfeit Serials Analysis component is refreshed and displays the counterfeit serial analysis for the date range selected.

To View Counterfeit Serials Analysis Detail Information:

1. Navigate to the Counterfeit Serials Analysis component within the Operations Dashboard.
2. Click the View Details link at the bottom of the Counterfeit Serials Analysis component.

Counterfeit Serials Analysis by Product page



Depending on the value in the View By field either the Counterfeit Serials Analysis by Product page or Counterfeit Serials Analysis by Location page appears. These two pages operate the same way except one page displays the counterfeit serial analysis details by product and the other one the counterfeit serial analysis details by location.

In the upper region of the page, the system displays a summary of the total number of suspect counterfeit, verified not counterfeit, or counterfeit serials by product or location in a bar graph format. Each bar graph represents a different product or location. In the upper right hand side of the region the total number of serials appears in the Total Serials field.

In the lower region of the page, the system displays in a table format the individual serial records that make up those suspect counterfeit, verified not counterfeit, or counterfeit totals for the product or the location. A "Duplicates Exist" column appears in the table displaying a Duplicates Exists icon if there are duplicate serials. Click the icon to access the Duplicate Serial dialog box where you can view the original serials and any other serials that may be duplicates.

Plus, the system populates the actual dates in the Counterfeit Date From and Thru fields from the Counterfeit Activity value entered previously.

3. (Optional) Hover over the bar graph to view details for that product or location.

   A text box appears displaying either the product code, product name, and total number of serials or location and total number of serials.

4. (Optional) View the serial record details for another product or location by clicking an individual bar graph in the upper region of the page.

   The lower region of the page is refreshed and displays in table format the detailed serial records for the product or location selected in the bar graph.

5. (Optional) View the duplicate information for a serial by clicking the Duplicates Exist icon in the Duplicates Exist column in the table in the lower region of the page.

   The Duplicate Serials dialog box appears displaying the original and other serial numbers that are duplicates. These serials may be the reason for the suspect counterfeit or counterfeit serials.

6. (Optional) View a different counterfeit type analysis by selecting a different view using the View field. Values are:

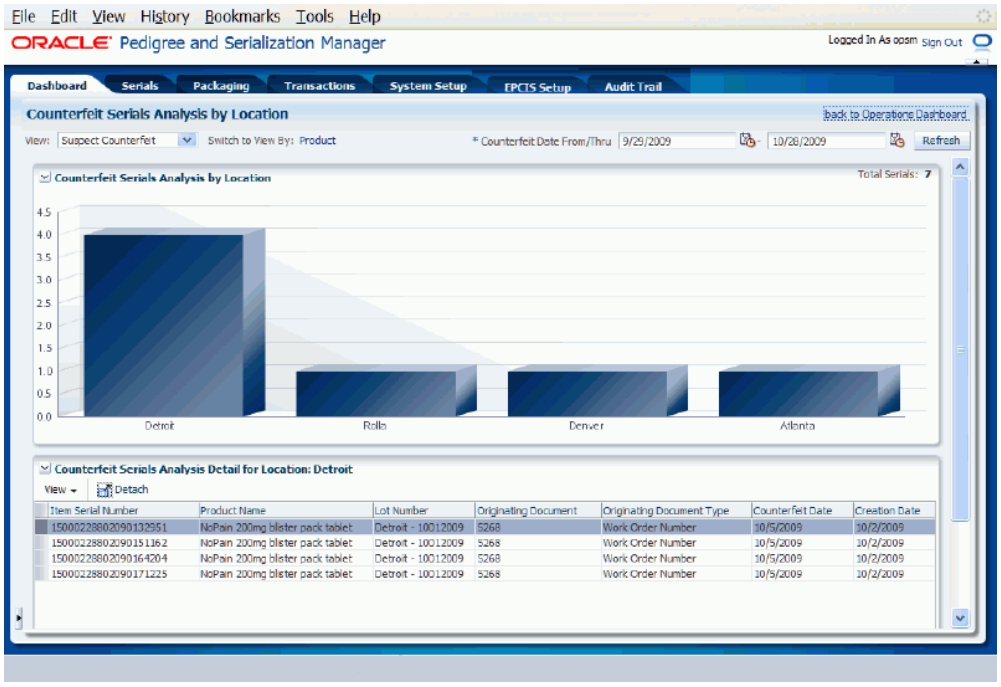
   - Counterfeit
   - Suspect Counterfeit

   The Counterfeit Serials Analysis by Product or by Location page is refreshed and displays the serial information pertaining to that counterfeit type. For example, you can change from viewing suspect counterfeit serials by product to viewing counterfeit serials by product.

7. View a different counterfeit serial analysis breakdown by clicking the link next to the Switch to View By field. Links are:

   - Location
   - Product

Counterfeit Serials Analysis by Location page



The Counterfeit Serials Analysis by Product or by Location page is refreshed and displays in a table format the total number of suspect counterfeit, verified not counterfeit, or counterfeit serials by product or location.

8. (Optional) Change the counterfeit date range by selecting a different date range using the Counterfeit Date From and Counterfeit Date Thru fields and then click the Refresh button.

   The Counterfeit Serials Analysis by Product or by Location page is refreshed and displays the information for the new date range.

9. To return to the main Operations Dashboard page, click the Back to Operations Dashboard link in the upper right corner of the Counterfeit Serials Analysis by Product or by Location page.

Using the Serial Range Management Component

Use the Serial Range Management component of the Operations Dashboard to view a summary of serial ranges with a count showing how many ranges by location or location group are within their critical or at-risk thresholds (range exhaustion) as well as ranges that are nearing their effective end date expiration (date expiration).

From the Serial Range Management component you can access the Serial Range Management page where you can view:

- More detailed information for each serial range by individual location, location group, or for all locations and location groups at once.

Use these procedures to view serial range information:

Prerequisites

❒ For the serial range threshold functionality to work correctly for each location or location group you must have specified the Serial Range Critical Threshold and Serial Range At Risk Threshold for each location using the Maintain Locations page or Maintain Serial Ranges page.

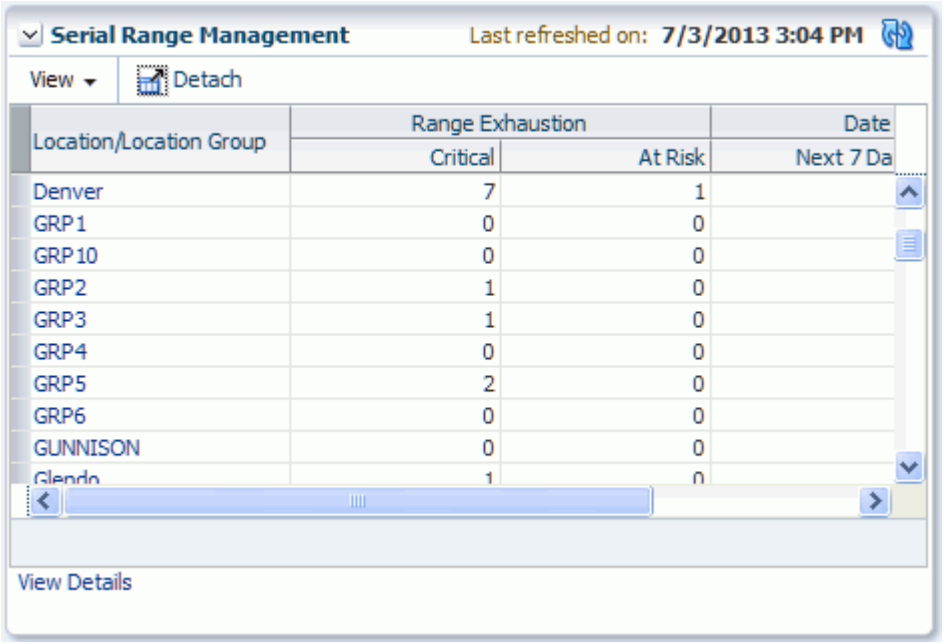
For information on setting up locations or serial ranges, see Maintaining Locations, page 4-42 or Maintaining Serial Ranges, page 4-176.

To View Serial Range Summary Information:

1. Navigate to the Operations Dashboard, page A-2.

2. Navigate to the Serial Range Management component.

Serial Range Management component



The Serial Range Management component appears displaying in a table format each location or location group and a total count of how many ranges are near range exhaustion (within their critical or at-risk thresholds) and how many ranges are near their end date expiration (next 7 days or next 8-30 days).

At the top of the Serial Range Management component appears the date and time the component was last refreshed and the Refresh Dashboard Component icon.

At the bottom of the Serial Range Management component appears the View Details link which is used to access the Serial Range Management page.

3. (Optional) Refresh the information that appears in the Serial Range Management component by clicking the Refresh Dashboard Component icon.

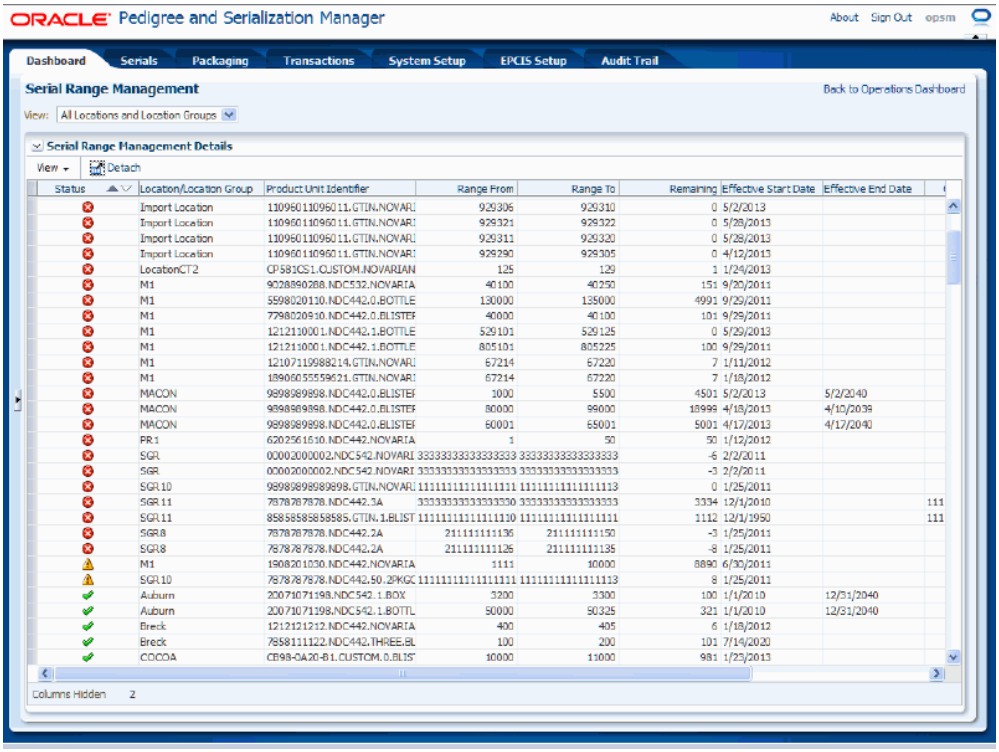
   The Serial Range Management component is refreshed and displays the most current information. The "Last refreshed on" field is updated with the current date and time.

To View Serial Range Detail Information:

1. Navigate to the Serial Range Management component within the Operations Dashboard.

2. Click the View Details link at the bottom of the Serial Range Management component or click a Location or Location Group link in the table.

Serial Range Management page



The Serial Range Management page appears displaying detailed information for all active serial ranges in the system for all locations and location groups, a specific location, or a specific location group in a table format. *All Locations and Location Groups* appears in the View field by default when you access the page from the View Details link. Otherwise, the specific location or location group appears in the View field by default when accessing the page from the Location or Location Group link in the table.

The Status column in the table displays a different icon to indicate if the ranges are within a critical or at-risk threshold based on either running out of serial numbers in the range or the ranges effective end date is nearing expiration. A different icon appears for each serial range status. Statuses are:

- Green check mark: Indicates that the range is not critical or at risk of exhaustion or expiration, or no thresholds have been defined.
- Yellow Triangle with Exclamation Point: Indicates that the range is at risk of nearing exhaustion.
- Red Circle with an X in the Middle: Indicates that the range is critical of nearing exhaustion.

- Blue Calendar page: Indicates the range is at risk of nearing effective date expiration.
- Yellow Calendar page with Exclamation Point: Indicates the range is critical and nearing effective end date.

3. View the serial ranges for a specific location, location group, or all locations and location groups by selecting a value in the View field at the top of the page. Views are:
   - All Locations and Location Groups
   - Each individual location that has serial ranges is listed.
   - Each individual location group that has serial ranges is listed.

   The Serial Range Management page is refreshed and displays the serial ranges for that specific location, location group, or all locations and location groups.
4. To return to the main Operations Dashboard page, click the Back to Operations Dashboard link in the upper right corner of the Serial Range Management page.

Adding Custom URLs to the Operations Dashboard

The Operations Dashboard in Oracle Pedigree and Serialization Manager (OPSM) enables you to add up to five custom URLs to the Dashboard. Using the Maintain System Parameters page you specify the URL name and the fully qualified URL (location) for each of the five custom URLs. After you specify the URLs using the Maintain System Parameters page these URLs are available from the Operations Dashboard Navigation menu.

Use this procedure to add custom URLs to the Operations Dashboard:

To Add Custom URLs to the Operations Dashboard:

1. Navigate to the Maintain System Parameters page, page A-2.
2. On the Dashboard tab, enter the Dashboard URL Name and the fully qualified Dashboard URL for one or more of the URLs you want to add to the Operations Dashboard.
3. Save your work.
4. Log out of Oracle Pedigree and Serialization Manager and then log back in.
5. Navigate to the Operations Dashboard, page A-2.

   The new Dashboard URLs appear for selection at the top of the Tasks (Navigation)

menu under the Operations Dashboard link. The Names that appear for the URLs on the Operations Dashboard are what you specified as the names for the URLs on the Maintain System Parameters page.

> **Note:** To remove the URLs go back the Maintain System Parameters page and remove the entries.

Refreshing the Information that Displays on the Operations Dashboard

When you access the Operations Dashboard in Oracle Pedigree and Serialization Manager (OPSM) the information that displays on the Dashboard is for that particular point in time. Using the Refresh icon you can periodically refresh the information that displays for the entire dashboard or you can use the Refresh icon associated with the different components of the page to refresh the information that appears just for that component.

Use these procedures to refresh the information that displays on the Operations Dashboard:

To Refresh the Information that Displays on the Operations Dashboard (Entire Dashboard):

1. Navigate to the Operations Dashboard, page A-2.

   The Operations Dashboard appears displaying information for each component (Location Details, Transaction Exceptions, Counterfeit Serial Analysis, and Serial Range Management) in the dashboard.

2. Click the Refresh All Dashboard Components icon located at the very top right hand corner of the Operations Dashboard.

   The system refreshes the information for the entire dashboard. The "Last refreshed on" field for each component is updated with the current date and time.

To Refresh the Information that Displays on the Operations Dashboard (Individual Component):

1. Navigate to the Operations Dashboard, page A-2.

   The Operations Dashboard appears displaying information for each component (Location Details, Transaction Exceptions, Counterfeit Serial Analysis, and Serial Range Management) in the dashboard.

2. Click the Refresh Dashboard Component icon located at the top right hand corner of an individual component.

   All of the components (Location Details, Transaction Exceptions, Counterfeit Serial

Analysis, and Serial Range Management) have the refresh icon.

The system refreshes the information for the individual component of the dashboard. The "Last refreshed on" field for the component is updated with the current date and time.

Part 7

Auditing Serial Data

13

Auditing Serial Data

This chapter covers the following topics:

- Understanding Auditing
- Setting Up the Audit Trail
- Viewing the Audit Trail Setup
- Updating the Audit Trail Setup
- Exporting Audit Trail Setup Information to Excel
- Synchronizing Audit Trail Setup Information
- Searching for Audit Trail History
- Viewing the Audit Trail History
- Exporting the Audit Trail History to Excel

Understanding Auditing

Oracle Pedigree and Serialization Manager (OPSM) gives you the ability to audit the changes or activity that occur to serial data in the OPSM database. The audit trail provides information on all changes made through the OPSM pages themselves, direct integrations with Oracle E-Business Suite, and the web service processes (add, update, and delete). Audit information for each change includes:

- The user who made the change in the database.
- The date and time when the change was made in the database.
- The fields that were changed in the database including before and after values of the changed fields.

The Audit Trail Setup page in OPSM gives administrators the flexibility to define which fields are audited within each business object based on their business requirements. All columns in each business object are available for audit. OPSM delivers the application

without any attributes selected for auditing. The business objects equate to the OPSM tables. The descriptions related to all of the columns in the OPSM database can be viewed using SQL Developer.

After you set up the audit trail and activity has occurred in the system, you will use the Audit Trail History page in OPSM to review the results of the audit and export the results to Excel if you choose. Recording and auditing of this serial data can assist you in being 21 CFR Part 11 compliant.

Business Objects

OPSM provides several business objects that are available for auditing. This table lists the business objects in the order that they appear in the Audit Trail Setup page along with their descriptions. Some of the business objects are listed multiple times because the hierarchy is based on the relationship between the business object. You only have to set up one instance of the business objects and it will apply to all instances. You can select any of these business objects when setting up the audit trail:

Business Objects

Node	Business Object	Description
SYSTEM SETUP		
	Dashboards	The Operations Dashboard in Oracle Pedigree and Serialization Manager (OPSM) provides information to support day-to-day activities that occur in OPSM.
	Dashboards Refresh	Stores information on the last time data displayed within the Dashboard components was updated.
	System Parameters	System parameters will define the owning source system default, source system precedence, serial type default, serial ranges default setting for product details and the default settings in OPSM for the different type of transactions.
	Location Groups	Location Groups in OPSM are used to associate locations which will share data, such as serial ranges.

Node	Business Object	Description
	Location Location Groups	The Location Location Groups table is used to maintain the relationship between the records in the Locations table and their associated location group.
	Locations	Locations in OPSM are used to define and maintain locations associated with the management of serial numbers.
	Location Contacts	Location Contacts are used to define the Pedigree Contact for each location, as well as the notification contact.
	Location Location Groups	The Location Location Groups table is used to maintain the relationship between the records in the Locations table and their associated location group.
	Serial Type Groups	Serial type groups are used to group one or more serial types for serial range management.
	Serial Type Group Details	Serial type group details stores the information specific to the serial type group (i.e. whether generation of serials is Random or Sequential).
	Products	Products and their associated records maintain product information associated with the management of serial numbers.
	Product Details	Information stored in Product Details will enable OPSM to determine the standards to use when generating serial numbers.
	Serial Types	Serial types are required in OPSM and are used to define the criteria and method for the generation of serial numbers.
	Locations	Locations in OPSM are used to define and maintain locations associated with the management of serial numbers.

Node	Business Object	Description
	Serial Type Groups	Serial type groups are used to group one or more serial types for serial range management.
	Product Items	Product Items are used to relate the transactional systems Item number to OPSM's Product.
	Product Item UOMs	Product Items UOMs are used to relate the transactional systems Item number to OPSM's Product Packaging Unit.
	Product Details	Information stored in Product Details will enable OPSM to determine the standards to use when generating serial numbers.
	Product Locations	Product Locations are used to override the processing behavior of the product for a particular location.
	Locations	Locations in OPSM are used to define and maintain locations associated with the management of serial numbers.
	Serial Destination Rules	Destination rules can be created for a transaction type, location, and product code. These rules are then used by the system to determine the destination to send a serial number to during its processing.
	Locations	Locations in OPSM are used to define and maintain locations associated with the management of serial numbers.
	Products	Products and their associated records maintain product information associated with the management of serial numbers.
	Serial Destinations	Serial Destinations store information about where to transmit serial data and which communication method to use.

Node	Business Object	Description
	Serial Ranges	Serial ranges reserves groups of serials for a specific location or location and product unit identifier (PUID).
	Locations	Locations in OPSM are used to define and maintain locations associated with the management of serial numbers.
	Serial Range Details	Serial range details stores information pertinent to the serial range, such as Next Number.
	Serial Type Groups	Serial type groups are used to group one or more serial types for serial range management.
	Location Groups	Location Groups in OPSM are used to associate locations which will share data, such as serial ranges.
	Lookup Types	Lookup types determine how the OPSM application controls access to and processes data.
	Lookup Type Translations	Lookup types translations stores the translated text for the various Lookup types.
	Lookup Values	Lookup values provide the allowed values for their associated lookup type.
	Lookup Value Translations	Lookup value translations stores the translated text for the different Lookup values.
SERIALS AND TRANSACTIONS		

Node	Business Object	Description
	Serials	Serials contains information about serial numbers which is a unique number assigned for identification which varies from its successor or predecessor by a fixed discrete integer value.
	Lots	The lot number is uniquely identified by the Lot Number, Source System, Location (optional), Product Code, Product Code Type, Product Code Variant, and Packaging Unit. The lot must be identified on a serial when it is commissioned, shipped, or returned. A valid lot expiration date is required for shipment and return of the serials.
	Locations	Locations in OPSM are used to define and maintain locations associated with the management of serial numbers.
	Product Details	Information stored in Product Details will enable OPSM to determine the standards to use when generating serial numbers.
	Packs	Packages are objects into which other objects are packed. Examples of packages are boxes, cases, totes, and so on.
	Labels	Labels represent identifiers that may or may not be unique but which are associated to a particular package within OPSM.
	Serials	Serials contains information about serial numbers which is a unique number assigned for identification which varies from its successor or predecessor by a fixed discrete integer value.
	Pack Associations	Pack associations maintain the relationship between the records in the packages and their identifying labels.

Node	Business Object	Description
	Labels	Labels represent identifiers that may or may not be unique but which are associated to a particular package within OPSM.
	Pack Associations	Pack associations maintain the relationship between the records in the packages and their identifying labels.
	Locations	Locations in OPSM are used to define and maintain locations associated with the management of serial numbers.
	Product Details	Information stored in Product Details will enable OPSM to determine the standards to use when generating serial numbers.
	Products	Products and their associated records maintain product information associated with the management of serial numbers.
	Serial Types	Serial types are required in OPSM and are used to define the criteria and method for the generation of serial numbers.
	Transaction Serial Associations	Transaction serial associations maintain the relationship between the serial records and their related transactions.
	Serials	Serials contains information about serial numbers which is a unique number assigned for identification which varies from its successor or predecessor by a fixed discrete integer value.
	Transactions	Transactions provide visibility into the events that occur for a serial number.
	Locations	Locations in OPSM are used to define and maintain locations associated with the management of serial numbers.

Node	Business Object	Description
	Lots	The lot number is uniquely identified by the Lot Number, Source System, Location (optional), Product Code, Product Code Type, Product Code Variant, and Packaging Unit. The lot must be identified on a serial when it is commissioned, shipped, or returned. A valid lot expiration date is required for shipment and return of the serials.
	Pedigrees	Pedigrees associates the pedigree document to the transaction record.
	Pedigree Documents	Pedigree documents contains the actual pedigree generated for the transaction.
	Product Details	Information stored in Product Details will enable OPSM to determine the standards to use when generating serial numbers.
	Product Items	Product Items are used to relate the transactional systems Item number to OPSM's Product.
	Product Item UOMs	Product Items UOMs are used to relate the transactional systems Item number to OPSM's Product Packaging Unit.
	Products	Products and their associated records maintain product information associated with the management of serial numbers.
	Transaction Address	Transaction addresses contains business addresses and shipping addresses related to the transaction.
	Transaction Documents	Transaction documents contain any document information associated to the transaction such as Work Order number, Sales Order, etc.

Node	Business Object	Description
	Transaction Errors	Transaction errors contains information related to errors encountered while processing the transaction.
	Transaction Labels	Transaction labels contain any shipping container information related to the transaction.
	Labels	Labels represent identifiers that may or may not be unique but which are associated to a particular package within OPSM.
	Product Items	Product Items are used to relate the transactional systems Item number to OPSM's Product.
	Transaction Products	Transaction products lists the products associated with the transaction.
	Transaction Serial Associations	Transaction serial associations maintain the relationship between the serial records and their related transactions.
	Transaction Serial Associations	Transaction serial associations maintain the relationship between the serial records and their related transactions.
	Transaction Documents	Transaction documents contain any document information associated to the transaction such as Work Order number, Sales Order, etc.
	Serial Generation Requests	When a request is made to OPSM to generate serials, the details of that request are stored here.
	Locations	Locations in OPSM are used to define and maintain locations associated with the management of serial numbers.

Node	Business Object	Description
	Product Details	Information stored in Product Details will enable OPSM to determine the standards to use when generating serial numbers.
	Serial Generation Request Messages	Serial Generation Request Messages stores any error or warning messages generated while processing a serial generation request.
	Transactions	Transactions provide visibility into the events that occur for a serial number.
	Job Instances	When you initiate a process in OPSM such as a web service, the system assigns a job instance Id to that specific run of the process. This can be used to verify if the process completed successfully or if there were errors or warnings during the execution of the process.
	Job Instance Messages	Any error or warning messages generated during a process initiated by OPSM are stored here.
	Job Instance Parameters	Job Instance Parameters stores details related to the process initiated by OPSM.
EPCIS		
	Users	Users contains the user information for EPCIS processing.
	Policies	Policies contains security information related to EPCIS Query processing.
	Policy Elements	Policy elements stores details related to the security policy for EPCIS Query processing.

Context Attributes

The system uses a user key as a unique identifier for a record that is being affected by an add, change, or delete activity. The user key may not provide enough information

for you to quickly identify the record that was affected. OPSM provides context attributes which give you user-friendly information which is easier to recognize and enables you to easily isolate the record in question. For example, if a change is made on the product detail record, and the product_detail_id is the user key, then the identifier may be 111538. By adding context attributes, OPSM can display the product code and the product UOM (1234-5645-55 - EA) which you can use to search for within the Maintain Products page.

This table lists the context attributes for the audit trail:

Context Attributes

Module Name	Business Object	User Key	Context Attribute 1	Context Attribute 2	Context Attribute 3
System Setup	PAS_S_DASHBOARDS	Dashboard Id	Not needed Only one record is allowed		
	PAS_S_DASHBOARDS_REFRESH	Dashboard Component			
	PAS_S_SYSTEM_PARAMETERS	System Parameter Id			
	PAS_S_LOCATION_GROUPS	Location Group	Location Group Description		
	PAS_S_LOCATION_LOCATION_GRPS	Location Location Grp Id	Location Group	Location Name	
	PAS_S_LOCATION CONTACTS	Location Contact Id	Contact Name	Location	
	PAS_S_LOCATIONS	Location			
	PAS_S_SERIAL_TYPE_GROUPS	Serial Type Group			

Module Name	Business Object	User Key	Context Attribute 1	Context Attribute 2	Context Attribute 3
	PAS_S_SERIAL_TYPE_GRP_ DTLS	Serial Type Grp Dtl Id	Serial Type Group	Product Unit Identifier	
	PAS_S_PRODUCTS	Product Id	Product Code (Formatted)	Product Code Variant	
	PAS_S_PRODUCT_DETAILS	Product Detail Id	Product Code (Formatted)	Packaging Unit (Product UOM)	
	PAS_S_SERIAL_TYPES	Serial Type	Serial Type Group		
	PAS_S_PRODUCT_ITEMS	Product Item Id	Item Number	Item Source	Product Code (Formatted)
	PAS_S_PRODUCT_ITEM_UOMS	Product Item UOM Id	Product Code (Formatted)	Item Number	Item UOM
	PAS_S_PRODUCT_LOCATIONS	Product Location ID	Product Code (Formatted)	Location	
	PAS_S_SER_DEST_RULES	Serial Dest Rules Id	Transaction Type	Serial Destination	Location
	PAS_S_SERIAL_DESTINATIONS	Destination	Serial Destination Description		
	PAS_S_SERIAL_RANGES	Range ID	Location	Location Group	Product Code (Formatted) (Conditional - will only display if PUID is provided)

Module Name	Business Object	User Key	Context Attribute 1	Context Attribute 2	Context Attribute 3
	PAS_S_SERIAL_RANGE_DETAILS	Range Detail ID	Location	Location Group	Product Code (Formatted) (Conditional - will only display if PUID is provided)
	PAS_S_LOOKUP_TYPES_B	Lookup Type			
	PAS_S_LOOKUP_TYPES_TL	Lookup Type	Lookup Type	Language	
	PAS_S_LOOKUP_VALUES_B	Lookup Code	Lookup Type		
	PAS_S_LOOKUP_VALUES_TL	Lookup Code	Lookup Type	Language	
Serials and Transactions	PAS_S_SERIALS	Unique Check String	Serial Number	Product Code (Formatted)	Packaging Unit (Product UOM)
	PAS_S_LOTS	Lot Id	Lot Number	Lot Source	Product Code (Formatted)
	PAS_S_PACKS	Pack Id	Package Unit	Package Identifier (Label)	Package Identifier Type (Label Type)
	PAS_S_LABELS	Label Id	Package Identifier (Label)	Package Identifier Type (Label Type)	

Module Name	Business Object	User Key	Context Attribute 1	Context Attribute 2	Context Attribute 3
	PAS_S_PACK_ASSOCIATIONS	Pack Association ID	Package Identifier (Parent Label)	Package Identifier (Child Label)	
	PAS_S_TRANS_SERIAL_ASSOCS	Trans Serial Assoc Id	Item Serial Number	Transaction Type	
	PAS_S_TRANSACTIONS	Transaction ID	Transaction Type	Transaction Date	
	PAS_S_PEDIGREES	Pedigree UUID	Transaction Type	Product Code (Formatted)	
	PAS_S_PEDIGREE_DOCUMENTS	Pedigree Document ID	Transaction Type	Product Code (Formatted)	Pedigree UUID
	PAS_S_TRANSACTION_ADDRESSES	Transaction Address Id	Address Code	Transaction Type	Transaction Date
	PAS_S_TRANSACTION_DOCS	Transaction Doc Id	Segment 2	Transaction Type	Transaction Date
	PAS_S_TRANSACTION_ERRORS	Transaction Error Id	Transaction Type	Transaction Date	Transaction Error
	PAS_S_TRANSACTION_LABELS	Transaction Label Id	Package Identifier (Label)	Transaction Type	
	PAS_S_TRANSACTION_PRODUCTS	Transaction Product ID	Transaction Type	Transaction Date	Product Code (Formatted)
	PAS_S_SERIAL_GEN_REQUESTS	Serial Gen Request Id	Source System	Product Code (Formatted)	Creation Date

Module Name	Business Object	User Key	Context Attribute 1	Context Attribute 2	Context Attribute 3
	PAS_S_SERIAL_GEN_REQ_MSGS	Serial Gen Request Msg ID	Product Code (Formatted)	Lot Number	Creation Date
	PAS_S_JOB_INSTANCES	Job Instance ID	Job Type		
	PAS_S_JOB_INSTANCE_MSGS	Job Instance Msg ID	Job Instance ID	Job Type	Error Code
	PAS_S_JOB_INSTANCE_PARAMS	Job Instance Param ID	Job Instance ID	Job Type	Parameter Name
	PAS_S_SERIAL_UPDATE_REQUESTS	Serial Update Request ID	Serial Update Type	Operation Name	Update Status
	PAS_S_SERIAL_LIST	Serial List ID	Item Serial Number	Serial Update Request ID	
EPCIS	PAS_EPC_USERS	EPC User	Description		
	PAS_EPC_POLICIES	EPC Policy	Policy Description		
	PAS_EPC_POLICY ELEMENTS	Policy Element ID	EPC Policy	Meaning	Element Value

Setting Up the Audit Trail

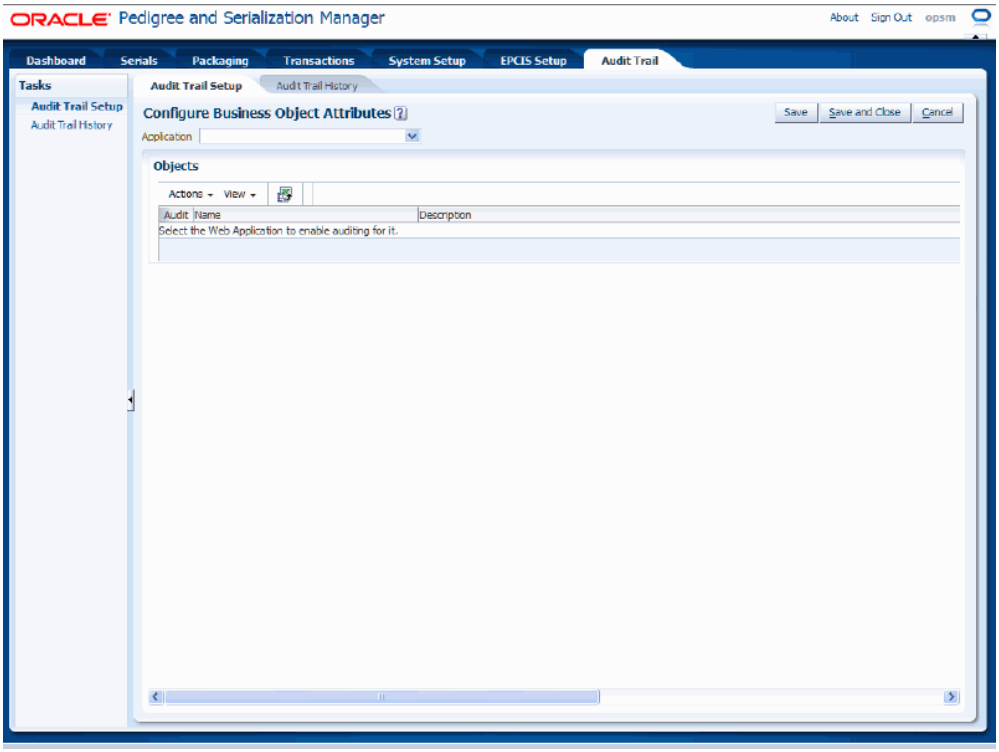
Use the Audit Trail Setup page in Oracle Pedigree and Serialization Manager (OPSM) to set up the OPSM business objects and their associated attributes that you want to audit.

Use this procedure to set up the audit trail:

To Set Up the Audit Trail:

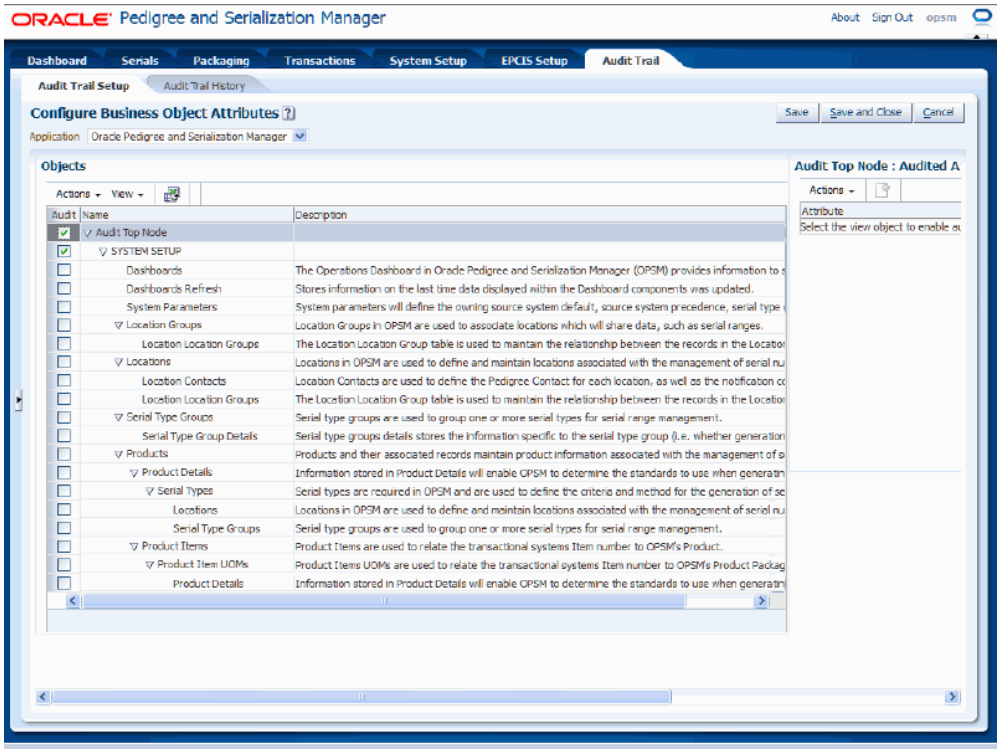
1. Navigate to the Audit Trail Setup page, page A-2.

Audit Trail Setup page



2. Select *Oracle Pedigree and Serialization Manager* in the Application field.

Audit Trail Setup page

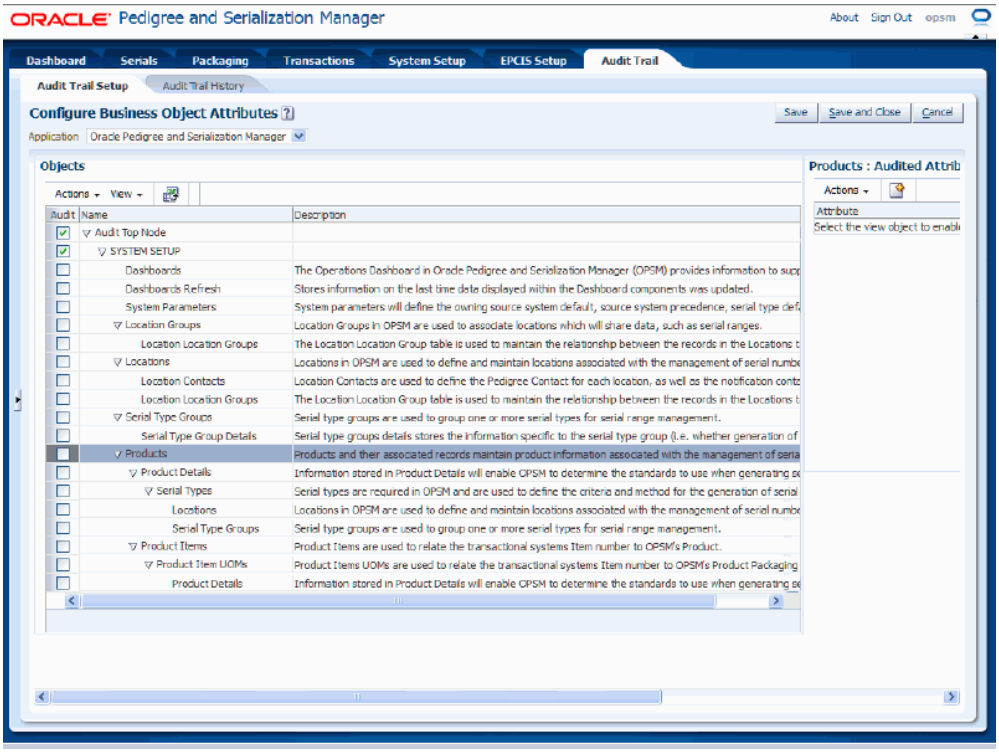


All of the business objects defined by OPSM display in the Objects region of the page in a tree format.

The business objects equate to the OPSM tables. The descriptions related to all of the columns in the OPSM database can be viewed using SQL Developer.

3. Select the business object name that you would like to audit in the tree (left side of page). Do not select the Audit check box. Click the object Name.

Audit Trail Setup page

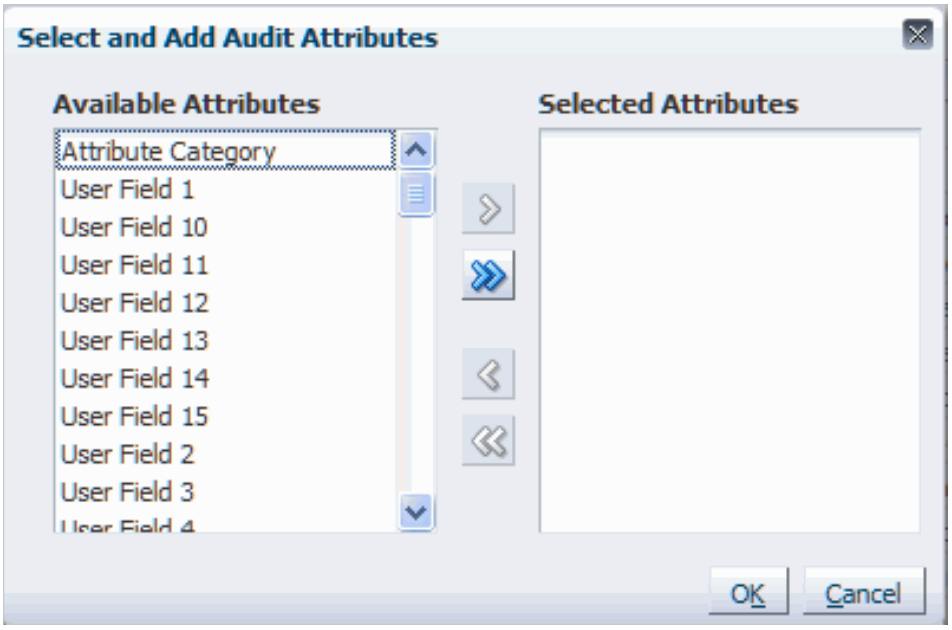


The title of region on the right side of the page will reflect the business object you selected along with "Audited Attributes". For example, if you select "Products" as the business object name, the region on the right side of the page will be titled "Products: Audited Attributes".

4. Select the attributes for the business object that you want to audit in the Audited Attributes region (right side of page):

    1. Select Create from the Actions menu or click the Create icon located at the top of the Audited Attributes table.

Select and Add Audit Attributes dialog box



The Select and Add Audit Attributes dialog box appears displaying all of the available attributes that can be audited for that business object.

2. Select the attributes you want to audit by using one of these options:

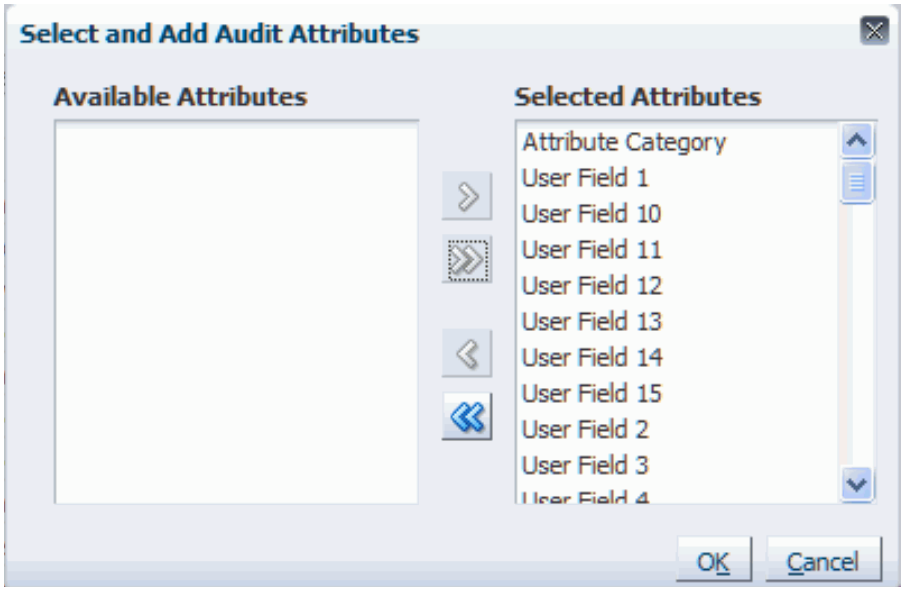
   - Select one or more attributes in the Available Attributes region and click the "Move selected items to other list" icon (single arrow pointing to the right).

     The selected available attributes move to the Selected Attributes region.

   - Click the "Move all items to other list" icon (double arrows pointing to the right).

     All of the available attributes move to the Selected Attributes region.

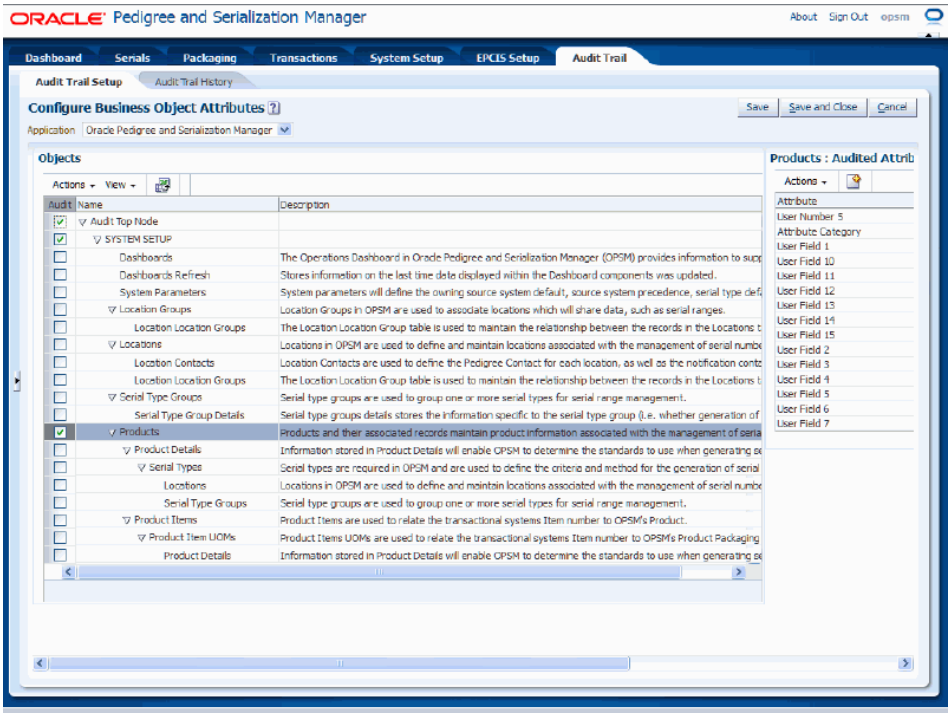
Select and Add Audit Attributes dialog box



All of the available attributes that were selected move to the Selected Attributes region.

3. Click the OK button.

Audit Trail Setup page



The Audit Trail Setup page re-displays with the Audit check box selected for the business object name in the Objects region (left side of page). All of the audited attributes that were selected display in the Audited Attributes region (right side of page).

5. Repeat steps 3 and 4 until you have defined all of the audit criteria for the audit trail.

6. Click the Save button to save your work.

Viewing the Audit Trail Setup

Use the Audit Trail Setup page in Oracle Pedigree and Serialization Manager (OPSM) to view the OPSM business objects and their associated attributes that you are currently auditing.

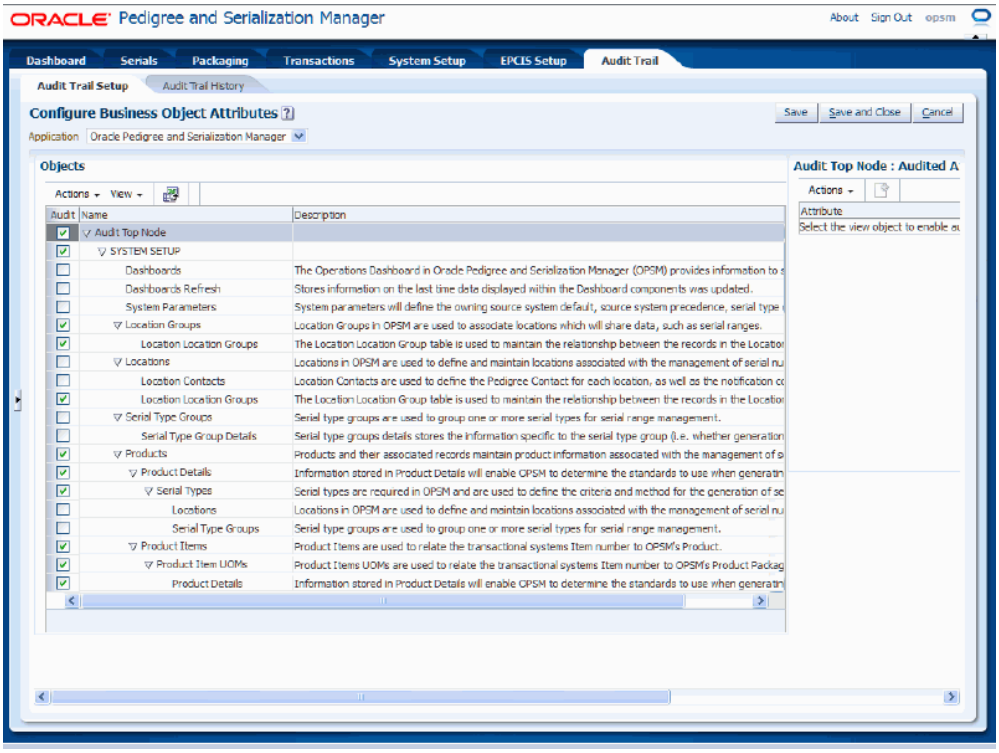
Use this procedure to view the audit trail setup:

To View the Audit Trail Setup:

1. Navigate to the Audit Trail Setup page, page A-2.

2. Select *Oracle Pedigree and Serialization Manager* in the Application field.

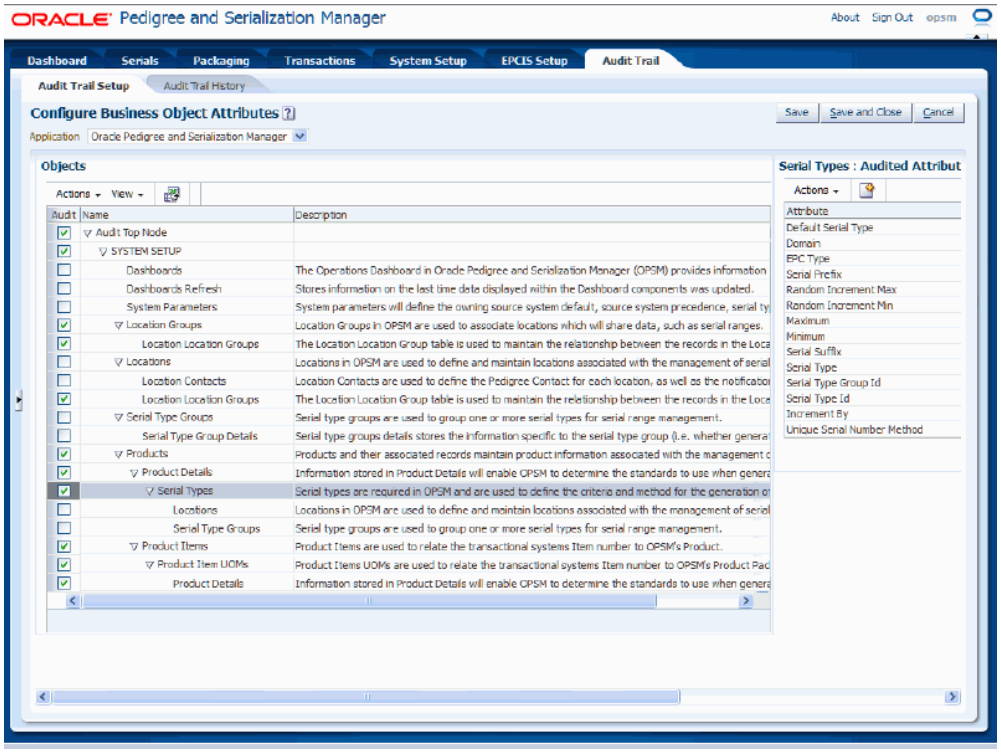
Audit Trail Setup page



All of the business objects defined by OPSM display in the Objects region of the page in a tree format. A check mark displays in the Audit column for those business object that are currently being audited.

3. Select one of the business objects that is currently being audited in the tree. Click the object name in the tree.

Audit Trail Setup page



The attributes that are being audited for the business object display in the Audited Attributes region (right side of the page).

4. Repeat step 3 for each business object that is being audited in the audit trail.

Updating the Audit Trail Setup

Use the Audit Trail Setup page in Oracle Pedigree and Serialization Manager (OPSM) to update the OPSM business objects and their associated attributes that you are currently auditing.

Use this procedure to update the audit trail setup:

To Update the Audit Trail Setup:

1. Navigate to the Audit Trail Setup page, page A-2.

2. Select *Oracle Pedigree and Serialization Manager* in the Application field.

   All of the business objects defined by OPSM display in the Objects region of the page in a tree format. A check mark in the Audit column means that particular business object has been selected for auditing.

3. Update the audit trail setup information by following one of these procedures:

To Remove All of the Business Objects from the Audit Trail Setup

1. Clear the Audit check box next to the Audit Top Node business object name.

   Note: The attributes are still selected for all of the business objects that you were auditing and have not been removed. At a later date you could come back and select to audit all of the business objects again by selecting the Audit check box next to the Audit Top Node and saving.

2. Click the Save button to save your work.

To Remove a Business Object from the Audit Trail Setup

1. Clear the Audit check box next to the business object name.

   Note: The attributes are still selected and have not been removed. At a later date you could come back and select to audit this business object again by selecting the Audit check box and saving.

2. Click the Save button to save your work.

To Add Back a Business Object that was Previously Removed from the Audit Trail Setup

1. Select the Audit check box next to a business object that still has attributes selected.

2. Click the Save button to save your work.

To Add Additional Business Objects and Attributes to the Audit Trail Setup

1. Follow the same steps as if you were setting up the audit trail.

   For more information, see Setting Up the Audit Trail, page 13-15.

To Add Additional Attributes to a Business Object or to Remove Attributes from a Business Object in the Audit Trail Setup

1. Select a business object name that is being auditing in the tree (left side of page). Click the object Name. A check mark in the Audit column means that particular business object has been selected for auditing.

   The existing attributes that are being audited for that business object name display in the Audited Attributes region.

2. Select Create from the Actions menu or click the Create icon located at the top of the Audited Attributes table.

The Select and Add Audit Attributes dialog box appears displaying all of the available attributes that can be audited for that business object along with the attributes that have already been selected.

3. Add or remove attributes that are available for auditing using one of these options:

   - Select one or more attributes in the Available Attributes region and click the "Move selected items to other list" icon (single arrow pointing to the right).

     The selected attributes move to the Selected Attributes region.

   - Click the "Move all items to other list" icon (double arrows pointing to the right).

     All of the available attributes move to the Selected Attributes region.

   - Select one or more attributes in the Selected Attributes region and click the "Remove selected items from list" icon (single arrow pointing left).

     The selected attributes move to the Available Attributes region.

   - Click the "Remove all items from list" icon (double arrows pointing to the left).

     All of the selected attributes move to the Available Attributes region.

4. Click the OK button.

   The Audit Trail Setup page re-displays reflecting the updated information.

Exporting Audit Trail Setup Information to Excel

Use the Audit Trail Setup page in Oracle Pedigree and Serialization Manager (OPSM) to export the audit trail setup information to a Microsoft Excel spreadsheet.

Use this procedure to export audit trail setup information to Excel:

To Export Audit Trail Setup Information to Excel:

1. Navigate to the Audit Trail Setup page, page A-2.

2. Select *Oracle Pedigree and Serialization Manager* in the Application field.

   All of the business objects defined by OPSM display in the Objects region of the page in a tree format. A check mark in the Audit column means that particular business object has been selected for auditing.

3. Select Export to Excel from the Actions menu or click the Export to Excel icon located at the top of the Objects region.

The system creates a Microsoft Excel spreadsheet file (.xls extension) that lists all of the business objects that have been selected for audit and those that have not, and a dialog box appears asking if you want to open the Excel spreadsheet or if you want to save the spreadsheet.

4. Open or save the Excel spreadsheet.

Synchronizing Audit Trail Setup Information

Use the Audit Trail Setup page in Oracle Pedigree and Serialization Manager (OPSM) to synchronize any additions or updates to the audit business objects and their associated attributes. For example, let's say you accept and install a patch that is delivered from OPSM and in that patch changes or additions will occur to tables or fields within the audit business objects in OPSM. In that case, you would synchronize the audit business objects that display on the Audit Trail Setup page to those that appear in the actual database so that the new or updated information is available for auditing in OPSM. Using the Synchronize action on the Audit Trail Setup page enables you to perform that synchronization.

Use this procedure to synchronize audit trail setup information:

To Synchronize Audit Trail Setup Information:

1. Navigate to the Audit Trail Setup page, page A-2.

2. Select *OPSM* in the Application field.

   All of the business objects defined by OPSM display in the Objects region of the page in a tree format. A check mark in the Audit column means that particular business object has been selected for auditing.

3. Select Synchronize from the Actions menu in the Objects region.

   The business objects and attributes are synchronized.

4. Click the Save button to save your work.

Searching for Audit Trail History

Use the Audit Trail History page in Oracle Pedigree and Serialization Manager (OPSM) to search for audit trail history records that have occurred in the OPSM system.

Use this procedure to search for audit trail history:

Prerequisites

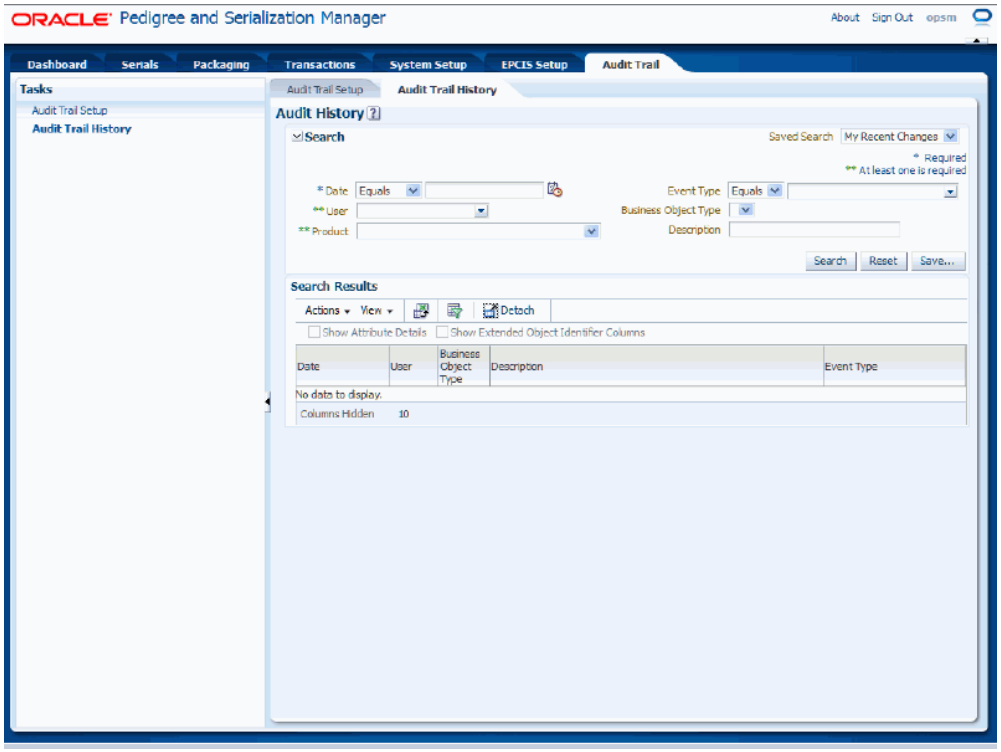
❒ Before you can search for the audit trail history records you must:

- Set up the audit trail using the Audit Trail Setup page in OPSM.
- Perform activity in OPSM related to the audit trail setup criteria that you have set up.

To Search for Audit Trail History:

1. Navigate to the Audit Trail History page, page A-2.

Audit Trail History page



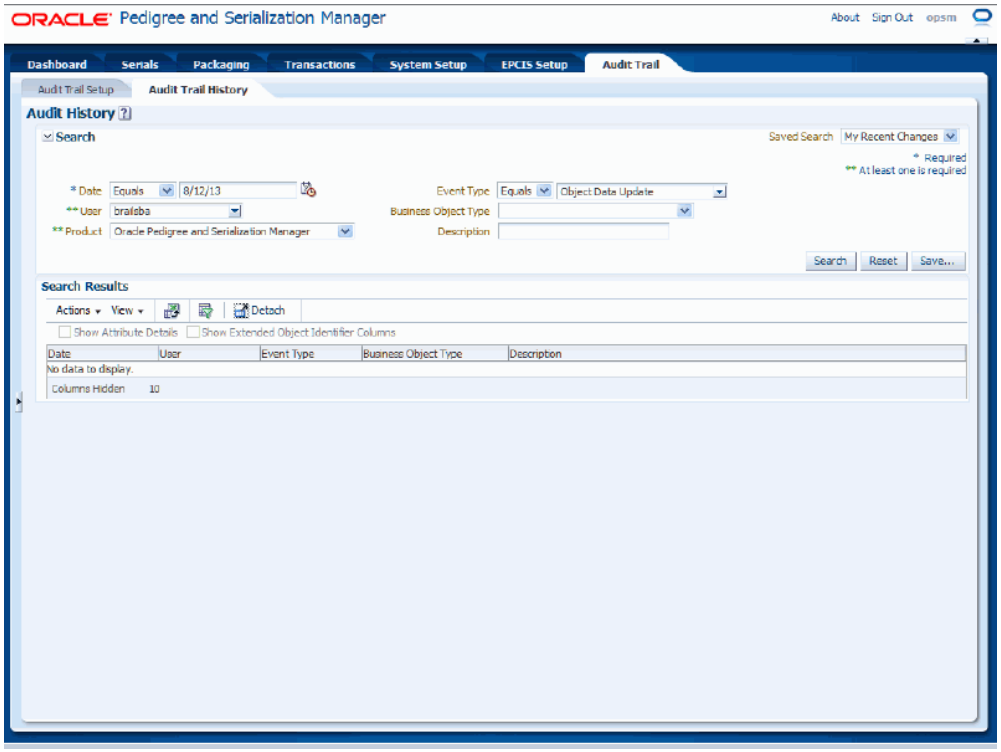
2. In the Search region, enter the search criteria for the audit trail history using these fields:

Field Name	Description
Date and Operator	Select the operator for the date and then enter the date for the audit trail history you want to search for. Operators are: • Equals • Before • After • Between If you select the Between operator you must enter a from and to date.
User	Select the user associated with the audit trail history. The User field or Product field, or both need to be selected.

Field Name	Description
Product	Select the product associated with the audit trail history. Other product options are hardcoded into the page, but only the *Oracle Pedigree and Serialization Manager* option applies. • Oracle Platform Security Services • Oracle SOA Suite (SOA) • Oracle Metadata Services (MDS) • Oracle Data Integrator (ODI) • BI Publisher • Oracle Enterprise Scheduler Service • Pages and Business Objects Extensibility (ADF) • Oracle Business Intelligence Enterprise Edition • Oracle Pedigree and Serialization Manager The User field or Product field, or both need to be selected.

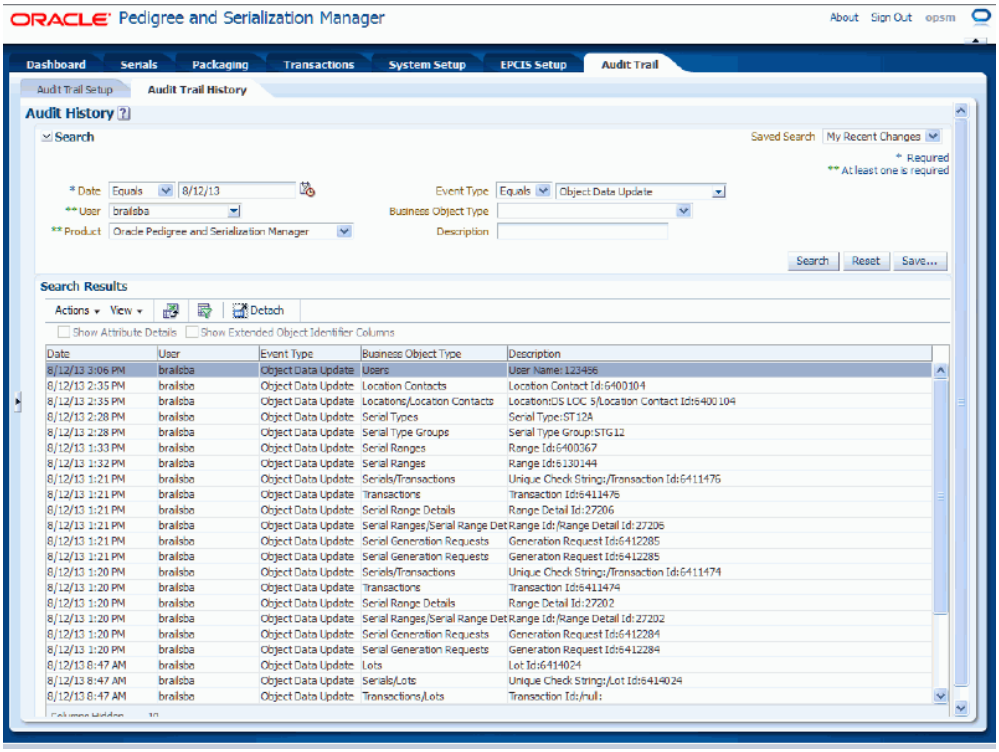
Field Name	Description
Event Type and Operator	(Optional) Select the operator for the event type and then enter the event type for the audit trail history you want to search for. Operators are: • Equals Event types are: • All • Object Data Insert • Object Data Update • Object Data Delete
Business Object Type	(Optional) Select the business object type associated with the audit trail history. Only business objects that have been set up for auditing display in this field. **Note:** You must select a business object type for the Show Attributes Detail check box to be available.
Description	(Optional) Enter a user key value in the Description field associated to the business object type.

Audit Trail History page



3. Click the Search button.

Audit Trail History page



All of the audit trail history records that match the search criteria appear in the Search Results region in a table format. For each record the following information displays:

Field Name	Description
Date	Displays the date for the audit trail history record.
User	Displays the user for the audit trail history record.
Event Type	Displays the event type for the audit trail history record.
Business Object Type	Displays the business object type for the audit trail history record.
Description	Displays the user key for the audit trail history record.

4. (Optional) View the attribute details by selecting the Show Attribute Details check box located at the top of the search results table.

   This check box is only available if you select a specific Business Object Type in the search region.

   The system displays the additional attribute detail columns in the search results table. For each record the following information displays:

Field Name	Description
Attribute	Displays the specific attribute that was audited.
Old Value	Displays the old value for the attribute if the audit trail history record pertains to an Object Data Update event type.
New Value	Displays the new value for the attribute if the audit trail history record pertains to an Object Data Update or Object Data Insert event types.

5. (Optional) View the object identifiers by selecting the Show Extended Object Identifier Columns check box located at the top of the search results table. This check box is only available if you also select the Show Attribute Details check box.

   The system displays the additional object identifier columns in the search results table. For each record the following information displays:

Field Name	Description
Context Name1	Displays the first context name for the audit trail history record.
Context Value1	Displays the first context value for the audit trail history record.
Context Name2	Displays the second context name for the audit trail history record.
Context Value2	Displays the second context value for the audit trail history record.

Field Name	Description
Context Name3	Displays the third context name for the audit trail history record.
Context Value3	Displays the third context value for the audit trail history record.

For more information on the context attributes used in auditing, see Understanding Auditing, page 13-1.

Viewing the Audit Trail History

Use the Audit Trail History page in Oracle Pedigree and Serialization Manager (OPSM) to view the audit trail history result information for the audit trail that you defined.

Use this procedure to view the audit trail history:

Prerequisites

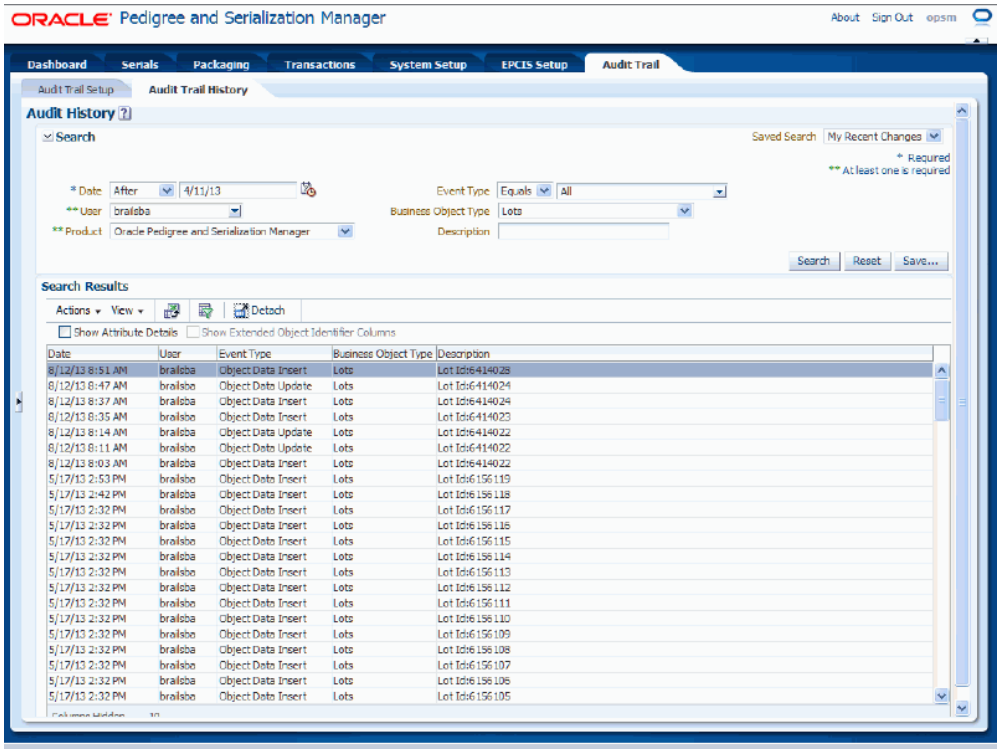
❒ Before you can view the audit trail l history result information you must:

- Set up the audit trail using the Audit Trail Setup page in OPSM.
- Perform activity in OPSM related to the audit trail setup criteria that you have set up.

To View the Audit Trail History:

1. Navigate to the Audit Trail History page, page A-2.
2. In the Search region, enter search criteria for the audit trail history.
3. Click the Search button.

Audit Trail History page

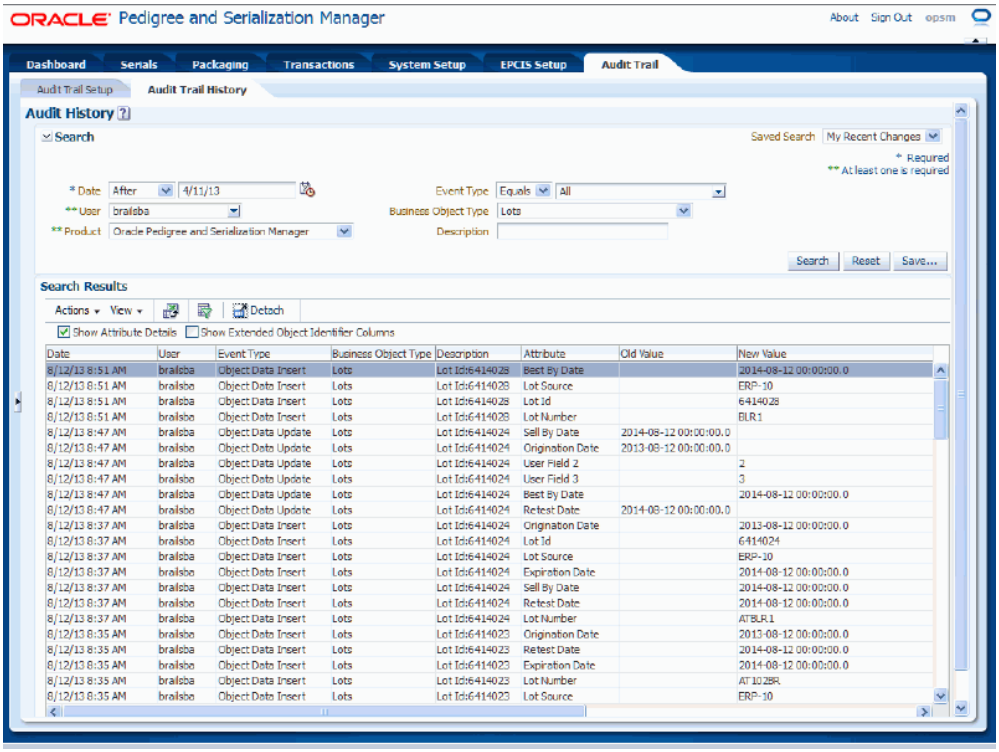


The audit trail history results that match the search criteria display in the Search Results region in a table format.

4. (Optional) View the attribute details by selecting the Show Attribute Details check box located at the top of the search results table.

   This check box is only available if you select a specific Business Object Type in the search region.

Audit Trail History page



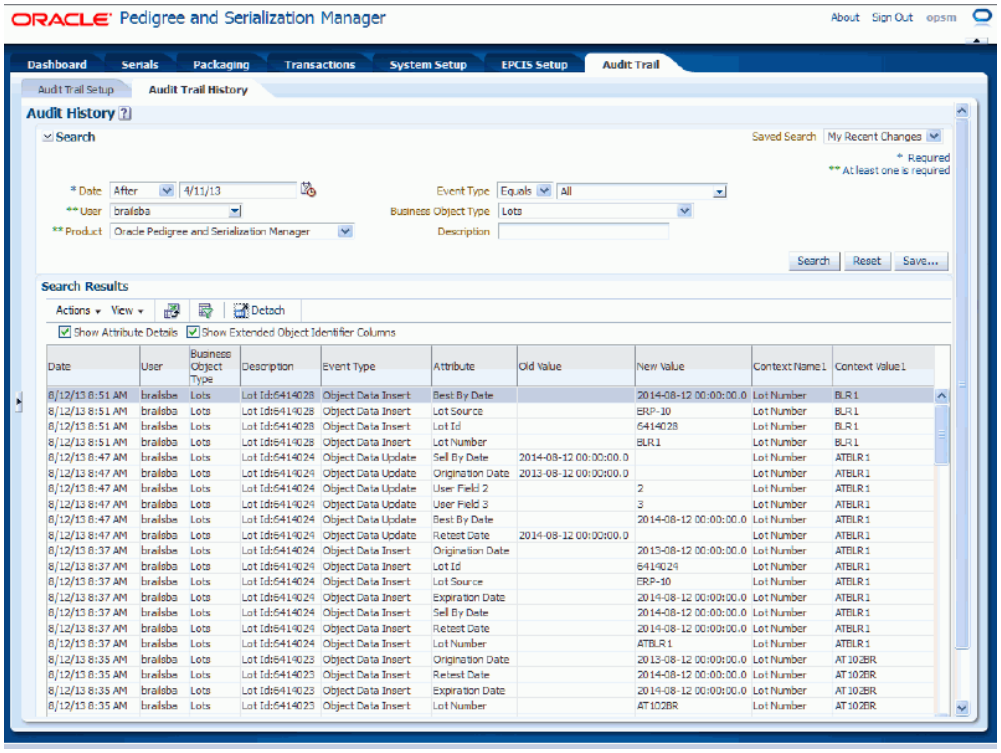
The system displays the additional attribute detail columns in the search results table. For each record the following information displays:

Field Name	Description
Attribute	Displays the specific attribute that was audited.
Old Value	Displays the old value for the attribute if the audit trail history record pertains to an Object Data Update or Object Data Delete event type.
New Value	Displays the new value for the attribute if the audit trail history record pertains to an Object Data Update or Object Data Insert event types.

5. (Optional) View the object identifiers by selecting the Show Extended Object Identifier Columns check box located at the top of the search results table. This

check box is only available if you also select the Show Attribute Details check box.

Audit Trail History page



The system displays the additional object identifier columns in the search results table. For each record the following information displays:

Field Name	Description
Context Name1	Displays the first context name for the audit trail history record.
Context Value1	Displays the first context value for the audit trail history record.
Context Name2	Displays the second context name for the audit trail history record.
Context Value2	Displays the second context value for the audit trail history record.

Field Name	Description
Context Name3	Displays the third context name for the audit trail history record.
Context Value3	Displays the third context value for the audit trail history record.

For more information on the context attributes used in auditing, see Understanding Auditing, page 13-1.

Exporting the Audit Trail History to Excel

Use the Audit Trail History page in Oracle Pedigree and Serialization Manager (OPSM) to export the audit trail history results to a Microsoft Excel spreadsheet.

Use this procedure to export the audit trail history to Excel:

Prerequisites

❒ The audit trail history details have already been created.

To Export the Audit Trail History to Excel:

1. Navigate to the Audit Trail History page, page A-2.
2. In the Search region, enter search criteria for the audit trail history.
3. Click the Search button.

   The audit trail history results that match the search criteria display in the Search Results region in a table format.
4. Select Export to Excel from the Actions menu or click the Export to Excel icon located at the top of the search results table.

   The system creates a Microsoft Excel comma separated value file (.csv extension) containing all of the audit trail history records and a dialog box appears asking if you want to open the Excel spreadsheet or if you want to save the spreadsheet.
5. Open or save the Excel spreadsheet.

Part 8

Understanding Web Services

14

Understanding Web Services

This chapter covers the following topics:

- Web Services Overview
- Web Services Detail
- Web Service Exceptions
- Web Service E-Mail Notifications

Web Services Overview

Oracle Pedigree and Serialization Manager (OPSM) can operate in an integrated mode with external transactional systems or it can operate as a standalone application. Through the use of web services and file transfer exchanges external third party systems can integrate with OPSM enabling them to streamline their business processes. OPSM hosts a set of inbound services.

For more information on web services and the Service Oriented Architecture (SOA), see

- Oracle SOA Home page that can be accessed from " http://www.oracle.com/us/technologies/soa/index.htm".
- Oracle SOA Suite User Guides that can be accessed from My Oracle Support > Oracle Fusion Middleware Documentation Library

These tables list the OPSM and EPCIS web services provided by OPSM and provide a high-level overview of each web service:

OPSM Web Services

Web Service	Functionality	Inbound/Outbound	WSDL
JobInstanceServiceAMService, page 14-25	Create Job Instance	Inbound	JobInstanceServiceAMService wsdl, page C-8
LotsServiceAMService, page 14-28	Merge Lots	Inbound	LotsServiceAMService wsdl, page C-11
PackagingServiceAMService, page 14-38	Pack Package	Inbound	PackagingServiceAMService wsdl, page C-14
PackagingServiceAMService, page 14-38	Unpack Package	Inbound	PackagingServiceAMService wsdl, page C-14
ProductServiceAMService, page 14-46	Create and update product	Inbound	ProductServiceAMService wsdl, page C-19
SerialGenRequestServiceAMService, page 14-57	Create Serial Generation Request	Inbound	SerialGenRequestServiceAMService wsdl, page C-22
SerialsServiceAMService, page 14-79	Serials - Edit Status and Usage by Label	Inbound	SerialsServiceAMService wsdl, page C-27
SerialsServiceAMService, page 14-79	Serials - Edit Status and Usage by List	Inbound	SerialsServiceAMService wsdl, page C-27
SerialsServiceAMService, page 14-79	Serials - Edit Status and Usage by Primary Document	Inbound	SerialsServiceAMService wsdl, page C-27
TransactionsServiceAMService, page 14-107	Add Transaction (Shipment, Return, and Import Serials)	Inbound	TransactionsServiceAMService wsdl, page C-34

EPCIS Web Services

CaptureService, page 14-3	Capture and store events in the EPCIS Repository	Inbound	CaptureService wsdl, page C-2
QueryService, page 14-135	Query events in the EPCIS Repository	Inbound	EPCglobalEPCISService wsdl, page C-3

Web Services Detail

This section lists the OPSM and EPCIS web services provided by Oracle Pedigree and Serialization Manager (OPSM) and provide the details for each web service.

CaptureService (Inbound)

The Capture web service is an inbound asynchronous business service part of the interoperability solution of the OPSM system. This service enables EPCIS events to get captured and stored in the events repository. Captured events can be queried by the EPCIS Query web service. The Capture service accepts the EPCISDocument form to store the EPCIS events in the repository.

Operation	Description
capture	Used to capture EPCIS events in the OPSM system.

capture Operation

This operation is used to capture EPCIS events in the OPSM system.

Key Logic

- EPCIS event gets validated against the EPCIS xsd schema if the EPCIS event is sent in the web service request.
- Each event provided in the web service request is split into individual xmls corresponding to the event.
- Individual xmls corresponding to the event get stored in the OPSM system.
- EPC codes corresponding to the individual xmls get stored in the OPSM system.

Required Input

- SchemaVersion
- CreationDate
- HeaderVersion (is mandatory if and only if StandardBusinessDocumentHeader is provided in the input event xml)
- EPCIS event

  Out of the four EPCIS events at least one event needs to be provided. EPCIS events are:

  - ObjectEvent
  - TransactionEvent
  - AggregationEvent
  - QuantityEvent

- EventTime is required for all EPCIS events.
- EventTimeZoneOffset is required for all EPCIS events.
- For Object Event these fields are required:
  - epcList (it should have zero or more occurrences of EPC).
  - action
- For TransactionEvent these fields are required:
  - bizTransactionList (with one or more occurrences of bizTransaction).
  - epcList (with zero or more occurrences of EPC).
  - action
- For AggregationEvent these fields are required:
  - childEPCs
  - action
- For QuantityEvent these fields are required:
  - epcClass

- quantity

Exceptions

- Required parameters are not passed.
- If web service request does not conform with the EPCIS Schema (this validation takes place only when VALIDATE_EPCIS_REPORT_FLAG value is Y in the system parameters table).
- First character in eventTimeZoneOffset is other than + or -.
- EventTimeZoneOffset is not in the range of -14:00 hrs to +14:00 hrs.
- If event type is AggregationEvent and action specified in input is either ADD or DELETE and parentId in input is null or empty.
- If event type is TransactionEvent and action is either ADD or OBSERVE and epcList has zero occurrences.
- If event type is AggregationEvent and action is OBSERVE and childEpc has zero occurrences.
- If event type is AggregationEvent and action is ADD and parentId is null or childEpc has zero occurrences.
- If event type is QuantityEvent and the Quantity provided is zero or blank .
- If Ignore Pure Identity flag is N then
  - If the parentID sent in does not conform to the Pure Identity format, an exception is thrown.
  - If the epcClass sent in does not conform to the Pure Identity format, an exception is thrown.
  - If the childEpcs sent in does not conform to the Pure Identity format, an exception is thrown.
  - If the epcList sent in does not conform to the Pure Identity format, an exception is thrown.
- If pure component 1 in epc code is other than * and contains non numeric value.
- If pure component 2 in epc code is other than * and contains non numeric value.
- If pure component 3 in epc code is other than * and contains non numeric value.

capture

The description information in this table was taken from the GS1 EPC Global - EPC Information Services (EPCIS) Version 1.0.1 Specification Guide [http://www.gs1.org/gsmp/kc/epcglobal/epcis/epcis_1_0_1-standard-20070921.pdf].

Name	Type	Mandatory	Description
schemaVersion	Number	Yes	The version of the schema corresponding to which the instance conforms.
creationDate	DateTime	Yes	The date the message was created. Used for auditing and logging.
EPCISHeader	EPCISHeader	No	The XML binding for the Core Event Types data definition module that includes an optional EPCISHeader element, which may be used by industry groups to incorporate additional information required for processing within that industry. The core schema includes a "Standard Business Document Header" (SBDH) as defined in [SBDH] as a required component of the EPCISHeader element. It also contains extensions of EPCISHeader.

Name	Type	Mandatory	Description
EPCISBody	EPCISBody	Yes	The XML binding for the Core Event Types data definition modules that includes EPCISBody a mandatory element. It contains eventList and extensions.

StandardBusinessDocumentHeader

The description information in this table was taken from the GS1 EPC Global - EPC Information Services (EPCIS) Version 1.0.1 Specification Guide [http://www.gs1.org/gsmp/kc/epcglobal/epcis/epcis_1_0_1-standard-20070921.pdf].

Name	Type	Mandatory	Description
HeaderVersion	String	Yes (If EPCIS Header Is provided)	Specifies the version number of the standard business document.
Sender	Partner	Yes (If EPCIS Header Is provided)	Sender of the message, party representing the organization which created the standard business document.
Receiver	Partner	Yes (If EPCIS Header Is provided)	Receiver of the message, party representing the organization which receives the standard business document.
DocumentIdentification	DocumentIdentification	Yes (If EPCIS Header Is provided)	Identification information for the document.
Manifest	Manifest	No	Describes attachments.

Name	Type	Mandatory	Description
BusinessScope	BusinessScope	No	The business scope provides a basis to determine which rules are applicable to the transaction involving the enclosed business documents.
Extension	EPCISDocumentExtensionType	No	Standard document business header supports extensibility so end users can address application needs or use case. User can give any elements under extensions.

Sender

The description information in this table was taken from the GS1 EPC Global - EPC Information Services (EPCIS) Version 1.0.1 Specification Guide [http://www.gs1.org/gsmp/kc/epcglobal/epcis/epcis_1_0_1-standard-20070921.pdf].

Name	Type	Mandatory	Description
Identifier	PartnerIdentification	Yes (If EPCIS Header is provided)	A unique identification key for the sending party.
Authority	String	No	Authority agency of the identification key.
ContactInformation	ContactInformation	No	Name of the contact person or department for the sending party. See ContactInformation, page 14-9.

Receiver

The description information in this table was taken from the GS1 EPC Global - EPC Information Services (EPCIS) Version 1.0.1 Specification Guide

[http://www.gs1.org/gsmp/kc/epcglobal/epcis/epcis_1_0_1-standard-20070921.pdf].

Name	Type	Mandatory	Description
Identifier	PartnerIdentification	Yes (If EPCIS Header is provided)	A unique identification key for the receiving party.
Authority	String	No	Authority agency of the identification key.
ContactInformation	ContactInformation	No	Name of the contact person or department for the receiving party. See ContactInformation, page 14-9.

ContactInformation

Name	Type	Mandatory	Description
Contact	String	Yes	Name of contact person or department.
EmailAddress	String	No	Email address of the contact.
FaxNumber	String	No	Fax number of the contact.
TelephoneNumber	String	No	Telephone number of the contact.
ContactTypeIdentifier	String	No	Role of the identifier. For example, SELLER.

DocumentIdentification

The description information in this table was taken from the GS1 EPC Global - EPC Information Services (EPCIS) Version 1.0.1 Specification Guide [http://www.gs1.org/gsmp/kc/epcglobal/epcis/epcis_1_0_1-standard-20070921.pdf].

Name	Type	Mandatory	Description
Standard	String	Yes	The name of the document standard contained in the payload.
TypeVersion	String	Yes	Version information of the document included in the payload of SBDH. This is the "complete" version of the document itself and is different than the "HeaderVersion".
InstanceIdentifier	String	Yes	Description that contains reference information which uniquely identifies this instance of the Standard Business Document (SBD) between the "Sender" and the "Receiver". This identifier identifies this document as being distinct from others.
Type	String	Yes	This element identifies the type of the document. If there is a business need to send multiple types of documents, then the multiple types MUST be business documents related to each other and having the same version identifier. Example; invoice, debitCreditAdvice, tradeItemDocument.

Name	Type	Mandatory	Description
MultipleType	Boolean	Yes	Flag to indicate that there is more than one type of business document in the payload of the SBDH.
CreationDateAndTime	String	Yes	Date and time of the SBDH document creation.

Manifest

Name	Type	Mandatory	Description
NumberOfItems	Integer	Yes	Number of attachments in document.
ManifestItem	ManifestItem	Yes	Specifies information about the attached item in a document. See ManifestItem, page 14-11.

ManifestItem

Name	Type	Mandatory	Description
MimeTypeQualifierCode	MimeTypeQualifierCode	Yes	MIME type of attached item.
UniformResourceIdentifier	anyURI	Yes	URL for the attached item.
Description	String	No	Description of the attached item.
Language	String	No	Language of the attached item.

BusinessScope

Name	Type	Mandatory	Description
Scope	Scope	No	Defines the scope of the business rule to the transactions involving the enclosed business documents. See Scope, page 14-12.

Scope

The description information in this table was taken from the GS1 EPC Global - EPC Information Services (EPCIS) Version 1.0.1 Specification Guide [http://www.gs1.org/gsmp/kc/epcglobal/epcis/epcis_1_0_1-standard-20070921.pdf].

Name	Type	Mandatory	Description
Type	String	No	This element identifies the type of the scope.
InstanceIdentifier	String	No	Description that contains reference information which uniquely identifies the scope.
Identifier	String	No	A unique identification key for the scope.
ScopeInformation	Scope	No	This is an abstract element with a substitution group. The element will be substituted by any one of the other elements that have the same substitution group.

EPCISBody

The description information in this table was taken from the GS1 EPC Global - EPC Information Services (EPCIS) Version 1.0.1 Specification Guide

[http://www.gs1.org/gsmp/kc/epcglobal/epcis/epcis_1_0_1-standard-20070921.pdf].

Name	Type	Mandatory	Description
EventList	EventListType	No	Defines the list of events in a document. Events can be objectEvent, transactionEvent, aggregationEvent, or quantityEvent. All events are a subclass of EPCISEvent.
extension	EPCISEventListExtensionType	No	EPCISBody supports extensibility so end users can address application needs or use case. User can give any elements under extensions.

EventList

The description information in this table was taken from the GS1 EPC Global - EPC Information Services (EPCIS) Version 1.0.1 Specification Guide [http://www.gs1.org/gsmp/kc/epcglobal/epcis/epcis_1_0_1-standard-20070921.pdf].

Name	Type	Mandatory	Description
ObjectEvent	ObjectEventType	No	ObjectEvent captures information about an event pertaining to one or more physical objects identified by EPCs.

Name	Type	Mandatory	Description
AggregationEvent	AggregationEventType	No	The event type AggregationEvent describes events that apply to objects that have been physically aggregated to one another. In such an event, there is a set of "contained" objects that have been aggregated within a " containing" entity that's meant to identify the physical aggregation itself.
QuantityEvent	QuantityEventType	No	A QuantityEvent captures an event that takes place with respect to a specified quantity of an object class.
TransactionEvent	TransactionEventType	No	The event type TransactionEvent describes the association or disassociation of physical objects to one or more business transactions. While other event types have an optional bizTransactionList field that may be used to provide context for an event, the TransactionEvent is used to declare in an unequivocal way that certain EPCs have been associated or disassociated with one or more business transactions as part of the event.

ObjectEvent

The description information in this table was taken from the GS1 EPC Global - EPC Information Services (EPCIS) Version 1.0.1 Specification Guide [http://www.gs1.org/gsmp/kc/epcglobal/epcis/epcis_1_0_1-standard-20070921.pdf].

Name	Type	Mandatory	Description
eventTime	DateTime	Yes	The date and time at which the EPCIS Capturing Application asserts the event occurred.
recordTime	DateTime	No	The date and time at which this event was recorded by an EPCIS Repository. This field SHALL be ignored when an event is presented to the EPCIS Capture Interface, and SHALL be present when an event is retrieved through the EPCIS Query Interface.
eventTimeZoneOffset	String	Yes	The time zone offset in effect at the time and place the event occurred, expressed as an offset from UTC.
baseExtension	EPCISEventExtension Type	No	It specifies the base extension for ObjectEvent.

Name	Type	Mandatory	Description
epcList	EPCListType	Yes	An unordered list of one or more EPCs naming the physical objects to which the event pertained. Each element of this list SHALL be a URI [RFC2396] denoting the unique identity for a physical object.
action	ActionType	Yes	The Action field of an ObjectEvent describes the events relationship to the lifecycle of the EPCs named in the event. Actions are ADD, DELETE, or OBSERVE.
bizStep	BusinessStepIDType	No	The business step of which this event was a part.
disposition	DispositionIDType	No	The business condition of the objects associated with the EPCs presumed to hold, until contradicted by a subsequent event.
readPoint	ReadPointType	No	The read point at which the event took place.
bizLocation	BusinessLocationType	No	The business location where the objects associated with the EPCs may be found, until contradicted by a subsequent event.

Name	Type	Mandatory	Description
bizTransactionList	BusinessTransactionListType	No	An unordered list of business transactions that define the context of this event.
extension	ObjectEventExtensionType	No	Extensions for object events are defined under the extensions tag. The main purpose of extensions is to adapt to particular business situations for different organizations.

AggregationEvent

The description information in this table was taken from the GS1 EPC Global - EPC Information Services (EPCIS) Version 1.0.1 Specification Guide [http://www.gs1.org/gsmp/kc/epcglobal/epcis/epcis_1_0_1-standard-20070921.pdf].

Name	Type	Mandatory	Description
eventTime	DateTime	Yes	The date and time at which the EPCIS Capturing Application asserts the event occurred.
recordTime	DateTime	No	The date and time at which this event was recorded by an EPCIS Repository. This field SHALL be ignored when an event is presented to the EPCIS Capture Interface, and SHALL be present when an event is retrieved through the EPCIS Query Interface.

Name	Type	Mandatory	Description
eventTimeZoneOffset	String	Yes	The time zone offset in effect at the time and place the event occurred, expressed as an offset from UTC.
baseExtension	EPCISEventExtensionType	No	It specifies the base extension for AggregationEvent.
parentId	ParentIDType	No	The identifier of the parent of the association.
childEPCs	EPCListType	Yes	An unordered list of the EPCs of the contained objects. Each element of the list SHALL be a URI [RFC2396] denoting the unique identity for a physical object.
action	ActionType	Yes	Action specifies how this event relates to the lifecycle of the aggregation named in this event. Actions are ADD, DELETE, or OBSERVE.
bizStep	BusinessStepIDType	No	The business step of which this event was a part.
disposition	DispositionIDType	No	The business condition of the objects associated with the EPCs presumed to hold, until contradicted by a subsequent event.

Name	Type	Mandatory	Description
readPoint	ReadPointType	No	The read point at which the event took place.
bizLocation	BusinessLocationType	No	The business location where the objects associated with the EPCs may be found, until contradicted by a subsequent event.
bizTransactionList	BusinessTransactionListType	No	An unordered list of business transactions that define the context of this event.
extension	AggregationEventExtensionType	No	Extensions for aggregation events are defined under the extensions tag. The main purpose of extensions is to adapt to particular business situations for different organizations.

QuantityEvent

The description information in this table was taken from the GS1 EPC Global - EPC Information Services (EPCIS) Version 1.0.1 Specification Guide [http://www.gs1.org/gsmp/kc/epcglobal/epcis/epcis_1_0_1-standard-20070921.pdf].

Name	Type	Mandatory	Description
eventTime	DateTime	Yes	The date and time at which the EPCIS Capturing Application asserts the event occurred.

Name	Type	Mandatory	Description
recordTime	DateTime	No	The date and time at which this event was recorded by an EPCIS Repository. This field SHALL be ignored when an event is presented to the EPCIS Capture Interface, and SHALL be present when an event is retrieved through the EPCIS Query Interface.
eventTimeZoneOffset	String	Yes	The time zone offset in effect at the time and place the event occurred, expressed as an offset from UTC.
baseExtension	EPCISEventExtension Type	No	It specifies the base extension for QuantityEvent.
epcClass	EPCClassType	Yes	The identifier specifying the object class to which the event pertains.
quantity	Integer	Yes	The quantity of the object within the class described by this event.
bizStep	BusinessStepIDType	No	The business step of which this event was a part.

Name	Type	Mandatory	Description
disposition	DispositionIDType	No	The business condition of the objects associated with the EPCs presumed to hold, until contradicted by a subsequent event.
readPoint	ReadPointType	No	The read point at which the event took place.
bizLocation	BusinessLocationType	No	The business location where the objects associated with the EPCs may be found, until contradicted by a subsequent event.
bizTransactionList	BusinessTransactionListType	No	An unordered list of business transactions that define the context of this event.
extension	QuantityEventExtensionType	No	Extensions for quantity events are defined under the extensions tag. The main purpose of extensions is to adapt to particular business situations for different organizations.

TransactionEvent

The description information in this table was taken from the GS1 EPC Global - EPC Information Services (EPCIS) Version 1.0.1 Specification Guide [http://www.gs1.org/gsmp/kc/epcglobal/epcis/epcis_1_0_1-standard-20070921.pdf].

Name	Type	Mandatory	Description
eventTime	DateTime	Yes	The date and time at which the EPCIS Capturing Application asserts the event occurred.
recordTime	DateTime	No	The date and time at which this event was recorded by an EPCIS Repository. This field SHALL be ignored when an event is presented to the EPCIS Capture Interface, and SHALL be present when an event is retrieved through the EPCIS Query Interface.
eventTimeZoneOffset	String	Yes	The time zone offset in effect at the time and place the event occurred, expressed as an offset from UTC.
baseExtension	EPCISEventExtension Type	No	It specifies the base extension for TransactionEvent.
bizTransactionList	BusinessTransactionL istType	Yes	An unordered list of business transactions that define the context of this event.
parentId	ParentIDType	No	The identifier of the parent of the EPCs given in the epcList.

Name	Type	Mandatory	Description
epcList	EPCListType	Yes	An unordered list of the EPCs of the objects associated with the business transaction. Each element of the list SHALL be a URI [RFC2396] denoting the unique identity for a physical object.
action	ActionType	Yes	Action specifies how this event relates to the lifecycle of the business transaction named in this event. Actions are ADD, DELETE, or OBSERVE.
bizStep	BusinessStepIDType	No	The business step of which this event was a part.
disposition	DispositionIDType	No	The business condition of the objects associated with the EPCs presumed to hold, until contradicted by a subsequent event.
readPoint	ReadPointType	No	The read point at which the event took place.
bizLocation	BusinessLocationTyp e	No	The business location where the objects associated with the EPCs may be found, until contradicted by a subsequent event.

Name	Type	Mandatory	Description
bizTransactionList	BusinessTransactionListType	No	An unordered list of business transactions that define the context of this event.
extension	TransactionEventExtensionType	No	Extensions for transaction events are defined under the extensions tag. The main purpose of extensions is to adapt to particular business situations for different organizations.

bizLocation

The description information in this table was taken from the GS1 EPC Global - EPC Information Services (EPCIS) Version 1.0.1 Specification Guide [http://www.gs1.org/gsmp/kc/epcglobal/epcis/epcis_1_0_1-standard-20070921.pdf].

Name	Type	Mandatory	Description
id	BusinessLocationIDType	Yes	Indicates the location Id of the business location.
extension	BusinessLocationExtensionType	No	Business location supports extensibility so end users can address application needs or use case. User can give any elements under extensions.

readPoint

The description information in this table was taken from the GS1 EPC Global - EPC Information Services (EPCIS) Version 1.0.1 Specification Guide [http://www.gs1.org/gsmp/kc/epcglobal/epcis/epcis_1_0_1-standard-20070921.pdf].

Name	Type	Mandatory	Description
id	ReadPointIDType	Yes	Read Point Id is a discretely recorded location that is meant to identify the most specific place at which an EPCIS event took place.
extension	ReadPointExtensionType	No	Read point supports extensibility so end users can address application needs or use case. User can give any elements under extensions.

WSDL

oracle.apps.pas.epc.service.capture.CaptureService.wsdl

For detailed descriptions of all input and output parameters, please refer to the CaptureService wsdl, page C-2 for this web service.

JobInstanceServiceAMService (Inbound)

The Job Instance web service is an inbound asynchronous business service part of the interoperability solution of the OPSM system. This service enables external systems to create job instances with job instance messages. The job instances and job instances messages are used for error notification when processing the createTransaction and mergeLot messages from the JMS Queue.

Operation	Description
createJobInstance createJobInstanceAsync	Used to create a new job instance and job instance messages within OPSM from an external system.

createJobInstance and createJobInstanceAsync Operations

These operations are used to create error, warning, and informational messages about a specified process into the Job Instances and Job Instance Messages table. It is used primarily in the error handling during asynchronous processing of messages from the

JMS Queue.

Key Logic

- Creates a job instance and one or more job instance messages.
- Error Substitution Value 1-5

  Up to five error substitution values can be entered on errors that allow for value substitution.

Required Input

- JobType
- JobStatus

Exceptions

- Required input is not received.
- Invalid error code.
- Invalid lookup value:
  - Job Type
  - Job Status
  - Web Services

jobInstance

Name	Type	Mandatory	Description
JobInstanceId	Long	No	Unique identifier for the job instance.
JobType	String	Yes	Identifies the job type. This must be a valid value in the PAS_JOB_TYPE lookup.

Name	Type	Mandatory	Description
JobStatus	String	Yes	Indicates the status of the job. This must be a valid value in the PAS_JOB_STATUS lookup.
WebServiceName	String	No	Identifies the web service associated with the job. This must be a valid value in the PAS_WEB_SERVICES lookup.

jobInstanceMsgVO

Name	Type	Mandatory	Description
JobInstanceMsgId	Long	No	Unique identifier for the job instance message.
ErrorCode	String	No	Identifies the error code from the resource bundle.
ErrorSeverityLevel	String	No	Indicates the severity level of the message.
ErrorSubValue1	String	No	Error substitution value.
ErrorSubValue2	String	No	Error substitution value.
ErrorSubValue3	String	No	Error substitution value.
ErrorSubValue4	String	No	Error substitution value.

Name	Type	Mandatory	Description
ErrorSubValue5	String	No	Error substitution value.

WSDL

oracle.apps.pas.transactions.jobInstanceService.applicationModule.common.serviceinterface.JobInstanceServiceAMService.wsdl

For detailed descriptions of all input and output parameters, please refer to the JobInstanceServiceAMService wsdl, page C-8 for this web service.

LotsServiceAMService (Inbound)

Inbound service that provides the ability to add or update lots and lot attributes from an external system into the OPSM system.

Operation	Description
mergeLot mergeLotAsync	These operations will merge lot information by adding a new lot or updating an existing lot in OPSM.

mergeLot and mergeLotAsync Operation

These operations are used to merge the lot information from an external system into the OPSM system.

Key Logic

The merge will attempt to find the lot in OPSM using the following precedence:

- If LotId is passed in the system will use LotId.
- If LotId and Location are not passed in, then the system will use LotNumber, LotSource, ProductCode, ProductCodeType, ProductCodeVariant, and ProductUom.
- If LotId is not passed and Location *is* passed then the system will use LotNumber, LotSource, Location, ProductCode, ProductCodeType, ProductCodeVariant, and ProductUom.
- If the product code information is not passed, ItemNumber, ItemSource, and ItemUom are used to identify the ProductCode, ProductCodeType,

ProductCodeVariant and ProductUom using the Item Cross Reference definition in OPSM.

- If both product and item information are provided, the product information will take precedence in identifying the product.
- If an existing lot is found in OPSM, the lot will be updated with the information that is passed in. If the lot is not found, a new lot will be added.

Required Input

One of the following combinations must exist to identify the lot:

- LotId
- LotNumber, LotSource, ProductCode, ProductCodeType, ProductCodeVariant, ProductUom
- LotNumber, LotSource, Location, ProductCode, ProductCodeType, ProductCodeVariant, ProductUom
- LotNumber, LotSource, ItemNumber, ItemSource, ItemUom
- LotNumber, LotSource, Location, ItemNumber, ItemSource, ItemUom

Exceptions

If LotId was passed in, and the lot is not found in OPSM, an exception is issued and the lot is not added.

lotRow

Name	Type	Mandatory	Description
LotId	Long	Conditional: One of the following combinations must be sent to identify the lot: • LotId or • LotNumber, LotSource, ProductCode, ProductCodeType, ProductCodeVariant, and ProductUom or • LotNumber, LotSource, Location, ProductCode, ProductCodeType, ProductCodeVariant, and ProductUom or • LotNumber, LotSource, Location, ItemNumber, ItemSource, ItemUom or • LotNumber, LotSource, ItemNumber, ItemSource, ItemUom	Unique identifier for the lot in OPSM. If the lot identifier is provided, the lot identifier will be used to locate the lot record to be updated.

Name	Type	Mandatory	Description
LotNumber	String	Conditional: One of the following combinations must be sent to identify the lot: • LotId or • LotNumber, LotSource, ProductCode, ProductCodeType, ProductCodeVariant, and ProductUom or • LotNumber, LotSource, Location, ProductCode, ProductCodeType, ProductCodeVariant, and ProductUom or • LotNumber, LotSource, Location, ItemNumber, ItemSource, ItemUom or • LotNumber, LotSource, ItemNumber, ItemSource, ItemUom	Lot number associated to the lot. The LotNumber, LotSource, Location, ProductCode, ProductCodeType, ProductCodeVariant, and ProductUom are used to uniquely identify the lot number to be created or updated if the LotId is not provided.

Name	Type	Mandatory	Description
LotSource	String	Conditional: One of the following combinations must be sent to identify the lot: • LotId or • LotNumber, LotSource, ProductCode, ProductCodeType, ProductCodeVariant, and ProductUom or • LotNumber, LotSource, Location, ProductCode, ProductCodeType, ProductCodeVariant, and ProductUom or • LotNumber, LotSource, Location, ItemNumber, ItemSource, ItemUom or • LotNumber, LotSource, ItemNumber, ItemSource, ItemUom	The source system associated to the lot. The LotNumber, LotSource, Location, ProductCode, ProductCodeType, ProductCodeVariant and ProductUom are used to uniquely identify the lot number to be created or updated if the LotId is not provided. This must be a valid value in the PAS_SOURCE_SYSTEM lookup.

Name	Type	Mandatory	Description
Location	String	Conditional: One of the following combinations must be sent to identify the lot: • LotId or • LotNumber, LotSource, ProductCode, ProductCodeType, ProductCodeVariant, and ProductUom or • LotNumber, LotSource, Location, ProductCode, ProductCodeType, ProductCode Variant, and ProductUom or • LotNumber, LotSource, Location, ItemNumber, ItemSource, ItemUom or • LotNumber, LotSource, ItemNumber, ItemSource, ItemUom	The location associated to the lot. The location can be null if the source system does not associate a location reference to the lot information. The LotNumber, LotSource, Location, ProductCode, ProductCodeType, ProductCodeVariant and ProductUom are used to uniquely identify the lot number to be created or updated if the LotId is not provided. This must be a location defined in OPSM.
ParentLot	String	No	The parent lot number associated to the lot.
OriginationDate	Date	No	The date that the lot originated.

Name	Type	Mandatory	Description
ExpirationDate	Date	No	The date that the lot expires. The lot expiration date is not required for creation of the lot, however, a shipment of the product without a lot expiration date will be flagged as an exception.
BestByDate	Date	No	The best by date associated with the lot.
SellByDate	Date	No	The sell by date associated with the lot.
RetestDate	Date	No	The retest date associated with the lot.

Name	Type	Mandatory	Description
ItemNumber	String	Conditional: One of the following combinations must be sent to identify the lot: • LotId or • LotNumber, LotSource, ProductCode, ProductCodeType, ProductCodeVariant, and ProductUom or • LotNumber, LotSource, Location, ProductCode, ProductCodeType, ProductCode Variant, and ProductUom or • LotNumber, LotSource, Location, ItemNumber, ItemSource, ItemUom or • LotNumber, LotSource, ItemNumber, ItemSource, ItemUom	ItemNumber, ItemSource, and ItemUom can optionally be used to identify the product associated to the lot in OPSM using the item cross reference. If both product and item information are sent, the product information will take precedence in identifying the product.

Name	Type	Mandatory	Description
ProductCode	String	Conditional: One of the following combinations must be sent to identify the lot: • LotId or • LotNumber, LotSource, ProductCode, ProductCodeType, ProductCodeVariant, and ProductUom or • LotNumber, LotSource, Location, ProductCode, ProductCodeType, ProductCodeVariant, and ProductUom or • LotNumber, LotSource, Location, ItemNumber, ItemSource, ItemUom or • LotNumber, LotSource, ItemNumber, ItemSource, ItemUom	ProductCode, ProductCodeType, ProductCodeVariant, and ProductUom are used to identify the product detail associated to the lot.

LotProductVO

Name	Type	Mandatory	Description
ProductCode	String	Yes	Identifies the product in OPSM. The product is uniquely identified using the ProductCode, ProductCodeType, ProductCodeVariant, and ProductUom.
ProductCodeType	String	Yes	Identifies the type of product code used in identification of the product in OPSM. This must be a valid value in the PAS_PRODUCT_CODE_TYPE lookup.
ProductCodeVariant	String	No	Identifies the specific variation of the product code when a product code is reused for different products over time. Default: NOVARIANT.
ProductUom	String	Yes	Identifies the product packaging unit where a specified product code is used for multiple packaging levels.

LotItemVO

Name	Type	Mandatory	Description
ItemNumber	String	Yes	Identifies the item number in the transactional system that is cross referenced to a product within OPSM.
ItemSource	String	Yes	Identifies the source system related to the item number. Item source is used to cross reference the item specific to a source system to identify the product in OPSM.
ItemUom	String	Yes	Identifies the item UOM in the transactional system that is cross referenced to the Product Packaging Unit in OPSM.

WSDL

oracle.apps.pas.serials.serialsService.applicationModule.common.serviceinterface.LotsServiceAMService.wsdl

For detailed descriptions of all input and output parameters, please refer to the LotsServiceAMService wsdl, page C-11 for this web service.

PackagingServiceAMService (Inbound)

These are inbound services into the OPSM system, which record the packaging operations (pack and unpack) that are used to maintain the packaging hierarchy within OPSM.

Operation	Description
packPackage packPackageAsync	The pack request will pack one or multiple single level or a multiple level packaging structure as defined in the request. Resulting in a complete packaging hierarchy within OPSM.
unpackPackage unpackPackageAsync	The unpack request will unpack one or more packages within a single unpack request.

packPackage and packPackageAsync Operations

These operations are used to pack one or multiple single level or multiple level packaging structure as defined in the request.

Key Logic

- The ChildLabel and ChildLabelType are used to identify the package that will be packed.
- The ParentLabel and ParentLabelType are used to identify the package into which the child package will be packed.
- If the ParentLabelType is not a serial type, the parent package will be added if it does not already exist. However, the child package must already exist. This implies that the packaging hierarchy should be sequenced bottom up to facilitate adding the next higher level parent before attempting to pack it into the next higher packaging level.

Uniqueness Check

To validate uniqueness for seeded serial types (SGTIN-96, STGIN-198, and USN-1), this web service uses serial type + serial number.

To validate uniqueness for *custom* serial types, this web service uses product code + serial number. The following combinations of product information can be used:

1. Product Code Only OR
2. Product Code, Product Code Type, Product Code Variant, and Product UOM OR
3. Product Detail Id

If Product Detail Id is entered the rest of the data is ignored. If the Product Detail Id is provided and it is invalid the processing will fail.

Required Input

- ParentLabel
- ParentLabelType
- ChildLabel
- ChildLabelType

Exceptions

- Required parameters not passed.
- Invalid lookup value:
  - Label Type
  - Packaging Unit
  - Label Print Format

Restrictions

An alternate Label and LabelType cannot be used to identify the package.

packPackage

Name	Type	Mandatory	Description
PackSequence	Long	No	Sequences the order in which the packPackage requests are processed. Default: 1.
ParentLabel	String	Yes	The primary label used to identify the package.
ParentLabelType	String	Yes	The primary label type used to identify the package. This must be a valid user defined value in the PAS_LABEL_TYPE lookup.

Name	Type	Mandatory	Description
ParentProductCode	String	No	Identifies the product code associated with the package.
ParentProductCodeType	String	No	Identifies the product code type associated with the product code.
ParentProductCodeVariant	String	No	Identifies the product code variant associated with the product code.
ParentProductUom	String	No	Identifies the product code unit of measure associated with the product code.
ParentProductDetailID	String	No	Identifies the product detail Id associated with the package. If the product detail Id is entered, it will take precedence over the following entries: • Product Code only • Product Code, Product Code Type, Product Code Variant, and Product UOM

Name	Type	Mandatory	Description
ReusableFlag	String	No	Identifies whether the container is reusable. This value is used when adding a new parent container. Valid values: 0,1. Default: 0.
PackagingUnit	String	No	Identifies the packaging unit. This value is used when adding a new parent container. This must be a valid value in the PAS_PACKAGE_UNIT lookup. Default: UNASSIGNED.
LabelPrintFormat	String	Yes	Identifies the label print format for the package. This value is used when adding a new parent container. This must be a valid value in the PAS_LABEL_PRINT_FORMAT lookup.
ChildLabel	String	Yes	The primary label used to identify the package that is being packed into the parent package. This package must exist in OPSM.

Name	Type	Mandatory	Description
ChildLabelType	String	Yes	The primary label type used to identify the package that is being packed into the parent package. This must be a value in the PAS_LABEL_TYPE lookup.
ChildProductCode	String	No	Identifies the product code associated with the package.
ChildProductCodeType	String	No	Identifies the product code type associated with the product code.
ChildProductCodeVariant	String	No	Identifies the product code variant associated with the product code.
ChildProductUom	String	No	Identifies the product code unit of measure associated with the product code.

Name	Type	Mandatory	Description
ChildProductDetailID	String	No	Identifies the product detail Id associated with the package. If the product detail Id is entered, it will take precedence over the following entries: • Product Code only • Product Code, Product Code Type, Product Code Variant, and Product UOM

unpackPackage and unpackPackageAsync Operations

These operations are used to unpack one or more packages from a higher level package.

Key Logic

The primary Label and LabelType are used to identify the package that will be unpacked. For example if a bottle is packed within a box and the label information for the bottle is sent, the bottle will be unpacked from the box.

Required Input

- Label
- LabelType

Exceptions

- Required parameters not passed.
- Invalid Lookup value:
  - Label Type

Restrictions

An alternate Label and LabelType cannot be used to identify the package.

unpackPackage

Name	Type	Mandatory	Description
Label	String	Yes	The primary label used to identify the package.
LabelType	String	Yes	The primary label type used to identify the package. This must be a valid user defined value in the PAS_LABEL_TYPE lookup.
ProductCode	String	No	Identifies the product code associated with the package.
ProductCodeType	String	No	Identifies the product code type associated with the product code.
ProductCodeVariant	String	No	Identifies the product code variant associated with the product code.
ProductUom	String	No	Identifies the product code unit of measure associated with the product code.

Name	Type	Mandatory	Description
ProductDetailId	String	No	Identifies the product detail Id associated with the package. If the product detail Id is entered, it will take precedence over the following entries: • Product Code only • Product Code, Product Code Type, Product Code Variant, and Product UOM

WSDL

oracle.apps.pas.serials.serialsService.applicationModule.common.serviceinterface.PackagingServiceAMService.wsdl

For detailed descriptions of all input and output parameters, please refer to the PackagingServiceAMService wsdl, page C-14 for this web service.

ProductServiceAMService (Inbound)

The Product Service web service is an inbound asynchronous business service part of the interoperability solution of the OPSM system. This service enables external systems to create or update product and related product detail, product item, and product item UOM records in OPSM. This web service behaves similar to the Product Synchronization ODI process.

Operation	Description
mergeProducts mergeProductsAsync	Used to create a new product and related product detail, product item, and product item UOMs records or update an existing product and related product detail, product item, and product item UOM in OPSM from an external system.

mergeProducts and mergeProductsAsync Operations

These operations are used to create a new product or update an existing product in OPSM from an external system. Multiple records can be processed at one time.

Key Logic

ProductCode, ProductCodeType, ProductCodeVariant, and ProductUom determine if the product detail being sent is an existing product detail or a new product detail. SourceSystem and ItemNumber determine if the item being sent is an existing item or a new item. SourceSystem, ItemNumber and ItemUom determine if the item UOM cross reference being sent is an existing item UOM or a new item UOM. Each entity in the input xml (product, product detail, item, and item uom cross reference) can be new or existing. If new, it will be created. If it is existing, it will be updated. If a field is sent in as blank, the existing data in that field will not be updated.

Required Input

At a minimum, the required product information and one required product detail must be provided.

- ProductCode
- ProductCodeType
- ProductUom
- SerialType
- Source System
- Item Number
- Item Uom

Exceptions

- Required input is not received.
- Invalid lookup value:
    - Dosage Form
    - Container Type
    - Label Print Format
    - Packaging Unit
    - Product Category
    - Product Code Type

- Serial Type

Product

Name	Type	Mandatory	Description
AttributeChar1	String	No	Indicates a segment of the user descriptive flexfield.
AttributeChar2	String	No	Indicates a segment of the user descriptive flexfield.
AttributeChar3	String	No	Indicates a segment of the user descriptive flexfield.
AttributeChar4	String	No	Indicates a segment of the user descriptive flexfield.
AttributeChar5	String	No	Indicates a segment of the user descriptive flexfield.
AttributeChar6	String	No	Indicates a segment of the user descriptive flexfield.
AttributeChar7	String	No	Indicates a segment of the user descriptive flexfield.
AttributeChar8	String	No	Indicates a segment of the user descriptive flexfield.
AttributeChar9	String	No	Indicates a segment of the user descriptive flexfield.
AttributeChar10	String	No	Indicates a segment of the user descriptive flexfield.

Name	Type	Mandatory	Description
AttributeChar11	String	No	Indicates a segment of the user descriptive flexfield.
AttributeChar12	String	No	Indicates a segment of the user descriptive flexfield.
AttributeChar13	String	No	Indicates a segment of the user descriptive flexfield.
AttributeChar14	String	No	Indicates a segment of the user descriptive flexfield.
AttributeChar15	String	No	Indicates a segment of the user descriptive flexfield.
AttributeNumber1	String	No	Indicates a segment of the user descriptive flexfield.
AttributeNumber2	String	No	Indicates a segment of the user descriptive flexfield.
AttributeNumber3	String	No	Indicates a segment of the user descriptive flexfield.
AttributeNumber4	String	No	Indicates a segment of the user descriptive flexfield.
AttributeNumber5	String	No	Indicates a segment of the user descriptive flexfield.
AttributeTimestamp1	DateTime	No	Indicates a segment of the user descriptive flexfield.

Name	Type	Mandatory	Description
AttributeTimestamp2	DateTime	No	Indicates a segment of the user descriptive flexfield.
AttributeTimestamp3	DateTime	No	Indicates a segment of the user descriptive flexfield.
AttributeTimestamp4	DateTime	No	Indicates a segment of the user descriptive flexfield.
AttributeTimestamp5	DateTime	No	Indicates a segment of the user descriptive flexfield.
ContainerSize	Decimal	Conditionally required. Yes if PedigreeControlFlag = 1. Otherwise, No.	Indicates the number of units contained in a package of the product (For example, 60 or 100). This is also known as pack size.
ContainerType	String	No	Indicates the type of packaging container. This must be a valid value in the PAS_CONTAINER_TYPE lookup.
ControlledSubstanceFlag	String	No Default = 0	A flag used to indicate if this product is a controlled substance or not.

Name	Type	Mandatory	Description
CreateSerialsForShipFlag	String	No Default = 0	A flag used to indicate if the system will create serials in the Oracle Pedigree and Serialization Manager system at the time of shipment. Turn on when serials should not already exist and should be created. Turn off when serials should exist for a shipment transaction.
DosageForm	String	Conditionally required. Yes if PedigreeControlFlag = 1. Otherwise, No.	Indicates the dosage form of the product (For example, TABLET or CAPSULE). This must be a valid value in the PAS_DOSAGE_FORM lookup.
Manufacturer	String	Conditionally required. Yes if PedigreeControlFlag = 1. Otherwise, No.	Identifies the manufacturer for the product.
PedigreeControlFlag	String	No Default = 0	A flag used to indicate if a pedigree should be created for this product when it ships.

Name	Type	Mandatory	Description
ProductCategory	String	No	Identifies the category code for the product (For example, stimulants, depressants, anti-anxiety, and so on). This must be a valid value in the PAS_PRODUCT_CATEGORY lookup.
ProductCode	String	Yes	Identifies the product code.
ProductCodeType	String	Yes	Identifies the type of product code (For example, NDC442, NDC532, NDC541, NDC542, and GTIN). This must be a valid value in the PAS_PRODUCT_CODE_TYPE lookup.
ProductCodeVariant	String	Conditionally required: • If ProductCodeVariant = NOVARIANT this field is not required. Default = NOVARIANT. • If ProductCodeVariant not equal to NOVARIANT then the ProductCodeVariant is required.	Identifies the product code variant for the product. A unique key value used in case the Produce Code and Product Code Type do not uniquely identify the product.

Name	Type	Mandatory	Description
ProductName	String	Conditionally required. Yes if PedigreeControlFlag = 1. Otherwise, No.	Identifies the name of the product.
ProductOwningSrcSys	String	For internal use only.	Identifies the owning source system for the existing product record.
RecordInternalReturnFlag	String	No Default = 0	Flag to activate the recording of returns from internal customers for this product.
RecordInternalShipmentFlag	String	No Default = 0	Flag to activate the recording of shipments from internal customers for this product.
SerialControl	String	No Default = OPSM Serialized	Indicates if the serials for this product are generated by the OPSM system or if the serials are externally generated. Values are OPSM Serialized and Externally Generated.
Strength	String	Conditionally required. Yes if PedigreeControlFlag = 1. Otherwise, No.	Indicates the strength or potency for the product including the unit of measure (For example, 60 mg or 25 ml).

Product Details

Name	Type	Mandatory	Description
EpcCompanyPrefix	String	No	Identifies the Electronic Product Code (EPC) company prefix assigned to the product.
EpcFilter	String	Conditionally required. Yes if Serial Type = SGTIN-96 or SGTIN-198	Indicates the default filter to be used when building the epcGlobal serial number.
EpcNumber	String	Conditionally required. Yes if Serial Type = SGTIN-96 or SGTIN-198	Indicates the Electronic Product Code (EPC) number assigned to the product. EPC Number is required for SGTIN serial types or serial types that are associated to a serial type group where the Product Unit Identifier Formula is set to EPC Number. For products associated with a GTIN product code type, the system populates the EPC Number with the value in the Product Code field and it cannot be changed.

Name	Type	Mandatory	Description
LabelPrintFormat	String	No	Identifies the print label format for the product and packaging unit (For example, Barcode, RFID, and so on). This must be a valid value in the PAS_LABEL_PRINT_FORMAT lookup.
LowestSaleableUnitQuantity	Decimal	No	Identifies the total number of the lowest saleable units contained in this packaging unit.
ProdLevelRangeCtrlFlag	String	No Default is 0.	A flag used to indicate whether or not to use ranges when generating serials for product level serial types.
ProductDetailOwningSrcSys	String	For internal use only.	Identifies the owning source system for the existing product detail record.
ProductUom	String	Yes	Identifies the unit of measure for the product.
SerialIncrease	String	No Default is 0.	Indicates how many additional serials should be generated above the quantity/percent requested (For example, 5, 10, or 12).

Name	Type	Mandatory	Description
SerialIncreaseType	String	No Default is Percent.	Indicates the overage type for the amount of serials to be over generated. Values are PERCENT and AMOUNT.
SerialType	String	Yes	Indicates the type of serial that will be generated. This must be a valid value in the PAS_SERIAL_TYPE lookup.
Product Items			
ItemDescription	String	No	Identifies the description of the item number from the transactional system.
ItemNumber	String	Yes	Identifies the item number from the transactional system
ItemUom	String	Yes	Identifies the unit of measure of the item number as it exists in the transactional system.
SourceSystem	String	Yes	Indicates the item source (transactional system) from which this item originates. This must be a valid value in the PAS_SOURCE_SYSTEM lookup.

WSDL

oracle.apps.pas.setup.setupService.applicationModule.common.serviceinterface.ProductServiceAMService.wsdl

For detailed descriptions of all input and output parameters, please refer to the ProductServiceAMService.wsdl , page C-19for this web service.

SerialGenRequestServiceAMService (Inbound)

The Serial Generation Request web service is an inbound asynchronous business service part of the interoperability solution of the OPSM system. This service enables external systems to make requests for OPSM for serial generation.

Operation	Description
createSerialGenerationRequest createSerialGenerationRequestAsync	Used to create a new serial generation request within OPSM from an external system.
createProcessSerialGenerationRequest createProcessSerialGenerationRequestAsync	Used to create and process a new serial generation request within OPSM from an external system.

createSerialGenerationRequest and createSerialGenerationRequestAsync Operations

These operations are used to create a new serial generation request within OPSM from an external system. Requests can then be processed to generate serials for the product. Requests can be created for a quantity of serials as well as a starting and ending serial number. Do not send in both types, each request must be for either a quantity or a starting and ending range. An item or product may be passed in as well and up to two referencing documents.

Key Logic

- If GenerationStatus is sent in as SUBMITTED, the serial generation request will process automatically. If GenerationStatus is REQUESTED or blank, the system will capture the request for future processing. The user will need to submit the request manually using the Serial Generation Request page in OPSM.

- If the product and lot information is provided on the serial generation request, the serials will be generated as COMMISSIONED. If either the product or lot information is not provided, serials are generated as RESERVED.

- The Item information can be used to identify the product if the product and item cross reference has been set up in OPSM.

- Optionally, the lot will be created in OPSM using the information provided on the serial generation request. OPSM must be configured in the system parameters to allow the creation of the lot for serial generation and the lot cannot already exist in OPSM.

- A request must be made for either a quantity or a range of serials. Both cannot be entered.

- If a StartingSerialNumber is sent but no EndingSerialNumber, then only one serial number will be generated.

- If the location requires identification of the product or the serial type is product specific, the product detail record must be identified.

- The Lot Record can be identified by one of the following combinations listed in order of precedence:

  1. Identified by LotId

  2. Identified by LotSource, LotNumber, LotLocation, and ProductDetailId

  3. Identified by LotSource, LotNumber, and ProductDetailId (where LotLocation is null)

For information on manually submitting a serial generation request, see Submitting Serial Generation Requests, page 7-23.

Required Input

- SourceSystem

- SerialQuantity *or* StartingSerialNumber *or* StartingSerialNumber and EndingSerialNumber

- LocationId *or* Location

- If the location requires identification of the product for serial generation or the serial type is product specific, then the serial must be identified through one of the following combinations:

  - ProductDetailId

  - ProductCode, ProductCodeType, ProductCodeVariant, ProductUOM

  - ItemNumber, ItemSource, SerializedUOM

Exceptions

- Required parameters not passed.

- Invalid request, either a quantity or a range must be entered.
- Invalid lookup value:
  - Source System
  - Serial Usage
  - Generation Status
  - Product Code Type

createSerialGenerationRequest

Name	Type	Mandatory	Description
GenerationStatus	String	No	The initial status of the serial generation request can be set to SUBMITTED or REQUESTED. When set to SUBMITTED, the serial generation request will automatically be submitted for processing. When set to REQUESTED, processing of the serial generation request must be manually initiated. Valid values: REQUESTED, SUBMITTED. Default: REQUESTED. This must be a valid value in the PAS_GENERATION_STATUS lookup.

Name	Type	Mandatory	Description
SourceSystem	String	Yes	Identifies the source system initiating the serial generation request. The source system must match the source system on the Location setup in OPSM. This must be a valid value in the PAS_SOURCE_SYSTEM lookup.
SerialQuantity	Decimal	Conditional: One of the following combinations must be passed: • SerialQuantity • StartingSerialNumber • StartingSerialNumber and EndingSerialNumber	The quantity of serials requested.
StartingSerialNumber	Decimal	Conditional: One of the following combinations must be passed: • SerialQuantity • StartingSerialNumber • StartingSerialNumber and EndingSerialNumber	The starting serial number used to request a range of serials instead of a quantity. If a starting serial number is passed without an ending serial number, it is assumed that the request is for one serial number.

Name	Type	Mandatory	Description
EndingSerialNumber	Decimal	Conditional: One of the following combinations must be passed: • SerialQuantity • StartingSerialNumber • StartingSerialNumber and EndingSerialNumber	The ending serial number used to request a range of serials instead of a quantity.

Name	Type	Mandatory	Description
IgnoreOverageFlag	String	Yes	Indicates that the overage amount defined in the product detail definition should not be applied in the calculation of the quantity of serial to generate. Valid values: • 1 = Do not apply overage amount in the calculation of the quantity of serials for generation • 0 = Apply overage amount Default: 0. **Note:** When a serial generation request is created through the Work Order Serialization process, this flag is always set to "1" since the work order processing logic calculates the overage amount.
SaleableUnitFlag	String	No	Indicates that the generated serials should be flagged as saleable units. Default: 1.

Name	Type	Mandatory	Description
LocationId	Long	Conditional: Either the LocationId or Location is required.	Identifies the location that initiated the serial generation request.
Location	String	Conditional: Either the LocationId or Location is required.	Identifies the location that initiated the serial generation request.
SerialUsage	String	Yes	Identifies the serial usage. This must be a valid user defined value in the PAS_SERIAL_USAGE lookup.
ProductDetailId	Long	Conditional: If the location requires identification of the product or the serial type is product specific, one of the following combinations must be sent to identify the product detail: • ProductDetailId • ItemNumber, ItemSource, SerializedUOM or • ProductCode, ProductCodeType, ProductCodeVariant, and ProductUOM	Unique identifier for the Product Detail record. If the ProductDetailId is provided, the ProductDetailId will be used to locate the product detail record.

Name	Type	Mandatory	Description
ProductCode	String	Conditional: If the location requires identification of the product or the serial type is product specific, one of the following combinations must be sent to identify the product detail: • ProductDetailId • ItemNumber, ItemSource, SerializedUOM or • ProductCode, ProductCodeType, ProductCodeVariant, and ProductUOM	Identifies the product in OPSM. The product is uniquely identified using the ProductCode, ProductCodeType, ProductCodeVariant, and ProductUOM. If ProductDetailId, ProductCode, ProductCodeType, ProductCodeVariant and ProductUOM are all provided, ProductDetailId will take precedence in identifying the product.

Name	Type	Mandatory	Description
ProductCodeType	String	Conditional: If the location requires identification of the product or the serial type is product specific, one of the following combinations must be sent to identify the product detail: • ProductDetailId • ItemNumber, ItemSource, SerializedUOM or • ProductCode, ProductCodeType, ProductCodeVariant, and ProductUOM	Identifies the type of product code used in identification of the product in OPSM. If ProductDetailId, ProductCode, ProductCodeType, ProductCodeVariant and ProductUOM are all provided, ProductDetailId will take precedence in identifying the product. This must be a valid value in the PAS_PRODUCT_CODE_TYPE lookup.

Name	Type	Mandatory	Description
ProductCodeVariant	String	Conditional: If the location requires identification of the product or the serial type is product specific, one of the following combinations must be sent to identify the product detail: • ProductDetailId • ItemNumber, ItemSource, SerializedUOM or • ProductCode, ProductCodeType, ProductCodeVariant, and ProductUOM	Identifies the specific variation of the product code when a product code is reused for different products over time. If ProductDetailId, ProductCode, ProductCodeType, ProductCodeVariant and ProductUOM are all provided, ProductDetailId will take precedence in identifying the product. Default: NOVARIANT.

Name	Type	Mandatory	Description
ProductUom	String	Conditional: If the location requires identification of the product or the serial type is product specific, one of the following combinations must be sent to identify the product detail: • ProductDetailId • ItemNumber, ItemSource, SerializedUOM or • ProductCode, ProductCodeType, ProductCodeVariant, and ProductUOM	Identifies the product packaging unit where a specified product code is used for multiple packaging levels. If ProductDetailId, ProductCode, ProductCodeType, ProductCodeVariant and ProductUOM are all provided, ProductDetailId will take precedence in identifying the product.

Name	Type	Mandatory	Description
ItemNumber	String	Conditional: If the location requires identification of the product or the serial type is product specific, one of the following combinations must be sent to identify the product detail: • ProductDetailId • ItemNumber, ItemSource, SerializedUOM or • ProductCode, ProductCodeType, ProductCodeVariant, and ProductUOM	Identifies the item number in the transactional system that is cross referenced to a product within OPSM. If Item information and Product information are both provided, the Product information will take precedence in identifying the product.

Name	Type	Mandatory	Description
ItemSource	String	Conditional: If the location requires identification of the product or the serial type is product specific, one of the following combinations must be sent to identify the product detail: • ProductDetailId • ItemNumber, ItemSource, SerializedUOM or • ProductCode, ProductCodeType, ProductCodeVariant, and ProductUOM	Identifies the source system related to the item number. Item source is used to cross reference the item specific to a source system to identify the product in OPSM. If Item information and Product information are both provided, the Product information will take precedence in identifying the product.

Name	Type	Mandatory	Description
SerializedUom	String	Conditional: If the location requires identification of the product or the serial type is product specific, one of the following combinations must be sent to identify the product detail: • ProductDetailId • ItemNumber, ItemSource, SerializedUOM or • ProductCode, ProductCodeType, ProductCodeVariant, and ProductUOM	Identifies the item UOM in the transactional system that is cross referenced to the product packaging unit in OPSM.
LotId	Long	No	Unique identifier for the lot in OPSM.
LotLocation	String	No	The location associated with the lot.
LotSource	String	No	The Source System associated with the lot.

Name	Type	Mandatory	Description
LotNumber	String	No	Lot number associated to the lot. The LotNumber, LotLocation, and ProductDetailId are used to uniquely identify the lot number to be created or updated if the LotId is not provided.
ParentLot	String	No	Identifies the parent lot number associated with the lot.
OriginationDate	Date	No	The origination date of the lot. Origination date is used to create the lot when OPSM is configured to allow creation of the lot when the transaction is processed and the lot does not already exist.
ExpirationDate	Date	No	The expiration date of the lot. Expiration date is used to create the lot when OPSM is configured to allow creation of the lot when the transaction is processed and the lot does not already exist.

Name	Type	Mandatory	Description
BestByDate	Date	No	The lot best by date. Best by date is used to create the lot when OPSM is configured to allow creation of the lot when the transaction is processed and the lot does not already exist.
SellByDate	Date	No	The lot sell by date. Sell by date is used to create the lot when OPSM is configured to allow creation of the lot when the transaction is processed and the lot does not already exist.
RetestDate	Date	No	The lot retest date. Retest date is used to create the lot when OPSM is configured to allow creation of the lot when the transaction is processed and the lot does not already exist.
Segment1	String	No	Identifies the 1st segment of the document (Document Organization) used as reference when commissioning the serials.

Name	Type	Mandatory	Description
Segment2	String	No	Identifies the 2nd segment of the document (Document Number) used as reference when commissioning the serials.
Segment3	String	No	Identifies the 3rd segment of the document (Document Type) used as reference when commissioning the serials.
Segment4	String	No	Identifies the 4th segment of the document (Document Line Number) used as a reference when commissioning serials.
Segment5	String	No	Identifies the 5th segment of the document used as a reference when commissioning serials.
Segment6	String	No	Identifies the 6th segment of the document used as a reference when commissioning serials.
Segment7	String	No	Identifies the 7th segment of the document used as a reference when commissioning serials.

Name	Type	Mandatory	Description
Segment8	String	No	Identifies the 8th segment of the document used as a reference when commissioning serials.
Segment9	String	No	Identifies the 9th segment of the document used as a reference when commissioning serials.
Segment10	String	No	Identifies the 10th segment of the document used as a reference when commissioning serials.
AlternateSegment1	String	No	Identifies the 1st (Document Organization) segment of the alternate document used as a reference when commissioning the serials.
AlternateSegment2	String	No	Identifies the 2nd (Document Number) segment of the alternate document used as a reference when commissioning the serials.
AlternateSegment3	String	No	Identifies the 3rd (Document Type) segment of the alternate document used as a reference when commissioning the serials.

Name	Type	Mandatory	Description
AlternateSegment4	String	No	Identifies the 4th (Document Line Number) segment of the alternate document used as a reference when commissioning the serials.
AlternateSegment5	String	No	Identifies the 5th segment of the alternate document used as a reference when commissioning the serials.
AlternateSegment6	String	No	Identifies the 6th segment of the alternate document used as a reference when commissioning the serials.
AlternateSegment7	String	No	Identifies the 7th segment of the alternate document used as a reference when commissioning the serials.
AlternateSegment8	String	No	Identifies the 8th segment of the alternate document used as a reference when commissioning the serials.
AlternateSegment9	String	No	Identifies the 9th segment of the alternate document used as a reference when commissioning the serials.

Name	Type	Mandatory	Description
AlternateSegment10	String	No	Identifies the 10th segment of the alternate document used as a reference when commissioning the serials.

createProcessSerialGenerationRequest and createProcessSerialGenerationRequestAsync Operations

These operations are used to create and process a new serial generation request within OPSM from an external system. Though the asynchronous version, createProcessSerialGenerationRequestAsync, is available only the synchronous version, createProcessSerialGenerationRequest, is supported. These operations differ from the createSerialGenerationRequest and the createSerialGenerationRequestAsync operations in that a separate step for submitting the request for processing is not needed. The xml elements for both the createProcessSerialGenerationRequest and the createSerialGenerationRequest are identical other than the type of the request. Requests can be created for a quantity of serials as well as a starting and ending serial number. Do not send in both types, each request must be for either a quantity or a starting and ending range. An item or product may be passed in as well and up to two referencing documents.

Key Logic

- Irrespective of the GenerationStatus in the request xml, it will be overwritten with a new status SYNC_REQ_SUBMITTED and the request will be processed immediately. The user need not submit the request manually using the Maintain Serial Generation Request page in OPSM.

- If the product and lot information is provided on the serial generation request, the serials will be generated as COMMISSIONED. If either the product or lot information is not provided, serials are generated as RESERVED.

- The Item information can be used to identify the product if the product and item cross reference has been set up in OPSM.

- Optionally, the lot will be created in OPSM using the information provided on the serial generation request. OPSM must be configured in the system parameters to allow the creation of the lot for serial generation and the lot cannot already exist in OPSM.

- A request must be made for either a quantity or a range of serials. Both cannot be entered.

- If a StartingSerialNumber is sent but no EndingSerialNumber, then only one serial number will be generated.
- If the location requires identification of the product or the serial type is product specific, the product detail record must be identified.
- The Lot Record can be identified by one of the following combinations listed in order of precedence:
  1. Identified by LotId
  2. Identified by LotSource, LotNumber, LotLocation, and ProductDetailId
  3. Identified by LotSource, LotNumber, and ProductDetailId (where LotLocation is null)

Required Input

- SourceSystem
- SerialQuantity *or* StartingSerialNumber *or* StartingSerialNumber and EndingSerialNumber
- LocationId *or* Location
- If the location requires identification of the product for serial generation or the serial type is product specific, then the serial must be identified through one of the following combinations:
  - ProductDetailId
  - ProductCode, ProductCodeType, ProductCodeVariant, ProductUOM
  - ItemNumber, ItemSource, SerializedUOM

Exceptions

- The exceptions are same as that for the createSerialGenerationRequest. In addition, a status message is returned back when there are errors or warnings as described below.

createProcessSerialGenerationRequest

The request xml for createProcessSerialGenerationRequest is the same as that for createSerialGenerationRequest except for:

Name	Type	Mandatory	Description
GenerationStatus	String	No	Irrespective of the GenerationStatus in the request xml, it will be overwritten with a new status SYNC_REQ_SUBMITTED and the request will be processed immediately. Values are: Any lookup value in the PAS_GENERATION_STATUS lookup type. Default value is: SYNC_REQ_SUBMITTED.

The createProcessSerialGenerationRequest returns a response xml back which has most of the elements in the request xml. The values are queried from the serial generation record after the processing is done. SerialGenerationRequestResponse has the following additional elements:

Name	Type	Description
EpcNumber	String	The EpcNumber from the Product Detail record.
GlobalLocationNumber	String	The GlobalLocationNumber from the Location record.

Name	Type	Description
StatusMessage	String	When there are errors, the following message is returned: No serials were generated. See the Maintain Serial Generation Request page in OPSM for details. When there are warnings, the following message is returned: Warning messages were generated during serial generation. See the Maintain Serial Generation Request page in OPSM for details. When there are no errors or warnings, no message is returned.

SerialGenerationRequestResponse has a child element SerialNumberList which is a list of serial numbers generated.

WSDL

oracle.apps.pas.transactions.serialGenRequestService.applicationModule.common.serviceinterface.SerialGenRequestServiceAMService.wsdl

For detailed descriptions of all input and output parameters, please refer to the SerialGenRequestServiceAMService wsdl, page C-22 for this web service.

SerialsServiceAMService (Inbound)

These are inbound services into the OPSM system that are used to update the status and usage of one or multiple serials. Common uses for this service are to commission or decommission serials, change the serial usage, and mark serials as counterfeit. The serials can be selected based on various attributes such as, primary document number, label, and list. All serials contained within the selection will be updated with the passed serial attributes. If an attribute is not passed, then its value will not be changed.

For each serial status and usage update performed, the Serials Service web service will create a transaction. The transactions that can be created by this web service are:

- Commission Transaction

  Serial status updated to Commission.

- Decommission Transaction

Serial status updated to Decommission.

- Reserve Transaction

  Serial status updated to Reserve.

- Edit Serial Transaction

  If any other attributes are updated and do not cause the serial status to be updated, then the update will be an Edit Serial transaction. For example, changing counterfeit status.

All of the transactions that are created by the Serials Service web service can be viewed and maintained using the Maintain Transactions page in OPSM.

For more information on managing transactions in OPSM, see Understanding Transactions, page 10-1.

Operation	Description
editSerialStatusAndUsageByLabel editSerialStatusAndUsageByLabelAsync	These operations will update serial status, serial usage, and counterfeit status information for a given Label and LabelType combination and will utilize packaging hierarchy to update the top level serial for the given label and label type and any serial that is packed within it. A Commission Serials, Decommission Serials, Reserve Serials, or Edit Serials transaction will be created depending on the type of edit performed.
editSerialStatusAndUsageByPrimaryDocument editSerialStatusAndUsageByPrimaryDocumentAsync	These operations will update serial status, serial usage, and counterfeit status information for a group of serial numbers identified by their primary document. These operations also support the commissioning of serials. A Commission Serials, Decommission Serials, Reserve Serials, or Edit Serials transaction will be created depending on the type of edit performed.

Operation	Description
editSerialStatusAndUsageByList editSerialStatusAndUsageByListAsync	These operations will update serial status, serial usage, and counterfeit status information for a given list of serial numbers. These operations also support the commissioning of serials. A Commission Serials, Decommission Serials, Reserve Serials, or Edit Serials transaction will be created depending on the type of edit performed.

editSerialStatusAndUsageByLabel and editSerialStatusAndUsageByLabelAsync Operations

These operations will update serial status, serial usage, and counterfeit status information for a Label and LabelType combination and will utilize packaging hierarchy to update the top level serial for the given Label and LabelType and any serial that is packed within it. These operations are performed only against existing serial numbers. A Decommission Serials or Edit Serials transaction will be created depending on the type of edit performed.

Key Logic

- Updating Serials
    - Serials that will be updated are identified by the primary Label and LabelType of the serial or a higher level packaging level. All serials within the packaging hierarchy will be updated.
    - Serials will be updated with the value of the attributes that are passed. If no value is passed for an attribute, that attribute will not be updated.
    - Decommission Serials transactions are created when processing of the input data causes the serial status on a serial to be updated to Decommissioned.
    - Edit Serials transactions are created when processing of the input data causes other attributes on a serial to be updated but not the serial status.
- Decommissioning
    - ReasonCode is required if changing SerialStatus to DECOMMISSIONED.
- Updating Serial Usage, Counterfeit Status, and Counterfeit Date
    - SerialUsage, CounterfeitStatus, and CounterfeitDate can be updated at any time even after the serial has been shipped or decommissioned.

    - Specifying a CounterfeitDate is optional when flagging the serial as counterfeit.

- Updating Product Information
    - Product information is only available for update if the Serial Type is defined as non-product specific, and the Serial State is not SHIPPED or RETURNED.

Required Input

- Label and LabelType must be the primary identifier of the package.

  The package can be a higher level container, a higher level packaging unit, or a higher level assembly.

- TransactionSourceName is the source system for the transaction.

Exceptions

- Required input is not received.
- SerialStatus value is invalid:
    - COMMISSIONED
    - RESERVED
- ReasonCode is required if changing serial status to DECOMMISSIONED.
- Serials cannot be found for Label and LabelType.
- Counterfeit date cannot be in the future.
- Lookup value is invalid:
    - Label Type
    - Serial Status
    - Reason Code
    - Serial Usage
    - Counterfeit Status
    - Transaction Source Name

Restrictions

This service does not support reserving or commissioning of serials (SerialStatus = RESERVED or SerialStatus = COMMISSIONED).

This service does not support updating serials based on the alternate packaging Label

and LabelType.

editSerialStatusandUsageByLabel

Name	Type	Mandatory	Description
Label	String	Yes	Identifies the primary identifier used for selection of the serials that will be updated.
LabelType	String	Yes	Identifies the type of primary identifier used for selection of the serials that will be updated. For example, SGTIN-96. This must be a valid user defined value in the PAS_LABEL_TYPE lookup.
TransactionSourceName	String	Yes	Identifies the system source name for the transaction. This must be a valid user defined value in the PAS_SOURCE_SYSTEM lookup.
SerialStatus	String	No	Identifies the status that will be used for updating the selected serials. This must be a valid status in the PAS_SERIAL_STATUS lookup.

Name	Type	Mandatory	Description
ReasonCode	String	Conditional: Required if the SerialStatus is DECOMMISSIONED.	Identifies the reason code on a decommissioned serial. This must be a valid user defined value in the PAS_REASON_CODE lookup.
SerialUsage	String	No	Identifies the serial usage. This must be a valid user defined value in the PAS_SERIAL_USAGE lookup.
CounterfeitStatus	String	No	Identifies the serial as COUNTERFEIT, NOTCOUNTERFEIT, or SUSPECT.
CounterfeitDate	Date	No	Notes the date of the counterfeit status.

editSerialStatusAndUsageByPrimaryDocument and editSeialStatusAndUsageByPrimaryDocumentAsync Operations

These operations will update SerialStatus, SerialUsage, and CounterfeitStatus information for a group of serial numbers identified by their primary document. These operations also support the commissioning of serials. These operations are performed only against existing serial numbers.

These operations will also create transactions in OPSM for every web service call. You can view the transactions and their status using the Maintain Transactions page in OPSM. If the web service ends in error then error messages are recorded in the database and they can be viewed on the Maintain Transactions page in OPSM.

These operations return a response XML back which has most of the elements in the request XML along with the generic error message if there are any errors that occur during processing. A Reserve Serials, Commission Serials, Decommission Serials, or Edit Serials transaction will be created depending on the type of edit performed.

Key Logic

- Updating Serials
  - Serials that will be updated are identified by the Segments of the primary document.
  - Serials will be updated with the value of the attributes that are passed. If no value is passed for an attribute, that attribute will not be updated.
- Updating Serial Usage, Counterfeit Status, and Counterfeit Date
  - SerialUsage, CounterfeitStatus, and CounterfeitDate can be updated at any time even after the serial has been shipped or decommissioned.
  - Specifying a CounterfeitDate is optional when flagging the serial as counterfeit.
- Updating Product Information
  - Product information is only available for update if the Serial Type is defined as non-product specific and the Serial Statue is not SHIPPED or RETURNED.
- Commissioning
  - Product and lot information is required.
  - If the product and lot are identified on the serial, the SerialStatus will be updated to COMMISSIONED.
  - The identified lot must be for the given product. The lot must already be defined within OPSM.
  - The service will not update serials with a state of SHIPPED or RETURNED or a status of DECOMMISSIONED.
  - If the Serial State is SHIPPED or RETURNED, the product or lot information cannot be updated.
  - The lot associated to the serial can be modified if the serial is not shipped or the serial has been returned.
- Decommissioning
  - ReasonCode is required if changing SerialStatus to DECOMMISSIONED.

Required Input

- Segment2 (Primary Document Number)
- Segment3 (Primary Document Type)

- TransactionSourceName (Source system for the transaction)

The primary document information on the serial is the document information recorded on the serial when the serial is generated. Identification of the primary document information at serial generation is optional. Therefore, serials may not contain a primary document identifier if it is not part of the standard business process.

Exceptions

- Required input is not received.
- Required input is received but the serials corresponding to the primary document cannot be found in OPSM.
- ProductCode only is provided and multiple product records are found in OPSM.
- ProductDetailID is provided but no corresponding record can be found in OPSM.
- ProductUom is provided and does not exist in lookup PAS_PRODUCT_UOM and ProductDetailID is not provided.
- Product information (ProductCode, ProductCodeType, ProductCodeVariant, and ProductUom) is received but there are no matching records found in OPSM.
- Counterfeit date cannot be in the future.
- ReasonCode is required if changing SerialStatus to DECOMMISSIONED.
- Serials for Primary Document Number and Document Type cannot be found.
- Lot does not exist.
- Lookup value is invalid:
    - Serial Status
    - Reason Code
    - Serial Usage
    - Counterfeit Status
    - Product Code Type
    - Product Unit of Measure (UOM)
    - Transaction Source Name

Restrictions

- This service does not support updating serials based on the non-primary Document

Number and Document Type.

editSerialStatusAndUsageByPrimaryDocument

Name	Type	Mandatory	Description
Segment1	String	No	Identifies the 1st segment (Document Organization) of the primary document for selection of serials.
Segment2	String	Yes	Identifies the 2nd segment (Document Number) of the primary document for selection of serials.
Segment3	String	Yes	Identifies the 3rd segment (Document Type) of the primary document for selection of serials. If Segment3 (Document Type) does not exist in the lookup PAS_DOCUMENT_TYPE then it will be added to this lookup and a message will be sent informing you about this.
Segment4	String	No	Identifies the 4th segment (Document Line Number) of the primary document for selection of serials.
Segment5	String	No	Identifies the 5th segment of the primary document for selection of serials.

Name	Type	Mandatory	Description
Segment6	String	No	Identifies the 6th segment of the primary document for selection of serials.
Segment7	String	No	Identifies the 7th segment of the primary document for selection of serials.
Segment8	String	No	Identifies the 8th segment of the primary document for selection of serials.
Segment9	String	No	Identifies the 9th segment of the primary document for selection of serials.
Segment10	String	No	Identifies the 10th segment of the primary document for selection of serials.
TransactionSourceName	String	Yes	Identifies the system source name for the transaction. This must be a valid user defined value in the PAS_SOURCE_SYSTEM lookup.

Name	Type	Mandatory	Description
OnlyReservedSerials	String	No	Indicates that only serials that are at a RESERVED status should be selected for update. Valid values: 1 = Reserve Serial Only, 0 = All Statuses. Default: 0.
SerialStatus	String	No	Identifies the status that will be used for updating the selected serials. This must be a valid status in the PAS_SERIAL_STATUS lookup.
ReasonCode	String	Conditional: Required if the SerialStatus is DECOMMISSIONED.	Identifies the reason code on a decommissioned serial. This must be a valid user defined value in the PAS_REASON_CODE lookup.
SerialUsage	String	No	Identifies the serial usage. This must be a valid user defined value in the PAS_SERIAL_USAGE lookup.
CounterfeitStatus	String	No	Identifies the serial as COUNTERFEIT, NOTCOUNTERFEIT, or SUSPECT.

Name	Type	Mandatory	Description
CounterfeitDate	Date	No	Notes the date of the counterfeit status.
ProductDetailId	Long	Conditional: One of the following combinations is required to identify the product when updating the SerialStatus to COMMISSIONED: • ProductDetailId • ProductCode, ProductCodeType, ProductCodeVariant, and ProductUom	Unique identifier for the Product Detail record. If the ProductDetailId is provided, the ProductDetailId will be used to locate the product detail record.
ProductCode	String	Conditional: One of the following combinations is required to identify the product when updating the SerialStatus to COMMISSIONED: • ProductDetailId • ProductCode, ProductCodeType, ProductCodeVariant, and ProductUom	Identifies the product in OPSM. The product is uniquely identified using the ProductCode, ProductCodeType, ProductCodeVariant, and ProductUom. If ProductDetailId, ProductCode, ProductCodeType, ProductCodeVariant and ProductUom are all provided, ProductDetailId will take precedence in identifying the product.

Name	Type	Mandatory	Description
ProductCodeType	String	Conditional: One of the following combinations is required to identify the product when updating the SerialStatus to COMMISSIONED: • ProductDetailId • ProductCode, ProductCodeType, ProductCodeVariant, and ProductUom	Identifies the type of product code used in identification of the product in OPSM. If ProductDetailId, ProductCode, ProductCodeType, ProductCodeVariant and ProductUom are all provided, ProductDetailId will take precedence in identifying the product. This must be a valid value in the PAS_PRODUCT_CODE_TYPE lookup.
ProductCodeVariant	String	Conditional: One of the following combinations is required to identify the product when updating the SerialStatus to COMMISSIONED: • ProductDetailId • ProductCode, ProductCodeType, ProductCodeVariant, and ProductUom	Identifies the specific variation of the product code when a product code is reused for different products over time. If ProductDetailId, ProductCode, ProductCodeType, ProductCodeVariant and ProductUom are all provided, ProductDetailId will take precedence in identifying the product. Default: NOVARIANT.

Name	Type	Mandatory	Description
ProductUom	String	Conditional: One of the following combinations is required to identify the product when updating the SerialStatus to COMMISSIONED: • ProductDetailId • ProductCode, ProductCodeType, ProductCodeVariant, and ProductUom	Identifies the product packaging unit where a specified product code is used for multiple packaging levels. If ProductDetailId, ProductCode, ProductCodeType, ProductCodeVariant, and ProductUom are all provided, ProductDetailId will take precedence in identifying the product.
LotId	Long	Conditional: One of the following combinations is required to identify the lot when updating the SerialStatus to COMMISSIONED: • LotId • LotNumber, LotSource, LotLocation	Unique identifier for the Lot record in OPSM. If the LotId is provided, the LotId will be used to locate the lot record.

Name	Type	Mandatory	Description
LotNumber	String	Conditional: One of the following combinations is required to identify the lot when updating the SerialStatus to COMMISSIONED: • LotId • LotNumber, LotSource, LotLocation	Lot number associated to the lot. The LotNumber, LotSource, LotLocation, and ProductDetailId are used to uniquely identify the lot number to be created or updated if the LotId is not provided. If LotId, LotNumber, LotSource and LotLocation are all provided, LotId will take precedence in identifying the lot.
LotSource	String	Conditional: One of the following combinations is required to identify the lot when updating the SerialStatus to COMMISSIONED: • LotId • LotNumber, LotSource, LotLocation	The source system associated to the lot. If LotId, LotNumber, LotSource and LotLocation are all provided, LotId will take precedence in identifying the lot. This must be a valid value in the PAS_SOURCE_SYSTEM lookup.

Name	Type	Mandatory	Description
LotLocation	String	Conditional: One of the following combinations is required to identify the lot when updating the SerialStatus to COMMISSIONED: • LotId • LotNumber, LotSource, LotLocation	The location associated to the lot. The location can be null if the source system does not associate a location reference to the lot information. If LotId, LotNumber, LotSource and LotLocation are all provided, LotId will take precedence in identifying the lot. This must be a valid location defined in OPSM.
CommissionSegment 1	String	No	Identifies the 1st segment of the document (Document Organization) used as reference when commissioning the serials.
CommissionSegment 2	String	No	Identifies the 2nd segment of the document (Document Number) used as reference when commissioning the serials.

Name	Type	Mandatory	Description
CommissionSegment 3	String	No	Identifies the 3rd segment of the document (Document Type) used as reference when commissioning the serials. If CommissionSegment 3 (Document Type) does not exist in the lookup PAS_DOCUMENT_TYPE then it will be added to this lookup and a message will be sent informing you about this.
CommissionSegment 4	String	No	Identifies the 4th segment of the document used as a reference when commissioning serials.
CommissionSegment 5	String	No	Identifies the 5th segment of the document used as a reference when commissioning serials.
CommissionSegment 6	String	No	Identifies the 6th segment of the document used as a reference when commissioning serials.

Name	Type	Mandatory	Description
CommissionSegment 7	String	No	Identifies the 7th segment of the document used as a reference when commissioning serials.
CommissionSegment 8	String	No	Identifies the 8th segment of the document used as a reference when commissioning serials.
CommissionSegment 9	String	No	Identifies the 9th segment of the document used as a reference when commissioning serials.
CommissionSegment 10	String	No	Identifies the 10th segment of the document used as a reference when commissioning serials.

editSerialStatusAndUsageByList and editSerialStatusAndUsageByListAsync Operations

These operations will update SerialStatus, SerialUsage, and CounterfeitStatus information for a given list of serial numbers. These operations also support the commissioning of serials. These operations are performed only against existing serial numbers. A Reserve Serials, Commission Serials, Decommission Serials, or Edit Serials transaction will be created depending on the type of edit performed.

Key Logic

- Updating Serials
  - Serials that will be updated are identified by a list of one or more ItemSerialNumbers.
  - Serials are checked for uniqueness using this criteria:

        - Serial Type and Item Serial Number if the serial type is a standard type.
        - Item Serial Number if the product information is not passed. In this case, if there are multiple serials with the same item serial number, the duplicate serials exception will be created.
        - Product Code and Item Serial Number if the serial type is a custom type.
    - Serials will be updated with the value of the attributes that are passed. If no value is passed for an attribute, that attribute will not be updated.

- Updating Serial Usage, Counterfeit Status, and Counterfeit Date
    - SerialUsage, CounterfeitStatus, and CounterfeitDate can be updated at any time even after the serial has been shipped or decommissioned.
    - Specifying a CounterfeitDate is optional when flagging the serial as counterfeit.

- Updating Product Information
    - Product information is only available for update if the Serial Type is defined as non-product specific and the Serial State is not SHIPPED or RETURNED.

- Commissioning
    - Product and lot information are required.
    - If the product and lot are identified on the serial, the SerialStatus will be updated to COMMISSIONED.
    - The identified lot must be for the given product. The lot must already be defined within OPSM.
    - The service will not update serials with a Serial State of SHIPPED or RETURNED, or a SerialStatus of DECOMMISSIONED.
    - If the Serial State is SHIPPED or RETURNED, the product or lot information cannot be updated.
    - The lot associated to the serial can be modified if the serial is not shipped or the serial has been returned.

- Decommissioning
    - ReasonCode is required if changing SerialStatus to DECOMMISSIONED.

Required Input

- One or more ItemSerialNumbers must be identified.
- TransactionSourceName (source system for the transaction) must be identified.

Exceptions

- Required input is not received.
- ReasonCode is required if changing SerialStatus to DECOMMISSIONED.
- Serials were not identified for update.
- ProductCode is invalid.
- Lot does not exist.
- LotLocationId is provided and it does not exist in OPSM.

  Note: This validation is only executed when LotId is not provided and LotLocation is provided.

- ProductCode only is provided and multiple product records are found in OPSM.
- Product information (ProductCode, ProductCodeType, ProductCodeVariant, and ProductUom) is provided and there are no matching records in OPSM.
- ProductDetailId is provided and no corresponding record is found in OPSM.
- ProductUom is provided and does not exist in lookup PAS_PRODUCT_UOM and the ProductDetailId is not provided.
- Counterfeit date cannot be in the future.
- Lookup value is invalid:
  - Serial Status
  - Reason Code
  - Serial Usage
  - Counterfeit Status
  - Product Unit of Measure (UOM)
  - Transaction Source Name

Restrictions

No Restrictions

editSerialStatusAndUsageByList

Name	Type	Mandatory	Description
SerialStatus	String	No	Identifies the status that will be used for updating the selected serials. This must be a valid status in the PAS_SERIAL_STATUS lookup.
ReasonCode	String	Conditional: Required if the SerialStatus is DECOMMISSIONED.	Identifies the reason code on a decommissioned serial. This must be a valid user defined value in the PAS_REASON_CODE lookup.
SerialUsage	String	No	Identifies the serial usage. This must be a valid user defined value in the PAS_SERIAL_USAGE lookup.
CounterfeitStatus	String	No	Identifies the serial as COUNTERFEIT, NOTCOUNTERFEIT, or SUSPECT.
CounterfeitDate	Date	No	Notes the date of the counterfeit status.

Name	Type	Mandatory	Description
ProductDetailId	Long	Conditional: One of the following combinations is required to identify the product when updating the SerialStatus to COMMISSIONED: • ProductDetailId • ProductCode, ProductCodeType, ProductCodeVariant, and ProductUOM	Unique identifier for the Product Detail record. If the ProductDetailId is provided, the ProductDetailId will be used to locate the product detail record.
ProductCode	String	Conditional: One of the following combinations is required to identify the product when updating the SerialStatus to COMMISSIONED: • ProductDetailId • ProductCode, ProductCodeType, ProductCodeVariant, and ProductUOM	Identifies the product in OPSM. The product is uniquely identified using the ProductCode, ProductCodeType, ProductCodeVariant, and ProductUOM. If ProductDetailId, ProductCode, ProductCodeType, ProductCodeVariant and ProductUOM are all provided, ProductDetailId will take precedence in identifying the product.

Name	Type	Mandatory	Description
ProductCodeType	String	Conditional: One of the following combinations is required to identify the product when updating the SerialStatus to COMMISSIONED: • ProductDetailId • ProductCode, ProductCodeType, ProductCodeVariant, and ProductUOM	Identifies the type of product code used in identification of the product in OPSM. If ProductDetailId, ProductCode, ProductCodeType, ProductCodeVariant and ProductUOM are all provided, ProductDetailId will take precedence in identifying the product. This must be a valid value in the PAS_PRODUCT_CODE_TYPE lookup.
ProductCodeVariant	String	Conditional: One of the following combinations is required to identify the product when updating the SerialStatus to COMMISSIONED: • ProductDetailId • ProductCode, ProductCodeType, ProductCodeVariant, and ProductUOM	Identifies the specific variation of the product code when a product code is reused for different products over time. If ProductDetailId, ProductCode, ProductCodeType, ProductCodeVariant and ProductUOM are all provided, ProductDetailId will take precedence in identifying the product. Default: NOVARIANT.

Name	Type	Mandatory	Description
ProductUOM	String	Conditional: One of the following combinations is required to identify the product when updating the SerialStatus to COMMISSIONED: • ProductDetailId • ProductCode, ProductCodeType, ProductCodeVariant, and ProductUOM	Identifies the product packaging unit where a specified product code is used for multiple packaging levels. If ProductDetailId, ProductCode, ProductCodeType, ProductCodeVariant and ProductUOM are all provided, ProductDetailId will take precedence in identifying the product.
LotId	Long	Conditional: One of the following combinations is required to identify the lot when updating the SerialStatus to COMMISSIONED: • LotId • LotNumber, LotSource, LotLocation	Unique identifier for the Lot record in OPSM. If the LotId is provided, the LotId will be used to locate the lot record.

Name	Type	Mandatory	Description
LotNumber	String	Conditional: One of the following combinations is required to identify the lot when updating the SerialStatus to COMMISSIONED: • LotId • LotNumber, LotSource, LotLocation	Lot number associated to the lot. The LotNumber, LotSource, LotLocation, and ProductDetailId are used to uniquely identify the lot number to be created or updated if the LotId is not provided. If LotId, LotNumber, LotSource and LotLocation are all provided, LotId will take precedence in identifying the lot.
LotSource	String	Conditional: One of the following combinations is required to identify the lot when updating the SerialStatus to COMMISSIONED: • LotId • LotNumber, LotSource, LotLocation	The source system associated to the lot. If LotId, LotNumber, LotSource and LotLocation are all provided, LotId will take precedence in identifying the lot. This must be a valid value in the PAS_SOURCE_SYSTEM lookup.

Name	Type	Mandatory	Description
LotLocation	String	Conditional: One of the following combinations is required to identify the lot when updating the SerialStatus to COMMISSIONED: • LotId • LotNumber, LotSource, LotLocation	The location associated to the lot. The location can be null if the source system does not associate a location reference to the lot information. If LotId, LotNumber, LotSource and LotLocation are all provided, LotId will take precedence in identifying the lot. This must be a valid location defined in OPSM.
LotLocationID	String	No	The lot location Id associated to the lot location.
TransactionSourceName	String	Yes	Identifies the source name for the transaction. This must be a valid user defined value in the PAS_SOURCE_SYSTEM lookup.
CommissionSegment1	String	No	Identifies the 1st segment of the document (Document Organization) used as reference when commissioning the serials.

Name	Type	Mandatory	Description
CommissionSegment 2	String	No	Identifies the 2nd segment of the document (Document Number) used as reference when commissioning the serials.
CommissionSegment 3	String	No	Identifies the 3rd segment of the document (Document Type) used as reference when commissioning the serials. If CommissionSegment 3 (Document Type) does not exist in the lookup PAS_DOCUMENT_TYPE then it will be added to this lookup and a message will be sent informing you about this.
CommissionSegment 4	String	No	Identifies the 4th segment of the document (Document Line Number) used as a reference when commissioning serials.
CommissionSegment 5	String	No	Identifies the 5th segment of the document used as a reference when commissioning serials.

Name	Type	Mandatory	Description
CommissionSegment 6	String	No	Identifies the 6th segment of the document used as a reference when commissioning serials.
CommissionSegment 7	String	No	Identifies the 7th segment of the document used as a reference when commissioning serials.
CommissionSegment 8	String	No	Identifies the 8th segment of the document used as a reference when commissioning serials.
CommissionSegment 9	String	No	Identifies the 9th segment of the document used as a reference when commissioning serials.
CommissionSegment 10	String	No	Identifies the 10th segment of the document used as a reference when commissioning serials.

SerialsListVO

Name	Type	Mandatory	Description
ItemSerialNumber	String	Yes	Identifies the serials that will be updated by the operation.

WSDL

oracle.apps.pas.serials.serialsService.applicationModule.common.serviceinterface.SerialsServiceAMService.wsdl

For detailed descriptions of all input and output parameters, please refer to the SerialsServiceAMService wsdl, page C-27 for this web service.

TransactionsServiceAMService (Inbound)

The Transaction web service is an inbound asynchronous business service part of the interoperability solution of the OPSM system. This service enables external systems to record an import, shipment, or return transaction into the OPSM system. In addition, the system shall optionally enable:

- Creating serials in OPSM at time of shipment (The OPSM system must be configured on the Product or Product Location Overrides to "Create Serials for Shipments".)

  For information on maintaining products, see Maintaining Products and Item Cross Reference, page 4-78.

- Commissioning the serials at time of shipment.

- Creating lots on a shipment, return, or import transaction (The OPSM System Parameters must be configured to "Allow Lot Creation" by transaction type.)

  For information on maintaining system parameters, see Maintaining System Parameters, page 4-23.

- Updating packaging hierarchy in OPSM at time of shipment or return.

- Transmitting serials to centralized serials databases on a shipment, return, or import (Serial Destination Rules must be defined for transmission of the serials).

  For information on defining serial destination rules, see Maintaining Serial Destinations and Destination Rules, page 4-191.

- Recording the shipment or return to an internal customer (The OPSM system must be configured on the Product or Product Location Overrides to "Record Internal Shipments" or "Record Internal Returns").

  For information on maintaining products, see Maintaining Products and Item Cross Reference, page 4-78.

Operation	Description
createTransaction createTransactionAsync	The createTransaction request will create a SHIPMENT, RETURN, or IMPORT transaction in OPSM. After the transaction is created, a business event is triggered to automatically process the newly created transaction.

createTransaction and createTransactionAsync Operations

These operations are used to create a shipment, return, or import transaction in OPSM.

Key Logic

- The TransactionSourceName must be the source system identified on the location defined in OPSM.
- Lot Validation and Creation
  - If Allow Lot Creation for the specific transaction type is configured in the System Parameters, the lot will be created in OPSM if it does not already exist using the information on the transaction. An existing lot will not be updated.
  - If lot creation is not allowed, the lot must already exist in OPSM.
- Shipment Transaction
  - A shipment transaction should contain the following elements:
    - transactionVO - required to have one and only one.
    - transactionProductVO - required to have at least one that identifies the transacted product. More than one may exist for identification of the product for lower level packaging units or components.
    - transactionLabelVO - optional, either labels (for inference) or serials should be identified. If neither is defined, the transaction will be created in OPSM with an exception status.
    - transactionSerialAssocVO - optional, either labels (for inference) or serials should be identified. If neither is defined, the transaction will be created in OPSM with an exception status.
    - transactionDocumentVO - optional, highly recommended for identification of the shipment reference document.

        - transactionAddressVO - optional, highly recommended for identification of trading partners.

    - Internal Shipment
        - OPSM must be configured to accept internal shipment transactions in the Product definition. If the system is not recording internal shipments, the message will not be processed.
        - If the transaction is flagged as internal, the serial state will not be updated.

    - Packaging Hierarchy
        - If a new package is identified on the transactions where the LabelType is not a Serial Type, it will automatically be created in OPSM when the shipment transaction is processed.
        - The packaging hierarchy will be automatically updated in OPSM based on the packing configuration sent on the shipment transaction.
        - The highest level package will be automatically unpacked when the shipment transaction is processed.

    - Inference
        - If a package is identified in the transactionLabelVO that does not have any associated serials, inference will be used to identify serials that match the product and lot identified on the transaction. Any lower level serials associated to the matched serials will also be identified on the transaction.
        - If a shipped item serial is identified that does not have lower level serials, inference will be used to identify lower level serials using the packaging hierarchy in OPSM.

- Return Transaction
    - A return transaction should contain the following elements:
        - transactionVO - required to have one and only one.
        - transactionProductVO - required to have at least one that identifies the transacted product. More than one may exist for identification of the product for lower level packaging units or components.
        - transactionLabelVO - optional, either labels (for inference) or serials should be identified. If neither is defined, the transaction will be created in OPSM with an exception status.

        - transactionSerialAssocVO - optional, either labels (for inference) or serials should be identified. If neither is defined, the transaction will be created in OPSM with an exception status.
        - transactionDocumentVO - optional, highly recommended for identification of the return reference document.
        - transactionAddressVO - optional, highly recommended for identification of trading partners.
    - Internal Return
        - OPSM must be configured to accept internal return transactions in the Product definition. If the system is not recording internal returns, the message will not be processed.
        - If the transaction is flagged as internal, the serial state will not be updated.
    - Packaging Hierarchy
        - If a new package is identified on the transactions where the LabelType is not a Serial Type, it will automatically be created in OPSM when the return transaction is processed.
        - The packaging hierarchy will be automatically updated in OPSM based on the packing configuration sent on the return transaction.
        - The highest level package will be automatically unpacked when the return transaction is processed.
    - Inference
        - If a package is identified in the transactionLabelVO that does not have any associated serials, inference will be used to identify serials that match the product and lot identified on the transaction. Any lower level serials associated to the match serials will also be identified on the transaction.
        - If a returned item serial is identified that does not have lower level serials, inference will be used to identify lower level serials using the packaging hierarchy in OPSM.
- Import Transaction
    - An Import transaction should contain the following elements:
        - transactionVO - required to have one and only one.

- transactionProductVO - required to have at least one that identifies the transacted product. More than one may exist for identification of the product for lower level packaging units or components.
- transactionSerialAssocVO - required, the number of transaction serial association records should match the transaction quantity.
- transactionDocumentVO - optional, highly recommended for identification of the reference document.

- Serial Creation
  - Serials identified on the import transaction will be created in OPSM.
  - If a duplicate serial already exists in OPSM, the duplicate serial will be created and both the original and the newly created serial will be flagged as suspect counterfeit.

Required Input

- transactionVO (Required)
  - TransLocation
  - TransactionType
  - TransDate
  - TransactionQuantity
  - TransactionUnitOfMeasure
  - TransactionSourceName
  - ItemNumber, ItemSource, ItemUOM *or* ProductCode, ProductCodeType, ProductCodeVariant, ProductUOM
  - LotNumber
  - LotSource

- TransactionProductVO (Required)
  - ItemNumber, ItemSource, ItemUOM *or* ProductCode, ProductCodeType, ProductCodeVariant, ProductUOM
  - LotNumber

    - LotSource

- TransactionSerialAssocVO (Optional)
    - ItemSerialNumber
    - SerialType
    - ShippedItemFlag - set to identify the shipped item (for example, item on the sales order line)

- TransactionLabelVO (Optional)
    - Label
    - LabelType
    - ShippedItemFlag - set to identify the shipped item (for example, item on the sales order line)

- TransactionDocumentVO (Optional)
    - PrimaryFlag

- TransactionAddressVO (Optional)
    - AddressCode
    - AddressType
    - Name

Exceptions

- Required parameters not passed.
- The transaction source system does not match the source system defined for the transaction location.
- Invalid lookup value:
    - Source System
    - Transaction Type
    - Serial Usage
    - Product Code Type

- Product UOM
- Label Type
- Packaging Unit
- Label Print Format
- Serial Type
- Address Code
- Address Type

- Invalid ProductCode provided on shipment and return transactions.
- Invalid Lot information provided (assuming Allow Lot Creation has not been enabled).

Restrictions

An alternate Label and LabelType cannot be used to identify the package.

transactionVO

Name	Type	Mandatory	Description
TransactionSourceName	String	Yes	Uniquely identifies the source system where the transaction originated. This must be a valid value in the PAS_SOURCE_SYSTEM lookup.
TransactionType	String	Yes	Identifies the transaction type. Valid values are: SHIPMENT, RETURN, and IMPORT. This must be a valid value in the PAS_TRANSACTION_TYPE lookup.

Name	Type	Mandatory	Description
InternalTransactionFlag	String	Yes	Indicates whether a change of ownership occurs as a result of the transaction. On a shipment or return transaction, if the transaction is flagged as internal the state of the serial will not be modified. Internal transactions can optionally be recorded in OPSM. This setting is configurable through the product definition and product location overrides. Valid values: • 1 = Yes (internal) • 0 = No
TransDate	dateTime (YYYY-MM-DDTHH:mm:ss:SSSS)	Yes	The date and time that the transaction occurred.
TransLocation	String	Yes	The location where the transaction occurred. This must be a valid location in OPSM.
TransactionQuantity	Decimal	Yes	The quantity of the product that was transacted.
TransactionUnitofMeasure	String	Yes	The UOM associated with the quantity.

Name	Type	Mandatory	Description
ItemNumber	String	Conditional: One of the following combinations must be sent to identify the product detail: • ItemNumber, ItemSource, ItemUOM or • ProductCode, ProductCodeType, ProductCodeVariant, and ProductUOM	Identifies the item number in the transactional system that is cross referenced to a product within OPSM.
ItemSource	String	Conditional: One of the following combinations must be sent to identify the product detail: • ItemNumber, ItemSource, ItemUOM or • ProductCode, ProductCodeType, ProductCodeVariant, and ProductUOM	Identifies the source system related to the item number. Item source is used to cross reference the item specific to a source system to identify the product in OPSM. This must be a valid value in the PAS_SOURCE_SYSTEM lookup.

Name	Type	Mandatory	Description
ItemUOM	String	Conditional: One of the following combinations must be sent to identify the product detail: • ItemNumber, ItemSource, ItemUOM or • ProductCode, ProductCodeType, ProductCodeVariant, and ProductUOM	Identifies the item UOM in the transactional system that is cross referenced to the product packaging unit in OPSM.
ProductCode	String	Conditional: One of the following combinations must be sent to identify the product detail: • ItemNumber, ItemSource, ItemUOM or • ProductCode, ProductCodeType, ProductCodeVariant, and ProductUOM	Identifies the product in OPSM. The product is uniquely identified using the ProductCode, ProductCodeType, ProductCodeVariant, and ProductUOM.

Name	Type	Mandatory	Description
ProductCodeType	String	Conditional: One of the following combinations must be sent to identify the product detail: • ItemNumber, ItemSource, ItemUOM or • ProductCode, ProductCodeType, ProductCodeVariant, and ProductUOM	Identifies the type of product code used in identification of the product in OPSM. This must be a valid value in the PAS_PRODUCT_CODE_TYPE lookup.
ProductCodeVariant	String	Conditional: One of the following combinations must be sent to identify the product detail: • ItemNumber, ItemSource, ItemUOM or • ProductCode, ProductCodeType, ProductCodeVariant, and ProductUOM	Identifies the specific variation of the product code when a product code is reused for different products over time. Default: NOVARIANT.

Name	Type	Mandatory	Description
ProductUOM	String	Conditional: One of the following combinations must be sent to identify the product detail: • ItemNumber, ItemSource, ItemUOM or • ProductCode, ProductCodeType, ProductCodeVariant, and ProductUOM	Identifies the product packaging unit where a specified product code is used for multiple packaging levels.
LotNumber	String	Yes	Lot number associated to the lot. The LotNumber, LotSource, LotLocation, and Product information are used to uniquely identify the lot number to be created or updated.
LotSource	String	Yes	The source system associated to the lot. This must be a valid value in the PAS_SOURCE_SYSTEM lookup.

Name	Type	Mandatory	Description
LotLocation	String	No	The location associated to the lot. The location can be null if the source system does not associate a location reference to the lot information. This must be a valid location in OPSM.
ParentLot	String	No	Identifies the parent lot number associated with the lot.
ImportSerialsFlag	String	Yes	Not used.
EventCreatedBy	String	No	The created by identity from the capturing application.
EventCreatedDate	dateTime (YYYY-MM-DDTHH:mm:ss:SSSS)	No	The date and time at which the capturing application asserts the event occurred.
EventCreatedSourceName	String	No	The source system identity of the capturing application.
EventUpdatedBy	String	No	The updated by identity from the capturing application.
EventUpdatedDate	dateTime (YYYY-MM-DDTHH:mm:ss:SSSS)	No	The date and time at which the capturing application asserts the event data was updated.

Name	Type	Mandatory	Description
EventUpdatedSourceName	String	No	The source system identity of the capturing application that updated the event.
AttributeCategory	String	No	Structure definition of the user descriptive flexfields.
AttributeChar1	String	No	User defined character field.
AttributeChar2	String	No	User defined character field.
AttributeChar3	String	No	User defined character field.
AttributeChar4	String	No	User defined character field.
AttributeChar5	String	No	User defined character field.
AttributeChar6	String	No	User defined character field.
AttributeChar7	String	No	User defined character field.
AttributeChar8	String	No	User defined character field.
AttributeChar9	String	No	User defined character field.
AttributeChar10	String	No	User defined character field.
AttributeChar11	String	No	User defined character field.

Name	Type	Mandatory	Description
AttributeChar12	String	No	User defined character field.
AttributeChar13	String	No	User defined character field.
AttributeChar14	String	No	User defined character field.
AttributeChar15	String	No	User defined character field.
AttributeNumber1	Decimal	No	User defined numeric field.
AttributeNumber2	Decimal	No	User defined numeric field.
AttributeNumber3	Decimal	No	User defined numeric field.
AttributeNumber4	Decimal	No	User defined numeric field.
AttributeNumber5	Decimal	No	User defined numeric field.
AttributeTimeStamp1	Decimal	No	User defined timestamp field.
AttributeTimeStamp2	Decimal	No	User defined timestamp field.
AttributeTimeStamp3	Decimal	No	User defined timestamp field.
AttributeTimeStamp4	Decimal	No	User defined timestamp field.
AttributeTimeStamp5	Decimal	No	User defined timestamp field.

TransactionProductVO

Name	Type	Mandatory	Description
ProductCode	String	Conditional: One of the following combinations must be sent to identify the product detail: • ItemNumber, ItemSource, ItemUom or • ProductCode, ProductCodeType, ProductCodeVariant, and ProductUOM	Identifies the product in OPSM. The product is uniquely identified using the ProductCode, ProductCodeType, ProductCodeVariant, and ProductUOM.
ProductCodeType	String	Conditional: One of the following combinations must be sent to identify the product detail: • ItemNumber, ItemSource, ItemUom or • ProductCode, ProductCodeType, ProductCodeVariant, and ProductUOM	Identifies the type of product code used in identification of the product in OPSM. This must be a valid value in the PAS_PRODUCT_CODE_TYPE lookup.

Name	Type	Mandatory	Description
ProductCodeVariant	String	Conditional: One of the following combinations must be sent to identify the product detail: • ItemNumber, ItemSource, ItemUom or • ProductCode, ProductCodeType, ProductCodeVariant, and ProductUOM	Identifies the specific variation of the product code when a product code is reused for different products over time. Default: NOVARIANT.
ProductUOM	String	Conditional: One of the following combinations must be sent to identify the product detail: • ItemNumber, ItemSource, ItemUom or • ProductCode, ProductCodeType, ProductCodeVariant, and ProductUOM	Identifies the product packaging unit where a specified product code is used for multiple packaging levels.

Name	Type	Mandatory	Description
ItemNumber	String	Conditional: One of the following combinations must be sent to identify the product detail: • ItemNumber, ItemSource, ItemUom or • ProductCode, ProductCodeType, ProductCodeVariant, and ProductUOM	Identifies the item number in the transactional system that is cross referenced to a product within OPSM.
ItemSource	String	Conditional: One of the following combinations must be sent to identify the product detail: • ItemNumber, ItemSource, ItemUom or • ProductCode, ProductCodeType, ProductCodeVariant, and ProductUOM	Identifies the source system related to the item number. Item source is used to cross reference the item specific to a source system to identify the product in OPSM.

Name	Type	Mandatory	Description
ItemUom	String	Conditional: One of the following combinations must be sent to identify the product detail: • ItemNumber, ItemSource, ItemUom or • ProductCode, ProductCodeType, ProductCodeVariant, and ProductUOM	Identifies the item UOM in the transactional system that is cross referenced to the product packaging unit in OPSM.
ItemIdentifier	Long	No	Not used.
LotNumber	String	Yes	Lot number associated to the lot. The LotNumber, LotSource, LotLocation, and Product information are used to uniquely identify the lot number to be created or updated.
LotSource	String	Yes	The source system associated to the lot. This must be a valid value in the PAS_SOURCE_SYSTEM lookup.

Name	Type	Mandatory	Description
LotLocation	String	No	The location associated to the lot. The location can be null if the source system does not associate a location reference to the lot information. This must be a valid location in OPSM.
ParentLot	String	No	Identifies the parent lot number associated with the lot.
Origination Date	Date	No	The origination date of the lot. Origination date is used to create the lot when OPSM is configured to allow creation of the lot when the transaction is processed and the lot does not already exist.
ExpirationDate	Date	No	The expiration date of the lot. Expiration date is used to create the lot when OPSM is configured to allow creation of the lot when the transaction is processed and the lot does not already exist.

Name	Type	Mandatory	Description
BestByDate	Date	No	The lot best by date. Best by date is used to create the lot when OPSM is configured to allow creation of the lot when the transaction is processed and the lot does not already exist.
SellByDate	Date	No	The lot sell by date. Sell by date is used to create the lot when OPSM is configured to allow creation of the lot when the transaction is processed and the lot does not already exist.
RetestDate	Date	No	The lot retest date. Retest date is used to create the lot when OPSM is configured to allow creation of the lot when the transaction is processed and the lot does not already exist.

TransactionSerialAssocVO

Name	Type	Mandatory	Description
ItemSerialNumber	String	Yes	A unique identifier assigned for identification of a specific unit of a product.

Name	Type	Mandatory	Description
SerialType	String	Yes	Identifies the type of serial number. This must be a valid value in the PAS_SERIAL_TYPE lookup.
SerialIdentification	String	No	Unique identification of the TransactionSerialAssoc record. Used in conjunction with the ParentSerialIdentification to establish hierarchy.
ParentSerialIdentification	String	No	Identifies the TransactionSerialAssoc instance that is the parent of the current TransactionSerialAssoc instance.
ShippedItemFlag	String	Yes	Identifies the serial as the shipped or transacted serial for the transaction. Valid values: 1 = Yes, 0 = No.
ManufacturedDate	Date	No	Identifies the date the product was manufactured. This value is used to populate the Manufactured Date in the Serials table when the serial is added during processing of the shipment transaction.

Name	Type	Mandatory	Description
SerialUsage	String	No	Identifies the serial usage. This value is used to populate the Serial Usage in the Serials table when the serial is added during processing of the shipment transaction. This must be a valid user defined value in the PAS_SERIAL_USAGE lookup.
SaleableUnitFlag	String	No	Identifies the serial as a saleable unit. This value is used to populate the Saleable Unit Flag in the Serials table when the serial is added during processing of the shipment transaction. Valid values: 1 = Yes, 0 = No.

TransactionLabelVO

Name	Type	Mandatory	Description
Label	String	Yes	The primary label used to identify the package.
LabelType	String	Yes	The primary label type used to identify the package. This must be a valid user defined value in the PAS_LABEL_TYPE lookup.

Name	Type	Mandatory	Description
ParentLabel	String	No	The primary ParentLabel and ParentLabelType are used to establish the packaging hierarchy where the Label and LabelType is packed into the ParentLabel and ParentLabelType.
ParentLabelType	String	No	The primary ParentLabel and ParentLabelType are used to establish the packaging hierarchy where the Label and LabelType is packed into the ParentLabel and ParentLabelType. This must be a valid value in the PAS_LABEL_TYPE lookup.
ShippedItemFlag	String	Yes	Identifies the label as the shipped or transacted serial for the transaction. Valid values: 1 = Yes, 0 = No.
ReusableFlag	String	No	Identifies the pack as reusable. This value is used in the creation of a new pack during processing of the transaction. Valid values: 1 = Yes, 0 = No.

Name	Type	Mandatory	Description
PackageUnit	String	No	Identifies the packaging unit associated with the package. This must be a valid value in the PAS_PACKAGE_UNIT lookup.
LabelPrintFormat	String	No	Identifies the label print format associated with the pack. This value is used for creation of new packs when processing the transaction. This must be a valid value in the PAS_LABEL_PRINT_FORMAT lookup.

TransactionAddressesVO

Name	Type	Mandatory	Description
AddressCode	String	Yes	Identifies the address as a source or destination address. This must be a valid value in the PAS_ADDRESS_CODE lookup.
AddressType	String	Yes	Identifies the type of address. This must be a valid value in the PAS_ADDRESS_TYPE lookup.

Name	Type	Mandatory	Description
Name	String	Yes	The business name associated with the address.
Street1	String	No	Used to hold a portion of the street address.
Street2	String	No	Used to hold a portion of the street address.
Street3	String	No	Used to hold a portion of the street address.
Street4	String	No	Used to hold a portion of the street address.
City	String	No	The city of the transaction address.
StateOrRegion	String	No	The state or region of the transaction address.
PostalCode	String	No	The postal code of the transaction address.
Country	String	No	The country of the transaction address.
GlobalLocationNumber	String	No	The Global Location Number associated with the transaction address.
Contact Name	String	No	The contact name for the transaction address.

Name	Type	Mandatory	Description
ContactPhone	String	No	The contact phone number for the transaction address.
ContactEmail	String	No	The contact email for the transaction address.

TransactionDocumentVO

Name	Type	Mandatory	Description
PrimaryFlag	String	Yes	Set to indicate that this reference document is the primary reference document. Only one reference document per transaction can be flagged as the primary.
Segment1	String	No	The 1st segment (Document Organization) of the reference document.
Segment2	String	No	The 2nd segment (Document Number) of the reference document.

Name	Type	Mandatory	Description
Segment3	String	No	The 3rd segment (Document Type) of the reference document. OPSM will automatically add a new Document Type to the PAS_DOCUMENT_TYPE lookup when processing the transaction if it does not exist.
Segment4	String	No	The 4th segment (Document Line Number) of the reference document.
Segment5	String	No	The 5th segment of the reference document.
Segment6	String	No	The 6th segment of the reference document.
Segment7	String	No	The 7th segment of the reference document.
Segment8	String	No	The 8th segment of the reference document.
Segment9	String	No	The 9th segment of the reference document.
Segment10	String	No	The 10th segment of the reference document.

Name	Type	Mandatory	Description
PedigreeDocumentType	String	No	The code used to identify the document type on the pedigree.

WSDL

oracle.apps.pas.transactions.transactionsService.applicationModule.common.serviceinterface.TransactionsServiceAMService.wsdl

For detailed descriptions of all input and output parameters, please refer to the TransactionsServiceAMService wsdl, page C-34 for this web service.

QueryService (Inbound)

The Query web service is an inbound synchronous business service part of the interoperability solution of the OPSM system. This service enables an external system to fetch the events that are recorded in the OPSM system. In addition, the OPSM system can optionally use EPCIS policies to restrict a user on a particular EPC code.

Operation	Description
getQueryNames	This operation will return all the queries that the Query web service supports.
getVendorVersion	This operation will return the version implemented by the vendor.
getStandardVersion	This operation will return the EPCIS implemented version.
poll	This operation will return the events based on the parameters provided and the access of the user.

getQueryNames Operation

This operation is used to fetch all of the Query Names that the EPCIS Query web service supports,

Key Logic

There are only two queries (SimpleEventQuery and SimpleMasterDataQuery) that are supported by the EPCIS Query web service.

Required Input

No input is required.

Exceptions

None

Restrictions

None

getVendorVersion Operation

This operation is used to fetch versions implemented by the vendor.

Key Logic

Return it as null. This value needs to be taken care of by the vendor.

Required Input

No input is required.

Exceptions

None

Restrictions

None

getStandardVersion Operation

This operation is used to fetch the EPCIS version implemented.

Key Logic

EPCIS 1.0 is implemented, so 1.0 is returned every time.

Required Input

No input is required.

Exceptions

None

Restrictions

None

poll Operation

This operation is used to fetch the events present in the EPCIS database based on various input parameters and access of the user.

Key Logic

EPCIS 1.0 is implemented, so 1.0 is returned every time.

Required Input

- queryName (Required)
- params (optional)
  - param

- name
- value

Exceptions

- Required parameter is incorrect or not provided.
- Optional parameters are provided but are incorrect.
- Setup parameters required are not present.
- Database query takes more time than the specified value.
- Number of events returned are more than the specified value.
- Size of the data returned is more than the specified value.

For more information, see Understanding the EPCIS Repository Setup Process, page 5-1.

Restrictions

None

Input Request for Poll

Name	Type	Mandatory	Description
queryName	String	Yes	It can be either SimpleEventQuery or SimpleMasterDataQuery.
name	String	No/Yes (see details that follow)	Refer to the following tables for all combinations.
value	String/Integer/Float/Date/List	No/Yes (see details that follow)	Refer to the following tables for all combinations.

When queryName = SimpleEventQuery:

<param>	<value> DataType	Can Specify Multiple Values	Enclosed in <string> </string>	Description
eventType	String	Yes	Yes	Identifies the type of event that needs to be fetched.
EQ_action	String	Yes	Yes	Identifies the action in the event to be fetched. It can be ADD, OBSERVE, or DELETE.
GE_eventTime LT_eventTime	ISO 8601 Date Format YYYY-MM-DDTHH:MMZ. Hours, minutes, and offset is mandatory.	No	No	Identifies the eventTime of the event (when the event occurred). • GE: Greater than or equal to • LT: Less Than
LT_recordTime GE_recordTime	ISO 8601 Date Format YYYY-MM-DDTHH:MMZ. Hours, minutes, and offset is mandatory.	No	No	Identifies the Time when the event was captured. • GE: Greater than or equal to • LT: Less Than
EQ_bizStep	String	Yes	Yes	Identifies the business step in the event.
EQ_disposition	String	Yes	Yes	Identifies the disposition step in the event.
EQ_readPoint	String	Yes	Yes	Identifies the readpoint in the event.
EQ_bizLocation	String	Yes	Yes	Identifies the business location in the event.

<param>	<value> DataType	Can Specify Multiple Values	Enclosed in <string> </string>	Description
EQ_bizTransaction_type	String	Yes	Yes	Identifies the type in the business step of the event.
MATCH_epc MATCH_parentID MATCH_anyEPC MATCH_epcClass	String, Range	Yes	Yes	Identifies the epc codes in the event. • epc: Matches the epcList and childEpc • parentId: Matches the parent epc code • anyEpc: Matches the parent epc code, child epc, and epc list • epcClass: Matches the epc class code
EQ_quantity LT_quantity LE_quantity GE_quantity GT_quantity	Integer, Float	No	No	Identifies the quantity in the event. • EQ: Equals • LT: Less than • LE: Less than or equal to • GE: Greater than or equal to • GT: Greater than
orderBy	eventTime, recordTime, quantity, <http://namespace>#<customtag>	No	No	Specifies the parameter to be used to arrange the returned events.

<param>	<value> DataType	Can Specify Multiple Values	Enclosed in <string> </string>	Description
orderDirection	ASC, DESC	No	No	Specifies the arrangement order of the events. orderBy is mandatory with this parameter.
eventCountLimit	Integer	No	No	Count of events that should be picked up from the top after arranging them according to the specified order. Cannot be entered with maxEventCount, but orderBy is mandatory with this parameter.
maxEventCount	Integer	No	No	Maximum number of events that should be returned. Cannot be entered with eventCountLimit.
WD_bizLocation	String	Yes	Yes	Identifies the bizlocation parameter of the events with descendents referred from the master data table.
WD_readPoint	String	Yes	Yes	Identifies the read point parameter of the events with descendents referred from the master data table.
EQ_fieldname	String, Integer, Float, Date, List	Yes	Yes (if String type is used)	Identifies the custom tag. • EQ: Equal to

<param>	<value> DataType	Can Specify Multiple Values	Enclosed in <string> </string>	Description
GT_fieldname	Integer, Float, Date	No	No	Identifies the custom tag. • GT: Greater than
LT_fieldname	Integer, Float, Date	No	No	Identifies the custom tag. • LT: Less than
LE_fieldname	Integer, Float, Date	No	No	Identifies the custom tag. • LE: Less than or equal to
GE_fieldname	Integer, Float, Date	No	No	Identifies the custom tag . • GE: Greater than or equal to
EXISTS_fieldname	N/A	N/A	N/A	Checks for the existence of the custom tag in the event.
HASATTR_fieldname	String	Yes	Yes	Checks for the vocabulary element Id (which has specified value) for the specified custom tag in the event.
EQATTR_fieldname_attrname	String	Yes	Yes	Checks for the value of the specified custom tag which is one of the vocabulary element ids which has the attribute name and value specified.

When queryName = SimpleMasterDataQuery:

<param>	<value> DataType	Can Specify Multiple Values	Enclosed in <string> </string>	Description
includeAttributes (required)	Boolean (true/false)	No	No	Determines whether the vocabulary elements are returned with attributes or not.
includeChildren (required)	Boolean (true/false)	No	No	Determines whether the vocabulary elements are returned with children or not.
vocabularyName	String	Yes	Yes	Identifies the vocabulary type.
attributeNames	String	Yes	Yes	Identifies the vocabulary elements which have the specified attributes.
EQ_name	String	Yes	Yes	Identifies the vocabulary element ID in the vocabulary element.
WD_name	String	Yes	Yes	Identifies the vocabulary element ID in the vocabulary element and includes them with the children.
HASATTR	String	Yes	Yes	Identifies the attribute ID in the vocabulary element and returns all of those vocabulary elements.
EQATTR_attrname	N/A	Yes	Yes	Identifies the vocabulary elements that have a non-null specified attribute.
maxElementCount	Integer	No	No	Identifies the maximum number of vocabulary elements that can be returned in one query.

WSDL

WSDL oracle.apps.pas.epc.service.query.EPCglobalEPCISService.wsdl

For detailed descriptions of all input and output parameters, please refer to the EPCglobalEPCISService wsdl, page C-3 for this web service.

Web Service Exceptions

Using the Web Service Exceptions page you can view the job instance messages created by the mergeLot, createTransaction, Serials Service (editSerialStatusAndUsageByPrimaryDocument, editSerialStatusAndUsageByLabel, editSerialStatusAndUsageByList), captureEpcisDoc, and Product Service web services. A web service can fail because the data that is being passed in the message is invalid or the data being passed is incorrect for the message. In addition, you can view the overall system problem errors or web services not running errors using the Web Service Exceptions page. If the web service processes successfully no message is recorded.

The Web Service Exceptions page is located under the Serials section and the Transactions section of the Task menu. The page is the same in both locations.

For more information on the Web Service Exceptions page, see Using the Job Instances Functionality, page 3-19.

Web Service E-Mail Notifications

Oracle Pedigree and Serialization Manager (OPSM) gives you the ability to send e-mail notifications for the following:

- Process errors that occur when processing transactions using the Transaction (createTransaction operation), Serials (editSerialStatusAndUsageByLabel, editSerialStatusAndUsageByList, and editSerialStatusAndUsageByPrimaryDocument operations), and Product (mergeProduct operation) web services.

- Exceptions that occur when processing shipment and return transactions using the Transaction (TransactionsServiceAMService) web service.

- Counterfeit status updates that occur for a serial using the Serials (SerialsServiceAMService) web service.

When processing transactions, serials, or products using the Transaction, Serials, and Product web services process errors can occur. For example, a process can be stuck in an "In Progress" status. When this happens no other transactions, serials , or products are allowed to process which halts all other subsequent jobs. Examples of where transactions get stuck "In Progress" are:

- Shipment transactions where input data through the web service is a mismatch

from the data in OPSM. For example, the unit of measure specified on the input data does not match the unit of measure in OPSM.

- Return transactions where input data through the web service is a mismatch from the data in OPSM.

When shipment or return transactions fail while being processed by the Transaction web service an exception is logged and these exceptions are reported in the OPSM Dashboard under Transaction Exceptions component. These exceptions are also sent in the e-mail notifications.

Finally, when the counterfeit status is updated on a serial using the Serials web services, those status changes are reported in the OPSM Dashboard under the Counterfeit Serial Analysis component. These status changes are also sent in the e-mail notifications.

OPSM using Oracle Scheduler will send e-mail notifications of these errors, exceptions, or counterfeit status changes to the individuals responsible for this information in your organization. You can send e-mail notifications to both a system-level e-mail address and a location-specific e-mail address. These e-mail addresses can be a single e-mail address or a distribution list. Oracle Scheduler only sends notifications that pertain to errors, exceptions, or counterfeit status updates that occur between each run of the scheduler. A consolidated e-mail containing all of the errors found will be sent to each e-mail address you specify. For example, if there are 20 transactions that are in exception, the system-wide e-mail addresses will receive one e-mail with the 20 transactions listed along with their associated errors. If 10 of those transactions belong to one location (for example, Detroit) then the Location Contact e-mail address for Detroit will receive one e-mail with the 10 transactions and their associated errors.

The Oracle Scheduler is included with the Oracle database that OPSM uses. The Oracle Scheduler is configured to execute a PL/SQL script which OPSM provides. This script will query the database to look for records where the transaction is stuck in a "In Progress" status, the status is in exception, or when the counterfeit status is updated on a serial. Oracle Scheduler will use the information you define in the System Parameters page to determine if notifications are to be sent and the time interval when the scheduler will run. In addition, the Oracle Scheduler will also use the e-mail addresses you define on the System Parameters page and Location Contacts tab of the Location page to determine the individuals that will receive the e-mail notifications.

For more information, see:

- Maintaining System Parameters, page 4-23.
- Maintaining Locations, page 4-42.
- *Oracle Pedigree and Serialization Manager Installation Guide.*
- *Oracle Pedigree and Serialization Manager Installation Guide,* Installing Oracle Pedigree and Serialization Manager chapter, Post Installation Tasks, Configure an Access Control List File for Web Service E-mail Notifications.

Web Service E-mail Notifications Process Flow

These steps illustrate a simple web services e-mail notification process flow:

Web Service E-mail Notifications Process Flow

1. Oracle Scheduler is installed and the PL/SQL script (procedure) is registered in the database.

   The system will register the procedure for you automatically upon install.

2. Access control list (ACL) file is configured for the web service e-mail notifications.

   For information see, Configure an Access Control List File for Web Service E-mail Notifications section in the *Oracle Pedigree and Serialization Manager Installation Guide.*

3. Administrator enables e-mail notification for the system and enters the e-mail notification setup information using the System Parameters page - Error Notification sub tab and the Create Location page - Location Contact sub tab.

4. Web services (Transaction (TransactionsServiceAMService), Serials (SerialsServiceAMService), and Product (ProductServiceAMService)) are executed and errors, exceptions, or counterfeit status updates occur.

5. Oracle Scheduler automatically queries the database per the time frame (Schedule Execution Interval (minutes) field) set on the System Parameters page.

   E-mail notifications are sent to the system-wide e-mail address or location-specific e-mail address listing the transactions where errors, exceptions, or counterfeit status updates have occurred along with the related information.

6. Individuals review the e-mail sent to them by Oracle Scheduler and take the necessary steps to correct the issues listed in the e-mail.

7. Web services (Transaction (TransactionsServiceAMService), Serials (SerialsServiceAMService), and Product (ProductServiceAMService)) that had issues are executed again.

A

Pages and Navigation Paths

This appendix covers the following topics:

- Overview of Oracle Pedigree and Serialization Manager Pages and Navigation Paths
- Pages and Navigation Paths

Overview of Oracle Pedigree and Serialization Manager Pages and Navigation Paths

The following table displays the default navigation path for each Oracle Pedigree and Serialization Manager page.

- Text in brackets ([]) indicates a button.
- (I) indicates an icon.
- (T) indicates to select a tab.
- (M) indicates to select the menu option from the page.

Pages and Navigation Paths

Oracle Pedigree and Serialization Manager Pages and Navigation Paths

Page	Navigator Menu Path
Audit Trail History	• (T) Audit Trail > (T) Audit Trail History • (T) Audit Trail > Select Audit Trail History link in Tasks region • (T) Dashboard > Select Audit Trail History link in Tasks region
Audit Trail Setup	• (T) Audit Trail > (T) Audit Trail Setup • (T) Audit Trail > Select Audit Trail Setup link in Tasks region • (T) Dashboard > Select Audit Trail Setup link in Tasks region
Commission Serials	• (T) Serials > (T) Commission Serials • (T) Serials > Select Commission Serials link in Tasks region • (T) Dashboard > Select Commission Serials link in Tasks region
Create Location	• Maintain Locations > (M) Actions > Create • Maintain Locations > (I) Create
Create Location Group	• Maintain Location Groups > (M) Actions > Create • Maintain Location Groups > (I) Create Location Group

Page	Navigator Menu Path
Create Lot	• Maintain Lots > (M) Actions > Create • Maintain Lots > (I) Create
Create Package	• Maintain Packages > (M) Actions > Create • Maintain Packages > (I) Create • Maintaining Packaging Hierarchy (Packaging Hierarchy side of page) > (M) Actions > Create Child Package • Maintaining Packaging Hierarchy (Packaging Hierarchy side of page) > [Create Child Package] • Maintaining Packaging Hierarchy (Packages side of page) > (M) Actions > Create Package • Maintaining Packaging Hierarchy (Packages side of page) > (I) Create New Package
Create Policy	• Maintain Policies > (M) Actions > Create • Maintain Policies > (I) Create Policy
Create Product	• Maintain Products > (M) Actions > Create • Maintain Products > (I) Create
Create Serial Destination	• Maintain Serial Destinations > (M) Actions > Create • Maintain Serial Destinations > (I) Create

Page	Navigator Menu Path
Create Serial Generation Requests	• Maintain Serial Generation Request > (M) Actions > Create • Maintain Serial Generation Requests > (I) Create
Create Serial Type Group	• Maintain Serial Type Groups > (M) Actions > Create • Maintain Serial Type Groups > (I) Create Serial Type Group
Create User	• Maintain Users > (M) Actions > Create • Maintain Users > (I) Create
Define Product and Item Cross Reference	Only available if integrating with an external transactional system.
Digital Signature Worklist	• (T) Transactions > (T) Digital Signature Worklist • (T) Transactions > Select Digital Signature Worklist link in Tasks region • (T) Dashboard > Select Digital Signature Worklist link in Tasks region
Edit Location	• Maintain Locations > (M) Actions > Edit • Maintain Locations > (I) Edit Location in search results table
Edit Location Group	• Maintain Location Groups > (M) Actions > Edit • Maintain Location Groups > (I) Edit Location Group

Page	Navigator Menu Path
Edit Lookup Type	• Maintain Lookups > (M) Actions > Edit • Maintain Lookups > (I) Edit Lookups in search results table
Edit Lot	• Maintain Lots > (M) Actions > Edit • Maintain Lots > (I) Edit Lot in search results table
Edit Package	• Maintain Packages > (M) Actions > Edit • Maintain Packages > (I) Edit Package in search results table
Edit Policy	• Maintain Policies > (M) Actions > Edit • Maintain Policies > (I) Edit Policy in search results table
Edit Product	• Maintain Products > (M) Actions > Edit • Maintain Products > (I) Edit Product in search results table
Edit Serial	• Maintain Serials > (M) Actions > Edit • Maintain Serials > (I) Edit in search results table
Edit Serial Destination	• Maintain Serial Destinations > (M) Actions > Edit • Maintain Serial Destinations > (I) Edit Serial Destination in search results table

Page	Navigator Menu Path
Edit Serial Type Group	• Maintain Serial Type Groups > (M) Actions > Edit • Maintain Serial Type Groups > (I) Edit Serial Type Group in search results table
Edit Status and Usage	• Maintain Packaging Hierarchy (Packaging Hierarchy side of page) > (M) Actions > Edit Status and Usage • Maintain Packaging Hierarchy (Packaging Hierarchy side of page) > [Edit Status and Usage]
Edit User	• Maintain Users > (M) Actions > Edit • Maintain Users > (I) Edit User in search results table
Lot Synchronization	• (T) Serials > (T) Lot Synchronization • (T) Serials > Select Lot Synchronization link in Tasks region • (T) Dashboard > Select Lot Synchronization link in Tasks region
Maintain EPCIS Preferences	• (T) EPCIS Setup > (T) Maintain EPCIS Preferences • (T) EPCIS Setup > Select Maintain EPCIS Preferences link in Tasks region • (T) Dashboard > Select Maintain EPCIS Preferences link in Tasks region

Page	Navigator Menu Path
Maintain Location Groups	• (T) System Setup > (T) Maintain Location Groups • (T) System Setup > Select Maintain Location Groups link in Tasks region • T) Dashboard > Select Maintain Location Groups link in Tasks region
Maintain Locations	• (T) System Setup > (T) Maintain Locations • (T) System Setup > Select Maintain Locations link in Tasks region • (T) Dashboard > Select Maintain Locations link in Tasks region
Maintain Lookups	• (T) System Setup > (T) Maintain Lookups • (T) System Setup > Select Maintain Lookups link in Tasks region • (T) Dashboard > Select Maintain Lookups link in Tasks region
Maintain Lots	• (T) Serials > (T) Maintain Lots • (T) Serials > Select Maintain Lots link in Tasks region • (T) Dashboard > Select Maintain Lots link in Tasks region
Maintain Packages	• (T) Packaging > (T) Maintain Packages • (T) Packaging > Select Maintain Packages link in Tasks region • (T) Dashboard > Select Maintain Packages link in Tasks region

Page	Navigator Menu Path
Maintain Packaging Hierarchy	• (T) Packaging > (T) Maintain Packaging Hierarchy • (T) Packaging > Select Maintain Packaging Hierarchy link in Tasks region • (T) Dashboard > Select Maintain Packaging Hierarchy link in Tasks region
Maintain Policies	• (T) EPCIS Setup > (T) Maintain Policies • (T) EPCIS Setup > Select Maintain Policies link in Tasks region • (T) Dashboard > Select Maintain Policies link in Tasks region
Maintain Products	• (T) System Setup > (T) Maintain Products • (T) System Setup > Select Maintain Products link in Tasks region • (T) Dashboard > Select Maintain Products link in Tasks region
Maintain Serial Destinations	• (T) System Setup > (T) Maintain Serial Destinations • (T) System Setup > Select Maintain Serial Destinations link in Tasks region • (T) Dashboard > Select Maintain Serial Destinations link in Tasks region

Page	Navigator Menu Path
Maintain Serial Generation Requests	• (T) Serials > (T) Maintain Serial Generation Requests • (T) Serials > Select Maintain Serial Generation Requests link in Tasks region • (T) Dashboard > Select Maintain Serial Generation Requests link in Tasks region
Maintain Serial Ranges	• (T) System Setup > (T) Maintain Serial Ranges • (T) System Setup > Select Maintain Serial Ranges link in Tasks region • (T) Dashboard > Select Maintain Serial Ranges link in Tasks region
Maintain Serial Type Groups	• (T) System Setup > (T) Maintain Serial Type Groups • (T) System Setup > Select Maintain Serial Type Groups link in Tasks region • (T) Dashboard > Select Maintain Serial Type Groups link in Tasks region
Maintain Serials	• (T) Serials > (T) Maintain Serials • (T) Serials > Select Maintain Serials link in Tasks region • (T) Dashboard > Select Maintain Serials link in Tasks region

Page	Navigator Menu Path
Maintain System Parameters	• (T) System Setup > (T) Maintain System Parameters • (T) System Setup > Select Maintain System Parameters link in Tasks region • (T) Dashboard > Select Maintain System Parameters link in Tasks region
Maintain Transactions	• (T) Transactions > (T) Maintain Transactions • (T) Transactions > Select Maintain Transactions link in Tasks region • (T) Dashboard > Select Maintain Transactions link in Tasks region
Maintain Transaction Serials	• Maintain Transactions > (I) Maintain Transaction Serials • Maintain Transactions > (M) Action > Maintain Transaction Serials
Maintain Users	• (T) EPCIS Setup > (T) Maintain Users • (T) EPCIS Setup > Select Maintain Users link in Tasks region • (T) Dashboard > Select Maintain Users link in Tasks region
Operations Dashboard	• (T) Dashboard • (T) Dashboard > Select Operations Dashboard link in Tasks region

Page	Navigator Menu Path
Oracle Business Intelligence Publisher application	• Maintain Transactions > (I) Print Pedigree XML • Maintain Transactions > (M) Action > Print Pedigree XML
Product Process Controls and Location Overrides	Only available if integrating with an external transactional system. Define Product and Item Cross Reference > [Product Location Override]
Product Synchronization	• (T) System Setup > (T) Product Synchronization • (T) System Setup > Select Product Synchronization link in Tasks region • (T) Dashboard > Select Product Synchronization link in Tasks region
Serial Destinations	• Maintain Transactions > (I) Transmit Serials • Maintain Transactions > (M) Action > Transmit Serials
Translate Lookup Code	• Edit Lookup Type > [Translate Lookup Code] • Edit Lookup Type > (M) Actions > Translate Lookup Code
Translate Lookup Type	Edit Lookup Type > [Translate Lookup Type]
View Location	Maintain Locations > Click the Location link in search results table
View Location Group	Maintain Location Groups> Click the Location Group link in search results table

Page	Navigator Menu Path
View Lot	Maintain Lots > Click the Lot Number link in the search results table
View Package	Maintain Packages > Click the Primary Package Identifier link in search results table
View Policy	Maintain Policies > Click the Policy link in search results table
View Serial	• Maintain Serials > (M) Actions > View • Maintain Serials > Click the Serial Number link in search results table
View Serial Destination	Maintain Serial Destinations > Click the Destination Description link in search results table
View Serial Destination Rules	• (T) System Setup > (T) View Serial Destination Rules • (T) System Setup > Select View Serial Destination Rules link in Tasks region • (T) Dashboard > Select View Serial Destination Rules link in Tasks region
View Serial Type Group	Maintain Serial Type Groups > Click the Serial Type Group link in search results table

Page	Navigator Menu Path
View Transaction	• Maintain Transactions > (M) Actions > View Transaction Detail • Maintain Transactions > (M) Actions > View Initiating Transaction's Detail • Maintain Transactions > Click the Transaction Type link in the search results table • Maintain Transactions > Click the Initiating Transaction link in the search results table • Digital Signature Worklist > (M) View Transaction Detail • Digital Signature Worklist > Click the Transaction Type link in the search results table
View Transaction Exceptions	• Maintain Transactions > (M) Actions > View Transaction Exceptions • Maintain Transactions > Click the Exception Status link in the search results table
View Users	Maintain Users > Click the User link in search results table

Page	Navigator Menu Path
Web Service Exceptions	• (T) Serials > (T) Web Service Exceptions • (T) Serials > Select Web Service Exceptions link in Tasks region • (T) Transactions > (T) Web Service Exceptions • (T) Transactions > Select Web Service Exceptions link in Tasks region • (T) Dashboard > Select Web Service Exceptions link in Tasks region from under the Serials or Transactions sections
Work Order Serialization	• (T) Serials > (T) Work Order Serialization • (T) Serials > Select Work Order Serialization link in Tasks region • (T) Dashboard > Select Work Order Serialization link in Tasks region

B

Lookup Types and Codes

This appendix covers the following topics:

- Lookup Types and Codes

Lookup Types and Codes

These tables list all of the Lookup Types and Codes used in Oracle Pedigree and Serialization Manager (OPSM).

For information on how to maintain lookup types and codes, see Maintaining Lookup Types and Codes, page 4-4.

OPSM Lookup Types and Codes - User Defined Access Level

Lookup Type	Lookup Type Meaning	Lookup Type Description	Lookup Codes
PAS_CONTAINER_TYPE	Container Type	The type of container or package for the product. This is typically the lowest saleable unit packaging type (e.g. Bottle, Blister Pack, etc.).	None by default.

Lookup Type	Lookup Type Meaning	Lookup Type Description	Lookup Codes
PAS_CUSTOM_LOOKUP_TYPE	Custom Lookup Type	Available for customer-defined use (such as a cross-reference within custom serial generation). This lookup type will not be referenced by OPSM during standard processing.	None by default.
PAS_CUSTOM_SERIAL_METHOD	Custom Serial Method	A lookup available for customer-defined use within the custom serial generation algorithm which will indicate which custom serial algorithm to use. This lookup must be configured by the end user for use in custom serial generation.	None by default.
PAS_DESTINATION_GROUPS	Destination Groups	Identifies a destination group which is used to organize like serial destinations for management of destination rules.	• EPCIS, EPCIS Destinations, Destination Group containing one or more EPCIS destinations • NON_EPCIC, Non-EPCIS Destinations, Destination Group containing one or more Non-EPCIS destinations

Lookup Type	Lookup Type Meaning	Lookup Type Description	Lookup Codes
PAS_DOCUMENT_TYPE	Document Type	The type of document (e.g. Invoice Number, Shipping Number, Work Order, etc.).	None by default.
PAS_DOSAGE_FORM	Dosage Form	The dosage form of the product is the physical form of the product that is packaged (e.g. Pill, Capsule, etc.).	None by default.
PAS_LABEL_PRINT_FORMAT	Label Print Format	The format for printing the label.	None by default.
PAS_LOCATION_TYPE	Location Type	The type of location.	None by default.

Lookup Type	Lookup Type Meaning	Lookup Type Description	Lookup Codes
PAS_LOT_EXTRACT	Lot Extract	Identifies the Oracle Data Integrator (ODI) scenario that will be used for the lot information extract.	None by default. Oracle provides these lookup codes for the integration between Oracle E-Business Suite and OPSM: • EBS_LOT_SYNC_DISCRETE_FULL, EBS Discrete Full, EBS Discrete Full Load • EBS_LOT_SYNC_DISCRETE_INCR, EBS Discrete Incremental, EBS Discrete Incremental Load • EBS_LOT_SYNC_PROCESS_R11_FULL, EBS R11 Process Full, EBS R11 Process Full Load • EBS_LOT_SYNC_PROCESS_R11_INCR, EBS R11 Process Incremental, EBS R11 Process Incremental Load
PAS_PACKAGE_UNIT	Package Unit Type	The type of packaging unit of the serialized product or higher level serialized container.	None by default.

Lookup Type	Lookup Type Meaning	Lookup Type Description	Lookup Codes
PAS_PRODUCT_CATEGORY	Product Category	The category of product.	None by default.
PAS_PRODUCT_EXTRACT	Product Extract	Identifies the Oracle Data Integrator (ODI) scenario that will be used for the product information extract.	None by default. Oracle provides these lookup codes for the integration between Oracle E-Business Suite and OPSM: • EBS_PROD_SYNC_FULL, EBS Full, EBS Product Full Load • EBS_PROD_SYNC_INCR, EBS Incremental, EBS Product Incremental Load
PAS_PRODUCT_UOM	Product Unit of Measure	The Product UOM or Product Packaging Unit of the serialized product. This lookup will be a subset of the PAS_PACKAGING_UNIT lookup (e.g. Bottle, Blister Pack, Box, Case).	None by default.
PAS_SERIAL_USAGE	Serial Usage	The current usage of the serialized item.	None by default.
PAS_SOURCE_SYSTEM	Source System	The identifier used to distinguish different transactional or ERP systems.	• EBIZ_01, EBIZ_01, Oracle E-Business Suite • OPSM, OPSM, OPSM

Lookup Type	Lookup Type Meaning	Lookup Type Description	Lookup Codes
PAS_WORK_ORDER_EXTRACT	Work Order Extract	Identifies the Oracle Data Integrator (ODI) scenario that will be used for the work order extract.	None by default. Oracle provides these lookup codes for the integration between Oracle E-Business Suite and OPSM: • EBS_WO_SERIAL_DISCRETE_FULL, EBS Discrete Full, EBS Discrete Full Load • EBS_WO_SERIAL_DISCRETE_INCR, EBS Discrete Incremental, EBS Discrete Incremental Load • EBS_WO_SERIAL_PROCESS_FULL, EBS Process Full, EBS Process Full Load • EBS_WO_SERIAL_PROCESS_INCR, EBS Process Incremental, EBS Process Incremental Load

OPSM Lookup Types and Codes - Extensible Access Level

Lookup Type	Lookup Type Meaning	Lookup Type Description	Lookup Code, Meaning, and Description
PAS_EPC_TYPE	EPC Number Type	Type of EPC Number	GTIN, GTIN-14, GTIN-14 EPC Number
PAS_LABEL_TYPE	Label Type	The type of identifier on the serialized product or serialized container.	• SGTIN-198, SGTIN-198, SGTIN-198 • SGTIN-96, SGTIN-96, SGTIN-96 • USN-1, USN-1, USN-1

Lookup Type	Lookup Type Meaning	Lookup Type Description	Lookup Code, Meaning, and Description
PAS_PRODUCT_CODE_TYPE	Product Code Type	The type of product code (e.g. GTIN, NDC442, NDC542, etc).	• GTIN, GTIN, Global Trade Identification Number • NDC442, NDC442, National Drug Code using the 4-4-2 configuration. • NDC532, NDC532, National Drug Code using the 5-3-2 configuration. • NDC541, NDC541, National Drug Code using the 5-4-1 configuration. • NDC542, NDC542, National Drug Code using the 5-4-2 configuration.
PAS_REASON_CODE	Reason Code	The reason code identifying why the serial was decommissioned.	• VOIDED, Voided, Serial was voided

Lookup Type	Lookup Type Meaning	Lookup Type Description	Lookup Code, Meaning, and Description
PAS_SERIAL_TYPE	Serial Type	The format of the serial number (e.g. SGTIN-96, etc.).	• SGTIN-198, SGTIN-198, SGTIN-198 • SGTIN-96, SGTIN-96, SGTIN-96 • USN-1, UNIQUE SERIAL NUMBER, UNIQUE SERIAL NUMBER
PAS_SERIAL_TYPE_GROUP	Serial Type Group	Identifies a serial group which is used to group like serial types for management of serial ranges.	• SGTIN, SGTIN, SGTIN • USN, USN, UNIQUE SERIAL NUMBER

OPSM Lookup Types and Codes - System Access Level

Lookup Type	Lookup Type Meaning	Lookup Type Description	Lookup Code, Meaning, and Description
PAS_ACTION_CODE	Action Code	Identifies the action to be taken when processing a record from the interface table.	MERGE, Merge Product and Item into OPSM, Merge Product and Item into OPSM

Lookup Type	Lookup Type Meaning	Lookup Type Description	Lookup Code, Meaning, and Description
PAS_ADDRESS_CODE	Address Code	The code of the address (i.e. source, destination, etc.).	• DESTINATION, Destination Address, Destination Address • SOURCE, Source Address, Source Address
PAS_ADDRESS_TYPE	Address Type	The type of address (i.e. shipping, business, etc.).	• BUSINESS, Business Address, Business Address • SHIPPING, Shipping Address, Shipping Address

Lookup Type	Lookup Type Meaning	Lookup Type Description	Lookup Code, Meaning, and Description
PAS_COMPOSITE_ALERT_CONTROL	Composite Alert Control	Reserved for future use. Indicates when e-mail alerts are sent during the SOA Composite fault processing.	• BOTH, Send E-mail for Business Process and Composite Faults, Provide an e-mail alert whenever the business process or the SOA composite has failed • BUSINESS_PROCESS, Send E-mail for Business Process Faults, Provide an e-mail alert whenever the business process being performed within a SOA composite has failed • COMPOSITE, Send E-mail for Composite Faults, Provide an e-mail alert whenever the SOA composite has failed. This can occur if services used by the composite are down, the database is down, etc.

Lookup Type	Lookup Type Meaning	Lookup Type Description	Lookup Code, Meaning, and Description
PAS_COUNTERFEIT_STATUS	Counterfeit Status	The status of the serial with regards to counterfeiting.	• COUNTERFEIT, Counterfeit, Counterfeit • NOTCOUNTERFEIT, Verified Not Counterfeit, Verified Not Counterfeit • SUSPECT, Suspect Counterfeit, Suspect Counterfeit
PAS_DIGITAL_SIGN_METHOD	Digital Signature Method	If digital signature functionality will be used, set the Digital Signature Method to Session.	SESSION, Session, Digitally Sign documents based on session
PAS_DIGITAL_SIGN_YESNO	Signed Document Attached	Identifies signed and unsigned pedigree documents.	• 0, No, Yes/No • 1, Yes, Yes/No

Lookup Type	Lookup Type Meaning	Lookup Type Description	Lookup Code, Meaning, and Description
PAS_EPC_CODE_TYPES	Code Type	EPCIS Code Type	• 0, parentID, Allow all EPC Codes in parentID tag • 1, epcList, Allow all EPC Codes in epcList tag • 100, noepc, Allow all entries without EPC codes • 2, childEPCs, Allow all EPC Codes in childEPCs tag • 3, epcClass, Allow all EPC Codes in epcClass tag

Lookup Type	Lookup Type Meaning	Lookup Type Description	Lookup Code, Meaning, and Description
PAS_EPC_EVENT_TYPES	Event Type	EPCIS Event Type	• 0, ObjectEvent, Captures event information pertaining to one or more physical objects identified by EPCs • 1, AggregationEvent, Captures the event details for objects that have been physically aggregated to one another • 100, Unknown, Unknown • 2, QuantityEvent, Captures event details regarding a specified quantity of an object class • 3, TransactionEvent, Captures event details where there is an association or disassociation of physical objects to one or more business transactions

Lookup Type	Lookup Type Meaning	Lookup Type Description	Lookup Code, Meaning, and Description
PAS_EPC_PURE_TYPES	Pure Type	EPCIS Pure Type	• 0, GID, General Identifier [urn:epc:id:gid:GeneralManagerNumber.ObjectClass.SerialNumber] • 1, SGTIN, General Identifier [urn:epc:id:sgtin:CompanyPrefix.ItemReference.SerialNumber] • 2, SSCC, General Identifier [urn:epc:id:sscc:CompanyPrefix.SerialReference] • 3, SGLN, General Identifier [urn:epc:id:sgln:CompanyPrefix.LocationReference.ExtensionComponent] • 4, GRAI, General Identifier [urn:epc:id:grai:CompanyPrefix.AssetType.SerialNumber] • 5, GIAI, General Identifier [urn:epc:id:giai:CompanyPrefix.IndividualAssetReference]

Lookup Type	Lookup Type Meaning	Lookup Type Description	Lookup Code, Meaning, and Description
			• 6, GSRN, General Identifier [urn:epc:id:giai:CompanyPrefix.ServiceReference] • 7, GDTI, General Identifier [urn:epc:id:giai:CompanyPrefix.DocumentType.SerialNumber]

Lookup Type	Lookup Type Meaning	Lookup Type Description	Lookup Code, Meaning, and Description
PAS_EPC_SGTIN-96_FILTER	EPC SGTIN-96 Filter Value	EPC SGTIN-96 Filter used during generation of EPC Serial Numbers.	• 0, All Others, All Others • 1, Point of Sale (POS) Trade Item, Point of Sale (POS) Trade Item • 2, Full Case for Transport, Full Case for Transport • 3, Reserved, Reserved • 4, Inner Pack Trade Item Grouping for Handling, Inner Pack Trade Item Grouping for Handling • 5, Reserved, Reserved • 6, Unit Load, Unit Load • 7, Unit not intended for individual sale, Unit inside Trade Item or component inside a product not intended for individual sale

Lookup Type	Lookup Type Meaning	Lookup Type Description	Lookup Code, Meaning, and Description
PAS_ERROR_STATUS	Transaction Error Status	Transaction Error Status	• CLEARED, Cleared, Cleared • DETECTED, Detected, Detected

Lookup Type	Lookup Type Meaning	Lookup Type Description	Lookup Code, Meaning, and Description
PAS_GENERATION_STATUS	Generation Status	Status of the serial generation request.	• ERRORS, Error(s) Exist, Error(s) exist for serial generation request • INPROGRESS, In Progress, Serial generation request is in progress • REQUESTED, Generation Requested, Serial generation request is waiting to be processed • SUBMITTED, Generation Submitted, Serial generation request is submitted to be processed • SUCCESS, Successful Generation, Serial generation request completed successfully • SYNC_REQ_SUBMITTED, Synchronous Request Submitted, Synchronous serial generation

Lookup Type	Lookup Type Meaning	Lookup Type Description	Lookup Code, Meaning, and Description
			request is submitted to be processed • TERMINATED, Abnormal Termination, Serial generation request has abnormally terminated • WARNINGS, Warning(s) Exist, Warning(s) exist for serial generation request
PAS_GEN_REQUEST_METHOD	Generation Request Method	The method used to create the Serial Generation Request.	• SERIALGENERATIONREQUEST UI, User Interface, Serial Generation Request User Interface • WEBSERVICEREQUEST, Web Service Request, Web Service Request • WORKORDERIMPORT, Work Order Import, Work Order Import

Lookup Type	Lookup Type Meaning	Lookup Type Description	Lookup Code, Meaning, and Description
PAS_INITIATING_OPERATION	Initiating Operation	The operation that initiated the transaction.	• UPDATEDOC, Serial Update by Primary Document, Serial Update by Primary Document, • UPDATELABEL, Serial Update by Label, Serial Update by Label • UPDATELIST, Serial Update by List, Serial Update by List

Lookup Type	Lookup Type Meaning	Lookup Type Description	Lookup Code, Meaning, and Description
PAS_JOB_STATUS	Job Status	The status of the Job.	• COMPLETE, Complete, Job was completed • ERRORS, Error(s) Exist, Error(s) exist for job processed • INPROGRESS, In Progress, Job is in processing • SUBMITTED, Submitted, Job was submitted • TERMINATED, Abnormal Termination, Job has abnormally terminated • WARNINGS, Warning(s) Exist, Warning(s) exist for job processed

Lookup Type	Lookup Type Meaning	Lookup Type Description	Lookup Code, Meaning, and Description
PAS_JOB_TYPE	Job Type	Job Type	• LOTSYNCH, Lot Synchronization, Lot Synchronization • PRODUCTSYNCH, Product Synchronization, Product Synchronization • WEBSERVICES, Web Service Exceptions, Web Service Exceptions • WOSERIALREQUEST, Work Order Serialization, Work Order Serialization,
PAS_LOT_SYNCH_ACTIONS	Actions for Lot Synchronization	Actions for Lot Synchronization (Extract, Merge, etc.)	• EXTRACT, Extract Lots, Extract, Lots • EXTRACTANDMERGE, Extract Lots and Merge Lots, Extract Lots and Merge Lots from Lot Interface table • MERGE, Merge Lots, Merge Lots from Lot Interface table

Lookup Type	Lookup Type Meaning	Lookup Type Description	Lookup Code, Meaning, and Description
PAS_METHOD_OF_COMM	Method of Communication	The method of communicating the serialized items (e.g. Web service, File exchange, etc.).	• FILEEXCHANGE, File Exchange, Exported/Imported using a File • WEBSERVICE, Web Service, Transmitted using Web Service
PAS_ON_OFF	On or Off Flag	Flag used to identify an "on" or "off" status. This profile option is used to determine the checked (on) and the unchecked (off) values in check boxes for several pages in OPSM. For example: • Require Product for Generation check box on the Create Location and Edit Location pages. • Controlled Substance, Record Internal Shipments, and Record Internal Returns check boxes on the Create Product and Edit Product pages.	• 0, Off, Off • 1, On, On

Lookup Type	Lookup Type Meaning	Lookup Type Description	Lookup Code, Meaning, and Description
PAS_ON_OFF_ALL	On or Off or All Flag	Reserved for future use. Flag used to identify an "on" or "off" or "all" status. This profile option is used specifically for flags within several pages in OPSM.	• ALL, All, All • OFF, Off, Off • ON, On, On
PAS_PRIMARY_NONPRIMARY	Primary Identifiers Only	Indicates whether to display primary identifiers only.	1, Yes, Yes
PAS_PRODUCT_SYNCH_ACTIONS	Actions for Product Synch	Actions for Product Synchronization.	• EXTRACT, Extract Items, Extract Items • EXTRACTAND MERGE, Extract Items and Merge Product and Item Cross Reference, Extract Items and Merge Product and Item Cross Reference • MERGE, Merge Product and Item Cross Reference, Merge Product and Item Cross Reference

Lookup Type	Lookup Type Meaning	Lookup Type Description	Lookup Code, Meaning, and Description
PAS_PRODUCT_UNIT_ID_FORMULA	Product Unit ID Formula	Identifies the structure of the Product Unit Identifier.	• EPCNUMBER, EPC Number, EPC Number • PRODUCT, Product Code + Product Code Type + Product Code Variant, Product Code + Product Code Type + Product Code Variant • PRODUCTPKGUNIT, Product Code + Product Code Type + Product Code Variant + Packaging Unit, Product Code + Product Code Type + Product Code Variant + Packaging Unit
PAS_QUANTITY_OR_RANGE	Quantity or Range	The method used for requesting serials on the serial generation request.	• QUANTITY, Quantity, Quantity • SERIALNUMBERRANGE, Serial Number Range, Serial Number Range

Lookup Type	Lookup Type Meaning	Lookup Type Description	Lookup Code, Meaning, and Description
PAS_RANGE_LEVEL_CONTROL	Range Level Control	The serial range control level.	• LOCATION, Location Level, Location Level • LOCATIONPRODUCT, Location and Product Level, Location and Product Level • NORANGE, No Range, No Range
PAS_RULES_TRANS_TYPE	Destination Rules Transaction Type	Transaction Types for transmission of serials to a destination.	• GENERATE, Serial Generation, Serial Generation • IMPORT, Import Serials, Import Serials • RETURN, Return, Return • SHIPMENT, Shipment, Shipment
PAS_SERIAL_CONTAINER	Include Containers/Product Serials	Indicates whether to display containers, product serials or both.	• 0, Containers, Containers • 1, Product Serials, Product Serials

Lookup Type	Lookup Type Meaning	Lookup Type Description	Lookup Code, Meaning, and Description
PAS_SERIAL_CONTROL	Serial Control	Indicates how serials can be created.	• EXTERNALLYGENERATED, Externally Generated, Externally Generated • OPSMSERIALIZED, OPSM Serialized, OPSM Serialized
PAS_SERIAL_INCREASE_TYPE	Serial Increase Type	The type of serial increase used when supporting an overage of serials during generation.	• PERCENT, Percent, Percent • QUANTITY, Quantity, Quantity
PAS_SERIAL_STATE	Serial State	The current state of the serialized item.	• RETURNED, Returned, Returned • SHIPPED, Shipped, Shipped

Lookup Type	Lookup Type Meaning	Lookup Type Description	Lookup Code, Meaning, and Description
PAS_SERIAL_STATUS	Serial Status	The status of the serialized item.	• COMMISSIONED, Commissioned, The serialized item is currently commissioned • DECOMMISSIONED, Decommissioned, The serialized item is currently decommissioned • RESERVED, Reserved, The serialized item is currently reserved
PAS_SIGNED_DOCUMENT_STATUS	Signed Document Status	Identifies signed and unsigned pedigree documents	• 0, Pending Signature, Unsigned pedigree documents • 1, Signed Documents, Signed pedigree documents

Lookup Type	Lookup Type Meaning	Lookup Type Description	Lookup Code, Meaning, and Description
PAS_SOURCE_SYSTEM_PRECEDENCE	Source System Precedence	Indicates whether the Product or Product Detail information can be changed by any source system or only the owning source system.	• ALL, Any Source System, Any source systems can update the product or product detail information. • OWNING, Owning Source System, Only the owning source system can update the product or product detail information.

Lookup Type	Lookup Type Meaning	Lookup Type Description	Lookup Code, Meaning, and Description
PAS_TIME_PERIODS	Dashboard Time Periods	Time periods, specified in days, for filtering information displayed in the dashboard components	• LAST30DAYS, Last 30 Days, Display activity on the dashboard that has occurred within the past 30 days • LAST365DAYS, Last 365 Days, Display activity on the dashboard that has occurred within the past 365 days • LAST60DAYS, Last 60 Days, Display activity on the dashboard that has occurred within the past 60 days • LAST7DAYS, Last 7 Days, Display activity on the dashboard that has occurred within the past 7 days • LAST90DAYS, Last 90 Days, Display activity on the dashboard that has occurred within the past 90 days

Lookup Type	Lookup Type Meaning	Lookup Type Description	Lookup Code, Meaning, and Description
PAS_TRANSACTION_EXCEPTION	Transaction Exception	Indicates if an exception exists against the transaction.	• ERRORS, Errors, Errors • NOEXCEPTION, No Exceptions, No Exceptions • WARNINGS, Warnings, Warnings
PAS_TRANSACTION_STATUS	Transaction Status	The status of the transaction in the OPSM system. (e.g. Pending, Confirmed, etc.)	• DISREGARD, Disregarded, Disregarded • INPROGRESS, In Progress, In Progress • PENDING, Pending, Pending • PROCESSED, Processed, Processed • SUBMITTED, Submitted, Submitted

Lookup Type	Lookup Type Meaning	Lookup Type Description	Lookup Code, Meaning, and Description
PAS_TRANSACTION_TYPE	Serial Transaction Type	The type of transaction performed against the serialized item.	• COMMISSION, Commission Serials, Commission Serials • DECOMMISSION, Decommission Serials, Decommission Serials • GENERATE, Serial Generation, Serial Generation • IMPORT, Import Serials, Import Serials • RESERVE, Reserve Serials, Reserve Serials • RETURN, Return, Return • SERIALEDIT, Edit Serials, Edit Serials • SHIPMENT, Shipment, Shipment • TRANSMIT, Serial Transmission, Serial Transmission

Lookup Type	Lookup Type Meaning	Lookup Type Description	Lookup Code, Meaning, and Description
PAS_UNIQUE_SERIAL_METHOD	Unique Serial Number Method	The method the system uses to determine the unique serial number.	• NEXTNUMBER, Use Next Number, Use the next available number • RANDOM, Use Random Number, Use a generated random number

Lookup Type	Lookup Type Meaning	Lookup Type Description	Lookup Code, Meaning, and Description
PAS_WEB_SERVICES	Web Services for Exception Handling Review	Web Services for Exception Handling Review	• CAPTUREEPCISDOC, captureEpcisDoc, captureEpcisDoc Web Service • CREATETRANSACTION, createTransaction, createTransaction Web Service • EDITSERIALDOC, Edit Serial by Primary Document Web Service, Edit Serial by Primary Document Web Service • EDITSERIALLABEL, Edit Serial by Label Web Service, Edit Serial by Label Web Service • EDITSERIALLIST, Edit Serial by List Web Service, Edit Serial by List Web Service • HTTPPOST, HTTPPost, HTTPPost EPCIS Capture Service • MERGELOT, mergeLot, mergeLot Web

Lookup Type	Lookup Type Meaning	Lookup Type Description	Lookup Code, Meaning, and Description
			Service
PAS_WO_SERIALIZATION_ACTIONS	Actions for Work Order Serialization	Actions for Work Order Serialization.	• EXTRACT, Extract Work Orders, Extract Work Orders • EXTRACTANDPROCESS, Extract Work Orders and process Work Order Serialization, Extract Work Orders and process Work Order Serialization • PROCESS, Process Work Order Serialization, Process Work Order Serialization

C

Web Service WSDLs

This appendix covers the following topics:

- Web Service WSDLs

Web Service WSDLs

This section lists all of the web service wsdls and provides the structure of each wsdl.

For more information on the OPSM and EPCIS web services, see the Web Services Overview, page 14-1.

CaptureService WSDL

```
<?xml version="1.0"?>
<wsdl:definitions targetNamespace="http://xmlns.oracle.com/epcis"
            xmlns="http://schemas.xmlsoap.org/wsdl/"
            xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/"
            xmlns:tns="http://xmlns.oracle.com/epcis"
            xmlns:xsd="http://www.w3.org/2001/XMLSchema"
            xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"
            xmlns:epcis="urn:epcglobal:epcis:xsd:1">
    <types>
        <xsd:schema>
              <xsd:import namespace="urn:epcglobal:epcis:xsd:1"
schemaLocation="EPCglobal-epcis-1_0.xsd"/>
        </xsd:schema>
    </types>
    <message name="epcisDocument">
    <part name="doc" element="epcis:EPCISDocument"/>
    </message>
    <portType name="capturePort">
        <operation name="capture">
            <input message="tns:epcisDocument"/>
        </operation>
    </portType>
    <binding name="captureBinding" type="tns:capturePort">
        <soap:binding style="document"
transport="http://schemas.xmlsoap.org/soap/http"/>
        <operation name="capture">
        <soap:operation soapAction=""/>
            <input>
                <soap:body use="literal"/>
            </input>
        </operation>
    </binding>
    <service name="CaptureService">
        <port name="capturePort" binding="tns:captureBinding">
           <soap:address
location="http://127.0.0.1:7001/opsmservices-epcis/CaptureService"/>
        </port>
    </service>
</wsdl:definitions>
```

EPCGlobalEPCISService WSDL

```
<?xml version='1.0' encoding='UTF-8'?>
<s0:definitions targetNamespace="urn:epcglobal:epcis:wsdl:1" xmlns=""
xmlns:s0="http://schemas.xmlsoap.org/wsdl/"
xmlns:s1="urn:epcglobal:epcis-query:xsd:1"
xmlns:s2="urn:epcglobal:epcis:wsdl:1"
xmlns:s3="http://schemas.xmlsoap.org/wsdl/soap/">
  <s0:documentation>
    Copyright (C) 2006, 2005 EPCglobal Inc., All Rights Reserved.
    EPCglobal Inc., its members, officers, directors, employees, or
agents shall not be liable for any injury, loss, damages, financial or
otherwise, arising from, related to, or caused by the use of this
document.  The use of said document shall constitute your express
consent to the foregoing exculpation.

  </s0:documentation>
  <s0:types>
    <xsd:schema targetNamespace="urn:epcglobal:epcis:wsdl:1"
xmlns:apachesoap="http://xml.apache.org/xml-soap"
xmlns:epcglobal="urn:epcglobal:xsd:1"
xmlns:epcis="urn:epcglobal:epcis:xsd:1"
xmlns:epcisq="urn:epcglobal:epcis-query:xsd:1"
xmlns:impl="urn:epcglobal:epcis:wsdl:1"
xmlns:s0="http://schemas.xmlsoap.org/wsdl/"
xmlns:s1="urn:epcglobal:epcis-query:xsd:1"
xmlns:s2="urn:epcglobal:epcis:wsdl:1"
xmlns:s3="http://schemas.xmlsoap.org/wsdl/soap/"
xmlns:soapenc="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/"
xmlns:wsdlsoap="http://schemas.xmlsoap.org/wsdl/soap/"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
      <xsd:import namespace="urn:epcglobal:xsd:1"
schemaLocation="EPCglobal.xsd"/>
      <xsd:import namespace="urn:epcglobal:epcis:xsd:1"
schemaLocation="EPCglobal-epcis-1_0.xsd"/>
      <xsd:import namespace="urn:epcglobal:epcis-query:xsd:1"
schemaLocation="EPCglobal-epcis-query-1_0.xsd"/>
    </xsd:schema>
  </s0:types>
  <s0:message name="getQueryNamesRequest">
    <s0:part element="s1:GetQueryNames" name="parms"/>
  </s0:message>
  <s0:message name="getQueryNamesResponse">
    <s0:part element="s1:GetQueryNamesResult"
name="getQueryNamesReturn"/>
  </s0:message>
  <s0:message name="ImplementationExceptionResponse">
    <s0:part element="s1:ImplementationException" name="fault"/>
  </s0:message>
  <s0:message name="ValidationExceptionResponse">
    <s0:part element="s1:ValidationException" name="fault"/>
  </s0:message>
  <s0:message name="SecurityExceptionResponse">
    <s0:part element="s1:SecurityException" name="fault"/>
  </s0:message>
  <s0:message name="QueryTooComplexExceptionResponse">
    <s0:part element="s1:QueryTooComplexException" name="fault"/>
  </s0:message>
  <s0:message name="InvalidURIExceptionResponse">
```

```
<s0:part element="s1:InvalidURIException" name="fault"/>
  </s0:message>
  <s0:message name="QueryParameterExceptionResponse">
    <s0:part element="s1:QueryParameterException" name="fault"/>
  </s0:message>
  <s0:message name="NoSuchNameExceptionResponse">
    <s0:part element="s1:NoSuchNameException" name="fault"/>
  </s0:message>
  <s0:message name="pollRequest">
    <s0:part element="s1:Poll" name="parms"/>
  </s0:message>
  <s0:message name="pollResponse">
    <s0:part element="s1:QueryResults" name="pollReturn"/>
  </s0:message>
  <s0:message name="QueryTooLargeExceptionResponse">
    <s0:part element="s1:QueryTooLargeException" name="fault"/>
  </s0:message>
  <s0:message name="getStandardVersionRequest">
    <s0:part element="s1:GetStandardVersion" name="parms"/>
  </s0:message>
  <s0:message name="getStandardVersionResponse">
    <s0:part element="s1:GetStandardVersionResult"
name="getStandardVersionReturn"/>
  </s0:message>
  <s0:message name="getVendorVersionRequest">
    <s0:part element="s1:GetVendorVersion" name="parms"/>
  </s0:message>
  <s0:message name="getVendorVersionResponse">
    <s0:part element="s1:GetVendorVersionResult"
name="getVendorVersionReturn"/>
  </s0:message>
  <s0:message name="DuplicateNameExceptionResponse">
    <s0:part element="s1:DuplicateNameException" name="fault"/>
  </s0:message>
  <s0:portType name="EPCISServicePortType">
    <s0:operation name="getQueryNames">
      <s0:input message="s2:getQueryNamesRequest"
name="getQueryNamesRequest"/>
      <s0:output message="s2:getQueryNamesResponse"
name="getQueryNamesResponse"/>
      <s0:fault message="s2:ImplementationExceptionResponse"
name="ImplementationExceptionFault"/>
      <s0:fault message="s2:ValidationExceptionResponse"
name="ValidationExceptionFault"/>
      <s0:fault message="s2:SecurityExceptionResponse"
name="SecurityExceptionFault"/>
    </s0:operation>
    <s0:operation name="poll">
      <s0:input message="s2:pollRequest" name="pollRequest"/>
      <s0:output message="s2:pollResponse" name="pollResponse"/>
      <s0:fault message="s2:QueryTooComplexExceptionResponse"
name="QueryTooComplexExceptionFault"/>
      <s0:fault message="s2:ImplementationExceptionResponse"
name="ImplementationExceptionFault"/>
      <s0:fault message="s2:QueryParameterExceptionResponse"
name="QueryParameterExceptionFault"/>
      <s0:fault message="s2:QueryTooLargeExceptionResponse"
name="QueryTooLargeExceptionFault"/>
      <s0:fault message="s2:ValidationExceptionResponse"
name="ValidationExceptionFault"/>
      <s0:fault message="s2:SecurityExceptionResponse"
```

```
name="SecurityExceptionFault"/>
      <s0:fault message="s2:NoSuchNameExceptionResponse"
name="NoSuchNameExceptionFault"/>
    </s0:operation>
    <s0:operation name="getStandardVersion">
      <s0:input message="s2:getStandardVersionRequest"
name="getStandardVersionRequest"/>
      <s0:output message="s2:getStandardVersionResponse"
name="getStandardVersionResponse"/>
      <s0:fault message="s2:ImplementationExceptionResponse"
name="ImplementationExceptionFault"/>
      <s0:fault message="s2:ValidationExceptionResponse"
name="ValidationExceptionFault"/>
      <s0:fault message="s2:SecurityExceptionResponse"
name="SecurityExceptionFault"/>
    </s0:operation>
    <s0:operation name="getVendorVersion">
      <s0:input message="s2:getVendorVersionRequest"
name="getVendorVersionRequest"/>
      <s0:output message="s2:getVendorVersionResponse"
name="getVendorVersionResponse"/>
      <s0:fault message="s2:ImplementationExceptionResponse"
name="ImplementationExceptionFault"/>
      <s0:fault message="s2:ValidationExceptionResponse"
name="ValidationExceptionFault"/>
      <s0:fault message="s2:SecurityExceptionResponse"
name="SecurityExceptionFault"/>
    </s0:operation>
  </s0:portType>
  <s0:binding name="EPCISServiceBinding" type="s2:EPCISServicePortType">
    <s3:binding style="document"
transport="http://schemas.xmlsoap.org/soap/http"/>
    <s0:operation name="getQueryNames">
      <s3:operation/>
      <s0:input>
        <s3:body use="literal"/>
      </s0:input>
      <s0:output>
        <s3:body use="literal"/>
      </s0:output>
      <s0:fault name="ImplementationExceptionFault">
        <s3:fault name="ImplementationExceptionFault" use="literal"/>
      </s0:fault>
      <s0:fault name="ValidationExceptionFault">
        <s3:fault name="ValidationExceptionFault" use="literal"/>
      </s0:fault>
      <s0:fault name="SecurityExceptionFault">
        <s3:fault name="SecurityExceptionFault" use="literal"/>
      </s0:fault>
    </s0:operation>
    <s0:operation name="poll">
      <s3:operation/>
      <s0:input>
        <s3:body use="literal"/>
      </s0:input>
      <s0:output>
        <s3:body use="literal"/>
      </s0:output>
      <s0:fault name="QueryTooComplexExceptionFault">
        <s3:fault name="QueryTooComplexExceptionFault" use="literal"/>
      </s0:fault>
```

```
<s0:fault name="ImplementationExceptionFault">
        <s3:fault name="ImplementationExceptionFault" use="literal"/>
      </s0:fault>
      <s0:fault name="QueryParameterExceptionFault">
        <s3:fault name="QueryParameterExceptionFault" use="literal"/>
      </s0:fault>
      <s0:fault name="QueryTooLargeExceptionFault">
        <s3:fault name="QueryTooLargeExceptionFault" use="literal"/>
      </s0:fault>
      <s0:fault name="ValidationExceptionFault">
        <s3:fault name="ValidationExceptionFault" use="literal"/>
      </s0:fault>
      <s0:fault name="SecurityExceptionFault">
        <s3:fault name="SecurityExceptionFault" use="literal"/>
      </s0:fault>
      <s0:fault name="NoSuchNameExceptionFault">
        <s3:fault name="NoSuchNameExceptionFault" use="literal"/>
      </s0:fault>
    </s0:operation>
    <s0:operation name="getStandardVersion">
      <s3:operation/>
      <s0:input>
        <s3:body use="literal"/>
      </s0:input>
      <s0:output>
        <s3:body use="literal"/>
      </s0:output>
      <s0:fault name="ImplementationExceptionFault">
        <s3:fault name="ImplementationExceptionFault" use="literal"/>
      </s0:fault>
      <s0:fault name="ValidationExceptionFault">
        <s3:fault name="ValidationExceptionFault" use="literal"/>
      </s0:fault>
      <s0:fault name="SecurityExceptionFault">
        <s3:fault name="SecurityExceptionFault" use="literal"/>
      </s0:fault>
    </s0:operation>
    <s0:operation name="getVendorVersion">
      <s3:operation/>
      <s0:input>
        <s3:body use="literal"/>
      </s0:input>
      <s0:output>
        <s3:body use="literal"/>
      </s0:output>
      <s0:fault name="ImplementationExceptionFault">
        <s3:fault name="ImplementationExceptionFault" use="literal"/>
      </s0:fault>
      <s0:fault name="ValidationExceptionFault">
        <s3:fault name="ValidationExceptionFault" use="literal"/>
      </s0:fault>
      <s0:fault name="SecurityExceptionFault">
        <s3:fault name="SecurityExceptionFault" use="literal"/>
      </s0:fault>
    </s0:operation>
  </s0:binding>
  <s0:service name="EPCglobalEPCISService">
    <s0:port binding="s2:EPCISServiceBinding"
name="EPCglobalEPCISServicePort">
      <s3:address
location="http://127.0.0.1:8888/epcis/EPCglobalEPCISServicePort"/>
```

```
</s0:port>
  </s0:service>
</s0:definitions>
```

JobInstanceServiceAMService WSDL

```
<wsdl:definitions
     name="JobInstanceServiceAMService"

targetNamespace="http://xmlns.oracle.com/apps/pas/transactions/transacti
onsService/applicationModule/common/"
     xmlns:plnk="http://schemas.xmlsoap.org/ws/2003/05/partner-link/"
     xmlns:errors="http://xmlns.oracle.com/adf/svc/errors/"

xmlns:orafault="http://xmlns.oracle.com/oracleas/schema/oracle-fault-11_
0"
     xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/"

xmlns:tns="http://xmlns.oracle.com/apps/pas/transactions/transactionsSer
vice/applicationModule/common/"
     xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"

xmlns:types="http://xmlns.oracle.com/apps/pas/transactions/transactionsS
ervice/applicationModule/common/types/"
    >
    <plnk:partnerLinkType name="JobInstanceServiceAMService">
        <plnk:role name="JobInstanceServiceAMServiceProvider">
            <plnk:portType name="tns:JobInstanceServiceAMService"/>
        </plnk:role>
        <plnk:role name="JobInstanceServiceAMServiceRequestor">
            <plnk:portType
name="tns:JobInstanceServiceAMServiceResponse"/>
        </plnk:role>
    </plnk:partnerLinkType>
    <wsdl:import namespace="http://xmlns.oracle.com/adf/svc/errors/"
location="classpath:/META-INF/wsdl/ServiceException.wsdl"/>
    <wsdl:types>
        <schema xmlns="http://www.w3.org/2001/XMLSchema">
            <import
namespace="http://xmlns.oracle.com/oracleas/schema/oracle-fault-11_0"
schemaLocation="classpath:/META-INF/oracle-webservices-async-fault-11_0.
xsd"/>
            <import
namespace="http://xmlns.oracle.com/apps/pas/transactions/transactionsSer
vice/applicationModule/common/types/"
                  schemaLocation="JobInstanceServiceAMService.xsd"/>
        </schema>
    </wsdl:types>
    <wsdl:message name="JobInstanceServiceAMService_createJobInstance">
        <wsdl:part name="parameters" element="types:createJobInstance"/>
    </wsdl:message>
    <wsdl:message
name="JobInstanceServiceAMService_createJobInstanceResponse">
        <wsdl:part name="parameters"
element="types:createJobInstanceResponse"/>
    </wsdl:message>
    <wsdl:message
name="JobInstanceServiceAMService_createJobInstanceAsync">
        <wsdl:part name="parameters"
element="types:createJobInstanceAsync"/>
    </wsdl:message>
    <wsdl:message name="JobInstanceServiceAMService_onFault">
        <wsdl:part name="parameters" element="orafault:Fault"/>
    </wsdl:message>
```

```
<wsdl:message
name="JobInstanceServiceAMService_createJobInstanceAsyncResponse">
        <wsdl:part name="parameters"
element="types:createJobInstanceAsyncResponse"/>
    </wsdl:message>
    <wsdl:portType name="JobInstanceServiceAMService">
        <wsdl:documentation>
            <ViewInstance
xmlns="http://xmlns.oracle.com/adf/svc/metadata/" Name="JobInstance"
xmlns:ns0="http://xmlns.oracle.com/apps/pas/transactions/transactionsSer
vice/view/common/"
                 SDOName="ns0:JobInstanceVOSDO"
CreateOpName="createJobInstance"/>
        </wsdl:documentation>
        <wsdl:operation name="createJobInstance">
            <wsdl:input
message="tns:JobInstanceServiceAMService_createJobInstance"/>
            <wsdl:output
message="tns:JobInstanceServiceAMService_createJobInstanceResponse"/>
            <wsdl:fault name="ServiceException"
message="errors:ServiceException"/>
        </wsdl:operation>
        <wsdl:operation name="createJobInstanceAsync">
            <wsdl:input
message="tns:JobInstanceServiceAMService_createJobInstanceAsync"
xmlns:ns1="http://www.w3.org/2006/05/addressing/wsdl"

ns1:Action="http://xmlns.oracle.com/apps/pas/transactions/transactionsSe
rvice/applicationModule/common/createJobInstanceAsync"/>
        </wsdl:operation>
    </wsdl:portType>
    <wsdl:portType name="JobInstanceServiceAMServiceResponse">
        <wsdl:operation name="onFault">
            <wsdl:input
message="tns:JobInstanceServiceAMService_onFault"
xmlns:ns1="http://www.w3.org/2006/05/addressing/wsdl"

ns1:Action="http://xmlns.oracle.com/oracleas/schema/oracle-fault-11_0/Fa
ult"/>
        </wsdl:operation>
        <wsdl:operation name="createJobInstanceAsyncResponse">
            <wsdl:input
message="tns:JobInstanceServiceAMService_createJobInstanceAsyncResponse"
xmlns:ns1="http://www.w3.org/2006/05/addressing/wsdl"

ns1:Action="http://xmlns.oracle.com/apps/pas/transactions/transactionsSe
rvice/applicationModule/common/createJobInstanceAsyncResponse"/>
        </wsdl:operation>
    </wsdl:portType>
    <wsdl:binding name="JobInstanceServiceAMServiceSoapHttp"
type="tns:JobInstanceServiceAMService">
        <soap:binding style="document"
transport="http://schemas.xmlsoap.org/soap/http"/>
        <wsdl:operation name="createJobInstance">
            <soap:operation
soapAction="http://xmlns.oracle.com/apps/pas/transactions/transactionsSe
rvice/applicationModule/common/createJobInstance"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
```

```
<soap:body use="literal"/>
            </wsdl:output>
            <wsdl:fault name="ServiceException">
                <soap:fault name="ServiceException" use="literal"
encodingStyle=""/>
            </wsdl:fault>
        </wsdl:operation>
        <wsdl:operation name="createJobInstanceAsync">
            <soap:operation
soapAction="http://xmlns.oracle.com/apps/pas/transactions/transactionsSe
rvice/applicationModule/common/createJobInstanceAsync"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
        </wsdl:operation>
    </wsdl:binding>
    <wsdl:binding name="JobInstanceServiceAMServiceResponseBinding"
type="tns:JobInstanceServiceAMServiceResponse">
        <soap:binding style="document"
transport="http://schemas.xmlsoap.org/soap/http"/>
        <wsdl:operation name="onFault">
            <soap:operation
soapAction="http://xmlns.oracle.com/oracleas/schema/oracle-fault-11_0/Fa
ult"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
        </wsdl:operation>
        <wsdl:operation name="createJobInstanceAsyncResponse">
            <soap:operation
soapAction="http://xmlns.oracle.com/apps/pas/transactions/transactionsSe
rvice/applicationModule/common/createJobInstanceAsyncResponse"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
        </wsdl:operation>
    </wsdl:binding>
    <wsdl:service name="JobInstanceServiceAMService">
        <wsdl:port name="JobInstanceServiceAMServiceSoapHttpPort"
binding="tns:JobInstanceServiceAMServiceSoapHttp">
            <soap:address
location="http://localhost:7105/opsmservices-transactions/JobInstanceSer
viceAMService"/>
        </wsdl:port>
    </wsdl:service>
</wsdl:definitions>
```

LotsServiceAMService WSDL

```
<wsdl:definitions
     name="LotsServiceAMService"

targetNamespace="/oracle/apps/pas/serials/serialsService/applicationModu
le/common/"
     xmlns:errors="http://xmlns.oracle.com/adf/svc/errors/"
     xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/"

xmlns:tns="/oracle/apps/pas/serials/serialsService/applicationModule/com
mon/"
     xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"

xmlns:types="/oracle/apps/pas/serials/serialsService/applicationModule/c
ommon/types/"
    >
    <wsdl:import namespace="http://xmlns.oracle.com/adf/svc/errors/"
location="classpath:/META-INF/wsdl/ServiceException.wsdl"/>
    <wsdl:types>
        <schema xmlns="http://www.w3.org/2001/XMLSchema">
            <import
namespace="/oracle/apps/pas/serials/serialsService/applicationModule/com
mon/types/"
                schemaLocation="LotsServiceAMService.xsd"/>
        </schema>
    </wsdl:types>
    <wsdl:message name="LotsServiceAMService_mergeLot">
        <wsdl:part name="parameters" element="types:mergeLot"/>
    </wsdl:message>
    <wsdl:message name="LotsServiceAMService_mergeLotResponse">
        <wsdl:part name="parameters" element="types:mergeLotResponse"/>
    </wsdl:message>
    <wsdl:portType name="LotsServiceAMService">
        <wsdl:documentation>
        mergeLot - Used to merge the lot information from an external
system into the OPSM system.
          Required input:
            LotId - Unique identifier of the lot
          or
            LotNumber
            LotSource - Source System of the lot

          ProductCode and LotProductVO
            ProductCode
            ProductCodeType
            ProductCodeVariant
            ProductUom
          or
            ItemNumber and LotItemVO
            ItemNumber
            ItemSource
            ItemUom

          Optional input:
            Location
            ParentLot
            OriginationDate - Date Lot was originated
            ExpirationDate - Date Lot expires
            BestByDate
```

```
SellByDate
            RetestDate

          Notes:
          If Item Number, Item Source, and Item Uom are passed, they are
used to
            get the Product Code, Product Code Type, Product Code
Variant, and Product Uom.
          The merge will attempt to find the lot using the following
precedence:
            If LotId passed, by LotId
            If LotId not passed and Location not passed, Lot Number, Lot
Source,
              Product Code, Product Code Type, Product Code Variant,
Product Uom
            If LotId not passed and Location passed, Lot Number, Lot
Source,
              Location,  Product Code, Product Code Type, Product Code
Variant, Product Uom
            If an existing lot is found, the lot will be updated with
the information
              that is passed. If the lot is not found, a new lot will be
added.
            If Lot Id was passed in, and not lot found, an error is
issued.
              The lot is not added.
       </wsdl:documentation>
        <wsdl:operation name="mergeLot">
            <wsdl:input message="tns:LotsServiceAMService_mergeLot"/>
            <wsdl:output
message="tns:LotsServiceAMService_mergeLotResponse"/>
            <wsdl:fault name="ServiceException"
message="errors:ServiceException"/>
        </wsdl:operation>
    </wsdl:portType>
    <wsdl:binding name="LotsServiceAMServiceSoapHttp"
type="tns:LotsServiceAMService">
        <soap:binding style="document"
transport="http://schemas.xmlsoap.org/soap/http"/>
        <wsdl:operation name="mergeLot">
            <soap:operation
soapAction="/oracle/apps/pas/serials/serialsService/applicationModule/co
mmon/mergeLot"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap:body use="literal"/>
            </wsdl:output>
            <wsdl:fault name="ServiceException">
                <soap:fault name="ServiceException" use="literal"
encodingStyle=""/>
            </wsdl:fault>
        </wsdl:operation>
    </wsdl:binding>
    <wsdl:service name="LotsServiceAMService">
        <wsdl:port name="LotsServiceAMServiceSoapHttpPort"
binding="tns:LotsServiceAMServiceSoapHttp">
            <soap:address
location="http://localhost:7102/PasSerializationManager-PasSerialsServic
e-context-root/LotsServiceAMService"/>
```

```
</wsdl:port>
    </wsdl:service>
</wsdl:definitions>
```

PackagingServiceAMService WSDL

```
<wsdl:definitions
     name="PackagingServiceAMService"

targetNamespace="http://xmlns.oracle.com/apps/pas/serials/serialsService
/applicationModule/common/"
     xmlns:plnk="http://schemas.xmlsoap.org/ws/2003/05/partner-link/"
     xmlns:errors="http://xmlns.oracle.com/adf/svc/errors/"

xmlns:orafault="http://xmlns.oracle.com/oracleas/schema/oracle-fault-11_
0"
     xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/"

xmlns:tns="http://xmlns.oracle.com/apps/pas/serials/serialsService/appli
cationModule/common/"
     xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"

xmlns:types="http://xmlns.oracle.com/apps/pas/serials/serialsService/app
licationModule/common/types/">
    <plnk:partnerLinkType name="PackagingServiceAMService">
        <plnk:role name="PackagingServiceAMServiceProvider">
            <plnk:portType name="tns:PackagingServiceAMService"/>
        </plnk:role>
        <plnk:role name="PackagingServiceAMServiceRequestor">
            <plnk:portType
name="tns:PackagingServiceAMServiceResponse"/>
        </plnk:role>
    </plnk:partnerLinkType>
    <wsdl:import namespace="http://xmlns.oracle.com/adf/svc/errors/"
location="classpath:/META-INF/wsdl/ServiceException.wsdl"/>
    <wsdl:types>
        <schema xmlns="http://www.w3.org/2001/XMLSchema">
            <import
namespace="http://xmlns.oracle.com/oracleas/schema/oracle-fault-11_0"
schemaLocation="classpath:/META-INF/oracle-webservices-async-fault-11_0.
xsd"/>
            <import
namespace="http://xmlns.oracle.com/apps/pas/serials/serialsService/appli
cationModule/common/types/"
                  schemaLocation="PackagingServiceAMService.xsd"/>
        </schema>
    </wsdl:types>
    <wsdl:message name="PackagingServiceAMService_unpackPackage">
        <wsdl:part name="parameters" element="types:unpackPackage"/>
    </wsdl:message>
    <wsdl:message
name="PackagingServiceAMService_unpackPackageResponse">
        <wsdl:part name="parameters"
element="types:unpackPackageResponse"/>
    </wsdl:message>
    <wsdl:message name="PackagingServiceAMService_packPackage">
        <wsdl:part name="parameters" element="types:packPackage"/>
    </wsdl:message>
    <wsdl:message name="PackagingServiceAMService_packPackageResponse">
        <wsdl:part name="parameters"
element="types:packPackageResponse"/>
    </wsdl:message>
    <wsdl:message name="PackagingServiceAMService_unpackPackageAsync">
        <wsdl:part name="parameters"
```

```
element="types:unpackPackageAsync"/>
    </wsdl:message>
    <wsdl:message name="PackagingServiceAMService_packPackageAsync">
        <wsdl:part name="parameters" element="types:packPackageAsync"/>
    </wsdl:message>
    <wsdl:message name="PackagingServiceAMService_onFault">
        <wsdl:part name="parameters" element="orafault:Fault"/>
    </wsdl:message>
    <wsdl:message
name="PackagingServiceAMService_unpackPackageAsyncResponse">
        <wsdl:part name="parameters"
element="types:unpackPackageAsyncResponse"/>
    </wsdl:message>
    <wsdl:message
name="PackagingServiceAMService_packPackageAsyncResponse">
        <wsdl:part name="parameters"
element="types:packPackageAsyncResponse"/>
    </wsdl:message>
    <wsdl:portType name="PackagingServiceAMService">
        <wsdl:documentation>
        packPackage - Used to record the packing of one label into
another from an external system.
          Required input:
            ParentLabel - Identifier of the container
            ParentLabelType - Type of Label
            ChildLabel - Identifer of the content
            ChildLabelType - Type of Label
          Notes:
            Parent Label can not be the same as Child Label
            Child Label must exist in OPSM. Parent will be create if it
does not exist.
          Optional input:
            PackSequence - Sequence of packing, Lowest level is packed
first
            ReusableFlag - If Parent Label is created, this will be used
            PackagingUnit - If Parent Label is created, this will be
used
            LabelPrintFormat - If Parent Label is created, this will be
used
        unpackPackage - Used to unpack a label from an external system.

          Required input:
            Label - Identifier to remove from what it is packed into
            LabelType - Type of Label
       </wsdl:documentation>
        <wsdl:operation name="unpackPackage">
            <wsdl:input
message="tns:PackagingServiceAMService_unpackPackage"/>
            <wsdl:output
message="tns:PackagingServiceAMService_unpackPackageResponse"/>
            <wsdl:fault name="ServiceException"
message="errors:ServiceException"/>
        </wsdl:operation>
        <wsdl:operation name="packPackage">
            <wsdl:input
message="tns:PackagingServiceAMService_packPackage"/>
            <wsdl:output
message="tns:PackagingServiceAMService_packPackageResponse"/>
            <wsdl:fault name="ServiceException"
message="errors:ServiceException"/>
        </wsdl:operation>
```

```
<wsdl:operation name="unpackPackageAsync">
            <wsdl:input
message="tns:PackagingServiceAMService_unpackPackageAsync"
xmlns:ns1="http://www.w3.org/2006/05/addressing/wsdl"

ns1:Action="http://xmlns.oracle.com/apps/pas/serials/serialsService/appl
icationModule/common/unpackPackageAsync"/>
        </wsdl:operation>
        <wsdl:operation name="packPackageAsync">
            <wsdl:input
message="tns:PackagingServiceAMService_packPackageAsync"
xmlns:ns1="http://www.w3.org/2006/05/addressing/wsdl"

ns1:Action="http://xmlns.oracle.com/apps/pas/serials/serialsService/appl
icationModule/common/packPackageAsync"/>
        </wsdl:operation>
    </wsdl:portType>
    <wsdl:portType name="PackagingServiceAMServiceResponse">
        <wsdl:operation name="onFault">
            <wsdl:input message="tns:PackagingServiceAMService_onFault"
xmlns:ns1="http://www.w3.org/2006/05/addressing/wsdl"

ns1:Action="http://xmlns.oracle.com/oracleas/schema/oracle-fault-11_0/Fa
ult"/>
        </wsdl:operation>
        <wsdl:operation name="unpackPackageAsyncResponse">
            <wsdl:input
message="tns:PackagingServiceAMService_unpackPackageAsyncResponse"
xmlns:ns1="http://www.w3.org/2006/05/addressing/wsdl"

ns1:Action="http://xmlns.oracle.com/apps/pas/serials/serialsService/appl
icationModule/common/unpackPackageAsyncResponse"/>
        </wsdl:operation>
        <wsdl:operation name="packPackageAsyncResponse">
            <wsdl:input
message="tns:PackagingServiceAMService_packPackageAsyncResponse"
xmlns:ns1="http://www.w3.org/2006/05/addressing/wsdl"

ns1:Action="http://xmlns.oracle.com/apps/pas/serials/serialsService/appl
icationModule/common/packPackageAsyncResponse"/>
        </wsdl:operation>
    </wsdl:portType>
    <wsdl:binding name="PackagingServiceAMServiceSoapHttp"
type="tns:PackagingServiceAMService">
        <soap:binding style="document"
transport="http://schemas.xmlsoap.org/soap/http"/>
        <wsdl:operation name="unpackPackage">
            <soap:operation
soapAction="http://xmlns.oracle.com/apps/pas/serials/serialsService/appl
icationModule/common/unpackPackage"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap:body use="literal"/>
            </wsdl:output>
            <wsdl:fault name="ServiceException">
                <soap:fault name="ServiceException" use="literal"
encodingStyle=""/>
            </wsdl:fault>
        </wsdl:operation>
```

```
<wsdl:operation name="packPackage">
            <soap:operation
soapAction="http://xmlns.oracle.com/apps/pas/serials/serialsService/appl
icationModule/common/packPackage"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap:body use="literal"/>
            </wsdl:output>
            <wsdl:fault name="ServiceException">
                <soap:fault name="ServiceException" use="literal"
encodingStyle=""/>
            </wsdl:fault>
        </wsdl:operation>
        <wsdl:operation name="unpackPackageAsync">
            <soap:operation
soapAction="http://xmlns.oracle.com/apps/pas/serials/serialsService/appl
icationModule/common/unpackPackageAsync"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
        </wsdl:operation>
        <wsdl:operation name="packPackageAsync">
            <soap:operation
soapAction="http://xmlns.oracle.com/apps/pas/serials/serialsService/appl
icationModule/common/packPackageAsync"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
        </wsdl:operation>
    </wsdl:binding>
    <wsdl:binding name="PackagingServiceAMServiceResponseBinding"
type="tns:PackagingServiceAMServiceResponse">
        <soap:binding style="document"
transport="http://schemas.xmlsoap.org/soap/http"/>
        <wsdl:operation name="onFault">
            <soap:operation
soapAction="http://xmlns.oracle.com/oracleas/schema/oracle-fault-11_0/Fa
ult"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
        </wsdl:operation>
        <wsdl:operation name="unpackPackageAsyncResponse">
            <soap:operation
soapAction="http://xmlns.oracle.com/apps/pas/serials/serialsService/appl
icationModule/common/unpackPackageAsyncResponse"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
        </wsdl:operation>
        <wsdl:operation name="packPackageAsyncResponse">
            <soap:operation
soapAction="http://xmlns.oracle.com/apps/pas/serials/serialsService/appl
icationModule/common/packPackageAsyncResponse"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
        </wsdl:operation>
    </wsdl:binding>
```

```
<wsdl:service name="PackagingServiceAMService">
        <wsdl:port name="PackagingServiceAMServiceSoapHttpPort"
binding="tns:PackagingServiceAMServiceSoapHttp">
            <soap:address
location="http://localhost:7105/opsmservices-serials/PackagingServiceAMS
ervice"/>
        </wsdl:port>
    </wsdl:service>
</wsdl:definitions>
```

ProductServiceAMService WSDL

```
<wsdl:definitions
     name="ProductServiceAMService"

targetNamespace="http://xmlns.oracle.com/oracle/apps/pas/setup/setupServ
ice/applicationModule/common/"
     xmlns:plnk="http://schemas.xmlsoap.org/ws/2003/05/partner-link/"
     xmlns:errors="http://xmlns.oracle.com/adf/svc/errors/"

xmlns:orafault="http://xmlns.oracle.com/oracleas/schema/oracle-fault-11_
0"
     xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/"

xmlns:tns="http://xmlns.oracle.com/oracle/apps/pas/setup/setupService/ap
plicationModule/common/"
     xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"

xmlns:types="http://xmlns.oracle.com/oracle/apps/pas/setup/setupService/
applicationModule/common/types/"
    >
    <plnk:partnerLinkType name="ProductServiceAMService">
        <plnk:role name="ProductServiceAMServiceProvider">
            <plnk:portType name="tns:ProductServiceAMService"/>
        </plnk:role>
        <plnk:role name="ProductServiceAMServiceRequestor">
            <plnk:portType name="tns:ProductServiceAMServiceResponse"/>
        </plnk:role>
    </plnk:partnerLinkType>
    <wsdl:import namespace="http://xmlns.oracle.com/adf/svc/errors/"
location="classpath:/META-INF/wsdl/ServiceException.wsdl"/>
    <wsdl:types>
        <schema xmlns="http://www.w3.org/2001/XMLSchema">
            <import
namespace="http://xmlns.oracle.com/oracleas/schema/oracle-fault-11_0"
schemaLocation="classpath:/META-INF/oracle-webservices-async-fault-11_0.
xsd"/>
            <import
namespace="http://xmlns.oracle.com/oracle/apps/pas/setup/setupService/ap
plicationModule/common/types/"
                    schemaLocation="ProductServiceAMService.xsd"/>
        </schema>
    </wsdl:types>
    <wsdl:message name="ProductServiceAMService_onFault">
        <wsdl:part name="parameters" element="orafault:Fault"/>
    </wsdl:message>
    <wsdl:message
name="ProductServiceAMService_mergeProductsAsyncResponse">
        <wsdl:part name="parameters"
element="types:mergeProductsAsyncResponse"/>
    </wsdl:message>
    <wsdl:message name="ProductServiceAMService_mergeProducts">
        <wsdl:part name="parameters" element="types:mergeProducts"/>
    </wsdl:message>
    <wsdl:message name="ProductServiceAMService_mergeProductsResponse">
        <wsdl:part name="parameters"
element="types:mergeProductsResponse"/>
    </wsdl:message>
    <wsdl:message name="ProductServiceAMService_mergeProductsAsync">
        <wsdl:part name="parameters"
```

```
element="types:mergeProductsAsync"/>
    </wsdl:message>
    <wsdl:portType name="ProductServiceAMServiceResponse">
        <wsdl:operation name="onFault">
            <wsdl:input message="tns:ProductServiceAMService_onFault"
xmlns:ns1="http://www.w3.org/2006/05/addressing/wsdl"

ns1:Action="http://xmlns.oracle.com/oracleas/schema/oracle-fault-11_0/Fa
ult"/>
        </wsdl:operation>
        <wsdl:operation name="mergeProductsAsyncResponse">
            <wsdl:input
message="tns:ProductServiceAMService_mergeProductsAsyncResponse"
xmlns:ns1="http://www.w3.org/2006/05/addressing/wsdl"

ns1:Action="http://xmlns.oracle.com/oracle/apps/pas/setup/setupService/a
pplicationModule/common/mergeProductsAsyncResponse"/>
        </wsdl:operation>
    </wsdl:portType>
    <wsdl:portType name="ProductServiceAMService">
        <wsdl:documentation/>
        <wsdl:operation name="mergeProducts">
            <wsdl:input
message="tns:ProductServiceAMService_mergeProducts"/>
            <wsdl:output
message="tns:ProductServiceAMService_mergeProductsResponse"/>
            <wsdl:fault name="ServiceException"
message="errors:ServiceException"/>
        </wsdl:operation>
        <wsdl:operation name="mergeProductsAsync">
            <wsdl:input
message="tns:ProductServiceAMService_mergeProductsAsync"
xmlns:ns1="http://www.w3.org/2006/05/addressing/wsdl"

ns1:Action="http://xmlns.oracle.com/oracle/apps/pas/setup/setupService/a
pplicationModule/common/mergeProductsAsync"/>
        </wsdl:operation>
    </wsdl:portType>
    <wsdl:binding name="ProductServiceAMServiceResponseBinding"
type="tns:ProductServiceAMServiceResponse">
        <soap:binding style="document"
transport="http://schemas.xmlsoap.org/soap/http"/>
        <wsdl:operation name="onFault">
            <soap:operation
soapAction="http://xmlns.oracle.com/oracleas/schema/oracle-fault-11_0/Fa
ult"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
        </wsdl:operation>
        <wsdl:operation name="mergeProductsAsyncResponse">
            <soap:operation
soapAction="http://xmlns.oracle.com/oracle/apps/pas/setup/setupService/a
pplicationModule/common/mergeProductsAsyncResponse"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
        </wsdl:operation>
    </wsdl:binding>
    <wsdl:binding name="ProductServiceAMServiceSoapHttp"
type="tns:ProductServiceAMService">
```

```
<soap:binding style="document"
transport="http://schemas.xmlsoap.org/soap/http"/>
        <wsdl:operation name="mergeProducts">
            <soap:operation
soapAction="http://xmlns.oracle.com/oracle/apps/pas/setup/setupService/a
pplicationModule/common/mergeProducts"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap:body use="literal"/>
            </wsdl:output>
            <wsdl:fault name="ServiceException">
                <soap:fault name="ServiceException" use="literal"/>
            </wsdl:fault>
        </wsdl:operation>
        <wsdl:operation name="mergeProductsAsync">
            <soap:operation
soapAction="http://xmlns.oracle.com/oracle/apps/pas/setup/setupService/a
pplicationModule/common/mergeProductsAsync"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
        </wsdl:operation>
    </wsdl:binding>
    <wsdl:service name="ProductServiceAMService">
        <wsdl:port name="ProductServiceAMServiceSoapHttpPort"
binding="tns:ProductServiceAMServiceSoapHttp">
            <soap:address
location="http://10.242.129.180:7101/opsmservices-setup/ProductServiceAM
Service"/>
        </wsdl:port>
    </wsdl:service>
</wsdl:definitions>
```

SerialGenRequestServiceAMService WSDL

```
<wsdl:definitions
     name="SerialGenRequestServiceAMService"

targetNamespace="http://xmlns.oracle.com/apps/pas/transactions/transacti
onsService/applicationModule/common/"
     xmlns:plnk="http://schemas.xmlsoap.org/ws/2003/05/partner-link/"
     xmlns:errors="http://xmlns.oracle.com/adf/svc/errors/"

xmlns:orafault="http://xmlns.oracle.com/oracleas/schema/oracle-fault-11_
0"
     xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/"

xmlns:tns="http://xmlns.oracle.com/apps/pas/transactions/transactionsSer
vice/applicationModule/common/"
     xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"

xmlns:types="http://xmlns.oracle.com/apps/pas/transactions/transactionsS
ervice/applicationModule/common/types/"
    >
    <plnk:partnerLinkType name="SerialGenRequestServiceAMService">
        <plnk:role name="SerialGenRequestServiceAMServiceProvider">
            <plnk:portType name="tns:SerialGenRequestServiceAMService"/>
        </plnk:role>
        <plnk:role name="SerialGenRequestServiceAMServiceRequestor">
            <plnk:portType
name="tns:SerialGenRequestServiceAMServiceResponse"/>
        </plnk:role>
    </plnk:partnerLinkType>
    <wsdl:import namespace="http://xmlns.oracle.com/adf/svc/errors/"
location="classpath:/META-INF/wsdl/ServiceException.wsdl"/>
    <wsdl:types>
        <schema xmlns="http://www.w3.org/2001/XMLSchema">
            <import
namespace="http://xmlns.oracle.com/oracleas/schema/oracle-fault-11_0"
schemaLocation="classpath:/META-INF/oracle-webservices-async-fault-11_0.
xsd"/>
            <import
namespace="http://xmlns.oracle.com/apps/pas/transactions/transactionsSer
vice/applicationModule/common/types/"
                  schemaLocation="SerialGenRequestServiceAMService.xsd"/>
        </schema>
    </wsdl:types>
    <wsdl:message
name="SerialGenRequestServiceAMService_createSerialGenerationRequest">
        <wsdl:part name="parameters"
element="types:createSerialGenerationRequest"/>
    </wsdl:message>
    <wsdl:message
name="SerialGenRequestServiceAMService_createSerialGenerationRequestResp
onse">
        <wsdl:part name="parameters"
element="types:createSerialGenerationRequestResponse"/>
    </wsdl:message>
    <wsdl:message
name="SerialGenRequestServiceAMService_createSerialGenerationRequestAsyn
c">
        <wsdl:part name="parameters"
element="types:createSerialGenerationRequestAsync"/>
```

```
</wsdl:message>
    <wsdl:message
name="SerialGenRequestServiceAMService_createProcessSerialGenerationRequ
est">
        <wsdl:part name="parameters"
element="types:createProcessSerialGenerationRequest"/>
    </wsdl:message>
    <wsdl:message
name="SerialGenRequestServiceAMService_createProcessSerialGenerationRequ
estResponse">
        <wsdl:part name="parameters"
element="types:createProcessSerialGenerationRequestResponse"/>
    </wsdl:message>
    <wsdl:message
name="SerialGenRequestServiceAMService_createProcessSerialGenerationRequ
estAsync">
        <wsdl:part name="parameters"
element="types:createProcessSerialGenerationRequestAsync"/>
    </wsdl:message>
    <wsdl:message name="SerialGenRequestServiceAMService_onFault">
        <wsdl:part name="parameters" element="orafault:Fault"/>
    </wsdl:message>
    <wsdl:message
name="SerialGenRequestServiceAMService_createSerialGenerationRequestAsyn
cResponse">
        <wsdl:part name="parameters"
element="types:createSerialGenerationRequestAsyncResponse"/>
    </wsdl:message>
    <wsdl:message
name="SerialGenRequestServiceAMService_createProcessSerialGenerationRequ
estAsyncResponse">
        <wsdl:part name="parameters"
element="types:createProcessSerialGenerationRequestAsyncResponse"/>
    </wsdl:message>
    <wsdl:portType name="SerialGenRequestServiceAMService">
        <wsdl:documentation>
            <ViewInstance
xmlns="http://xmlns.oracle.com/adf/svc/metadata/"
Name="SerialGenerationRequest"

xmlns:ns0="http://xmlns.oracle.com/apps/pas/transactions/transactionsSer
vice/view/common/"
                SDOName="ns0:SerialGenerationRequestVOSDO"
CreateOpName="createSerialGenerationRequest"/>
        </wsdl:documentation>
        <wsdl:operation name="createSerialGenerationRequest">
            <wsdl:input
message="tns:SerialGenRequestServiceAMService_createSerialGenerationRequ
est"/>
            <wsdl:output
message="tns:SerialGenRequestServiceAMService_createSerialGenerationRequ
estResponse"/>
            <wsdl:fault name="ServiceException"
message="errors:ServiceException"/>
        </wsdl:operation>
        <wsdl:operation name="createSerialGenerationRequestAsync">
            <wsdl:input
message="tns:SerialGenRequestServiceAMService_createSerialGenerationRequ
estAsync"
                xmlns:ns1="http://www.w3.org/2006/05/addressing/wsdl"
ns1:Action="http://xmlns.oracle.com/apps/pas/transactions/transactionsSe
```

```
rvice/applicationModule/common/createSerialGenerationRequestAsync"/>
        </wsdl:operation>
        <wsdl:operation name="createProcessSerialGenerationRequest">
            <wsdl:input
message="tns:SerialGenRequestServiceAMService_createProcessSerialGenerat
ionRequest"/>
            <wsdl:output
message="tns:SerialGenRequestServiceAMService_createProcessSerialGenerat
ionRequestResponse"/>
            <wsdl:fault name="ServiceException"
message="errors:ServiceException"/>
        </wsdl:operation>
        <wsdl:operation
name="createProcessSerialGenerationRequestAsync">
            <wsdl:input
message="tns:SerialGenRequestServiceAMService_createProcessSerialGenerat
ionRequestAsync"
                  xmlns:ns1="http://www.w3.org/2006/05/addressing/wsdl"
ns1:Action="http://xmlns.oracle.com/apps/pas/transactions/transactionsSe
rvice/applicationModule/common/createProcessSerialGenerationRequestAsync
"/>
        </wsdl:operation>
    </wsdl:portType>
    <wsdl:portType name="SerialGenRequestServiceAMServiceResponse">
        <wsdl:operation name="onFault">
            <wsdl:input
message="tns:SerialGenRequestServiceAMService_onFault"
xmlns:ns1="http://www.w3.org/2006/05/addressing/wsdl"

ns1:Action="http://xmlns.oracle.com/oracleas/schema/oracle-fault-11_0/Fa
ult"/>
        </wsdl:operation>
        <wsdl:operation
name="createSerialGenerationRequestAsyncResponse">
            <wsdl:input
message="tns:SerialGenRequestServiceAMService_createSerialGenerationRequ
estAsyncResponse"
                  xmlns:ns1="http://www.w3.org/2006/05/addressing/wsdl"
ns1:Action="http://xmlns.oracle.com/apps/pas/transactions/transactionsSe
rvice/applicationModule/common/createSerialGenerationRequestAsyncRespons
e"/>
        </wsdl:operation>
        <wsdl:operation
name="createProcessSerialGenerationRequestAsyncResponse">
            <wsdl:input
message="tns:SerialGenRequestServiceAMService_createProcessSerialGenerat
ionRequestAsyncResponse"
                  xmlns:ns1="http://www.w3.org/2006/05/addressing/wsdl"
ns1:Action="http://xmlns.oracle.com/apps/pas/transactions/transactionsSe
rvice/applicationModule/common/createProcessSerialGenerationRequestAsync
Response"/>
        </wsdl:operation>
    </wsdl:portType>
    <wsdl:binding name="SerialGenRequestServiceAMServiceResponseBinding"
type="tns:SerialGenRequestServiceAMServiceResponse">
        <soap:binding style="document"
transport="http://schemas.xmlsoap.org/soap/http"/>
        <wsdl:operation name="onFault">
            <soap:operation
soapAction="http://xmlns.oracle.com/oracleas/schema/oracle-fault-11_0/Fa
ult"/>
```

```
<wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
        </wsdl:operation>
        <wsdl:operation
name="createSerialGenerationRequestAsyncResponse">
            <soap:operation
soapAction="http://xmlns.oracle.com/apps/pas/transactions/transactionsSe
rvice/applicationModule/common/createSerialGenerationRequestAsyncRespons
e"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
        </wsdl:operation>
        <wsdl:operation
name="createProcessSerialGenerationRequestAsyncResponse">
            <soap:operation
soapAction="http://xmlns.oracle.com/apps/pas/transactions/transactionsSe
rvice/applicationModule/common/createProcessSerialGenerationRequestAsync
Response"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
        </wsdl:operation>
    </wsdl:binding>
    <wsdl:binding name="SerialGenRequestServiceAMServiceSoapHttp"
type="tns:SerialGenRequestServiceAMService">
        <soap:binding style="document"
transport="http://schemas.xmlsoap.org/soap/http"/>
        <wsdl:operation name="createSerialGenerationRequest">
            <soap:operation
soapAction="http://xmlns.oracle.com/apps/pas/transactions/transactionsSe
rvice/applicationModule/common/createSerialGenerationRequest"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap:body use="literal"/>
            </wsdl:output>
            <wsdl:fault name="ServiceException">
                <soap:fault name="ServiceException" use="literal"
encodingStyle=""/>
            </wsdl:fault>
        </wsdl:operation>
        <wsdl:operation name="createSerialGenerationRequestAsync">
            <soap:operation
soapAction="http://xmlns.oracle.com/apps/pas/transactions/transactionsSe
rvice/applicationModule/common/createSerialGenerationRequestAsync"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
        </wsdl:operation>
        <wsdl:operation name="createProcessSerialGenerationRequest">
            <soap:operation
soapAction="http://xmlns.oracle.com/apps/pas/transactions/transactionsSe
rvice/applicationModule/common/createProcessSerialGenerationRequest"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap:body use="literal"/>
```

```
</wsdl:output>
            <wsdl:fault name="ServiceException">
                <soap:fault name="ServiceException" use="literal"
encodingStyle=""/>
            </wsdl:fault>
        </wsdl:operation>
        <wsdl:operation
name="createProcessSerialGenerationRequestAsync">
            <soap:operation
soapAction="http://xmlns.oracle.com/apps/pas/transactions/transactionsSe
rvice/applicationModule/common/createProcessSerialGenerationRequestAsync
"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
        </wsdl:operation>
    </wsdl:binding>
    <wsdl:service name="SerialGenRequestServiceAMService">
        <wsdl:port name="SerialGenRequestServiceAMServiceSoapHttpPort"
binding="tns:SerialGenRequestServiceAMServiceSoapHttp">
            <soap:address
location="http://localhost:7101/opsmservices-transactions/SerialGenReque
stServiceAMService"/>
        </wsdl:port>
    </wsdl:service>
</wsdl:definitions>
```

SerialsServiceAMService WSDL

```
<wsdl:definitions
     name="SerialsServiceAMService"

targetNamespace="http://xmlns.oracle.com/oracle/apps/pas/transactions/tr
ansactionsService/applicationModule/common/"
     xmlns:plnk="http://schemas.xmlsoap.org/ws/2003/05/partner-link/"
     xmlns:errors="http://xmlns.oracle.com/adf/svc/errors/"

xmlns:orafault="http://xmlns.oracle.com/oracleas/schema/oracle-fault-11_
0"
     xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/"

xmlns:tns="http://xmlns.oracle.com/oracle/apps/pas/transactions/transact
ionsService/applicationModule/common/"
     xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"

xmlns:types="http://xmlns.oracle.com/oracle/apps/pas/transactions/transa
ctionsService/applicationModule/common/types/"
    >
    <plnk:partnerLinkType name="SerialsServiceAMService">
        <plnk:role name="SerialsServiceAMServiceProvider">
            <plnk:portType name="tns:SerialsServiceAMService"/>
        </plnk:role>
        <plnk:role name="SerialsServiceAMServiceRequestor">
            <plnk:portType name="tns:SerialsServiceAMServiceResponse"/>
        </plnk:role>
    </plnk:partnerLinkType>
    <wsdl:import namespace="http://xmlns.oracle.com/adf/svc/errors/"
location="classpath:/META-INF/wsdl/ServiceException.wsdl"/>
    <wsdl:types>
        <schema xmlns="http://www.w3.org/2001/XMLSchema">
            <import
namespace="http://xmlns.oracle.com/oracleas/schema/oracle-fault-11_0"
schemaLocation="classpath:/META-INF/oracle-webservices-async-fault-11_0.
xsd"/>
            <import
namespace="http://xmlns.oracle.com/oracle/apps/pas/transactions/transact
ionsService/applicationModule/common/types/"
                  schemaLocation="SerialsServiceAMService.xsd"/>
        </schema>
    </wsdl:types>
    <wsdl:message
name="SerialsServiceAMService_editSerialStatusAndUsageByLabel">
        <wsdl:part name="parameters"
element="types:editSerialStatusAndUsageByLabel"/>
    </wsdl:message>
    <wsdl:message
name="SerialsServiceAMService_editSerialStatusAndUsageByLabelResponse">
        <wsdl:part name="parameters"
element="types:editSerialStatusAndUsageByLabelResponse"/>
    </wsdl:message>
    <wsdl:message
name="SerialsServiceAMService_editSerialStatusAndUsageByLabelAsync">
        <wsdl:part name="parameters"
element="types:editSerialStatusAndUsageByLabelAsync"/>
    </wsdl:message>
    <wsdl:message
name="SerialsServiceAMService_editSerialStatusAndUsageByList">
```

```
<wsdl:part name="parameters"
element="types:editSerialStatusAndUsageByList"/>
    </wsdl:message>
    <wsdl:message
name="SerialsServiceAMService_editSerialStatusAndUsageByListResponse">
        <wsdl:part name="parameters"
element="types:editSerialStatusAndUsageByListResponse"/>
    </wsdl:message>
    <wsdl:message
name="SerialsServiceAMService_editSerialStatusAndUsageByListAsync">
        <wsdl:part name="parameters"
element="types:editSerialStatusAndUsageByListAsync"/>
    </wsdl:message>
    <wsdl:message
name="SerialsServiceAMService_editSerialStatusAndUsageByPrimaryDocument"
>
        <wsdl:part name="parameters"
element="types:editSerialStatusAndUsageByPrimaryDocument"/>
    </wsdl:message>
    <wsdl:message
name="SerialsServiceAMService_editSerialStatusAndUsageByPrimaryDocumentR
esponse">
        <wsdl:part name="parameters"
element="types:editSerialStatusAndUsageByPrimaryDocumentResponse"/>
    </wsdl:message>
    <wsdl:message
name="SerialsServiceAMService_editSerialStatusAndUsageByPrimaryDocumentA
sync">
        <wsdl:part name="parameters"
element="types:editSerialStatusAndUsageByPrimaryDocumentAsync"/>
    </wsdl:message>
    <wsdl:message name="SerialsServiceAMService_onFault">
        <wsdl:part name="parameters" element="orafault:Fault"/>
    </wsdl:message>
    <wsdl:message
name="SerialsServiceAMService_editSerialStatusAndUsageByLabelAsyncRespon
se">
        <wsdl:part name="parameters"
element="types:editSerialStatusAndUsageByLabelAsyncResponse"/>
    </wsdl:message>
    <wsdl:message
name="SerialsServiceAMService_editSerialStatusAndUsageByListAsyncRespons
e">
        <wsdl:part name="parameters"
element="types:editSerialStatusAndUsageByListAsyncResponse"/>
    </wsdl:message>
    <wsdl:message
name="SerialsServiceAMService_editSerialStatusAndUsageByPrimaryDocumentA
syncResponse">
        <wsdl:part name="parameters"
element="types:editSerialStatusAndUsageByPrimaryDocumentAsyncResponse"/>
    </wsdl:message>
    <wsdl:portType name="SerialsServiceAMService">
        <wsdl:documentation>
            <ViewInstance
xmlns="http://xmlns.oracle.com/adf/svc/metadata/"
Name="EditSerialStatusAndUsageByLabel"

xmlns:ns0="http://xmlns.oracle.com/oracle/apps/pas/transactions/transact
ionsService/view/common/"
                SDOName="ns0:EditSerialStatusAndUsageByLabelVOSDO"/>
```

```
<ViewInstance xmlns="http://xmlns.oracle.com/adf/svc/metadata/"
Name="EditSerialStatusAndUsageByLabelResponse"

xmlns:ns0="http://xmlns.oracle.com/oracle/apps/pas/transactions/transact
ionsService/view/common/"

SDOName="ns0:EditSerialStatusAndUsageByLabelResponseVOSDO"/>
            <ViewInstance
xmlns="http://xmlns.oracle.com/adf/svc/metadata/"
Name="EditSerialStatusAndUsageByList"

xmlns:ns0="http://xmlns.oracle.com/oracle/apps/pas/transactions/transact
ionsService/view/common/"
                    SDOName="ns0:EditSerialStatusAndUsageByListVOSDO"/>
            <ViewInstance
xmlns="http://xmlns.oracle.com/adf/svc/metadata/"
Name="EditSerialStatusAndUsageByListResponse"

xmlns:ns0="http://xmlns.oracle.com/oracle/apps/pas/transactions/transact
ionsService/view/common/"

SDOName="ns0:EditSerialStatusAndUsageByListResponseVOSDO"/>
        </wsdl:documentation>
        <wsdl:operation name="editSerialStatusAndUsageByLabel">
            <wsdl:input
message="tns:SerialsServiceAMService_editSerialStatusAndUsageByLabel"/>
            <wsdl:output
message="tns:SerialsServiceAMService_editSerialStatusAndUsageByLabelResp
onse"/>
            <wsdl:fault name="ServiceException"
message="errors:ServiceException"/>
        </wsdl:operation>
        <wsdl:operation name="editSerialStatusAndUsageByLabelAsync">
            <wsdl:input
message="tns:SerialsServiceAMService_editSerialStatusAndUsageByLabelAsyn
c"
                    xmlns:ns1="http://www.w3.org/2006/05/addressing/wsdl"
ns1:Action="http://xmlns.oracle.com/oracle/apps/pas/transactions/transac
tionsService/applicationModule/common/editSerialStatusAndUsageByLabelAsy
nc"/>
        </wsdl:operation>
        <wsdl:operation name="editSerialStatusAndUsageByList">
            <wsdl:input
message="tns:SerialsServiceAMService_editSerialStatusAndUsageByList"/>
            <wsdl:output
message="tns:SerialsServiceAMService_editSerialStatusAndUsageByListRespo
nse"/>
            <wsdl:fault name="ServiceException"
message="errors:ServiceException"/>
        </wsdl:operation>
        <wsdl:operation name="editSerialStatusAndUsageByListAsync">
            <wsdl:input
message="tns:SerialsServiceAMService_editSerialStatusAndUsageByListAsync
" xmlns:ns1="http://www.w3.org/2006/05/addressing/wsdl"

ns1:Action="http://xmlns.oracle.com/oracle/apps/pas/transactions/transac
tionsService/applicationModule/common/editSerialStatusAndUsageByListAsyn
c"/>
        </wsdl:operation>
        <wsdl:operation
name="editSerialStatusAndUsageByPrimaryDocument">
```

```
<wsdl:input
message="tns:SerialsServiceAMService_editSerialStatusAndUsageByPrimaryDo
cument"/>
            <wsdl:output
message="tns:SerialsServiceAMService_editSerialStatusAndUsageByPrimaryDo
cumentResponse"/>
            <wsdl:fault name="ServiceException"
message="errors:ServiceException"/>
        </wsdl:operation>
        <wsdl:operation
name="editSerialStatusAndUsageByPrimaryDocumentAsync">
            <wsdl:input
message="tns:SerialsServiceAMService_editSerialStatusAndUsageByPrimaryDo
cumentAsync"
                    xmlns:ns1="http://www.w3.org/2006/05/addressing/wsdl"
ns1:Action="http://xmlns.oracle.com/oracle/apps/pas/transactions/transac
tionsService/applicationModule/common/editSerialStatusAndUsageByPrimaryD
ocumentAsync"/>
        </wsdl:operation>
    </wsdl:portType>
    <wsdl:portType name="SerialsServiceAMServiceResponse">
        <wsdl:operation name="onFault">
            <wsdl:input message="tns:SerialsServiceAMService_onFault"
xmlns:ns1="http://www.w3.org/2006/05/addressing/wsdl"

ns1:Action="http://xmlns.oracle.com/oracleas/schema/oracle-fault-11_0/Fa
ult"/>
        </wsdl:operation>
        <wsdl:operation
name="editSerialStatusAndUsageByLabelAsyncResponse">
            <wsdl:input
message="tns:SerialsServiceAMService_editSerialStatusAndUsageByLabelAsyn
cResponse"
                    xmlns:ns1="http://www.w3.org/2006/05/addressing/wsdl"
ns1:Action="http://xmlns.oracle.com/oracle/apps/pas/transactions/transac
tionsService/applicationModule/common/editSerialStatusAndUsageByLabelAsy
ncResponse"/>
        </wsdl:operation>
        <wsdl:operation
name="editSerialStatusAndUsageByListAsyncResponse">
            <wsdl:input
message="tns:SerialsServiceAMService_editSerialStatusAndUsageByListAsync
Response"
                    xmlns:ns1="http://www.w3.org/2006/05/addressing/wsdl"
ns1:Action="http://xmlns.oracle.com/oracle/apps/pas/transactions/transac
tionsService/applicationModule/common/editSerialStatusAndUsageByListAsyn
cResponse"/>
        </wsdl:operation>
        <wsdl:operation
name="editSerialStatusAndUsageByPrimaryDocumentAsyncResponse">
            <wsdl:input
message="tns:SerialsServiceAMService_editSerialStatusAndUsageByPrimaryDo
cumentAsyncResponse"
                    xmlns:ns1="http://www.w3.org/2006/05/addressing/wsdl"
ns1:Action="http://xmlns.oracle.com/oracle/apps/pas/transactions/transac
tionsService/applicationModule/common/editSerialStatusAndUsageByPrimaryD
ocumentAsyncResponse"/>
        </wsdl:operation>
    </wsdl:portType>
    <wsdl:binding name="SerialsServiceAMServiceResponseBinding"
type="tns:SerialsServiceAMServiceResponse">
```

```
<soap:binding style="document"
transport="http://schemas.xmlsoap.org/soap/http"/>
        <wsdl:operation name="onFault">
            <soap:operation
soapAction="http://xmlns.oracle.com/oracleas/schema/oracle-fault-11_0/Fa
ult"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
        </wsdl:operation>
        <wsdl:operation
name="editSerialStatusAndUsageByLabelAsyncResponse">
            <soap:operation
soapAction="http://xmlns.oracle.com/oracle/apps/pas/transactions/transac
tionsService/applicationModule/common/editSerialStatusAndUsageByLabelAsy
ncResponse"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
        </wsdl:operation>
        <wsdl:operation
name="editSerialStatusAndUsageByListAsyncResponse">
            <soap:operation
soapAction="http://xmlns.oracle.com/oracle/apps/pas/transactions/transac
tionsService/applicationModule/common/editSerialStatusAndUsageByListAsyn
cResponse"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
        </wsdl:operation>
        <wsdl:operation
name="editSerialStatusAndUsageByPrimaryDocumentAsyncResponse">
            <soap:operation
soapAction="http://xmlns.oracle.com/oracle/apps/pas/transactions/transac
tionsService/applicationModule/common/editSerialStatusAndUsageByPrimaryD
ocumentAsyncResponse"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
        </wsdl:operation>
    </wsdl:binding>
    <wsdl:binding name="SerialsServiceAMServiceSoapHttp"
type="tns:SerialsServiceAMService">
        <soap:binding style="document"
transport="http://schemas.xmlsoap.org/soap/http"/>
        <wsdl:operation name="editSerialStatusAndUsageByLabel">
            <soap:operation
soapAction="http://xmlns.oracle.com/oracle/apps/pas/transactions/transac
tionsService/applicationModule/common/editSerialStatusAndUsageByLabel"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap:body use="literal"/>
            </wsdl:output>
            <wsdl:fault name="ServiceException">
                <soap:fault name="ServiceException" use="literal"/>
            </wsdl:fault>
        </wsdl:operation>
        <wsdl:operation name="editSerialStatusAndUsageByLabelAsync">
            <soap:operation
```

```
soapAction="http://xmlns.oracle.com/oracle/apps/pas/transactions/transac
tionsService/applicationModule/common/editSerialStatusAndUsageByLabelAsy
nc"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
        </wsdl:operation>
        <wsdl:operation name="editSerialStatusAndUsageByList">
            <soap:operation
soapAction="http://xmlns.oracle.com/oracle/apps/pas/transactions/transac
tionsService/applicationModule/common/editSerialStatusAndUsageByList"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap:body use="literal"/>
            </wsdl:output>
            <wsdl:fault name="ServiceException">
                <soap:fault name="ServiceException" use="literal"/>
            </wsdl:fault>
        </wsdl:operation>
        <wsdl:operation name="editSerialStatusAndUsageByListAsync">
            <soap:operation
soapAction="http://xmlns.oracle.com/oracle/apps/pas/transactions/transac
tionsService/applicationModule/common/editSerialStatusAndUsageByListAsyn
c"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
        </wsdl:operation>
        <wsdl:operation
name="editSerialStatusAndUsageByPrimaryDocument">
            <soap:operation
soapAction="http://xmlns.oracle.com/oracle/apps/pas/transactions/transac
tionsService/applicationModule/common/editSerialStatusAndUsageByPrimaryD
ocument"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap:body use="literal"/>
            </wsdl:output>
            <wsdl:fault name="ServiceException">
                <soap:fault name="ServiceException" use="literal"/>
            </wsdl:fault>
        </wsdl:operation>
        <wsdl:operation
name="editSerialStatusAndUsageByPrimaryDocumentAsync">
            <soap:operation
soapAction="http://xmlns.oracle.com/oracle/apps/pas/transactions/transac
tionsService/applicationModule/common/editSerialStatusAndUsageByPrimaryD
ocumentAsync"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
        </wsdl:operation>
    </wsdl:binding>
    <wsdl:service name="SerialsServiceAMService">
        <wsdl:port name="SerialsServiceAMServiceSoapHttpPort"
binding="tns:SerialsServiceAMServiceSoapHttp">
            <soap:address
```

```
location="http://localhost:7101/opsmservices-transactions/SerialsService
AMService"/>
        </wsdl:port>
    </wsdl:service>
</wsdl:definitions>
```

TransactionsServiceAMService WSDL

```
<wsdl:definitions name="TransactionsServiceAMService"

targetNamespace="http://xmlns.oracle.com/apps/pas/transactions/transacti
onsService/applicationModule/common/"

xmlns:plnk="http://schemas.xmlsoap.org/ws/2003/05/partner-link/"
                  xmlns:errors="http://xmlns.oracle.com/adf/svc/errors/"

xmlns:orafault="http://xmlns.oracle.com/oracleas/schema/oracle-fault-11_
0"
                  xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/"

xmlns:tns="http://xmlns.oracle.com/apps/pas/transactions/transactionsSer
vice/applicationModule/common/"
                  xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"

xmlns:types="http://xmlns.oracle.com/apps/pas/transactions/transactionsS
ervice/applicationModule/common/types/">
    <plnk:partnerLinkType name="TransactionsServiceAMService">
        <plnk:role name="TransactionsServiceAMServiceProvider">
            <plnk:portType name="tns:TransactionsServiceAMService"/>
        </plnk:role>
        <plnk:role name="TransactionsServiceAMServiceRequestor">
            <plnk:portType
name="tns:TransactionsServiceAMServiceResponse"/>
        </plnk:role>
    </plnk:partnerLinkType>
    <wsdl:import namespace="http://xmlns.oracle.com/adf/svc/errors/"

location="classpath:/META-INF/wsdl/ServiceException.wsdl"/>
    <wsdl:types>
        <schema xmlns="http://www.w3.org/2001/XMLSchema">
            <import
namespace="http://xmlns.oracle.com/oracleas/schema/oracle-fault-11_0"

schemaLocation="classpath:/META-INF/oracle-webservices-async-fault-11_0.
xsd"/>
            <import
namespace="http://xmlns.oracle.com/apps/pas/transactions/transactionsSer
vice/applicationModule/common/types/"
                    schemaLocation="TransactionsServiceAMService.xsd"/>
        </schema>
    </wsdl:types>
    <wsdl:message name="TransactionsServiceAMService_createTransaction">
        <wsdl:part name="parameters" element="types:createTransaction"/>
    </wsdl:message>
    <wsdl:message
name="TransactionsServiceAMService_createTransactionResponse">
        <wsdl:part name="parameters"
element="types:createTransactionResponse"/>
    </wsdl:message>
    <wsdl:message
name="TransactionsServiceAMService_createTransactionAsync">
        <wsdl:part name="parameters"
element="types:createTransactionAsync"/>
    </wsdl:message>
    <wsdl:message name="TransactionsServiceAMService_onFault">
        <wsdl:part name="parameters" element="orafault:Fault"/>
```

```
</wsdl:message>
    <wsdl:message
name="TransactionsServiceAMService_createTransactionAsyncResponse">
        <wsdl:part name="parameters"
                   element="types:createTransactionAsyncResponse"/>
    </wsdl:message>
    <wsdl:portType name="TransactionsServiceAMService">
        <wsdl:documentation>
            <ViewInstance
xmlns="http://xmlns.oracle.com/adf/svc/metadata/"
                          Name="TransactionVO"

xmlns:ns0="http://xmlns.oracle.com/apps/pas/transactions/transactionsSer
vice/view/common/"
                          SDOName="ns0:TransactionVOSDO"
                          CreateOpName="createTransaction"/>
        </wsdl:documentation>
        <wsdl:operation name="createTransaction">
            <wsdl:input
message="tns:TransactionsServiceAMService_createTransaction"/>
            <wsdl:output
message="tns:TransactionsServiceAMService_createTransactionResponse"/>
            <wsdl:fault name="ServiceException"
                        message="errors:ServiceException"/>
        </wsdl:operation>
        <wsdl:operation name="createTransactionAsync">
            <wsdl:input
message="tns:TransactionsServiceAMService_createTransactionAsync"

xmlns:ns1="http://www.w3.org/2006/05/addressing/wsdl"

ns1:Action="http://xmlns.oracle.com/apps/pas/transactions/transactionsSe
rvice/applicationModule/common/createTransactionAsync"/>
        </wsdl:operation>
    </wsdl:portType>
    <wsdl:portType name="TransactionsServiceAMServiceResponse">
        <wsdl:operation name="onFault">
            <wsdl:input
message="tns:TransactionsServiceAMService_onFault"

xmlns:ns1="http://www.w3.org/2006/05/addressing/wsdl"

ns1:Action="http://xmlns.oracle.com/oracleas/schema/oracle-fault-11_0/Fa
ult"/>
        </wsdl:operation>
        <wsdl:operation name="createTransactionAsyncResponse">
            <wsdl:input
message="tns:TransactionsServiceAMService_createTransactionAsyncResponse
"

xmlns:ns1="http://www.w3.org/2006/05/addressing/wsdl"

ns1:Action="http://xmlns.oracle.com/apps/pas/transactions/transactionsSe
rvice/applicationModule/common/createTransactionAsyncResponse"/>
        </wsdl:operation>
    </wsdl:portType>
    <wsdl:binding name="TransactionsServiceAMServiceSoapHttp"
                  type="tns:TransactionsServiceAMService">
        <soap:binding style="document"
                      transport="http://schemas.xmlsoap.org/soap/http"/>
        <wsdl:operation name="createTransaction">
```

```
<soap:operation
soapAction="http://xmlns.oracle.com/apps/pas/transactions/transactionsSe
rvice/applicationModule/common/createTransaction"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
            <wsdl:output>
                <soap:body use="literal"/>
            </wsdl:output>
            <wsdl:fault name="ServiceException">
                <soap:fault name="ServiceException" use="literal"
                            encodingStyle=""/>
            </wsdl:fault>
        </wsdl:operation>
        <wsdl:operation name="createTransactionAsync">
            <soap:operation
soapAction="http://xmlns.oracle.com/apps/pas/transactions/transactionsSe
rvice/applicationModule/common/createTransactionAsync"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
        </wsdl:operation>
    </wsdl:binding>
    <wsdl:binding name="TransactionsServiceAMServiceResponseBinding"
                  type="tns:TransactionsServiceAMServiceResponse">
        <soap:binding style="document"
                      transport="http://schemas.xmlsoap.org/soap/http"/>
        <wsdl:operation name="onFault">
            <soap:operation
soapAction="http://xmlns.oracle.com/oracleas/schema/oracle-fault-11_0/Fa
ult"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
        </wsdl:operation>
        <wsdl:operation name="createTransactionAsyncResponse">
            <soap:operation
soapAction="http://xmlns.oracle.com/apps/pas/transactions/transactionsSe
rvice/applicationModule/common/createTransactionAsyncResponse"/>
            <wsdl:input>
                <soap:body use="literal"/>
            </wsdl:input>
        </wsdl:operation>
    </wsdl:binding>
    <wsdl:service name="TransactionsServiceAMService">
        <wsdl:port name="TransactionsServiceAMServiceSoapHttpPort"
                   binding="tns:TransactionsServiceAMServiceSoapHttp">
            <soap:address
location="http://localhost:7105/opsmservices-transactions/TransactionsSe
rviceAMService"/>
        </wsdl:port>
    </wsdl:service>
</wsdl:definitions>
```

D

Version and Build Information

This appendix covers the following topics:

- Viewing Version and Build Information

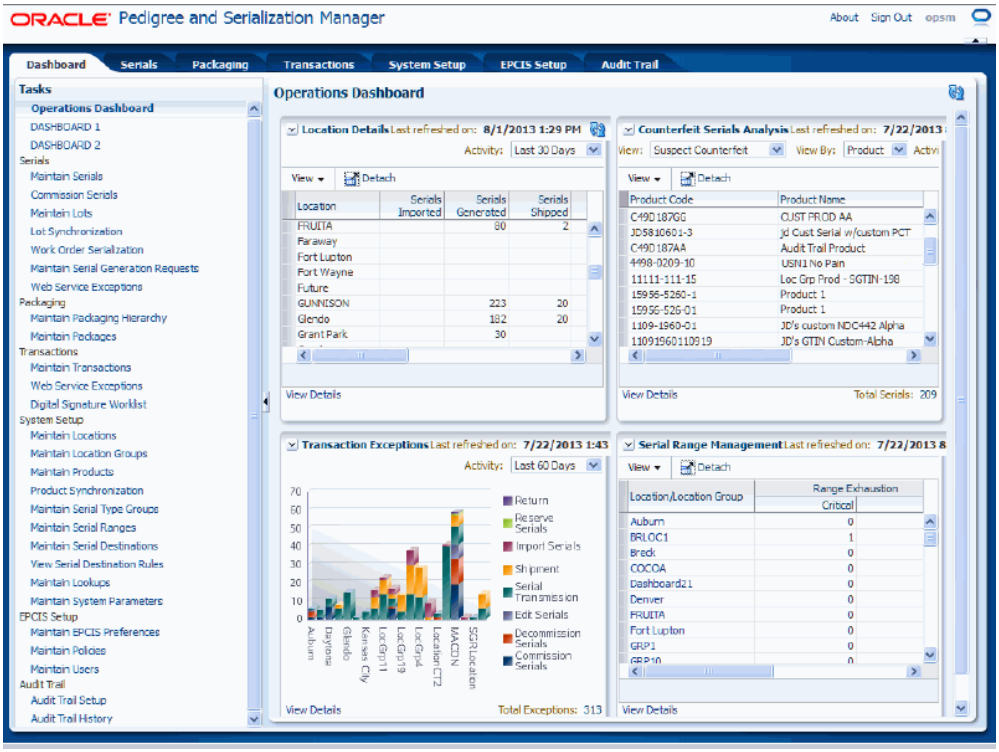
Viewing Version and Build Information

Using the Oracle Pedigree and Serialization Manager (OPSM) application you can view the version of OPSM and build of code you are running. This information may be necessary to provide to support when diagnosing issues with OPSM.

To View Version and Build Information:

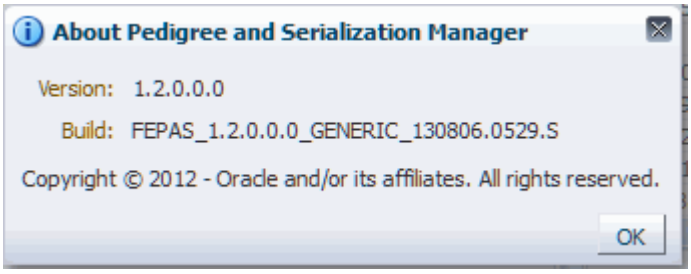
1. Log in to the OPSM application.

Operations Dashboard page



2. Click the About link in the header portion of the application (upper right hand corner of the page).

About Pedigree and Serialization Manager dialog box



The About Pedigree and Serialization Manager dialog box will appear displaying the Version and Build of the OPSM application you are running.

3. To close the About Pedigree and Serialization dialog box, click the OK button.

The About Pedigree and Serialization Manager dialog box closes.

Index

A

adding
  containers and/or product serials transaction, 10-45
  destination rules to serial destination, 4-200
  lookup codes to lookup type, 4-18
  packages to packaging hierarchy, 9-12
  policy details, 5-12, 5-17
  URLs Operations Dashboard, 12-21
auditing
  context attributes, 13-10
  overview, 13-1
audit trail history
  exporting to Excel, 13-38
  searching, 13-26
  viewing, 13-34
audit trail setup
  setting up, 13-15
  updating, 13-23
  viewing, 13-21
audit trail setup information
  exporting to Excel, 13-25
  synchronizing, 13-26

C

CaptureService web service, 14-3
CaptureService wsdl, C-2
changing
  columns in table, 3-3
changing and reordering
  columns in table, 3-11
commissioning
  serials, 7-75
    single, 7-73
commission serials transactions
  overview, 10-2
common functionality
  using job instances, 3-19
  using saved search, 3-14
  using table, 3-1
common table functionality
  change/reorder columns in table, 3-11
  change columns in table, 3-3
  detach table, 3-1
  reorder columns in table (drag and drop), 3-6
  reorder columns in table (View menu), 3-8
containers
  adding to transaction, 10-45
  deleting transaction, 10-64
  updating transaction, 10-66
  viewing transaction, 10-61
context attributes
  auditing, 13-10
Counterfeit Serials Analysis component
  using, 12-11
creating
  location groups, 4-72
  locations, 4-48
  lots, 6-14
  packages, 8-6
    packaging hierarchy, 9-29
  packaging hierarchy, 9-12
  pedigree, 11-6
  policies, 5-10

products, 4-87
saved search, 3-15
serial destinations, 4-194
serial generation requests, 7-15
serial ranges, 4-186
serial type groups, 4-165
transactions using JMS queue, 10-69
users, 5-24

D

deactivating
locations, 4-64
decommissioning
serials, 7-98
single, 7-74
decommission serials transactions
overview, 10-2
defining
lot synchronization scenarios, 4-216
product and item cross reference integrated transactional systems, 4-109
product synchronization scenarios, 4-216
work order serialization scenarios, 4-216
deleting
alternate identifier from package, 8-14
alternate identifier from package (alternate method), 8-15
containers and/or product serials transaction, 10-64
destination rules for a serial destination, 4-205
item cross-reference for product, 4-108
item UOM cross-reference for products, 4-108
job instances, 3-34
location groups, 4-77
locations, 4-65
lookup codes from lookup types, 4-22
lots, 6-20
packages complete, 8-13
policy details, 5-15, 5-17
product details, 4-107
products, 4-106
item cross-references, 4-108
item UOM cross-reference, 4-108
location overrides, 4-108
product details, 4-107
serial generation details, 4-107
saved search, 3-18
serial destinations, 4-200
serial generation requests, 7-25
serial ranges, 4-191
serial type groups, 4-175
serial types from serial type groups, 4-175
users, 5-28
deleting policies, 5-17
destination rules
adding serial destination, 4-200
deleting serial destination, 4-205
editing serial destination, 4-204
detaching
tables, 3-1
digitally signing
pedigree
Digital Signature Worklist page, 11-18
Maintain Transactions page, 11-9
disregarding
transactions, 10-44

E

editing
destination rules for a serial destination, 4-204
location groups, 4-75
locations, 4-63
lookup types and codes, 4-16
lots, 6-18
packages, 8-11
policies, 5-15
policy details, 5-16
products, 4-105
serial destinations, 4-198
serial ranges, 4-190
serials, 7-68
serial type groups, 4-173
status and usage serialized items
packaging hierarchy, 9-25
users, 5-26
edit serials transactions
overview, 10-3
e-mail notifications
web service, 14-143
e-mail notifications process flow
web service, 14-145
EPCGlobalEPCISService wsdl, C-3

EPCIS
overview, 2-1
EPCIS preferences
maintaining, 5-2
modifying, 5-5
setting, 5-2
viewing, 5-2
EPCIS repository
overview, 2-1
EPCIS repository setup process
overview, 5-1
exceptions
web service, 14-143
exporting to Excel
audit trail history, 13-38
audit trail setup information, 13-25
extensible lookup types and codes
list, 4-11

I

import serials transactions
overview, 10-3
integrated transactional systems
defining product and item cross reference, 4-109
searching for transactions, 10-30

J

job instances
deleting, 3-34
searching advanced, 3-24
searching basic, 3-19
using, 3-19
viewing details, 3-33
JobInstanceServiceAMService web service, 14-25
JobInstanceServiceAMService wsdl, C-8

K

key features
Oracle Pedigree and Serialization Manager, 1-5

L

Location Details component
using, 12-2
location groups
associating locations, 4-73
creating, 4-72
deleting, 4-77
deleting locations, 4-75
editing, 4-75
maintaining, 4-66
location groups
searching
advanced search, 4-68
basic search, 4-66
locations
associating location groups, 4-73
creating, 4-48
deactivating, 4-64
deleting, 4-65
deleting location groups, 4-75
editing, 4-63
maintaining, 4-42
searching, 4-45
viewing details, 4-47
lookup codes
adding to lookup type, 4-18
deleting from lookup types, 4-22
maintaining, 4-4
lookup types
adding lookup codes, 4-18
deleting lookup codes, 4-22
maintaining, 4-4
searching, 4-13
viewing details, 4-15
lookup types and codes
editing, 4-16
list, B-1
list of extensible, 4-11
list of user defined, 4-5
maintaining, 4-4
lot definition
overview, 6-1
lots
creating, 6-14
deleting, 6-20
editing, 6-18
merging using JMS queue, 6-36
searching, 6-3
advanced search, 6-7
basic search, 6-3

synchronizing (lot interface table), 6-21
viewing, 6-13
viewing detail information, 6-13
LotsServiceAMService web service, 14-28
LotsServiceAMService wsdl, C-11

M

maintaining
EPCIS preferences, 5-2
location groups, 4-66
locations, 4-42
lookup codes, 4-4
lookup types, 4-4
lookup types and codes, 4-4
packaging hierarchy, 9-24
policies, 5-5
products, 4-78
serial destination rules, 4-191
serial destinations, 4-191
serial ranges, 4-176
serial type groups, 4-159
serial types, 4-159
system parameters, 4-23
maintaining
users
EPCIS, 5-18
Maintain Transaction page
overview, 10-8
merging
lots using JMS queue, 6-36
modifying
EPCIS preferences, 5-5
system parameters, 4-42

O

Operations Dashboard
adding custom URLs, 12-21
refreshing information, 12-22
using Counterfeit Serials Analysis component, 12-11
using Location Details component, 12-2
using Serial Range Management component, 12-17
using Transaction Exceptions component, 12-7
Oracle E-Business Suite
adding containers and/or product serials to transaction, 10-45
defining product and item cross reference, 4-109
deleting containers and/or product serials to transaction, 10-64
performing work order serialization OPSM, 7-26
synchronizing lots, 6-21
synchronizing products OPSM, 4-141
updating containers and/or product serials to transaction, 10-66
viewing containers and/or product serials to transaction, 10-61
Oracle Pedigree and Serialization Manager
key features, 1-5
overview, 1-1
set up process, 4-1
overview
auditing, 13-1
commission serials transactions, 10-2
decommission serials transactions, 10-2
defining serial ranges by location, 4-176
defining serial ranges by location and product unit identifier, 4-178
defining serial ranges by location group, 4-179
defining serial ranges by location group and product unit identifier, 4-180
edit serials transactions, 10-3
EPCIS, 2-1
EPCIS repository setup process, 5-1
EPCIS respository, 2-1
import serials transactions, 10-3
lot definition, 6-1
Maintain Transactions page, 10-8
Oracle Pedigree and Serialization Manager, 1-1
packages, 8-1
pedigree, 11-1
pedigree setup process, 11-4
product code types supported, 1-7
product definition, 4-2
product unit identifier (PUID), 4-159
reserve serials transactions, 10-4
return transactions, 10-4
serial generation, 7-1
serial generation transactions, 10-5
serial transmission transactions, 10-5

serial types, 4-161
setting up OPSM, 4-1
shipment transactions, 10-6
transactions, 10-1
transactions OPSM integration with Oracle E-Business Suite, 10-7
web services, 14-1

P

packages
adding to packaging hierarchy, 9-12
creating, 8-6
creating Maintain Packaging Hierarchy page, 9-29
deleting alternate identifier, 8-14
deleting alternate identifier (alternate method), 8-15
deleting complete, 8-13
editing, 8-11
overview, 8-1
packing into packaging hierarchy, 9-12
searching, 8-1
Maintain Packaging Hierarchy page, 9-5
viewing detail information, 8-5
packaging hierarchy
creating, 9-12
maintaining, 9-24
removing packages, 9-21
searching, 9-1
unpacking packages, 9-21
viewing, 9-8
PackagingServiceAMService web service, 14-38
PackagingServiceAMService wsdl, C-14
packing
packages to packaging hierarchy, 9-12
pages and navigation paths, A-2
pedigree
creating, 11-6
digitally signing Digital Signature Worklist page, 11-18
digitally signing Maintain Transactions page, 11-9
overview, 11-1
overview setup process, 11-4
printing Digital Signature Worklist page, 11-23
printing Maintain Transactions page, 11-21
searching for signed or unsigned, 11-12
viewing Digital Signature Worklist page, 11-27
viewing Maintain Transactions page, 11-26
performing
work order serialization external system, 7-26
personalizing
saved search, 3-17
policies
creating, 5-10
deleting, 5-17
editing, 5-15
maintaining, 5-5
searching (advanced), 5-7
searching (basic), 5-5
policy details
adding, 5-12, 5-17
deleting, 5-15, 5-17
editing, 5-16
printing
pedigree
Digital Signature Worklist page, 11-23
Maintain Transactions page, 11-21
procedures
to add a child package (create child package action or button)
packaging hierarchy, 9-18
to add a child package (drag and drop)
packaging hierarchy, 9-17
to add a child package (using pack icon)
packaging hierarchy, 9-14
to add containers and/or product serials to a transaction, 10-46
to add custom URLs to the Operations Dashboard
Operations Dashboard, 12-21
to add destination rules to a serial destination, 4-200
to add lookup codes to a lookup type, 4-18
to add policy details, 5-12, 5-17
to associate locations to a location group, 4-73
to change and reorder columns that appear in the table at one time, 3-11
to change the columns that appear in a table, 3-3
to commission a single serial number, 7-73
to commission serials (Commission Serials

page), 7-82
to commission serials (Edit Serial page), 7-82
to commission serials (Maintain Serials page), 7-76
to create a saved search, 3-15
to create location groups, 4-72
to create locations, 4-48
to create lots, 6-15
to create packages, 8-7
to create packages using the Maintain Packaging Hierarchy page (Packages region), 9-30
to create packages using the Maintain Packaging Hierarchy page (within packaging hierarchy tree), 9-30
to create packaging hierarchies, 9-13
to create policies, 5-10
to create products, 4-87
to create serial destinations, 4-194
to create serial generation requests, 7-16
to create serial ranges, 4-186
to create serial type groups, 4-165
to create users, 5-24
to deactivate locations, 4-64
to decommission a single serial number, 7-74
to decommission serials (Commission Serials page), 7-99
to decommission serials (Edit Serial page), 7-99
to decommission serials (Maintain Serials page), 7-99
to define product and packaging information from an external system (product does not exist in OPSM), 4-110
to define product and packaging information from an external system (product exists in OPSM), 4-122
to delete a complete package, 8-14
to delete all of the product information, 4-106
to delete an alternate identifier from a package, 8-14
to delete an alternate identifier from a package (alternate method), 8-15
to delete a saved search, 3-18
to delete containers and/or product serials from a transaction, 10-64
to delete destination rules for a serial destination, 4-205
to delete item cross-reference, 4-108
to delete item unit of measure cross-reference, 4-108
to delete job instances, 3-34
to delete location groups, 4-77
to delete location overrides for a product, 4-108
to delete locations, 4-65
to delete locations from a location group, 4-75
to delete lookup codes associated with a lookup type, 4-22
to delete lots, 6-20
to delete policies, 5-17
to delete policy details, 5-15, 5-17
to delete product details, 4-107
to delete serial destinations, 4-200
to delete serial generation details for a product, 4-107
to delete serial generation requests, 7-25
to delete serial ranges, 4-191
to delete serial type groups, 4-175
to delete serial types associated with a serial type groups, 4-175
to delete users, 5-28
to detach a table, 3-1
to digitally sign a pedigree using the Digital Signature Worklist page, 11-19
to digitally sign a pedigree using the Maintain Transactions page, 11-9
to disregard transactions, 10-44
to edit a serial number, 7-69
to edit destination rules for a serial destination, 4-204
to edit location groups, 4-75
to edit locations, 4-63
to edit lookup types and codes, 4-16
to edit lots, 6-19
to edit packages, 8-12
to edit policies, 5-15
to edit policy details, 5-16
to edit product and packaging information from an external system, 4-136
to edit products, 4-105
to edit serial destinations, 4-198
to edit serial ranges, 4-190
to edit serial type groups, 4-173

to edit status and usage of serialized items, 9-25
to edit users, 5-26
to export audit trail setup information to Excel, 13-25
to export the audit trail history to Excel, 13-38
to extract and merge item information from an external system, 4-152
to extract and merge lot information from an external system, 6-22
to extract and process work order serialization from an external system, 7-27
to extract item information from an external system, 4-143
to extract lot information from an external system, 6-27
to extract work orders from an external system, 7-35
to maintain packaging hierarchies, 9-24
to manually create a pedigree, 11-6
to merge the extracted items into OPSM, 4-147
to merge the extracted lots into OPSM, 6-33
to modify EPCIS preferences, 5-5
to modify system parameters, 4-42
to personalize a saved search, 3-17
to print a pedigree using the Digital Signature Worklist page, 11-24
to print a pedigree using the Maintain Transactions page, 11-21
to process transactions, 10-43
to process work order serialization in OPSM, 7-41
to refresh the information that displays on the Operations Dashboard (entire dashboard)
Operations Dashboard, 12-22
to refresh the information that displays on the Operations Dashboard (individual component)
Operations Dashboard, 12-22
to remove (unpack) packages from a packaging hierarchy, 9-21
to reorder the columns that appear in a table (drag and drop), 3-6
to reorder the columns that appear in a table (View menu), 3-8
to search for audit trail history, 13-27
to search for job instances (advanced search), 3-24
to search for job instances (basic search), 3-19
to search for location groups (advanced search), 4-68
to search for location groups (basic search), 4-66
to search for locations, 4-45
to search for lookup types, 4-13
to search for lots (advanced search), 6-7
to search for lots (basic search), 6-3
to search for packages, 8-2
to search for packages using the Maintain Packaging Hierarchy page, 9-6
to search for packaging hierarchies, 9-1
to search for policies (advanced search), 5-7
to search for policies (basic search), 5-5
to search for products (advanced search, 4-81
to search for products (basic search, 4-78
to search for serial destinations, 4-192
to search for serial generation requests, 7-5
to search for serial ranges, 4-182
to search for serials (advanced search), 7-53
to search for serials (basic search), 7-48
to search for serial type groups, 4-162
to search for signed or unsigned pedigree documents (advanced search), 11-15
to search for signed or unsigned pedigree documents (basic search), 11-12
to search for transactions (advanced search), 10-20
to search for transactions (basic search), 10-11
to search for transactions from integrated transactional systems, 10-31
to search for users (advanced search), 5-20
to search for users (basic search), 5-18
to set EPCIS preferences, 5-2
to set system parameters, 4-24
to set up the audit trail, 13-15
to submit serial generation requests, 7-23
to synchronize audit trail setup information, 13-26
to transmit serials, 10-68
to update containers and/or product serials for a transaction, 10-66
to update the audit trail setup, 13-23
to view a pedigree using the Digital Signature Worklist, 11-28

to view a pedigree using the Maintain Transactions page, 11-27
to view containers and/or product serials for a transaction, 10-61
to view counterfeit serials analysis summary information
Operations Dashboard, 12-12
to view counterfeit serials detail information
Operations Dashboard, 12-14
to view EPCIS preferences, 5-2
to view initiating transaction detail information, 10-41
to view job instance details, 3-33
to view location detail information, 4-47
to view location details (map view)
Operations Dashboard, 12-5
to view location details (table view)
Operations Dashboard, 12-4
to view location detail summary information
Operations Dashboard, 12-2
to view lookup type details, 4-15
to view lot detail information, 6-13
to view package detail information, 8-5
to view packaging hierarchies, 9-9
to view serial destination detail information, 4-194
to view serial destination rules (advanced search), 4-210
to view serial destination rules (basic search), 4-206
to view serial detail information, 7-61
to view serial generation request messages, 7-13
to view serial range detail information
Operations Dashboard, 12-19
to view serial range summary information
Operations Dashboard, 12-18
to view serial type group information, 4-165
to view system parameters, 4-24
to view the audit trail history, 13-34
to view the audit trail setup, 13-21
to view transaction detail information, 10-33
to view transaction detail information using the Digital Signature Worklist page, 11-26
to view transaction exception information, 10-40
to view transaction exceptions detail information
Operations Dashboard, 12-9
to view transaction exceptions summary information
Operations Dashboard, 12-7
to view web service exceptions, 6-38, 10-71
process flow
serial generation, 7-3
web service exceptions, 6-37
processing
transactions, 10-43
product and item cross reference
defining integrated transactional systems, 4-109
product code types
overview, 1-7
product definition
overview, 4-2
products
creating, 4-87
deleting complete, 4-106
deleting location overrides, 4-108
deleting serial generation details, 4-107
editing, 4-105
maintaining, 4-78
searching
advanced search, 4-81
basic search, 4-78
synchronizing (products interface table), 4-141
product serials
adding to transaction, 10-45
deleting transaction, 10-64
updating transaction, 10-66
viewing transaction, 10-61
ProductServiceAMService web service, 14-46
ProductServiceAMService WSDL, C-19
product unit identifier (PUID)
overview, 4-159

Q

QueryService web service, 14-135

R

refreshing information
Operations Dashboard, 12-22
removing

packages
packaging hierarchy, 9-21
reordering
columns in table (drag and drop), 3-6
columns in table (View menu), 3-8
reserve serials transactions
overview, 10-4
return transactions
overview, 10-4
overview OPSM integration with Oracle E-Business Suite, 10-7

S

saved search
creating, 3-15
deleting, 3-18
personalizing, 3-17
using, 3-14
scenarios
defining lot synchronization, 4-216
defining product synchronization, 4-216
defining work order serialization, 4-216
searching
audit trail history, 13-26
job instances
advanced, 3-24
basic, 3-19
location groups
advanced search, 4-68
basic search, 4-66
locations, 4-45
lookup types, 4-13
lots, 6-3
advanced search, 6-7
basic search, 6-3
package hierarchy, 9-1
packages, 8-1
Maintain Packaging Hierarchy page, 9-5
pedigree signed or unsigned, 11-12
products
advanced search, 4-81
basic search, 4-78
serial destinations, 4-192
serial generation requests, 7-5
serial ranges, 4-182
serials, 7-47
serial type groups, 4-162
transactions, 10-10
transactions integrated transactional systems, 10-30
searching (advanced)
policies, 5-7
users, 5-20
searching (basic)
policies, 5-5
users, 5-18
serial destination rules
maintaining, 4-191
viewing, 4-206
advanced search, 4-210
basic search, 4-206
serial destinations
creating, 4-194
deleting, 4-200
editing, 4-198
maintaining, 4-191
searching, 4-192
viewing details, 4-194
serial generation
overview, 7-1
process flow OPSM, 7-3
serial generation request messages
viewing, 7-13
serial generation requests
creating, 7-15
deleting, 7-25
searching, 7-5
submitting, 7-23
serial generation transactions
overview, 10-5
SerialGenRequestServiceAMService web service, 14-57
SerialGenRequestServiceAMService wsdl, C-22
Serial Range Management component
using, 12-17
serial ranges
creating, 4-186
deleting, 4-191
editing, 4-190
maintaining, 4-176
searching, 4-182
serials
commissioning, 7-75

single, 7-73
decommissioning, 7-98
single, 7-74
editing, 7-68
searching, 7-47
transmitting
transactions, 10-67
viewing detail information, 7-60
SerialsServiceAMService web service, 14-79
SerialsServiceAMService wsdl, C-27
serial transmission transactions
overview, 10-5
serial type groups
creating, 4-165
deleting, 4-175
editing, 4-173
maintaining, 4-159
searching, 4-162
serial types
deleting serial type groups, 4-175
maintaining, 4-159
overview, 4-161
viewing, 4-165
setting
EPCIS preferences, 5-2
setting up
audit trail setup, 13-15
set up
system parameters, 4-24
shipment transactions
overview, 10-6
overview OPSM integration with Oracle E-Business Suite, 10-7
status and usage
editing for serialized items
packaging hierarchy, 9-25
submitting
serial generation requests, 7-23
synchronizing
audit trail setup information, 13-26
lots (lot interface table), 6-21
products (products interface table), 4-141
system parameters
maintaining, 4-23
modifying, 4-42
setting, 4-24
viewing, 4-24

T

tables
change and reorder columns, 3-11
changing columns, 3-3
detaching, 3-1
reorder columns (drag and drop), 3-6
reorder columns (View menu), 3-8
using common functionality, 3-1
Transaction Exceptions component
using, 12-7
transactions
adding containers and/or product serials, 10-45
creating using JMS queue, 10-69
deleting containers and/or product serials, 10-64
disregarding, 10-44
overview, 10-1
overview OPSM integration with Oracle E-Business Suite, 10-7
processing, 10-43
searching, 10-10
searching integrated transactional systems, 10-30
transmitting serials, 10-67
updating containers and/or product serials, 10-66
viewing containers and/or product serials, 10-61
viewing details, 10-32
Digital Signature Worklist page, 11-25
viewing exception information, 10-39
viewing initiating transaction details, 10-41
TransactionsServiceAMService web service, 14-107
TransactionsServiceAMService wsdl, C-34
transmitting
serials
transactions, 10-67

U

unpacking
packages
packaging hierarchy, 9-21
updating

audit trail setup, 13-23
containers and/or product serials transaction, 10-66
URLs
adding Operations Dashboard, 12-21
user defined lookup types and codes
list, 4-5
users
creating, 5-24
deleting, 5-28
editing, 5-26
maintaining
EPCIS, 5-18
searching (advanced), 5-20
searching (basic), 5-18
using
Counterfeit Serials Analysis component
Operations Dashboard, 12-11
job instances functionality, 3-19
Location Details component
Operations Dashboard, 12-2
Serial Range Management component
Operations Dashboard, 12-17
Transaction Exceptions component
Operations Dashboard, 12-7

V

version and build information
viewing, D-1
viewing
audit trail history, 13-34
audit trail setup, 13-21
containers and/or product serials transaction, 10-61
EPCIS preferences, 5-2
initiating transaction detail information, 10-41
job instance details, 3-33
location details, 4-47
lookup type details, 4-15
lot detail information, 6-13
lots, 6-13
packages detail information, 8-5
packaging hierarchy, 9-8
pedigree
Digital Signature Worklist page, 11-27
Maintain Transactions page, 11-26
serial destination rules, 4-206
advanced search, 4-210
basic search, 4-206
serial destinations, 4-194
serial detail information, 7-60
serial generation request messages, 7-13
serial type groups, 4-165
system parameters, 4-24
transaction detail information, 10-32
Digital Signature Worklist page, 11-25
transaction exception information, 10-39
version and build information, D-1

W

web service
e-mail notifications, 14-143
e-mail notifications process flow, 14-145
exceptions, 14-143
exceptions process flow, 6-37
web services
CaptureService, 14-3
detail, 14-3
JobInstanceServiceAMService, 14-25
LotsServiceAMService, 14-28
overview, 14-1
PackagingServiceAMService, 14-38
ProductServiceAMService, 14-46
QueryService, 14-135
SerialGenRequestServiceAMService, 14-57
SerialsServiceAMService, 14-79
TransactionsServiceAMService, 14-107
wsdls, C-1
work order serialization
performing external system, 7-26
wsdls, C-1
CaptureService, C-2
EPCGlobalEPCISService, C-3
JobInstanceServiceAMService, C-8
LotsServiceAMService, C-11
PackagingServiceAMService, C-14
ProductServiceAMService WSDL, C-19
SerialGenRequestServiceAMService, C-22
SerialsServiceAMService, C-27
TransactionsServiceAMService, C-34