

Oracle® Pedigree and Serialization Manager

Process Guide

Release 2.2

Part No. E88351-02

August 2017

Oracle Pedigree and Serialization Manager Process Guide, Release 2.2

Part No. E88351-02

Copyright © 2010, 2017, Oracle and/or its affiliates. All rights reserved.

Primary Author: Jan Lineberry

Contributing Author: Karla Biggs-Gregory

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this is software or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, then the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are "commercial computer software" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

This software or hardware and documentation may provide access to or information about content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services unless otherwise set forth in an applicable agreement between you and Oracle. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services, except as set forth in an applicable agreement between you and Oracle.

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>.

Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info> or visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs> if you are hearing impaired.

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..... 1-8

Location Security Overview..... 1-9

2 Understanding the Electronic Product Code Information Services Repository

Electronic Product Code Information Services 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.....	4-2
Understanding the Product Definition Process.....	4-3
Maintaining Lookup Types and Codes.....	4-5
Maintaining System Parameters.....	4-24
Maintaining Locations.....	4-47
Maintaining Location Groups.....	4-73
Maintaining Products.....	4-87
Defining Product and Item Cross Reference Information from Integrated Transactional Systems.....	4-123
Synchronizing Products (Products Interface Table).....	4-155
Maintaining Users.....	4-173
Maintaining User Groups.....	4-182
Maintaining Location Security Roles.....	4-198
Maintaining Location Security.....	4-214
Maintaining Serial Type Groups and Serial Types.....	4-226
Maintaining Serial Ranges.....	4-245
Maintaining Serial Destinations and Destination Rules.....	4-262
Viewing Serial Destination Rules.....	4-277
Defining Synchronization and Work Order Serialization Scenarios.....	4-289

5 Setting Up the Electronic Product Code Information Services Repository

Understanding the Electronic Product Code Information Services Repository Setup Process.....	5-1
Maintaining Electronic Product Code Information Services Preferences.....	5-2
Maintaining Policies.....	5-5

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.....	6-15
Creating Lots.....	6-16
Editing Lots.....	6-21

Deleting Lots.....	6-24
Synchronizing Lots (Lot Interface Table).....	6-25
Merging Lots Using JMS Queue.....	6-41

7 Managing Serials

Understanding Serial Generation.....	7-1
Searching for Serial Generation Requests.....	7-5
Viewing Serial Generation Request Messages.....	7-14
Creating Serial Generation Requests.....	7-17
Submitting Serial Generation Requests.....	7-26
Deleting Serial Generation Requests.....	7-29
Performing Work Order Serialization from an External System.....	7-30
Searching for Serials.....	7-52
Viewing Serial Detail Information.....	7-67
Editing Serials.....	7-74
Commissioning Serials.....	7-85
Decommissioning Serials.....	7-110

Part 4 Managing Packaging Hierarchy and Packages

8 Maintaining Packages

Understanding Packages.....	8-1
Searching for Packages.....	8-2
Viewing Package Detail Information.....	8-7
Creating Packages.....	8-8
Editing Packages.....	8-15
Deleting a Complete Package.....	8-17
Deleting an Alternate Identifier from a Package.....	8-19
Deleting an Alternate Identifier from a Package (Alternate Method).....	8-20

9 Managing Packaging Hierarchy

Searching for Packaging Hierarchies.....	9-1
Searching for Packages Using the Maintain Packaging Hierarchy Page.....	9-5
Viewing Packaging Hierarchies.....	9-9
Creating Packaging Hierarchies.....	9-13
Removing (Unpacking) Packages from a Packaging Hierarchy.....	9-23
Maintaining Packaging Hierarchies.....	9-26
Editing Status and Usage of Serialized Items.....	9-27
Creating Packages Using the Maintain Packaging Hierarchy Page.....	9-32

Part 5 Managing Transactions

10 Managing Transactions

Understanding Transactions.....	10-1
Searching for Transactions.....	10-10
Searching for Transactions from Integrated Transactional Systems	10-32
Viewing Transaction Detail Information.....	10-34
Viewing Transaction Exception Information.....	10-41
Viewing Initiating Transaction Detail Information.....	10-43
Processing Transactions.....	10-45
Disregarding Transactions.....	10-47
Adding Containers and/or Product Serials to a Transaction.....	10-49
Viewing Containers and/or Product Serials for a Transaction.....	10-66
Deleting Containers and/or Product Serials from a Transaction.....	10-69
Updating Containers and/or Product Serials for a Transaction.....	10-71
Transmitting Serials.....	10-73
Creating Transactions Using JMS Queue.....	10-75

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.....	11-13
Digitally Signing a Pedigree Using the Digital Signature Worklist Page.....	11-21
Printing a Pedigree Using the Maintain Transactions Page.....	11-24
Printing a Pedigree Using the Digital Signature Worklist Page.....	11-27
Viewing Transaction Detail Information Using the Digital Signature Worklist Page.....	11-30
Viewing a Pedigree Using the Maintain Transactions Page.....	11-32
Viewing a Pedigree Using the Digital Signature Worklist Page.....	11-33

Part 6 Using the Operations Dashboard

12 Using the Operations Dashboard

Using the Location Details Component.....	12-2
Using the Transaction Exceptions Component.....	12-8
Using the Counterfeit Serials Analysis Component.....	12-12

Using the Serial Range Management Component.....	12-18
Adding Custom URLs to the Operations Dashboard.....	12-22
Refreshing the Information that Displays on the Operations Dashboard.....	12-23

Part 7 Auditing Serial Data

13 Auditing Serial Data

Understanding Auditing.....	13-1
Setting Up the Audit Trail.....	13-17
Viewing the Audit Trail Setup.....	13-23
Updating the Audit Trail Setup.....	13-25
Exporting Audit Trail Setup Information to Excel.....	13-27
Synchronizing Audit Trail Setup Information.....	13-28
Searching for Audit Trail History.....	13-28
Viewing the Audit Trail History.....	13-36
Exporting the Audit Trail History to Excel.....	13-40

Part 8 Understanding Web Services and PL/SQL Services

14 Understanding Web Services and PL/SQL Services

Web Services and PL/SQL Services Overview.....	14-1
Web Services and PL/SQL Services Detail.....	14-4
JobInstanceServiceAMService (Inbound).....	14-4
LotsServiceAMService (Inbound).....	14-7
PackagingServiceAMService (Inbound).....	14-23
ProductServiceAMService (Inbound).....	14-39
SerialGenRequestServiceAMService (Inbound).....	14-52
SerialsServiceAMService (Inbound).....	14-77
TransactionsServiceAMService (Inbound).....	14-122
CaptureService (Inbound).....	14-202
QueryService (Inbound).....	14-230
Web Service Exceptions.....	14-242
Web Service E-Mail Notifications.....	14-243
Web Service E-mail Notifications Process Flow.....	14-245

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-7
LotsServiceAMService WSDL.....	C-10
PackagingServiceAMService WSDL.....	C-12
ProductServiceAMService WSDL.....	C-16
SerialGenRequestServiceAMService WSDL.....	C-18
SerialsServiceAMService WSDL.....	C-26
TransactionsServiceAMService WSDL.....	C-32

D Version and Build Information

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

E Using Custom Serial Generation

Using the PAS_SERIAL_GEN.generate_serial Procedure.....	E-1
Using the PAS_SERIAL_VAL.validate_serial Procedure.....	E-5

F Oracle Pedigree and Serialization Manager Error and Warning Messages

Error and Warning Messages.....	F-1

Index

Send Us Your Comments

Oracle Pedigree and Serialization Manager Process Guide, Release 2.2

Part No. E88351-02

Oracle welcomes customers' comments and suggestions on the quality and usefulness of this document. Your feedback is important, and helps us to best meet your needs as a user of our products. For example:

- Are the implementation steps correct and complete?
- Did you understand the context of the procedures?
- Did you find any errors in the information?
- Does the structure of the information help you with your tasks?
- Do you need different information or graphics? If so, where, and in what format?
- Are the examples correct? Do you need more examples?

If you find any errors or have any other suggestions for improvement, then please tell us your name, the name of the company who has licensed our products, the title and part number of the documentation and the chapter, section, and page number (if available).

Note: Before sending us your comments, you might like to check that you have the latest version of the document and if any concerns are already addressed. To do this, access the new Oracle E-Business Suite Release Online Documentation CD available on My Oracle Support and www.oracle.com. It contains the most current Documentation Library plus all documents revised or released recently.

Send your comments to us using the electronic mail address: appsdoc_us@oracle.com

Please give your name, address, electronic mail address, and telephone number (optional).

If you need assistance with Oracle software, then please contact your support representative or Oracle Support Services.

If you require training or instruction in using Oracle software, then please contact your Oracle local office and inquire about our Oracle University offerings. A list of Oracle offices is available on our Web site at www.oracle.com.

Preface

Intended Audience

Welcome to Release 2.2 of the *Oracle Pedigree and Serialization Manager Process Guide*. See Related Information Sources on page xiii 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>.

Access to Oracle Support

Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info> or visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs> if you are hearing impaired.

Structure

- 1 Understanding Oracle Pedigree and Serialization Manager**
- 2 Understanding the Electronic Product Code Information Services 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 Electronic Product Code Information Services 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, returned, reserved, commissioned, decommissioned, and edited 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.

Note: This component does not reflect the exception counts created during the running of the PL/SQL services.

- **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 and PL/SQL Services

A Pages and Navigation Paths

B Lookup Types and Codes

C Web Service WSDLs

D Version and Build Information

E Using Custom Serial Generation

F Oracle Pedigree and Serialization Manager Error and Warning Messages

Related Information Sources

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

Do Not Use Database Tools to Modify Oracle E-Business Suite Data

Oracle STRONGLY RECOMMENDS that you never use SQL*Plus, Oracle Data Browser, database triggers, or any other tool to modify Oracle E-Business Suite 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 E-Business Suite data, you risk destroying the integrity of your data and you lose the ability to audit changes to your data.

Because Oracle E-Business Suite tables are interrelated, any change you make using an Oracle E-Business Suite form can update many tables at once. But when you modify Oracle E-Business Suite data using anything other than Oracle E-Business Suite, 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 E-Business Suite.

When you use Oracle E-Business Suite 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

Understanding Oracle Pedigree and Serialization Manager

This chapter covers the following topics:

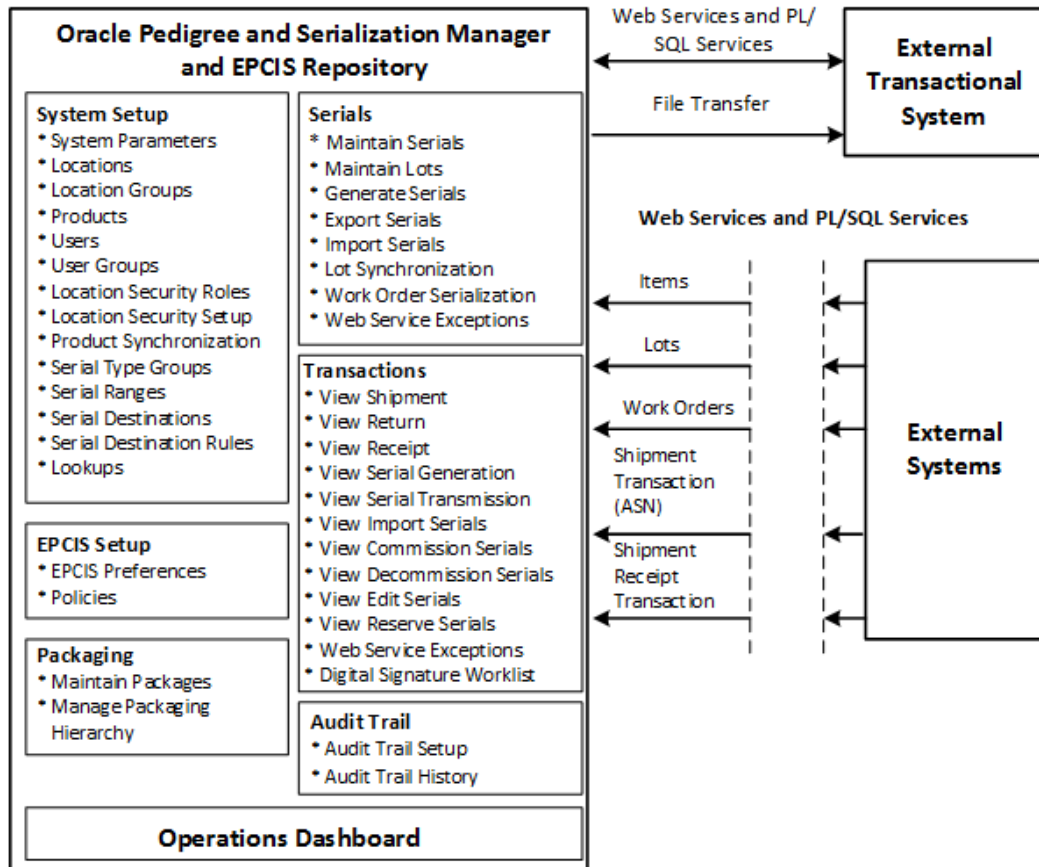
- Oracle Pedigree and Serialization Manager Overview
- Product Code Types Supported
- Location Security Overview

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, and 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
- Electronic Product Code Information Services (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, users, user groups, information for location security (location security roles

and location security setup), and other set up information used for maintaining serial numbers (serial type groups and serial ranges, serial destinations, and serial destination rules).

For more information on location security, see *Location Security Overview*, page 1-9.

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 and policies. 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 Electronic Product Code Information Services 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, receipt, 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 and print pedigrees for shipment and receipt transactions. You can also digitally sign pedigrees created 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, PL/SQL 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 and PL/SQL services provided include:

OPSM Web Services and PL/SQL Services

- createSerialGenerationRequest
- createProcessSerialGenerationRequest
- editSerialStatusAndUsageByLabel
- editSerialStatusAndUsageByList
- editSerialStatusAndUsageByListSQL
- editSerialStatusAndUsageByPrimaryDocument
- mergeLot
- mergeProducts
- packPackage
- unpackPackage
- processPackageSQL
- processUnpackSQL
- createTransaction (Shipments, Receipts, Returns, and Imports)
- processTransactionSQL
- processImportAndPackSQL
- createJobInstance

EPCIS Repository Web Services

- Capture
- getQueryNames
- getVendorVersion
- getStandardVersion
- poll
- getSubscriptionIDs

- subscribe
- unsubscribe

For more information on the web services and PL/SQL services, see *Web Services and PL/SQL Services Overview*, page 14-1.

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
 - Receiving externally serialized items

For more information on the integration between OPSM and EBS, see the *Oracle Serialization and Tracking Process Integration Pack for Oracle Pedigree and Serialization Manager and Oracle E-Business Suite 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 receipt 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
- Create and print Pedigree for receipt transactions
- Audit Management
 - Set up audit trail
 - View audit trail history
- Oracle Pedigree and Serialization Manager Operations Dashboard
 - Serial and transaction metrics
 - Serials by Location (imported, generated, shipped, returned, received, reserved, commissioned, decommissioned, and edited)
 - Location Information
 - Transaction Exceptions Metric (commission serials, decommission serials, reserve serials, edit serials, shipment, return, import, serial generation, and serial transmission)

These transactions exceptions metrics are only displayed for transactions created through the Java web services. No exceptions display for receipt transactions as the receipt transactions are created through a PL/SQL web service.
 - 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

Location Security Overview

Oracle Pedigree and Serialization Manager (OPSM) provides two methods for securing OPSM data. These methods are:

- Functional security
- (Optional) Location security

Functional Security

Using functional security, users are assigned to job roles which establishes the pages and task links that they can access in OPSM but the data within those pages is not restricted in any way. For example, a user may be given access to setup data, such as Maintain Products, and that access enables them to add, update, and delete any product information pertaining to products. The actual data within the page is not restricted.

For more information on functional security, see the *Oracle Pedigree and Serialization Security Guide*.

Location Security

Using location security, users are restricted to the data that they can access in OPSM based on the user's location or location group as well as their job role. It is optional to use location security in OPSM. To use location security, you must first define all of the

users that will be using location security using the Maintain Users page in OPSM. The usernames you select in the Maintain Users page must match the usernames that are used to log into OPSM. Then, you can group these users into user groups if required using the Maintain Users Groups page. After the users and user groups are set up, you can associate the users or user groups with a location security role of your choice using the Maintain Location Security Roles page. Creating user groups and location security roles is optional when using location security. From there, you can set up location security by user, user group, or location security role using the Location Security Setup page. For each user, user group, or location security role you set up you specify the locations or locations groups they can access along with their access level (read, update, and delete) to the locations or location groups. After location security information is set up, you then enable location security in the environment by selecting the Enable Location Security check box in the Maintain System Parameters page.

Most of the data in OPSM such as, products, serial destinations, serial ranges, lots, packages, and transactions are associated to a location or location group. In these cases, when using location security, you can restrict the data the user can access by location or location group and their location security privileges. For example, a user may be given access to setup data, such as Maintain Products, but only for the Denver location and only for the Read and Update access level. This access enables them to view and update any product information pertaining to products associated to the Denver location but not for any other locations.

There is some data in OPSM that is defined at the system-level and cannot be restricted by location. The following data is not associated with locations and security access to this data will only be role based at the page level (functional security):

- Lookups
- Serial Type Groups
- System Parameters
- Maintain EPCIS Preferences
- Maintain Users
- Maintain Policies
- Audit Trail

Parent/Child Relationships

Some of the pages in OPSM have data where the location or location group is associated to a child level record (for example, Product Details and Serial Destination Rules). In these situations, the following rules apply:

- If the user has update location security access to one of the child records, they will see the parent record in queries. For example, if the user is working in the Create

Lot page and has update data access to one of the Product Detail records, they will see the parent product displayed in the Product Code field and the corresponding Search and Select popup for that page.

- If the user has no location security access to any of the child records, and, as above, the user is working in the Create Lot page they will not see the parent product displayed in the Product Code field and the corresponding Search and Select popup for that page.
- If the user has read access to one of the child records and update or delete data access to another of the child records, the user will only be able to edit the record to which they have update or delete access. They will not be able to edit the parent record.
- If the user does not have delete access to all child records, the delete icon on the parent will be disabled as well as the delete icon on the detail line itself.
- If the user does not have update access to all child records, the fields on the parent will be disabled.
- If the user has update data access to all child records, they will be able to edit the parent record.
- On query pages, the location associated to the data record will be used to determine what is visible in the query results table.
- On edit pages, the location of the data elements will be used similarly to create. If the user has update location security access to one of the child records of the data element (for example, Product), they will be able to see the parent record in queries and update the data. If the user does not have update location security access to one of the child records of the data element (for example, Product), they will be able to see the data but the field is disabled.

Location or Location Group Creation

Since location security is controlled by location and location group, some assumptions must be made as these items are being set up. For a user to create new locations and locations groups and then be able to inquire on those records, the system will automatically provide the user creating the location or location group with read access location security. This will enable the user to view the data, but will prevent them from processing with this data until a security administrator can provide the necessary privileges. If the user that is creating the location or location group is not found in the Maintain Users page, a warning will be issued stating that access to the location cannot be granted. The location or location group will be created in the OPSM system.

No Location or Location Groups Assigned

Location security can only be enforced if the data has a location or location group assigned. However, for some data, a location assignment is not required. To prevent users from having access to unauthorized data, any elements that do not have a location or location group assigned are only visible to a super user. A super user has access to all the OPSM job roles and the Maintain Users page in OPSM.

Location Security Process Flow

Following is a very basic process flow for using location security in OPSM:

1. Users are created in the Oracle WebLogic Server for OPSM and assigned job roles (functional security).

For more information, see the *Oracle Pedigree and Serialization Manager Security Guide*.

2. OPSM Setup information is defined in the OPSM application. This includes:

1. Locations are created using the Maintain Locations page in OPSM.

For more information, see Maintaining Locations, page 4-47.

2. Location groups are created using the Maintain Location Groups page in OPSM.

For more information, see Maintaining Location Groups, page 4-73.

3. Users are created using the Maintain Users page in OPSM.

For more information, see Maintaining Users, page 4-173.

4. (Optional) Users groups are created using the Maintain User Groups page in OPSM.

For more information, see Maintaining User Groups, page 4-182.

5. (Optional) Location security roles are created using the Maintain Location Security Roles page in OPSM.

For more information, see Maintaining Location Security Roles, page 4-198.

6. Location security information is set up for a user, user group, or location security role using the Location Security Setup page in OPSM.

For more information, see Maintaining Location Security, page 4-214.

3. Users perform their daily job roles using the different pages in OPSM but are restricted to the location setup information that was defined for them.

For more information, see the various chapters in this guide.

Understanding the Electronic Product Code Information Services Repository

This chapter covers the following topics:

- Electronic Product Code Information Services Repository Overview

Electronic Product Code Information Services Repository Overview

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

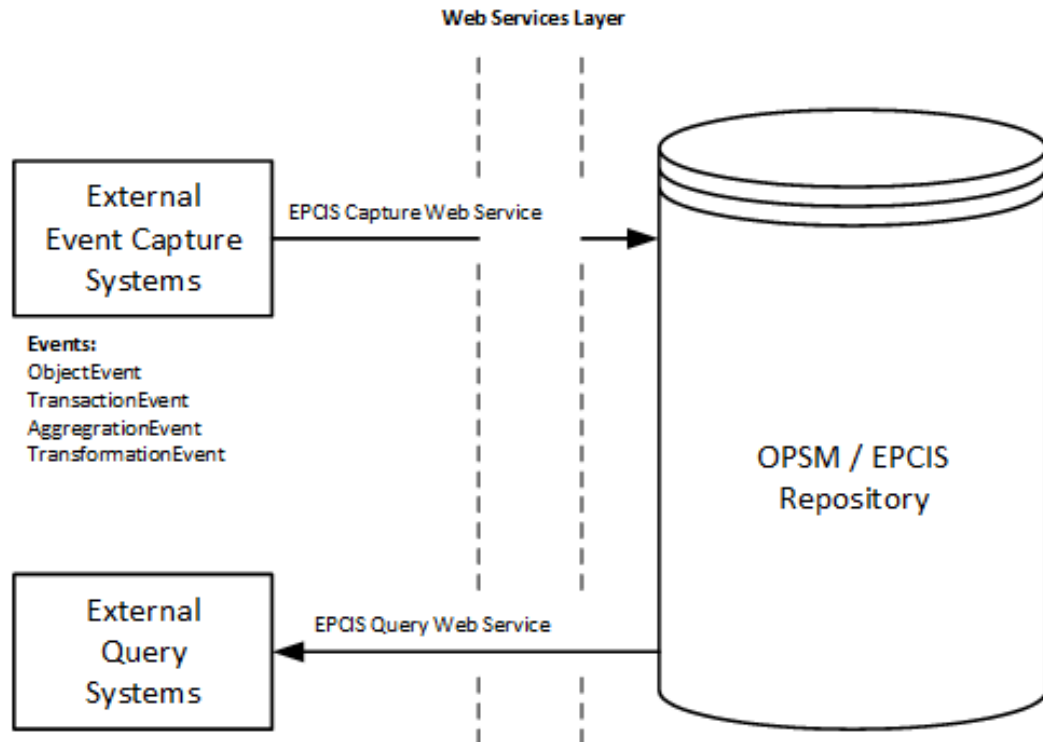
The EPCIS data model specifies a standard way to represent visibility information about physical objects, including descriptions of product movements in a supply chain. The main components of the data model include EPC, Event Time, Business Step, Disposition, Read Point, Business Location, and Business 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:

- ObjectEvent
- TransactionEvent
- AggregationEvent
- TransformationEvent

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 are 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 and functional security is also required to be able to submit events for capture.

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 and policies) and users that you define in OPSM to determine the EPCIS events that can be accessed and functional security is also required to be able to query data.

For more information, see:

- Understanding the EPCIS Repository Setup Process, page 5-1.
- Web Services and PL/SQL Services Overview, page 14-1.
- *Oracle Pedigree and Serialization Manager Security Guide*

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, to reorder the columns that appear in a table, and to change and reorder columns that appear in a table at one time:

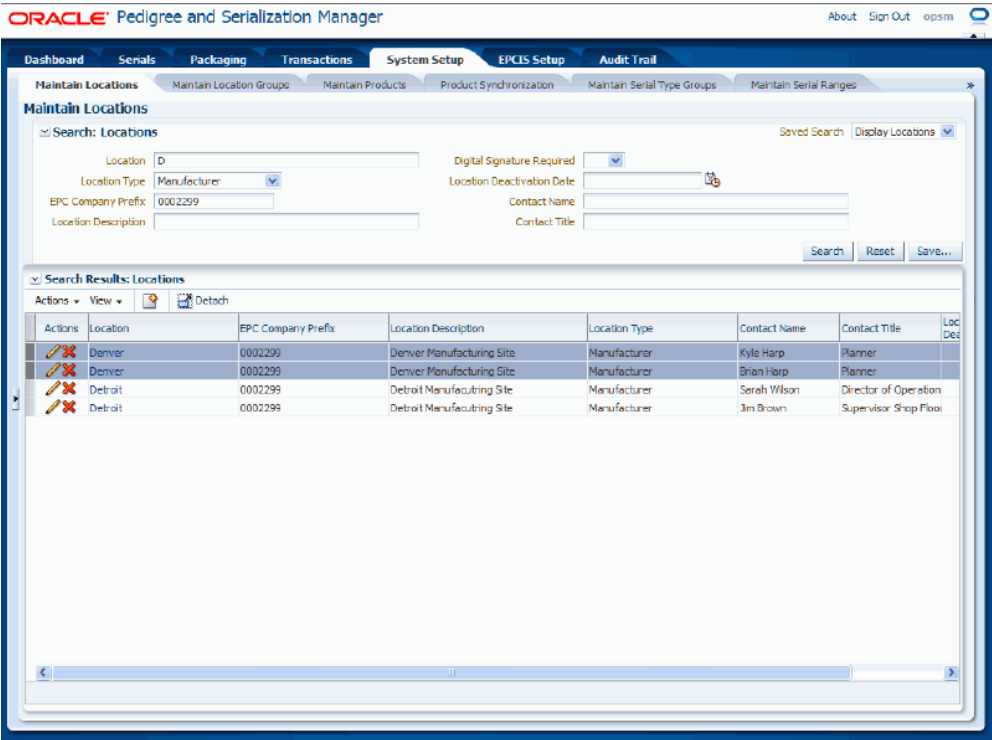
To Detach a Table:

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.

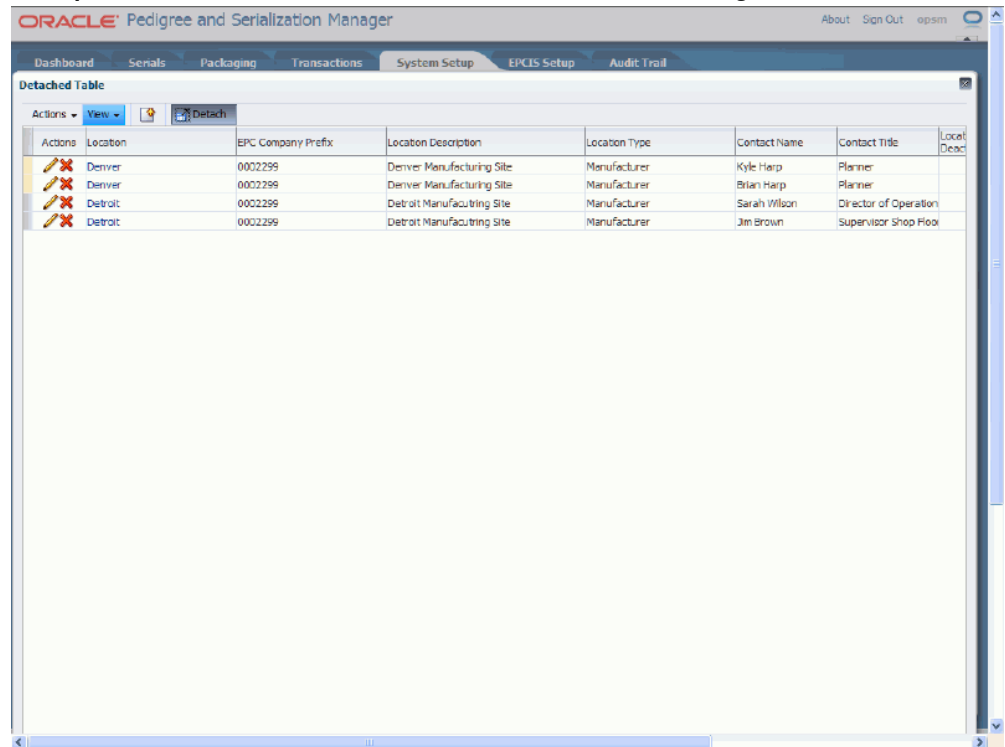
Example of the Maintain Locations Page Where the Search Results Display in a Table Format



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.

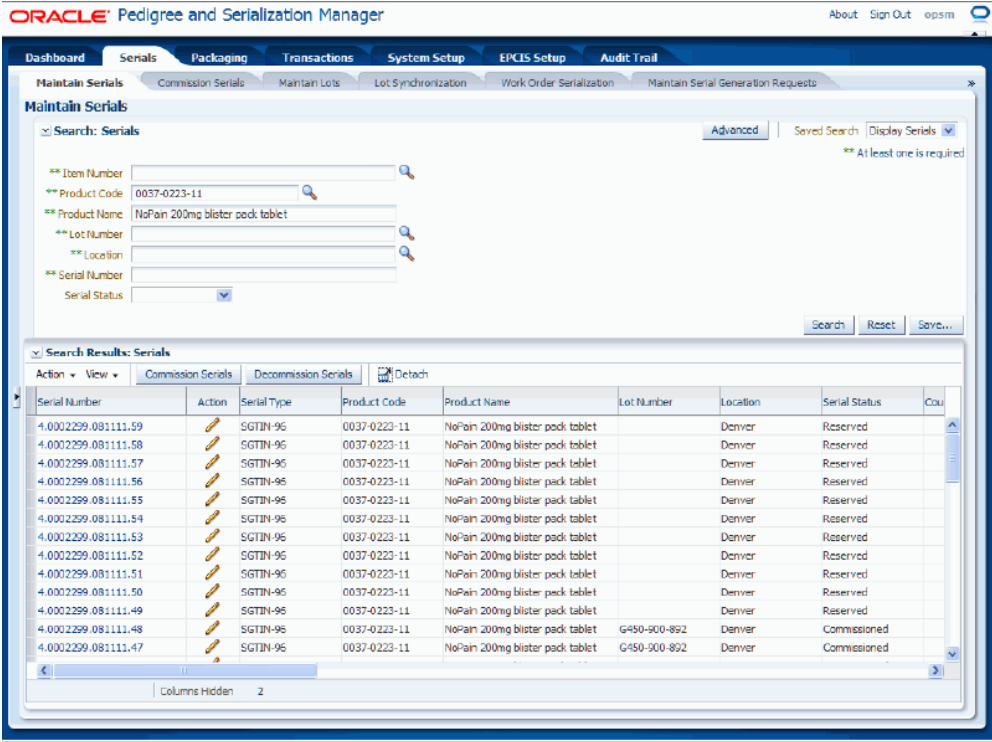
4. Select Attach from the View menu or click the Detach icon located at the top of the table.

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

Oracle Pedigree and Serialization Manager

Dashboard | **Serials** | Packaging | Transactions | System Setup | EPCIS Setup | Audit Trail

Maintain Serials | Commission Serials | Maintain Lots | Lot Synchronization | Work Order Serialization | Maintain Serial Generation Requests

Search: Serials [Advanced] [Saved Search] [Display Serials] [At least one is required]

** Item Number
 ** Product Code 0037-0223-11
 ** Product Name NoPain 200mg blister pack tablet
 ** Lot Number
 ** Location
 ** Serial Number
 Serial Status

[Search] [Reset] [Save...]

Search Results: Serials

Action View Commission Serials Decommission Serials Detach

Serial Number	Columns	Show All	Product Code	Product Name	Lot Number	Location	Serial Status	Columns Hidden
4.000225	Detach	Serial Number	37-0223-11	NoPain 200mg blister pack tablet		Denver	Reserved	
4.000225	Reorder Columns...	Action	37-0223-11	NoPain 200mg blister pack tablet		Denver	Reserved	
4.000229.081111.57		Serial Type	37-0223-11	NoPain 200mg blister pack tablet		Denver	Reserved	
4.000229.081111.56		Product Code	37-0223-11	NoPain 200mg blister pack tablet		Denver	Reserved	
4.000229.081111.55		Product Name	37-0223-11	NoPain 200mg blister pack tablet		Denver	Reserved	
4.000229.081111.54		Product Code Type	37-0223-11	NoPain 200mg blister pack tablet		Denver	Reserved	
4.000229.081111.53		Product Code variant	37-0223-11	NoPain 200mg blister pack tablet		Denver	Reserved	
4.000229.081111.52		Lot Number	37-0223-11	NoPain 200mg blister pack tablet		Denver	Reserved	
4.000229.081111.51		Location	37-0223-11	NoPain 200mg blister pack tablet		Denver	Reserved	
4.000229.081111.50		Serial Status	37-0223-11	NoPain 200mg blister pack tablet		Denver	Reserved	
4.000229.081111.49		Manage Columns...	37-0223-11	NoPain 200mg blister pack tablet	G450-900-892	Denver	Commissioned	
4.000229.081111.48			37-0223-11	NoPain 200mg blister pack tablet	G450-900-892	Denver	Commissioned	
4.000229.081111.47			37-0223-11	NoPain 200mg blister pack tablet		Denver	Commissioned	

Columns Hidden 2

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

ORACLE Pedigree and Serialization Manager

Dashboard Serials Packaging Transactions System Setup EPICIS Setup Audit Trail

Maintain Serials Commission Serials Maintain Lots Lot Synchronization Work Order Serialization Maintain Serial Generation Requests

Maintain Serials

Search: Serials

Advanced Saved Search Display Serials

** Item Number

** Product Code 0037-0223-11

** Product Name NoPain 200mg blister pack tablet

** Lot Number

** Location

** Serial Number

Serial Status

Search Reset Save...

Search Results: Serials

Action View Commission Serials Decommission Serials Detach

Serial Number	Serial Type	Product Code	Product Name	Lot Number	Location	Serial Status	Counterfeit Sta
4.0002299.081111.59	SGTIN-96	0037-0223-11	NoPain 200mg blister pack tablet		Denver	Reserved	
4.0002299.081111.58	SGTIN-96	0037-0223-11	NoPain 200mg blister pack tablet		Denver	Reserved	
4.0002299.081111.57	SGTIN-96	0037-0223-11	NoPain 200mg blister pack tablet		Denver	Reserved	
4.0002299.081111.56	SGTIN-96	0037-0223-11	NoPain 200mg blister pack tablet		Denver	Reserved	
4.0002299.081111.55	SGTIN-96	0037-0223-11	NoPain 200mg blister pack tablet		Denver	Reserved	
4.0002299.081111.54	SGTIN-96	0037-0223-11	NoPain 200mg blister pack tablet		Denver	Reserved	
4.0002299.081111.53	SGTIN-96	0037-0223-11	NoPain 200mg blister pack tablet		Denver	Reserved	
4.0002299.081111.52	SGTIN-96	0037-0223-11	NoPain 200mg blister pack tablet		Denver	Reserved	
4.0002299.081111.51	SGTIN-96	0037-0223-11	NoPain 200mg blister pack tablet		Denver	Reserved	
4.0002299.081111.50	SGTIN-96	0037-0223-11	NoPain 200mg blister pack tablet		Denver	Reserved	
4.0002299.081111.49	SGTIN-96	0037-0223-11	NoPain 200mg blister pack tablet		Denver	Reserved	
4.0002299.081111.48	SGTIN-96	0037-0223-11	NoPain 200mg blister pack tablet	G450-900-892	Denver	Commissioned	
4.0002299.081111.47	SGTIN-96	0037-0223-11	NoPain 200mg blister pack tablet	G450-900-892	Denver	Commissioned	
4.0002299.081111.46	SGTIN-96	0037-0223-11	NoPain 200mg blister pack tablet	G450-900-892	Denver	Commissioned	
4.0002299.081111.45	SGTIN-96	0037-0223-11	NoPain 200mg blister pack tablet	G450-900-892	Denver	Commissioned	
4.0002299.081111.44	SGTIN-96	0037-0223-11	NoPain 200mg blister pack tablet	G450-900-892	Denver	Commissioned	

Columns Hidden 3

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

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

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

ORACLE Pedigree and Serialization Manager

Dashboard Serials Packaging Transactions System Setup EPICIS Setup Audit Trail

Maintain Serials Commission Serials Maintain Lots Lot Synchronization Work Order Serialization Maintain Serial Generation Requests

Search: Serials Advanced Saved Search Display Serials

** Item Number
 ** Product Code 0037-0223-11
 ** Product Name NoPain 200mg blister pack tablet
 ** Lot Number
 ** Location
 ** Serial Number
 Serial Status

Search Reset Save...

Search Results: Serials

Action View Commission Serials Decommission Serials Detach

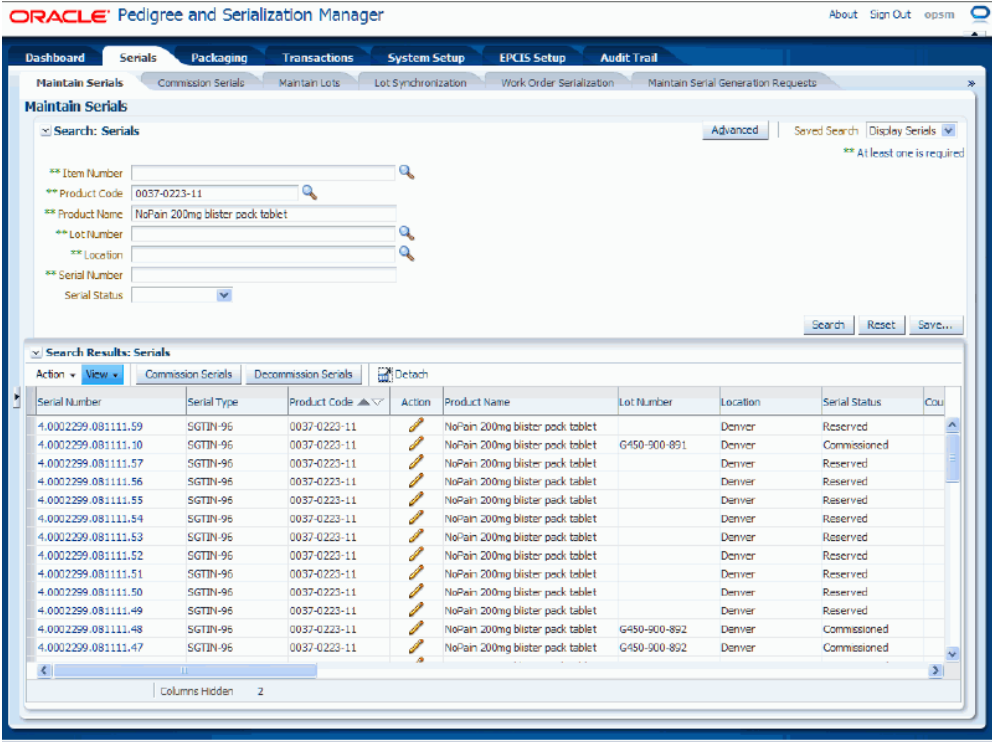
Serial Number	Action	Serial Type	Product Code	Product Name	Lot Number	Location	Serial Status	Cou
4.0002299.081111.59		SGTIN-96	0037-0223-11	NoPain 200mg blister pack tablet		Denver	Reserved	
4.0002299.081111.58		SGTIN-96	0037-0223-11	NoPain 200mg blister pack tablet		Denver	Reserved	
4.0002299.081111.57		SGTIN-96	0037-0223-11	NoPain 200mg blister pack tablet		Denver	Reserved	
4.0002299.081111.56		SGTIN-96	0037-0223-11	NoPain 200mg blister pack tablet		Denver	Reserved	
4.0002299.081111.55		SGTIN-96	0037-0223-11	NoPain 200mg blister pack tablet		Denver	Reserved	
4.0002299.081111.54		SGTIN-96	0037-0223-11	NoPain 200mg blister pack tablet		Denver	Reserved	
4.0002299.081111.53		SGTIN-96	0037-0223-11	NoPain 200mg blister pack tablet		Denver	Reserved	
4.0002299.081111.52		SGTIN-96	0037-0223-11	NoPain 200mg blister pack tablet		Denver	Reserved	
4.0002299.081111.51		SGTIN-96	0037-0223-11	NoPain 200mg blister pack tablet		Denver	Reserved	
4.0002299.081111.50		SGTIN-96	0037-0223-11	NoPain 200mg blister pack tablet		Denver	Reserved	
4.0002299.081111.49		SGTIN-96	0037-0223-11	NoPain 200mg blister pack tablet		Denver	Reserved	
4.0002299.081111.48		SGTIN-96	0037-0223-11	NoPain 200mg blister pack tablet	G450-900-892	Denver	Commissioned	
4.0002299.081111.47		SGTIN-96	0037-0223-11	NoPain 200mg blister pack tablet	G450-900-892	Denver	Commissioned	

Columns Hidden 2

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

ORACLE[®] Pedigree and Serialization Manager

About Sign Out opsm

Dashboard Serials Packaging Transactions System Setup EPCLIS Setup Audit Trail

Maintain Serials Commission Serials Maintain Lots Lot Synchronization Work Order Serialization Maintain Serial Generation Requests

Maintain Serials

Search: Serials Advanced Saved Search Display Serials

** Item Number
 ** Product Code 0037-0223-11
 ** Product Name NoPain 200mg blister pack tablet
 ** Lot Number
 ** Location
 ** Serial Number
 Serial Status

Search Reset Save...

Search Results: Serials

Action View Commission Serials Decommission Serials Detach

Serial Number	Action	Serial Type	Product Code	Product Name	Lot Number	Location	Serial Status	Cou
4.0002299.081111.59		SGTIN-96	0037-0223-11	NoPain 200mg blister pack tablet		Denver	Reserved	
4.0002299.081111.58		SGTIN-96	0037-0223-11	NoPain 200mg blister pack tablet		Denver	Reserved	
4.0002299.081111.57		SGTIN-96	0037-0223-11	NoPain 200mg blister pack tablet		Denver	Reserved	
4.0002299.081111.56		SGTIN-96	0037-0223-11	NoPain 200mg blister pack tablet		Denver	Reserved	
4.0002299.081111.55		SGTIN-96	0037-0223-11	NoPain 200mg blister pack tablet		Denver	Reserved	
4.0002299.081111.54		SGTIN-96	0037-0223-11	NoPain 200mg blister pack tablet		Denver	Reserved	
4.0002299.081111.53		SGTIN-96	0037-0223-11	NoPain 200mg blister pack tablet		Denver	Reserved	
4.0002299.081111.52		SGTIN-96	0037-0223-11	NoPain 200mg blister pack tablet		Denver	Reserved	
4.0002299.081111.51		SGTIN-96	0037-0223-11	NoPain 200mg blister pack tablet		Denver	Reserved	
4.0002299.081111.50		SGTIN-96	0037-0223-11	NoPain 200mg blister pack tablet		Denver	Reserved	
4.0002299.081111.49		SGTIN-96	0037-0223-11	NoPain 200mg blister pack tablet		Denver	Reserved	
4.0002299.081111.48		SGTIN-96	0037-0223-11	NoPain 200mg blister pack tablet	G450-900-892	Denver	Commissioned	
4.0002299.081111.47		SGTIN-96	0037-0223-11	NoPain 200mg blister pack tablet	G450-900-892	Denver	Commissioned	

Columns Hidden 2

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

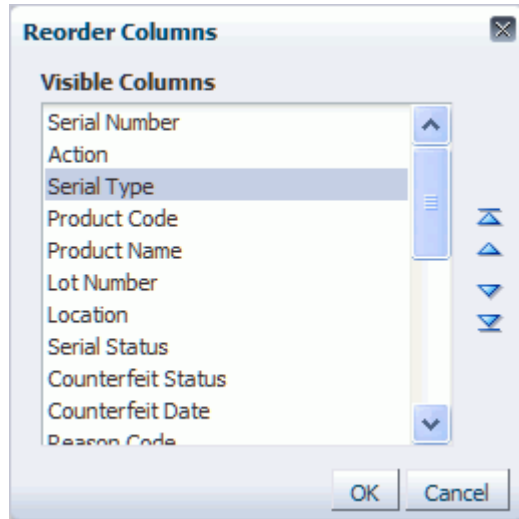
3. Select Reorder Columns from the View menu.

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 that are located on the right side 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 items 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

ORACLE Pedigree and Serialization Manager About Sign Out opsm

Dashboard **Serials** **Packaging** **Transactions** **System Setup** **EPICIS Setup** **Audit Trail**

Maintain Serials Commission Serials Maintain Lots Lot Synchronization Work Order Serialization Maintain Serial Generation Requests

Search: Serials Advanced | Saved Search | Display Serials

**** Item Number** **** Product Code** 0037-0223-11 **** Product Name** NoPain 200mg blister pack tablet **** Lot Number** **** Location** **** Serial Number** **Serial Status**

Search | Reset | Save...

Search Results: Serials

Action **View** **Commission Serials** **Decommission Serials** **Detach**

Serial Number	Serial Type	Product Code	Action	Product Name	Lot Number	Location	Serial Status	Cou
4.0002299.081111.59	SGTIN-96	0037-0223-11		NoPain 200mg blister pack tablet		Denver	Reserved	
4.0002299.081111.10	SGTIN-96	0037-0223-11		NoPain 200mg blister pack tablet	G450-900-891	Denver	Commissioned	
4.0002299.081111.57	SGTIN-96	0037-0223-11		NoPain 200mg blister pack tablet		Denver	Reserved	
4.0002299.081111.56	SGTIN-96	0037-0223-11		NoPain 200mg blister pack tablet		Denver	Reserved	
4.0002299.081111.55	SGTIN-96	0037-0223-11		NoPain 200mg blister pack tablet		Denver	Reserved	
4.0002299.081111.54	SGTIN-96	0037-0223-11		NoPain 200mg blister pack tablet		Denver	Reserved	
4.0002299.081111.53	SGTIN-96	0037-0223-11		NoPain 200mg blister pack tablet		Denver	Reserved	
4.0002299.081111.52	SGTIN-96	0037-0223-11		NoPain 200mg blister pack tablet		Denver	Reserved	
4.0002299.081111.51	SGTIN-96	0037-0223-11		NoPain 200mg blister pack tablet		Denver	Reserved	
4.0002299.081111.50	SGTIN-96	0037-0223-11		NoPain 200mg blister pack tablet		Denver	Reserved	
4.0002299.081111.49	SGTIN-96	0037-0223-11		NoPain 200mg blister pack tablet		Denver	Reserved	
4.0002299.081111.48	SGTIN-96	0037-0223-11		NoPain 200mg blister pack tablet	G450-900-892	Denver	Commissioned	
4.0002299.081111.47	SGTIN-96	0037-0223-11		NoPain 200mg blister pack tablet	G450-900-892	Denver	Commissioned	

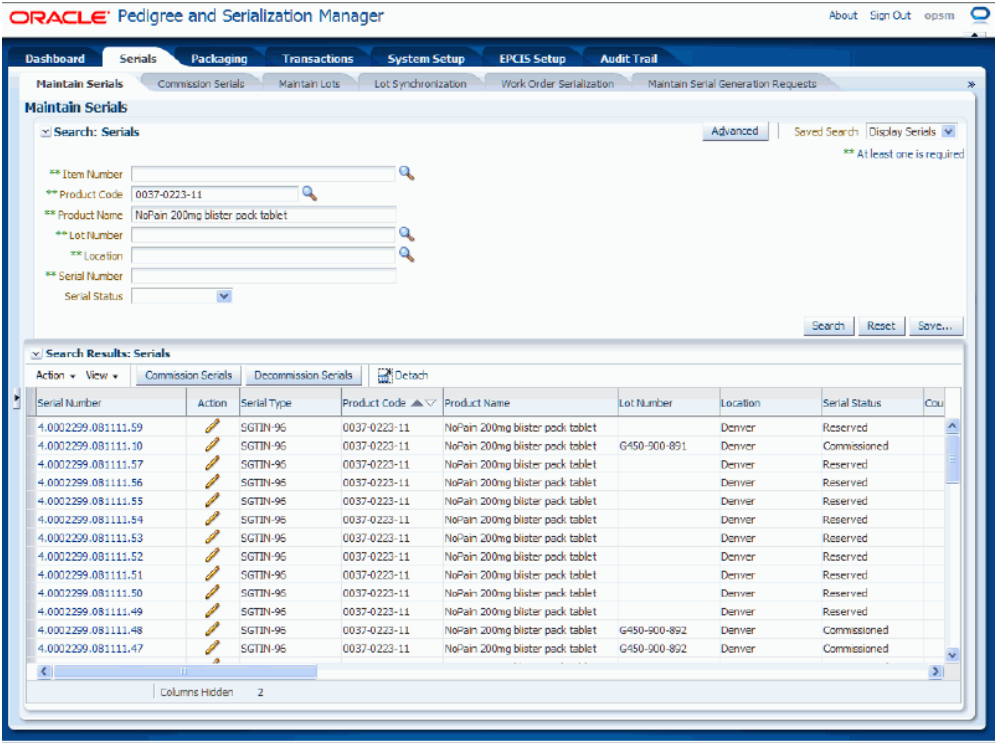
Columns Hidden 2

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.

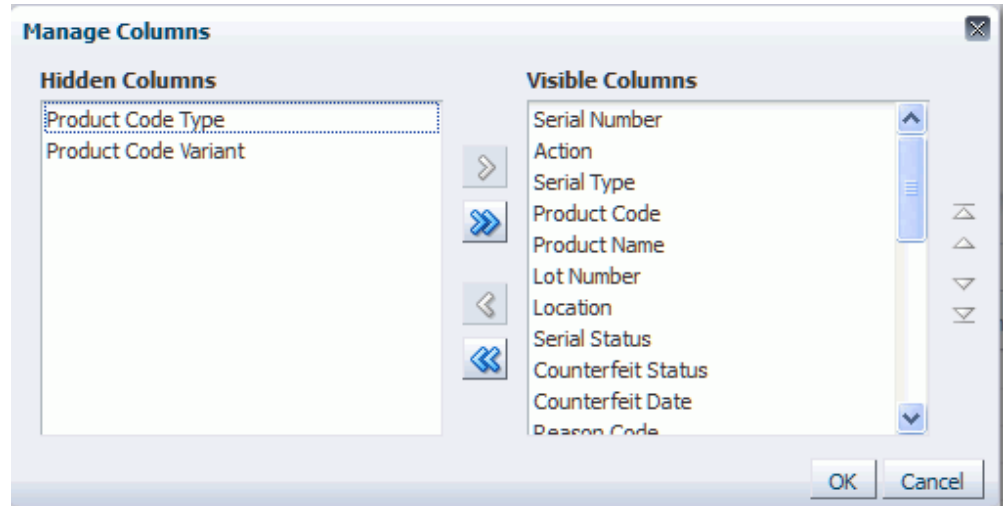
Example of Maintain Serials Page Where Search Results Display in a Table Format



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.

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 items from list" icon to move the visible column to the Hidden Columns region.
 - Click the "Remove all items from list" icon to move all visible columns to the Hidden Columns region.
 - Click the "Move selected items 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 that you want to display in 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)

Oracle Pedigree and Serialization Manager

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

Maintain Serials | Commission Serials | Maintain Lots | Lot Synchronization | Work Order Serialization | Maintain Serial Generation Requests

Maintain Serials

Search: Serials

Advanced | Saved Search | Display Serials

** Item Number:

** Product Code: 0037-0223-11

** Product Name: NoPain 200mg blister pack tablet

** Lot Number:

** Location:

** Serial Number:

Serial Status:

Search | Reset | Save...

Search Results: Serials

Action | View | Commission Serials | Decommission Serials | Details

Product Code	Serial Number	Serial Type	Product Name	Lot Number	Location	Serial Status	Counterfeit Sta
0037-0223-11	4.0002299.081111.59	SGTIN-96	NoPain 200mg blister pack tablet		Denver	Reserved	
0037-0223-11	4.0002299.081111.10	SGTIN-96	NoPain 200mg blister pack tablet	G450-900-891	Denver	Commissioned	
0037-0223-11	4.0002299.081111.87	SGTIN-96	NoPain 200mg blister pack tablet		Denver	Reserved	
0037-0223-11	4.0002299.081111.56	SGTIN-96	NoPain 200mg blister pack tablet		Denver	Reserved	
0037-0223-11	4.0002299.081111.55	SGTIN-96	NoPain 200mg blister pack tablet		Denver	Reserved	
0037-0223-11	4.0002299.081111.54	SGTIN-96	NoPain 200mg blister pack tablet		Denver	Reserved	
0037-0223-11	4.0002299.081111.53	SGTIN-96	NoPain 200mg blister pack tablet		Denver	Reserved	
0037-0223-11	4.0002299.081111.52	SGTIN-96	NoPain 200mg blister pack tablet		Denver	Reserved	
0037-0223-11	4.0002299.081111.51	SGTIN-96	NoPain 200mg blister pack tablet		Denver	Reserved	
0037-0223-11	4.0002299.081111.50	SGTIN-96	NoPain 200mg blister pack tablet		Denver	Reserved	
0037-0223-11	4.0002299.081111.49	SGTIN-96	NoPain 200mg blister pack tablet		Denver	Reserved	
0037-0223-11	4.0002299.081111.48	SGTIN-96	NoPain 200mg blister pack tablet	G450-900-892	Denver	Commissioned	
0037-0223-11	4.0002299.081111.47	SGTIN-96	NoPain 200mg blister pack tablet	G450-900-892	Denver	Commissioned	
0037-0223-11	4.0002299.081111.46	SGTIN-96	NoPain 200mg blister pack tablet	G450-900-892	Denver	Commissioned	
0037-0223-11	4.0002299.081111.45	SGTIN-96	NoPain 200mg blister pack tablet	G450-900-892	Denver	Commissioned	
0037-0223-11	4.0002299.081111.44	SGTIN-96	NoPain 200mg blister pack tablet	G450-900-892	Denver	Commissioned	

Columns Hidden: 3

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.

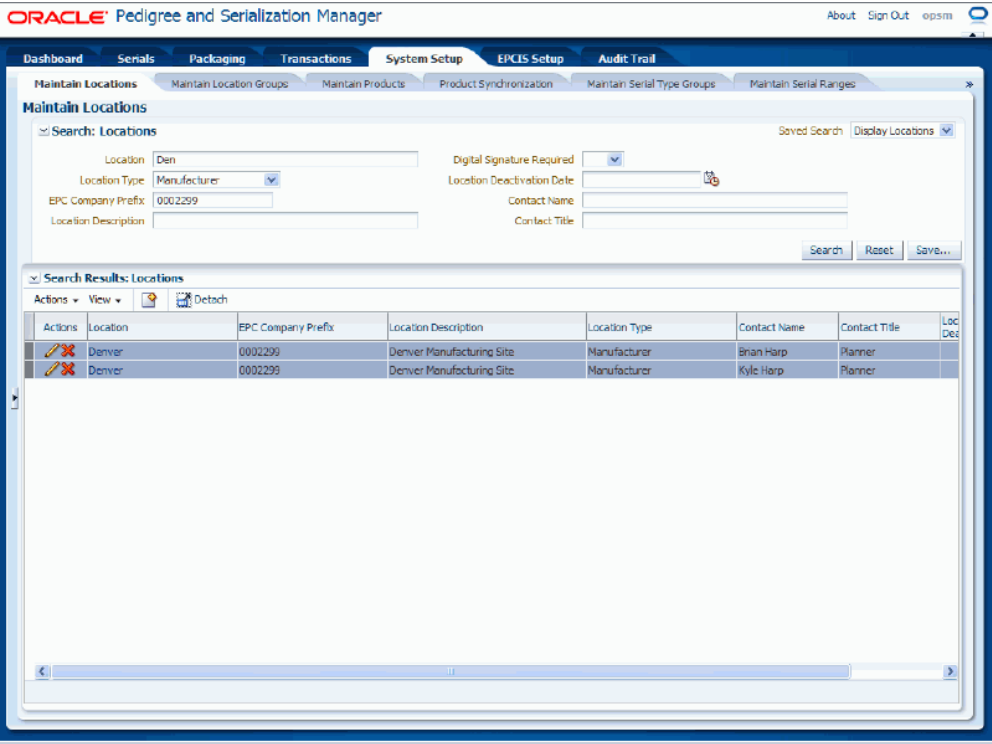
Use these procedures to create a saved search, personalize a saved search, and delete a

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



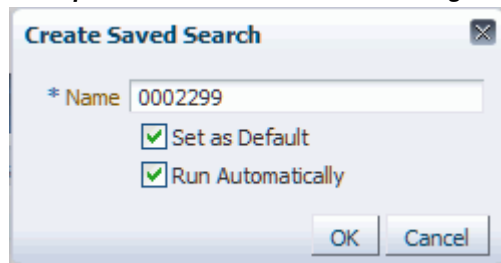
All of the available data that matches the search criteria appears in a table format.

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

Search: Locations

Location: Den
Location Type: Manufacturer
EPC Company Prefix: 0002299
Location Description:
Digital Signature Required: ☒
Location Deactivation Date:
Contact Name:
Contact Title:
Saved Search: 0002299
Search Reset Save...

Search Results: Locations

Actions	Location	EPC Company Prefix	Location Description	Location Type	Contact Name	Contact Title	Loc Dec
	Denver	0002299	Denver Manufacturing Site	Manufacturer	Brian Harp	Planner	
	Denver	0002299	Denver Manufacturing Site	Manufacturer	Kyle Harp	Planner	

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:

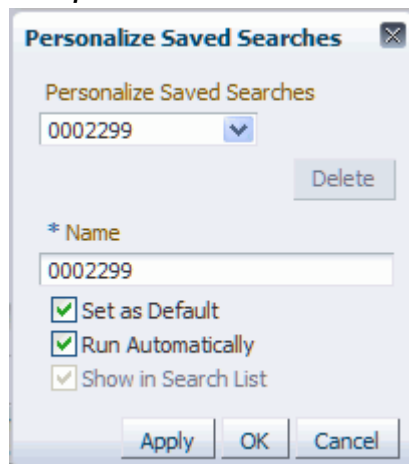
1. Navigate to an Oracle and Pedigree and Serialization Manager page where a Saved Search has been created.
2. Select the Saved Search you want to personalize using the drop down arrow next to the Saved Search field.
3. Select Personalize using the drop down arrow for the Saved Search field.

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.

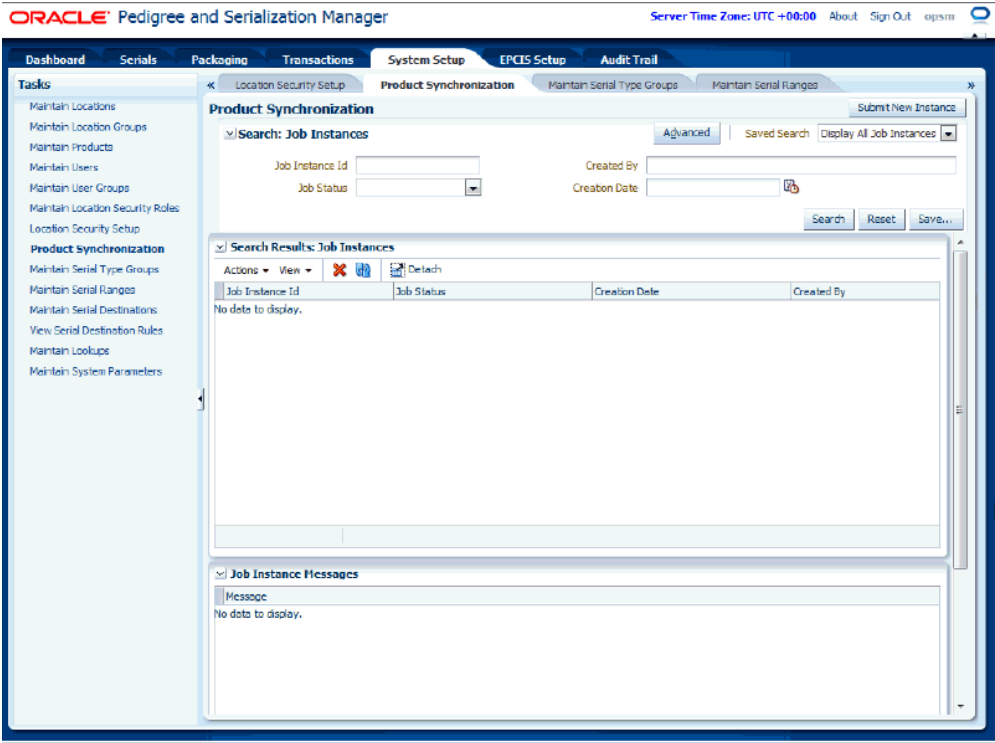
Use these procedures to search for (basic and advanced search), view, and delete job instances:

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)

The screenshot displays the Oracle Pedigree and Serialization Manager interface. The main section is titled "Product Synchronization" and includes a search area with fields for "Job Instance Id", "Job Status", "Created By", and "Creation Date". The "Creation Date" field is set to "5/3/2013". Below the search area, the "Search Results: Job Instances" table is shown, listing job instances with their status, creation date, and created by. The table has columns: Job Instance Id, Job Status, Creation Date, Created By, and Message Severity. The results show five job instances, with the first one having an "Error(s) Exist" status and the others being "Complete".

Job Instance Id	Job Status	Creation Date	Created By	Message Severity
6151031	Error(s) Exist	5/3/2013 11:29 PM	3dlest02	✖
6151023	Complete	5/3/2013 10:43 PM	bralsba	✔
6151022	Error(s) Exist	5/3/2013 10:38 PM	bralsba	✖
6151021	Error(s) Exist	5/3/2013 10:32 PM	bralsba	✖
6151020	Complete	5/3/2013 10:09 PM	bralsba	✔

Below the table, the "Job Instance Messages" section shows a message for the selected job instance (6151031). The message text is: "The following error occurred during ODI invocation: Session completed successfully with errors reported in error tables. Selected job options: Synchronization Action = EXTRACT, Extract Scenario Name = EBS_PROD_SYNC_FULL, Source System = EBI2_01. 651 records in interface table prior to extract from source system EBI2_01. 48 records inserted, 650 records updated by the extract." The message severity is indicated by a red "X" icon.

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

ORACLE Pedigree and Serialization Manager Server Time Zone: UTC +00:00 About Sign Out opsm

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

Tasks

- Maintain Locations
- Maintain Location Groups
- Maintain Products
- Maintain Users
- Maintain User Groups
- Maintain Location Security Roles
- Location Security Setup
- Product Synchronization**
- Maintain Serial Type Groups
- Maintain Serial Ranges
- Maintain Serial Destinations
- View Serial Destination Rules
- Maintain Lookups
- Maintain System Parameters

Product Synchronization

Location Security Setup | **Product Synchronization** | Maintain Serial Type Groups | Maintain Serial Ranges

Submit New Instance

☒ Search: Job Instances Advanced Saved Search Display All Job Instances

Job Instance Id Created By
Job Status Creation Date

Search Reset Save...

☒ Search Results: Job Instances

Actions

Job Instance Id	Job Status	Creation Date	Created By
No data to display.			

☒ Job Instance Messages

Message

No data to display.

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

ORACLE[®] Pedigree and Serialization Manager About Sign Out epsms

Dashboard Serials Packaging Transactions **System Setup** EPCLIS Setup Audit Trail

« Maintain Location Groups Maintain Products **Product Synchronization** Maintain Serial Type Groups Maintain Serial Ranges Maintain Serial Destinations »

Product Synchronization Submit New Instance

Search: Job Instances Basic Saved Search Display All Job Instances

Job Instance Id Equals Created By Equals
Job Status Equals Creation Date Equals

Search Reset Save... Add Fields

Search Results: Job Instances

Actions View

Job Instance Id	Job Status	Creation Date	Created By	Message Severity
No data to display.				

Job Instance Messages

Message	Message Severity
No data to display.	

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)

The screenshot shows the Oracle Pedigree and Serialization Manager interface. The 'Product Synchronization' tab is active. Under 'Search: Job Instances', the search criteria are: Job Instance Id equals 6153031, Job Status equals Error(s) Exist, and Created By equals Admin02. The search results table shows one row with Job Instance Id 6153031, Job Status Error(s) Exist, Creation Date 5/3/2013 11:29 PM, Created By Admin02, and Message Severity Error. Below the table, the 'Job Instance Messages' section displays a message: 'The following error occurred during ODI invocation: Session completed successfully with errors reported in error tables. Selected job options: Synchronization Action = EXTRACT, Extract Scenario Name = EBS_PROD_SYNC_FULL, Source System = EBI2_01. 651 records in interface table prior to extract from source system EBI2_01. 48 records inserted, 650 records updated by the extract.'

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)

The screenshot displays the Oracle Pedigree and Serialization Manager interface. The 'Product Synchronization' section is active, showing search criteria and results. The search criteria include Job Instance Id, Job Status, Created By, and Creation Date. The search results table lists job instances with their status, creation date, and message severity. Below the table, the 'Job Instance Messages' section displays detailed error messages for the selected job instance.

Job Instance Id	Job Status	Creation Date	Created By	Message Severity
6151031	Error(s) Exist	5/3/2013 11:29 PM	jdlest02	Error
6151023	Complete	5/3/2013 10:43 PM	bralsba	Informational
6151022	Error(s) Exist	5/3/2013 10:38 PM	bralsba	Error
6151021	Error(s) Exist	5/3/2013 10:32 PM	bralsba	Error
6151020	Complete	5/3/2013 10:09 PM	bralsba	Informational

Rows Selected: 1

Job Instance Messages

The following error occurred during ODI invocation: Session completed successfully with errors reported in error tables.
 Selected job options: Synchronization Action = EXTRACT, Extract Scenario Name = EBS_PROD_SYNC_FULL, Source System = EBI2_01.
 651 records in interface table prior to extract from source system EBI2_01.
 48 records inserted, 650 records updated by the extract.

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

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 Users
- Maintaining User Groups
- Maintaining Location Security Roles
- Maintaining Location Security
- 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 4-5.
2. Set up OPSM system parameters.
For more information, see *Maintaining System Parameters*, page 4-24.
3. Create locations.
For more information, see *Maintaining Locations*, page 4-47.
4. Create location groups (optional).
For more information, see *Maintaining Location Groups*, page 4-73.
5. Create Products and Item Cross Reference.
For more information, see *Understanding the Product Definition Process*, page 4-3, *Maintaining Products*, page 4-87, *Defining Product and Item Cross Reference Information from Integrated Transactional Systems*, page 4-123, *Synchronizing Products (Products Interface table)*, page 4-155, and *Web Services Detail*, page 14-4.
6. Create users (optional).
For more information, see *Maintaining Users*, page 4-173.
7. Create user groups (optional)
For more information, see *Maintaining User Groups*, page 4-182.
8. Create location security roles (optional)
For more information, see *Maintaining Location Security Roles*, page 4-198.
9. Set up location security (optional)
For more information, see *Maintaining Location Security*, page 4-214.
10. Create serial type groups and serial types.

For more information, see *Maintaining Serial Type Groups and Serial Types*, page 4-226.

11. Create serial ranges (optional).

For more information, see *Maintaining Serial Ranges*, page 4-245.

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

For more information, see *Maintaining Serial Destinations and Destination Rules*, page 4-262 and *Viewing Serial Destination Rules*, page 4-277.

13. 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 4-289.

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, the required regulatory product attributes required to generate a pedigree, and the product packaging level information and attributes that control serialization of the product packaging unit.

The serialization attributes determine the serial type, serial generation overage amounts, and serial range control. The process control attributes for the product determine the following:

- If serials are tracked for transactions with no change of ownership
- If pedigrees are created
- If serials can be created from shipment and receipt transactions
- If serials are generated by OPSM or externally for the product

The process control attributes 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 4-87.

- 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 4-155.

- 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 4-123.

- 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 14-4.

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 4-123.

For more information on maintaining system parameters, see Maintaining System Parameters, page 4-24.

- 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 4-155.

For more information on maintaining system parameters, see Maintaining System Parameters, page 4-24.

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 is not 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 indicates which custom serial algorithm to use. This lookup must be configured by the end user for use in custom serial generation.	None by default.

Lookup Type	Lookup Type Meaning	Lookup Type Description	Lookup Codes
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.
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.

Lookup Type	Lookup Type Meaning	Lookup Type Description	Lookup Codes
PAS_LOT_EXTRACT	Lot Extract	Identifies the Oracle Data Integrator (ODI) scenario that is 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_INCREMENTAL, 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_INCREMENTAL, 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 is 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_SYN C_FULL, EBS Full, EBS Product Full Load - EBS_PROD_SYN C_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 is 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 is 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_INCREMENTAL, EBS Discrete Incremental, EBS Discrete Incremental Load • EBS_WO_SERIAL_PROCESS_FULL, EBS Process Full, EBS Process Full Load • EBS_WO_SERIAL_PROCESS_INCREMENTAL, 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_ADDRESS_CODE	Address Code	The type of address (i.e. source, destination, etc.)	• DESTINATION, Destination Address, Destination Address • SOURCE, Source Address, Source Address
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 B 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

The screenshot shows the Oracle Pedigree and Serialization Manager interface. The top navigation bar includes 'Dashboard', 'Serials', 'Packaging', 'Transactions', 'System Setup', 'EPCIS Setup', and 'Audit Trail'. The 'System Setup' tab is active, and the 'Maintain Lookups' sub-tab is selected. On the left, a 'Tasks' sidebar lists various maintenance tasks. The main content area is titled 'Maintain Lookups' and contains a search section with the following fields:

- Search: Lookup Types** (Saved Search | Display Lookup Types ▼)
- Lookup Type:
- Meaning:
- Description:

Buttons for 'Search', 'Reset', and 'Save...' are located to the right of the search fields. Below the search section, a 'Search Results: Lookup Types' table is shown. The table has columns for 'Action', 'View', 'Detach', 'Lookup Type', 'Meaning', and 'Description'. The table is currently empty, displaying the message 'No data to display.'

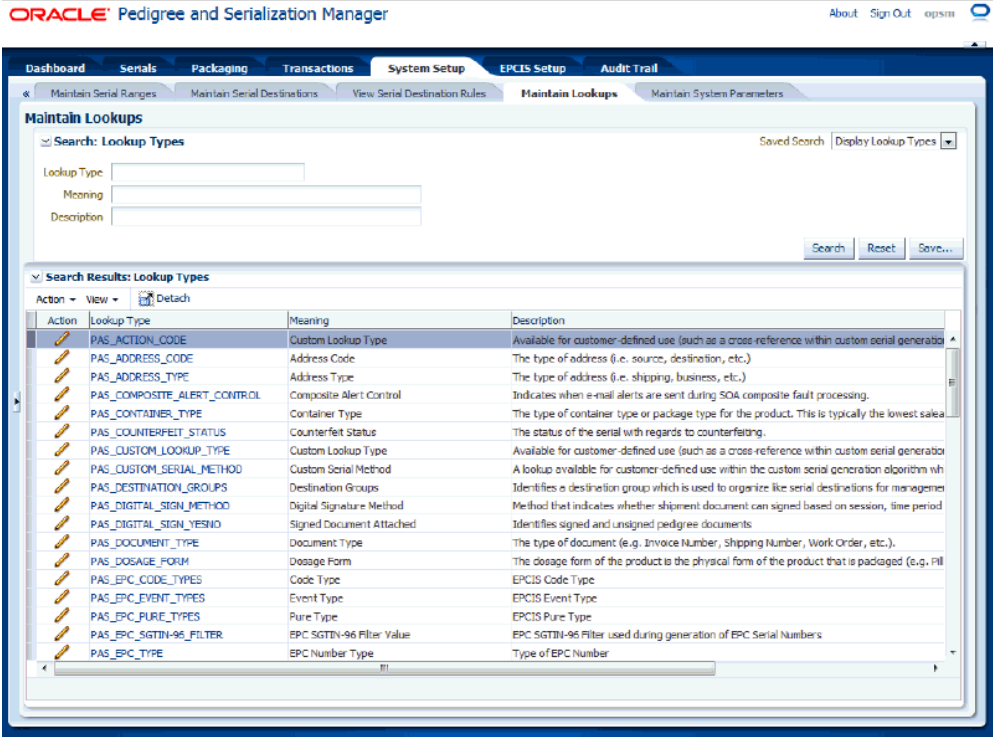
2. In the Search: Lookup Types region, enter the search criteria for the lookup types using one or more of these fields:

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 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 for which you want to view the details.

View Lookup Type page

ORACLE Pedigree and Serialization Manager

About Sign Out opsm

The screenshot shows the 'View Lookup Type' page in the Oracle Pedigree and Serialization Manager. The page has a navigation bar with tabs: Dashboard, Serials, Packaging, Transactions, System Setup, EPCS Setup, and Audit Trail. The 'System Setup' tab is active, and the 'Maintain Lookups' sub-tab is selected. The page is titled 'View Lookup Type' and has a 'Cancel' button in the top right corner.

View Lookup Type Details

Lookup Type: PAS_PRODUCT_CATEGORY
Meaning: Product Category
Description: The category of product.
Language: American English
Access Level: User Defined

View Lookup Codes

Actions: View, Detach

Lookup Code	Meaning	Description
ALLERGY	Allergy	Drugs that provide allergy relief.
ANALGESIC	Analgesic	Drugs that relieve pain.
ANTI-ANXIETY	Anti-anxiety	Drugs that reduce anxiety.
ANTIBIOTIC	Antibiotic	Drugs that fight bacterial infections.
DECONGESTANT	Decongestant	Drugs that reduce the swelling of mucous membranes.
DIURETIC	Diuretic	Drugs that rid the body of excess fluid.
HAIR LOSS	Hair Loss	Drugs that regrow hair.
PLACEBO	Placebo	Drugs or treatment that is inert.
SKINCARE	Skin Care	Drugs that improve skin conditions.
WEIGHT LOSS	Weight Loss	Drugs that rid the body of excess fat.

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:

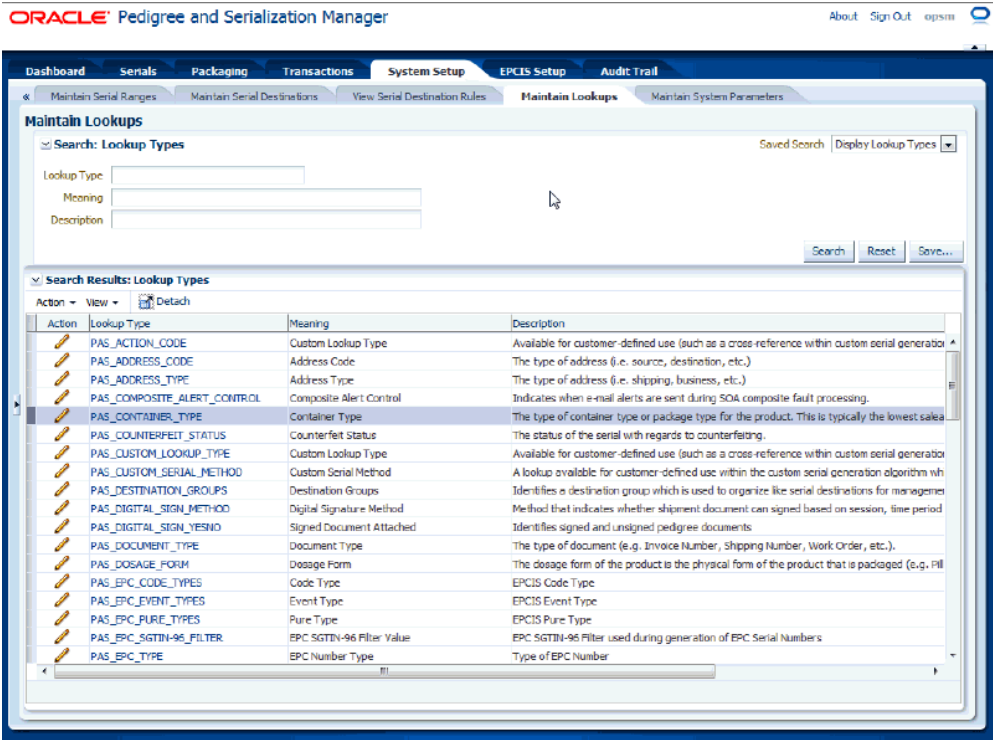
1. Navigate to the Maintain Lookups page, page A-2.
2. Enter search criteria for the lookup types you want to edit and click the Search button.

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 for which you want to edit the lookup type fields or edit the lookup codes.

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

ORACLE[®] Pedigree and Serialization Manager

About Sign Out opsm

The screenshot displays the 'Edit Lookup Type' page. At the top, there are tabs for 'Dashboard', 'Serials', 'Packaging', 'Transactions', 'System Setup', 'EPCIS Setup', and 'Audit Trail'. The 'System Setup' tab is active, and within it, the 'Maintain Lookups' sub-tab is selected. The page title is 'Edit Lookup Type'. Below the title, there are buttons for 'Save', 'Save and Close', and 'Cancel'. The main content area is divided into two sections: 'Lookup Type Details' and 'Lookup Codes'. The 'Lookup Type Details' section shows the following information: Lookup Type: PAS_CONTAINER_TYPE, * Meaning: Container Type, Description: The type of container type or package type for the product. This is typically the lowest saleable unit packaging type. (e.g. Bot, Language: American English, and Access Level: User Defined. The 'Lookup Codes' section contains a table with three columns: Lookup Code, Meaning, and Description. The table lists various lookup codes and their corresponding meanings and descriptions.

Lookup Code	Meaning	Description
BLISTERPACK	Blister Pack	Blister Pack
BOTTLE	Bottle	Bottle
BOX	Box	Box
CASE	Case	Case
KIT	Kit	Kit
PALLET	PALLET	PALLET
PLANE	Plane	Plane
RAIL CAR	RAIL CAR	Rail Car
SYRINGE	Syringe	Syringe
TRUCK	truck	truck

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 for which you want to add lookup codes 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 for which want to add lookup code fields.

Maintain Lookups page

ORACLE Pedigree and Serialization Manager About Sign Out opsm

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

Maintain Serial Ranges **Maintain Serial Destinations** **View Serial Destination Rules** **Maintain Lookups** **Maintain System Parameters**

Maintain Lookups

Search: Lookup Types Saved Search Display Lookup Types

Lookup Type:
Meaning:
Description:

Search Reset Save...

Search Results: Lookup Types

Action	View	Detach	Lookup Type	Meaning	Description
			PAS_ACTION_CODE	Custom Lookup Type	Available for customer-defined use (such as a cross-reference within custom serial generation)
			PAS_ADDRESS_CODE	Address Code	The type of address (i.e. source, destination, etc.)
			PAS_ADDRESS_TYPE	Address Type	The type of address (i.e. shipping, business, etc.)
			PAS_COMPOSITE_ALERT_CONTROL	Composite Alert Control	Indicates when e-mail alerts are sent during SOA composite fault processing.
			PAS_CONTAINER_TYPE	Container Type	The type of container type or package type for the product. This is typically the lowest sales
			PAS_COUNTERFEIT_STATUS	Counterfeit Status	The status of the serial with regards to counterfeiting.
			PAS_CUSTOM_LOOKUP_TYPE	Custom Lookup Type	Available for customer-defined use (such as a cross-reference within custom serial generation)
			PAS_CUSTOM_SERIAL_METHOD	Custom Serial Method	A lookup available for customer-defined use within the custom serial generation algorithm
			PAS_DESTINATION_GROUPS	Destination Groups	Identifies a destination group which is used to organize like serial destinations for manage
			PAS_DIGITAL_SIGN_METHOD	Digital Signature Method	Method that indicates whether shipment document can signed based on session, time period
			PAS_DIGITAL_SIGN_YESNO	Signed Document Attached	Identifies signed and unsigned pedigree documents
			PAS_DOCUMENT_TYPE	Document Type	The type of document (e.g. Invoice Number, Shipping Number, Work Order, etc.).
			PAS_DOSAGE_FORM	Dosage Form	The dosage form of the product to the physical form of the product that is packaged (e.g. Pill
			PAS_EPC_CODE_TYPES	Code Type	EPCIS Code Type
			PAS_EPC_EVENT_TYPES	Event Type	EPCIS Event Type
			PAS_EPC_PURE_TYPES	Pure Type	EPCIS Pure Type
			PAS_EPC_SGTIN-96_FILTER	EPC SGTIN-96 Filter Value	EPC SGTIN-96 Filter used during generation of EPC Serial Numbers
			PAS_EPC_TYPE	EPC Number Type	Type of EPC Number

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

ORACLE[®] Pedigree and Serialization Manager

About Sign Out opsm

The screenshot displays the 'Edit Lookup Type' page. At the top, there are tabs for 'Dashboard', 'Serials', 'Packaging', 'Transactions', 'System Setup', 'EPCIS Setup', and 'Audit Trail'. The 'System Setup' tab is active, and within it, the 'Maintain Lookups' sub-tab is selected. The page title is 'Edit Lookup Type'. Below the title, there are buttons for 'Save', 'Save and Close', and 'Cancel'. The main content area is divided into two sections. The first section, 'Lookup Type Details', shows the following information: 'Lookup Type: PAS_CONTAINER_TYPE', '* Meaning: Container Type', 'Description: The type of container type or package type for the product. This is typically the lowest saleable unit packaging type. (e.g. Bot', 'Language: American English', and 'Access Level: User Defined'. The second section, 'Lookup Codes', contains a table with three columns: 'Lookup Code', 'Meaning', and 'Description'. The table lists various container types and their corresponding meanings and descriptions.

Lookup Code	Meaning	Description
BLISTERPACK	Blister Pack	Blister Pack
BOTTLE	Bottle	Bottle
BOX	Box	Box
CASE	Case	Case
KIT	Kit	Kit
PALLET	PALLET	PALLET
PLANE	Plane	Plane
RAIL CAR	RAIL CAR	Rail Car
SYRINGE	Syringe	Syringe
TRUCK	truck	truck

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

ORACLE Pedigree and Serialization Manager

AboutSign Outopsm

DashboardSerialsPackagingTransactionsSystem SetupEPCS SetupAudit Trail

Maintain Serial RangesMaintain Serial DestinationsView Serial Destination RulesMaintain LookupsMaintain System Parameters

SaveSave and CloseCancel

Lookup Type Details

Lookup Type: PAS_CONTAINER_TYPE

* Meaning: Container Type

Description: The type of container type or package type for the product. This is typically the lowest saleable unit packaging type. (e.g. Bot

Language: American English

Access Level: User Defined

Lookup Codes

ActionsViewAddDetach

Lookup Code	Meaning	Description
BLISTERPACK	Blister Pack	Blister Pack
BOTTLE	Bottle	Bottle
BOX	Box	Box
CASE	Case	Case
KIT	Kit	Kit
PALLET	PALLET	PALLET
PLANE	Plane	Plane
RAIL CAR	RAIL CAR	Rail Car
SYRINGE	Syringe	Syringe

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

ORACLE[®] Pedigree and Serialization Manager

About Sign Out opsm

Edit Lookup Type

Lookup Type: PAS_CONTAINER_TYPE
* Meaning: Container Type
Description: The type of container type or package type for the product. This is typically the lowest saleable unit packaging type. (e.g. Bot
Language: American English
Access Level: User Defined

Lookup Codes

Lookup Code	Meaning	Description
VIAL	Vial	Vial
BLISTERPACK	Blister Pack	Blister Pack
BOTTLE	Bottle	Bottle
BOX	Box	Box
CASE	Case	Case
KIT	Kit	Kit
PALLET	PALLET	PALLET
PLANE	Plane	Plane
RAIL CAR	Rail Car	Rail Car
SYRINGE	Syringe	Syringe

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 for which you want to delete lookup codes 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 for which you want to delete lookup code fields.

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 are 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 may 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 define the owning source system default, source system precedence, serial type default, use serial ranges default setting for product details, and if you want to enable location security. They 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 is used to print Pedigrees, Digital Signature Keystore information, error notification setup information, and transaction statement 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 screenshot shows the Oracle Pedigree and Serialization Manager interface. The top navigation bar includes 'Dashboard', 'Serials', 'Packaging', 'Transactions', 'System Setup', 'EPCIS Setup', and 'Audit Trail'. The 'System Setup' tab is active, and the 'Maintain System Parameters' sub-tab is selected. The left sidebar lists various tasks, with 'Maintain System Parameters' highlighted. The main content area displays the following settings:

- Owning Source System Default:** DPGM
- Source System Precedence:** Any Source System
- Serial Type Default:** SGTIN-198
- Use Serial Ranges Default:** ☐
- Enable Location Security:** ☒

Below these settings is a row of sub-tabs: 'Generate', 'Import', 'Shipment', 'Return', 'Transmit', 'Dashboard', 'Pedigree', and 'Digital Signature Keystore'. The 'Generate' sub-tab is active, showing the following options:

- Allow Lot Creation:** ☒
- Serial Commit Size:** 2300

A 'Save' button is located in the top right corner of the main content area.

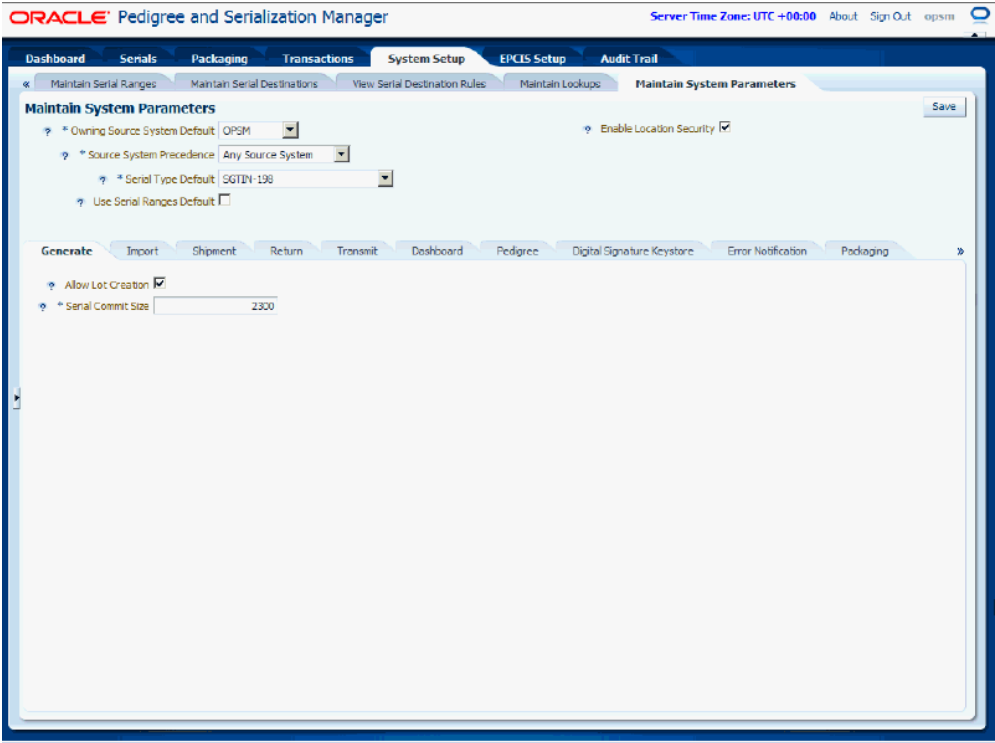
The Maintain System Parameters page appears displaying the current settings for the system parameters.

2. Select the different sub tabs (Generate, Import, Shipment, Return, Transmit, Dashboard, Pedigree, Digital Signature Keystore, Error Notification, Packaging, Serial Edit, Transaction Statement, and Receipt) 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 defaults 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 4-99.

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 appears 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 4-99.
Use Serial Ranges Default check box	(Optional) If this check box is selected, then the Use Serial Ranges check box defaults 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 4-99.

Field Name	Description
Enable Location Security check box	(Optional) Select this check box if you want to enable location security in the environment. For more information on location security, see: • Location Security Overview, page 1-9

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 issues an exception for the generate transaction.
Serial Commit Size	When performing a generate transaction, enter the number of serials that are processed before the system commits the serials to the database.

5. Select the Import sub tab.

Maintain System Parameters page - Import sub tab

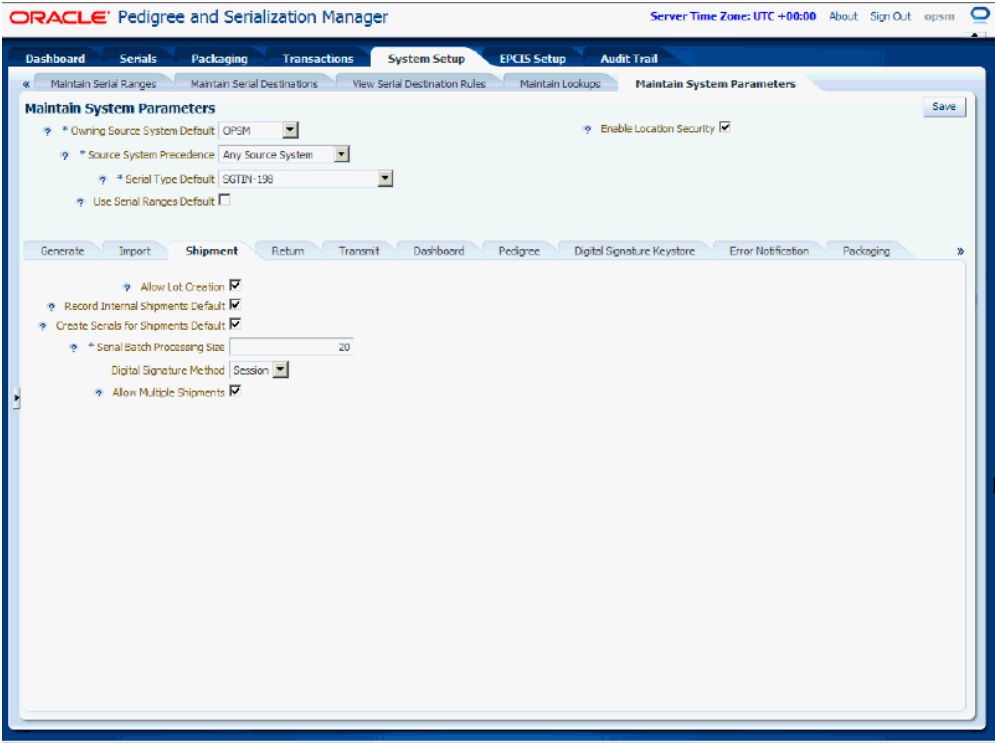
The screenshot shows the Oracle Pedigree and Serialization Manager interface. The top navigation bar includes 'Dashboard', 'Serials', 'Packaging', 'Transactions', 'System Setup', 'EPCIS Setup', and 'Audit Trail'. The 'System Setup' tab is active, and the 'Maintain System Parameters' sub-tab is selected. The page title is 'Maintain System Parameters'. Below the title, there are several configuration options: 'Owning Source System Default' (dropdown menu set to 'OPSM'), 'Source System Precedence' (dropdown menu set to 'Any Source System'), 'Serial Type Default' (dropdown menu set to 'SGTIN-198'), and 'Use Serial Ranges Default' (checkbox). To the right, there is a checkbox for 'Enable Location Security' which is checked. A 'Save' button is located in the top right corner. Below these options, there is a horizontal tab bar with 'Generate', 'Import', 'Shipment', 'Return', 'Transmit', 'Dashboard', 'Pedigree', 'Digital Signature Keystore', 'Error Notification', and 'Packaging'. The 'Import' tab is selected. Under the 'Import' tab, there are two more options: 'Allow Lot Creation' (checkbox) and 'Serial Commit Size' (text input field set to '2000').

- 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 issues an exception for the import transaction.
Serial Commit Size	When performing an import transaction, enter the number of serials that are processed before the system commits the serials to the database.

- 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 issues 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 defaults as selected on the Create Product page, when creating a new product. If selected on the Create Product page, then the system records shipments to internal customers for that product. For more information on creating products, see Procedure: To Create Products, page 4-99.
Create Serials for Shipments Default check box	(Optional) If this check box is selected, then the Create Serials for Shipment check box defaults 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 are created for that product in OPSM at the time of shipment. If the serials already exist, the shipment transaction is set to an exception status. For more information on creating a new product, see Procedure: To Create Products, page 4-99.
Serial Batch Processing Size	When processing a shipment transaction, enter the number of serials that are 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.
Allow Multiple Shipments check box	(Optional) Select this check box, if you want the system to allow multiple external shipments of serial numbers that are not included in a packaging hierarchy. Multiple external shipments of a packaging hierarchy are not allowed. The TransactionServiceAMService endpoint uses this parameter to determine whether the shipped state should be ignored or not when processing a shipment transaction.

9. Select the Return sub tab.

Maintain System Parameters page - Return sub tab

The screenshot shows the Oracle Pedigree and Serialization Manager interface. The top navigation bar includes 'Dashboard', 'Serials', 'Packaging', 'Transactions', 'System Setup', 'EPICIS Setup', and 'Audit Trail'. The 'System Setup' tab is active, and the 'Maintain System Parameters' sub-tab is selected. The page title is 'Maintain System Parameters'. The 'Return' sub-tab is also active. The 'Return' sub-tab contains the following parameters:

- * Owning Source System Default: OPSM (dropdown)
- * Source System Precedence: Any Source System (dropdown)
- * Serial Type Default: SGTIN-198 (dropdown)
- Use Serial Ranges Default: ☐
- Enable Location Security: ☒
- Allow Lot Creation: ☒
- Record Internal Returns Default: ☐
- * Serial Batch Processing Size: 100

A 'Save' button is located in the top right corner of the 'Maintain System Parameters' section.

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 issues 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 defaults as selected on the Create Product page when creating a new product. If selected on the Create Product page, then the system records product returns from internal customers for that product. For more information on creating products, see Procedure: To Create Products, page 4-99.
Serial Batch Processing Size	When processing a return transaction, enter the number of serials that are 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

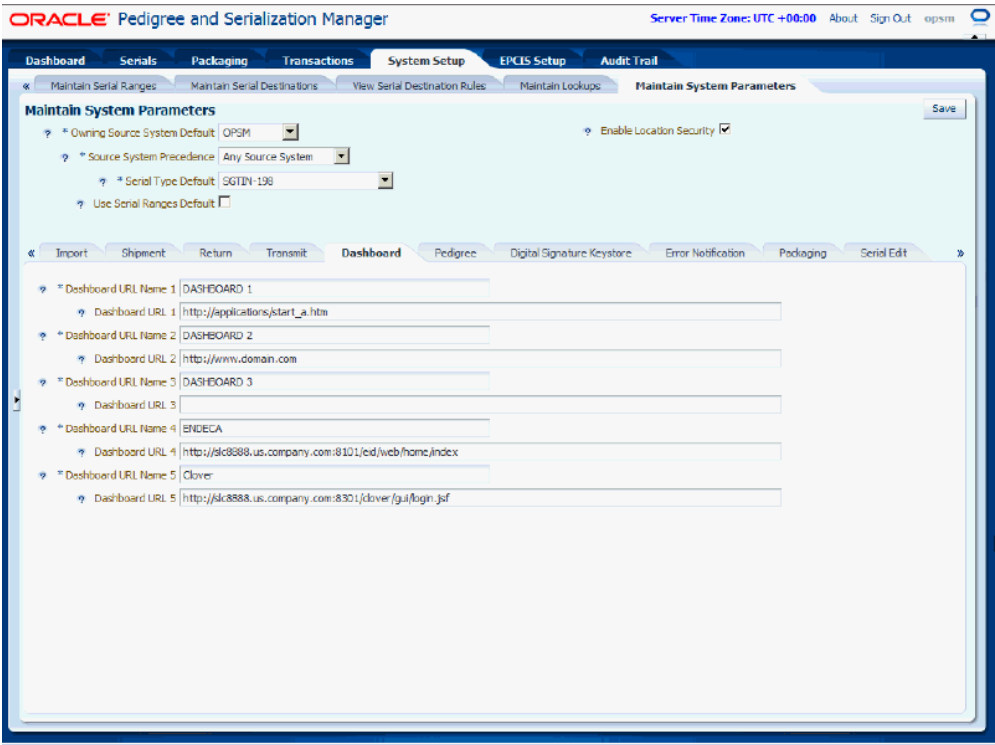
The screenshot shows the Oracle Pedigree and Serialization Manager interface. The top navigation bar includes 'Dashboard', 'Serials', 'Packaging', 'Transactions', 'System Setup', 'EPICIS Setup', and 'Audit Trail'. The 'System Setup' tab is active, and the 'Maintain System Parameters' sub-tab is selected. The page title is 'Maintain System Parameters'. Below the title, there are several configuration options: 'Owning Source System Default' (dropdown menu set to 'OPSM'), 'Source System Precedence' (dropdown menu set to 'Any Source System'), 'Serial Type Default' (dropdown menu set to 'SGTIN-198'), and 'Use Serial Ranges Default' (checkbox). A 'Save' button is located in the top right corner. Below these options, there is a section for 'Serial Batch Processing Size' with a value of '100'. The bottom navigation bar includes 'Generate', 'Import', 'Shipment', 'Return', 'Transmit', 'Dashboard', 'Pedigree', 'Digital Signature Keystore', 'Error Notification', and 'Packaging'. The 'Transmit' sub-tab is selected.

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 are 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

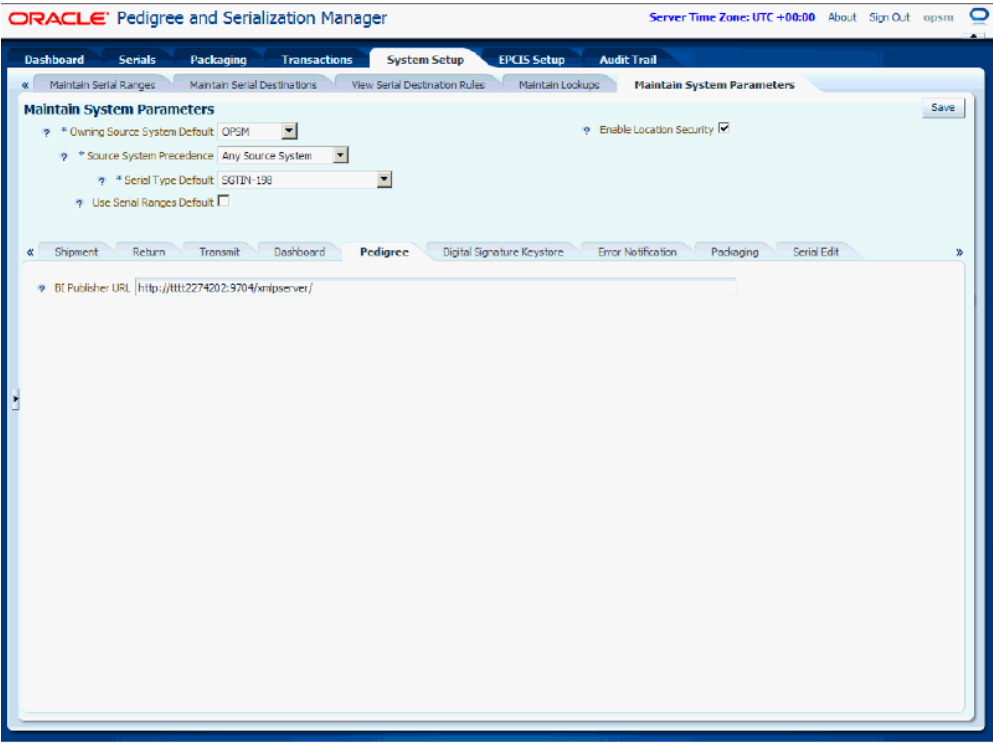


14. Select the settings for the following parameters:

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, <code>http://www.domain.com</code>). If no value is entered, the URL does not display on the Operations Dashboard. For more information, see Adding Custom URLs to the Operations Dashboard, page 12-22.

15. Select the Pedigree sub tab.

Maintain System Parameters page - Pedigree sub tab

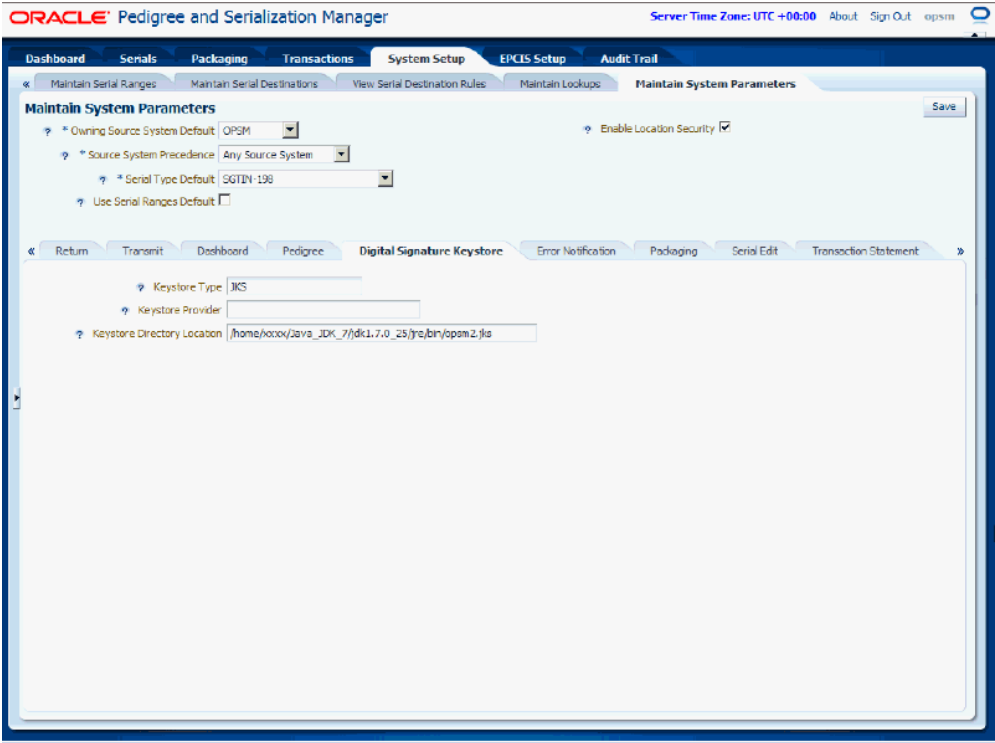


16. Enter the setting for the following parameter:

Field Name	Description
BI Publisher URL	Enter the BI Publisher server URL that is 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 is 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 is used for the digital signature of Pedigree documents.

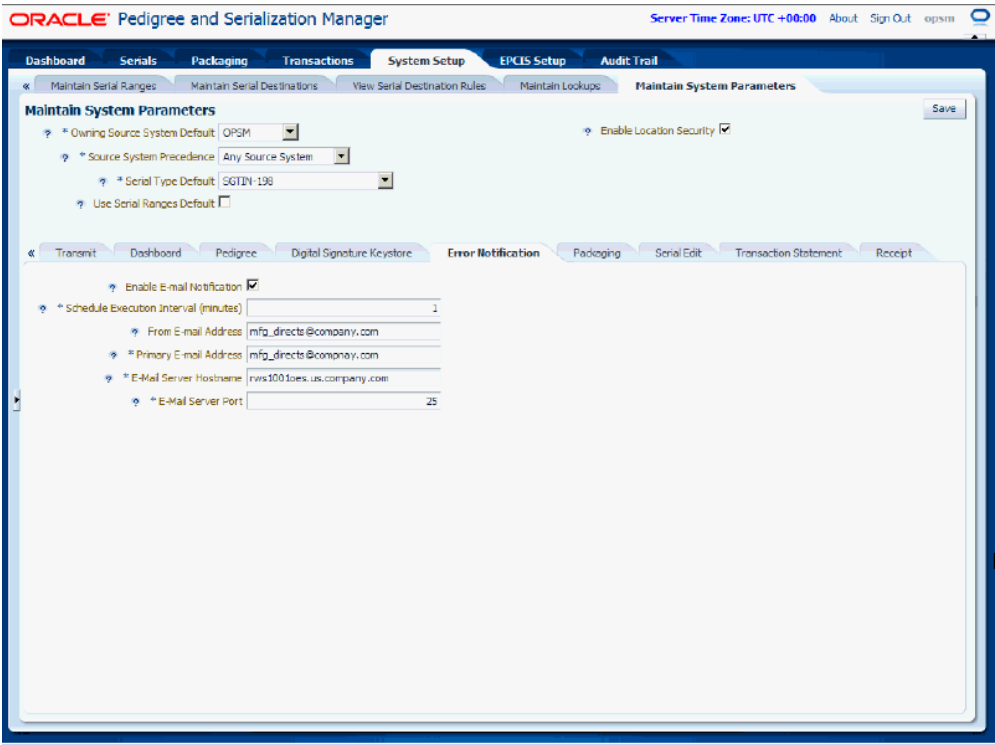
Field Name	Description
Keystore Directory Location	Enter the location of the keystore file including the full path and file name. For example: - Linux: /home/XXXX/pasKeystore/keystorefile.jks - Windows: d: HomepasKeystorekeystorefile.jks This file should be located on the same middle-tier as the WebLogic 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 11-21

19. Select the Error Notification sub tab.

Maintain System Parameters page - Error Notification sub tab



20. Enter the settings for the following parameters:

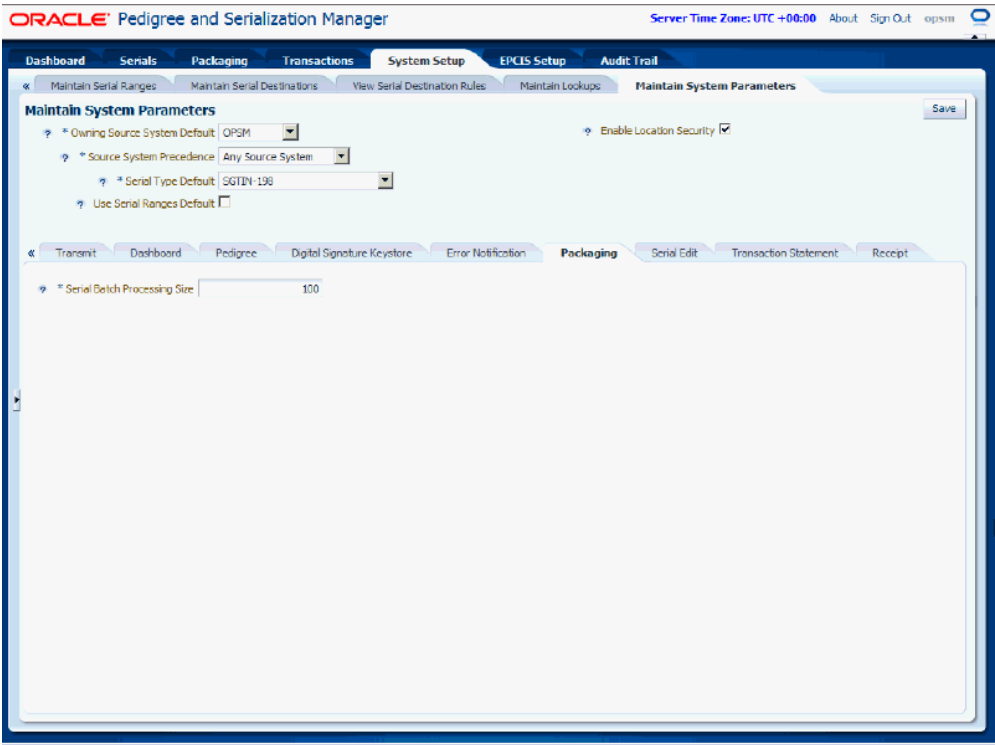
Field Name	Description
Enable E-mail Notification check box	Select this check box if you want the system to send notification e-mails if errors are detected on transactions or transactions that are locked as "In Progress" during the processing of the Transaction Service, Serial Service, and Product Service web services. If this check box is not selected, the system does 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 checks 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 appears in the From line of the e-mail notification. If this information is not specified, the "To" e-mail address appears by default in the notification.
Primary E-mail Address	Enter the primary e-mail address where messages are 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 are 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 are 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 14-243.

21. Select the Packaging sub tab.

Maintain System Parameters page - Packaging sub tab



22. Enter the setting for the following parameter:

Field Name	Description
Serial Batch Processing Size	When processing packaging transactions using the PackagingServiceAMService endpoint (web service operations), enter the number of serials that are 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.

23. Click the Save button.

24. Select the Serial Edit sub tab.

Maintain System Parameters page - Serial Edit sub tab

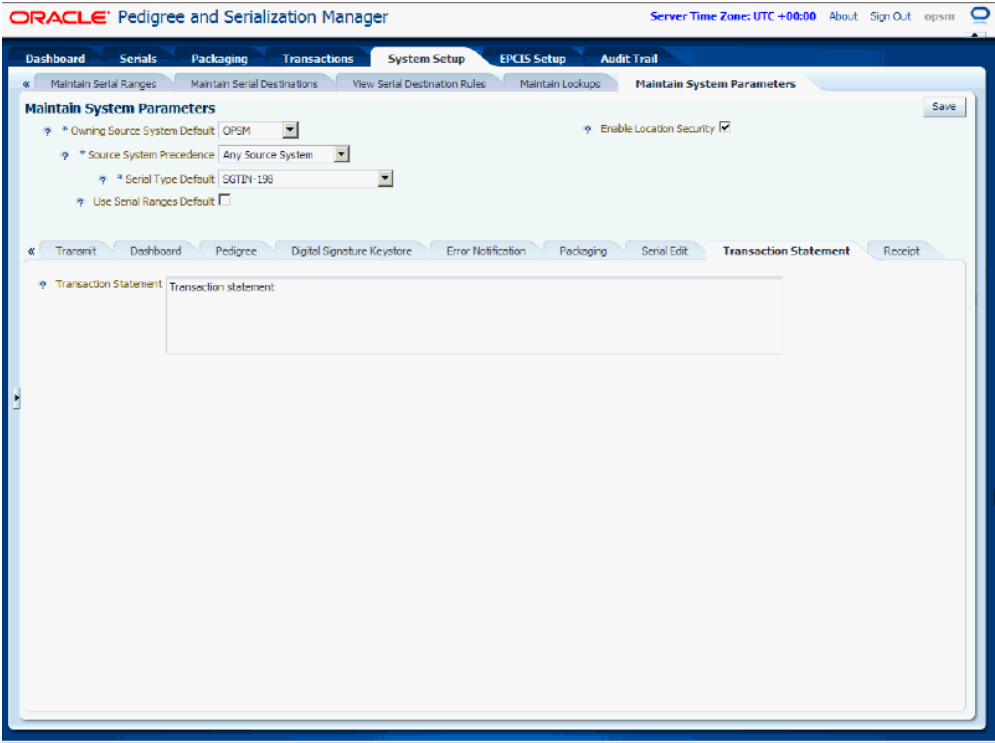
The screenshot displays the 'Maintain System Parameters' page in the Oracle Pedigree and Serialization Manager. The 'Serial Edit' sub tab is active. The page contains several configuration options for serials, including dropdown menus for 'Owning Source System Default' (set to OPSM), 'Source System Precedence' (set to Any Source System), and 'Serial Type Default' (set to SGTIN-198). There is also a checkbox for 'Use Serial Ranges Default' which is checked. A 'Serial Batch Processing Size' field is set to 500. A 'Save' button is located in the top right corner of the main content area.

25. Enter 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 endpoint (web service operations), enter the number of serials that are processed by the system as a batch. Processing the serials in batches is a mechanism used to improve performance and scalability. All web service operations within the SerialsServiceAMService endpoint use this parameter. 1000 appears by default for this field.

26. Click the Save button.
27. Select the Transaction Statement sub tab.

Maintain System Parameters page - Transaction Statement sub tab



28. Enter the setting for the following parameter:

Field Name	Description
Transaction Statement	(Optional) Enter the transaction statement required by the Federal Drug Supply Chain Security Act (DSCSA) that will appear for each transaction. This transaction statement is delivered with every transaction produced by Oracle Pedigree and Serialization Manager. This field is a free form variable character text field and can be up to 400 characters in length.

29. Click the Save button.

30. Select the Receipt sub tab.

Maintain System Parameters page - Receipt sub tab

The screenshot shows the Oracle Pedigree and Serialization Manager interface. The top navigation bar includes 'Dashboard', 'Serials', 'Packaging', 'Transactions', 'System Setup', 'EPCIS Setup', and 'Audit Trail'. The 'System Setup' tab is active, and the 'Maintain System Parameters' sub-tab is selected. The page displays several parameters for receipt transactions:

- Owning Source System Default:** OPSM (dropdown)
- Source System Precedence:** Any Source System (dropdown)
- Serial Type Default:** SGTIN-198 (dropdown)
- Use Serial Ranges Default:** ☐
- Enable Location Security:** ☒
- Allow Lot Creation:** ☒
- Record Internal Receipts Default:** ☒
- Create Serials for Receipts Default:** ☒
- Allow Multiple Receipts:** ☐

31. 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 receipt if the lot doesn't already exist. If no lot exists in OPSM, and this parameter is not set, the system issues an exception for the receipt transaction.

Field Name	Description
Record Internal Receipts Default check box	(Optional) If this check box is selected, then the Record Internal Receipts check box defaults as selected on the Create Product page, when creating a new product. If selected on the Create Product page, then the system records receipts to internal customers for that product. For more information on creating products, see Procedure: To Create Products, page 4-99.
Create Serials for Receipts Default check box	(Optional) If this check box is selected, then the Create Serials for Receipts check box defaults as selected on the Create Product page when creating a new product. If selected on the Create Product page, then the serials for the receipts are created for that product in OPSM at the time of receipt. If the serials already exist, the receipt transaction is set to an exception status. For more information on creating a new product, see Procedure: To Create Products, page 4-99.
Allow Multiple Receipts check box	(Optional) Select this check box, if you want the system to allow multiple external receipts of serial numbers that are not included in a packaging hierarchy. Multiple external receipts of a packaging hierarchy are not allowed. The TransactionServiceAMService endpoint uses this parameter to determine whether the received state should be ignored or not when processing a receipt transaction.

32. 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 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.

If you are using location security, the Maintain Locations, View Location, and Edit Location pages are secured based on the locations and privileges that you are authorized for in the Location Security Setup page. When searching for and viewing locations, you will only be able to search for and view location information associated to locations you have at a minimum *read access* to in the Location Security Setup page. When editing or deactivating locations, you must have *update access* to the location in the Location Security Setup page. When deleting locations, you must have *delete access* to the location in the Location Security Setup page.

When creating locations you only need functional security access to the Create Location page. After you create and save the new location, the system automatically creates the location security setup information for you and the new location with only *read access* in the Location Security Setup page. In addition, when associating location groups to a location during the location creation process, the location groups that are available for selection are those that you have *update access* to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

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 does not generate new serials for the location. Previously generated serials for the location (when it was active) are transacted as normal.

- Location contacts information:
 - Username
 - Description
 - User Title
 - User Email
 - User Telephone
 - User URL
 - Primary contact check box
 - Receive error notifications check box

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

- Username on the location contact is the username that is entered when the user is prompted for digital signature validation (it is the user that is authorized to sign pedigrees).
- Contact marked as the primary contact is the contact that displays and prints on the Pedigree document. Only one primary contact is allowed.

- Contact marked as the one to receive error notifications is the contact that receives 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:

Prerequisites

- ☐ Location security information must be set up if you are using location security.

To Search for Locations:

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

Maintain Locations page

The screenshot shows the 'Maintain Locations' page in the Oracle Pedigree and Serialization Manager. The page has a navigation bar with tabs for Dashboard, Serials, Packaging, Transactions, System Setup (selected), EPCIS Setup, and Audit Trail. Under 'System Setup', there are sub-tabs: Maintain Locations (selected), Maintain Location Groups, Maintain Products, Maintain Users, and Maintain User Groups. A left-hand 'Tasks' menu lists various maintenance tasks. The main content area is titled 'Maintain Locations' and contains a 'Search: Locations' section with several input fields and buttons. Below the search fields is a 'Search Results: Locations' section with a table header and a message indicating no data is currently displayed.

Actions	Location	EPC Company Prefix	Location Description	Location Type	Username
No data to display.					

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. If you are using location security, you will only be able to view locations that you have at a minimum <i>read access</i> to in the Location Security Setup page. For more information on location security, see Location Security Overview, page 1-9.
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.
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.
Username	(Optional) Select the location contacts username.
User Title	(Optional) Enter the location contacts user title.

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

3. Click the Search button.

Maintain Locations page

The screenshot shows the 'Maintain Locations' page in the Oracle Pedigree and Serialization Manager. The page has a top navigation bar with tabs: Dashboard, Serials, Packaging, Transactions, System Setup (selected), EPCIS Setup, and Audit Trail. Below the navigation bar, there are sub-tabs: Maintain Locations (selected), Maintain Location Groups, Maintain Products, Maintain Users, Maintain User Groups, and Maintain Location Security Roles. The main content area is divided into two sections: 'Search: Locations' and 'Search Results: Locations'.

Search: Locations

Location:
 Location Type:
 EPC Company Prefix:
 Location Description:
 Digital Signature Required:
 Location Deactivation Date:
 Username:
 User Title:
 Search:

Search Results: Locations

Actions:

Actions	Location	EPC Company Prefix	Location Description	Location Type	Username	User Title	Loc Det
	Denver	0002299	Denver Manufacturing Site	Manufacturer	sharp	Planner	
	Denver	0002299	Denver Manufacturing Site	Manufacturer	sharp	Planner	
	Gilroy Site	0002299	Gilroy Site Location	Manufacturer	jbrown	Floor Manager	
	Gilroy Site	0002299	Gilroy Site Location	Manufacturer	sjones	Director	
	Morgan Hill	002299	Morgan Hill Location	Manufacturer	jbrown	Floor Manager	
	Morgan Hill	002299	Morgan Hill Location	Manufacturer	sjones	Director	

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

If you are using location security, all of the locations that you have at a minimum *read access* to in the Location Security Setup page appear.

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 the detail information for and click the Search button.

If you are using location security, you will only be able to view location detail information for locations that you have at a minimum *read access* in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

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

ORACLE Pedigree and Serialization Manager Server Time Zone: UTC +00:00 About Sign Out opsm

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

Maintain Locations Maintain Location Groups Maintain Products Maintain Users Maintain User Groups Maintain Location Security Roles

View Location Cancel

Location: Detroit Location Deactivation Date:
Location Description: Detroit Manufacturing Site External Reference Identifier: External909999
Source System: OPSM Digital Signature Required: ☒

Location Information Location Controls Serial Range Thresholds Location Contacts Location Groups User Defined Fields

Location Type: Manufacturer State License Number: 228345
EPC Company Prefix: 123456 DEA Number: DEA09777
Global Location Number: 1.0002299.1001.0 License State/Region: Michigan
Longitude: -83.033 License Agency: MI105
Latitude: 42.317

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.

If you are using location security, you can create a new location if you have functional security access to the Create Location page. After you create and save the new location, the system automatically creates the location security setup information for you and the new location with *only read access* in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

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 does not generate new serials for the location. Previously generated serials for the location (when it was active) are 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

The screenshot shows the 'Create Location' page in the Oracle Pedigree and Serialization Manager. The page has a top navigation bar with tabs: Dashboard, Serials, Packaging, Transactions, System Setup (selected), EPCIS Setup, and Audit Trail. Below this is a sub-navigation bar with tabs: Maintain Locations (selected), Maintain Location Groups, Maintain Products, Maintain Users, Maintain User Groups, and Maintain Location Security Roles. The main form area is titled 'Create Location' and contains several input fields and a 'Save and Create Another' button. The 'Location' field is set to 'Hollister Site'. The 'Location Description' is 'Hollister Site Location'. The 'Source System' is 'OPSM'. The 'Location Deactivation Date' is empty. The 'External Reference Identifier' is 'External009908'. The 'Digital Signature Required' checkbox is checked. Below the main form is a sub-tabbed area with tabs: Location Information (selected), Location Controls, Serial Range Thresholds, Location Contacts, Location Groups, and User Defined Fields. The 'Location Information' sub-tab shows fields for 'Location Type', 'BPC Company Prefix', 'Global Location Number', 'Longitude', 'Latitude', 'State License Number', 'DEA Number', 'License State / Region', and 'License Agency'.

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 displays the location on the Location Map located within the Operations Dashboard.
Latitude	(Optional) Enter the latitude for the location. Entering longitude and latitude information displays 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

The screenshot shows the 'Create Location' page in the Oracle Pedigree and Serialization Manager. The 'Location Information' sub tab is selected. The page includes a top navigation bar with tabs like Dashboard, Serials, Packaging, Transactions, System Setup, EPCIS Setup, and Audit Trail. Below this, there are sub-tabs for Maintain Locations, Maintain Location Groups, Maintain Products, Maintain Users, Maintain User Groups, and Maintain Location Security Roles. The 'Create Location' form contains several fields:

- * Location: Hollister Site
- Location Description: Hollister Site Location
- * Source System: OPSM
- Location Deactivation Date: (empty)
- External Reference Identifier: External009908
- Digital Signature Required: ☒
- Location Type: Manufacturer
- State License Number: CA4656
- DEA Number: DEA0008
- SPC Company Prefix: 002299
- Global Location Number: 1,002299,1002,0
- License State / Region: CA North
- License Agency: CA300
- Longitude: 83.033
- Latitude: 42.317

 At the bottom, there are tabs for Location Controls, Serial Range Thresholds, Location Contacts, Location Groups, and User Defined Fields.

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 uses when generating or importing serials for this location.

Note: The Non-Product Specific Serial Type field does 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 utilizes

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

Create Location page - Location Controls sub tab

The screenshot shows the Oracle Pedigree and Serialization Manager interface. The top navigation bar includes 'Dashboard', 'Serials', 'Packaging', 'Transactions', 'System Setup', 'EPCIS Setup', and 'Audit Trail'. The 'System Setup' tab is active, and the 'Maintain Locations' sub-tab is selected. The 'Create Location' form is displayed with the following fields: 'Location' (Hollister Site), 'Location Description' (Hollister Site Location), 'Source System' (OPSM), 'Location Deactivation Date' (empty), 'External Reference Identifier' (External009900), and 'Digital Signature Required' (checked). The 'Location Controls' sub-tab is active, showing 'Require Product for Generation' (checked) and 'Default Label Type' (GTIN). The 'Serial Range Thresholds' sub-tab is also visible.

9. Select the Serial Range Thresholds sub tab.
10. Enter the following information:

Field Name	Description
Serial Range Critical Threshold	(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 appears 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 <i>Critical</i> 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 12-18.
Serial Range At Risk Threshold	(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 appears 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 <i>At Risk</i> 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 12-18.

Create Location page - Serial Range Thresholds sub tab

The screenshot shows the Oracle Pedigree and Serialization Manager interface. The top navigation bar includes 'Dashboard', 'Serials', 'Packaging', 'Transactions', 'System Setup', 'EPCIS Setup', and 'Audit Trail'. The 'System Setup' tab is active, and the 'Maintain Locations' sub-tab is selected. The 'Create Location' form is displayed with the following fields:

- * Location: Hollister Site
- Location Description: Hollister Site Location
- * Source System: OPSM (dropdown)
- Location Deactivation Date: (empty)
- External Reference Identifier: External009900
- Digital Signature Required: ☒

Below the form, there are tabs for 'Location Information', 'Location Controls', 'Serial Range Thresholds', 'Location Contacts', 'Location Groups', and 'User Defined Fields'. The 'Serial Range Thresholds' tab is active, showing two thresholds:

Threshold	Value
Serial Range Critical Threshold	50
Serial Range At Risk Threshold	20

11. Select the Location Contacts sub tab.

Create Location page - Location Contacts sub tab

ORACLE Pedigree and Serialization Manager Server Time Zone: UTC +00:00 About Sign Out eprsm

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

Maintain Locations Maintain Location Groups Maintain Products Maintain Users Maintain User Groups Maintain Location Security Roles

Create Location Save and Create Another Save and Close Cancel

* Location Hollister Site Location Deactivation Date

Location Description Hollister Site Location External Reference Identifier External009908

* Source System OPSM Digital Signature Required ☒

Location Information Location Controls Serial Range Thresholds **Location Contacts** Location Groups User Defined Fields

Location Contacts

Actions View Detach

Actions	* Username	User Description	User Title	User Email	User Telephone	User URL	Primary Contact ?	Receive Error Notifications ?

12. Maintain Location Contacts:

To Create Location Contacts

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

Create Location page - Location Contacts sub tab

The screenshot shows the 'Create Location' page in the Oracle Pedigree and Serialization Manager. The 'Location Contacts' sub tab is active. The form includes fields for 'Location' (Hollister Site), 'Location Description' (Hollister Site Location), 'Source System' (OPSM), 'Location Deactivation Date', 'External Reference Identifier' (External009988), and 'Digital Signature Required' (checked). Below the form is a table for 'Location Contacts' with columns: Actions, Username, User Description, User Title, User Email, User Telephone, User URL, Primary Contact, and Receive Error Notifications. A new row is visible in the table.

A new row appears in the location contacts table.

2. Enter the following information:

Field Name	Description
Username	Select the username for the location contact. For information on maintaining users, see Maintaining Users, page 4-173.
Description	The description for the user appears by default from the username selected.
User Title	The user title for the user appears by default from the username selected.
User Email	The user e-mail for the user appears by default from the username selected.

Field Name	Description
User Telephone	The user telephone for the user appears by default from the username selected.
User URL	The user URL for the user appears by default from the username selected.
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 is the one that displays and prints on the Pedigree document.
Receive Error Notifications check box	Select this check box if the system sends 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 14-243.

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

Create Location page - Location Contacts sub tab

The screenshot shows the 'Create Location' page in the Oracle Pedigree and Serialization Manager. The 'Location Contacts' sub tab is selected. The page includes a header with navigation tabs (Dashboard, Serials, Packaging, Transactions, System Setup, EPCIS Setup, Audit Trail) and a sub-header with maintenance tabs (Maintain Locations, Maintain Location Groups, Maintain Products, Maintain Users, Maintain User Groups, Maintain Location Security Roles). The main form area contains fields for 'Location' (Hollister Site), 'Location Description' (Hollister Site Location), 'Source System' (OPSM), 'Location Deactivation Date', 'External Reference Identifier' (External009988), and 'Digital Signature Required' (checked). Below these fields is a table for 'Location Contacts' with columns: Actions, Username, User Description, User Title, User Email, User Telephone, User URL, Primary Contact, and Receive Error Notifications. Two contacts are listed: 'brown' (Jim Brown, Supervisor Shop PI) and 'jones' (Sarah Jones, Director). The 'Actions' column for each contact has a red 'X' icon for deletion.

Actions	* Username	User Description	User Title	User Email	User Telephone	User URL	Primary Contact	Receive Error Notifications
	brown	Jim Brown	Supervisor Shop PI	jbrown@detra.mfg.cc	1-202-564-8000	www.detra.mfg.com	☒	☒
	jones	Sarah Jones	Director	sarahjones@mhhl.d	408-990-8000	www.morganh.com	☐	☒

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.

13. Select the Location Groups tab.

Create Location page - Location Groups sub tab

The screenshot shows the 'Create Location' page in the Oracle Pedigree and Serialization Manager. The 'Location Groups' sub-tab is active. The page includes a header with navigation tabs (Dashboard, Serials, Packaging, Transactions, System Setup, EPCIS Setup, Audit Trail) and a sub-header with maintenance tabs (Maintain Locations, Maintain Location Groups, Maintain Products, Maintain Users, Maintain User Groups, Maintain Location Security Roles). The 'Create Location' form has fields for Location (Hollister Site), Location Description (Hollister Site Location), Source System (OPSM), Location Deactivation Date, External Reference Identifier (External009908), and Digital Signature Required (checked). Below the form is a table for 'Location Groups' with columns 'Location Group', 'Location Group Description', and 'Actions'. The table is currently empty, displaying 'No data to display.'

14. 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

The screenshot shows the 'Create Location' page in the Oracle Pedigree and Serialization Manager. The 'Location Groups' sub-tab is active. The form includes the following fields:

- Location:** Hollister Site
- Location Description:** Hollister Site Location
- Source System:** OPSM
- Location Deactivation Date:** (empty)
- External Reference Identifier:** External009988
- Digital Signature Required:** ☒

Below the form is a table for 'Location Groups' with the following columns: Location Group, Location Group Description, and Actions. A new row is visible in the table.

Location Group	Location Group Description	Actions

A new row appears in the location groups table.

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

If you are using location security, you will only be able to select location groups that you have *update access* to in the Location Security Setup page.

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 4-73.

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

Create Location page - Location Groups sub tab

The screenshot shows the 'Create Location' page in the Oracle Pedigree and Serialization Manager. The 'Location Groups' sub-tab is active. The form includes the following fields:

- Location:** Hollister Site
- Location Description:** Hollister Site Location
- Source System:** OPSM
- Location Deactivation Date:** (empty)
- External Reference Identifier:** External009908
- Digital Signature Required:** ☒

Below the form is a table for 'Location Groups' with the following columns: Location Group, Location Group Description, and Actions. The table contains one entry:

Location Group	Location Group Description	Actions
A0001	A0001 Location Group	[Delete Icon]

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.

15. Select the User Defined Fields sub tab.
16. 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

The screenshot shows the Oracle Pedigree and Serialization Manager interface. The top navigation bar includes 'Dashboard', 'Serials', 'Packaging', 'Transactions', 'System Setup', 'EPCIS Setup', and 'Audit Trail'. The 'System Setup' tab is active, and the 'Maintain Locations' sub-tab is selected. The 'Create Location' form is displayed with the following fields: 'Location' (Hollister Site), 'Location Description' (Hollister Site Location), 'Source System' (OPSM), 'Location Deactivation Date', 'External Reference Identifier' (External009900), and 'Digital Signature Required' (checked). The 'User Defined Fields' sub-tab is active, showing three sections: 'Character' (User Field 1: A489, User Field 2-5: empty), 'Numeric' (User Number 1: 5,999, User Number 2-5: empty), and 'Date / Time' (User Date 1-3: empty). The bottom of the page has buttons for 'Save and Create Another', 'Save and Close', and 'Cancel'.

17. 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.

If you are using location security, after you save the location, the system automatically creates the location security setup information for you and this location with *only read access* in the Location Security Setup page.

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.

If you are using location security, you will only be able to edit locations that you have *update access* to in the Location Security Setup page.

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 screenshot displays the 'Edit Location' page in the Oracle Pedigree and Serialization Manager. The page title is 'Edit Location'. The location being edited is 'Gray Site'. The form contains the following fields and values:

Field	Value
Location	Gray Site
Location Description	Gray Site Location
* Source System	OPSM
Location Deactivation Date	
External Reference Identifier	External009998
Digital Signature Required	☒
Location Type	Manufacturer
EPC Company Prefix	0002299
Global Location Number	1,0002299,1002,0
Longitude	-83.033
Latitude	42.317
State License Number	CA1666
DEA Number	DEA0009
License State / Region	CA North
License Agency	CA300

The 'Save and Close' button is located in the top right corner of the form.

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.

If you are using location security, you will only be able to deactivate locations that you have *update access* to in the Location Security Setup page.

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 becomes 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

The screenshot displays the 'Edit Location' page in the Oracle Pedigree and Serialization Manager. The page is divided into several sections. At the top, there's a navigation bar with tabs like Dashboard, Serials, Packaging, Transactions, System Setup, EPCIS Setup, and Audit Trail. Below this, there's a sub-navigation bar with tabs like Maintain Locations, Maintain Location Groups, Maintain Products, Maintain Users, Maintain User Groups, and Maintain Location Security Roles. The 'Edit Location' page is currently active. It contains several input fields and a 'Save and Close' button. The fields include: Location (Gray Site), Location Description (Gray Site Location), Location Deactivation Date (1/23/2015), External Reference Identifier (External009998), and Digital Signature Required (checked). Below these fields, there are tabs for Location Information, Location Controls, Serial Range Thresholds, Location Contacts, Location Groups, and User Defined Fields. The 'Location Information' tab is selected, showing fields for Location Type (Manufacturer), EPC Company Prefix (0002299), Global Location Number (1,0002299,1002,0), Longitude (-83.033), Latitude (42.317), State License Number (CA4566), DEA Number (DEA0009), License State / Region (CA North), and License Agency (CA300). The 'Save and Close' button is located at the top right of the 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 does not generate new serials for the location and you cannot associate deactivated locations to a location group. Previously generated serials for the location (when it was active) are 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.

If you are using location security, you will only be able to delete locations that you have *delete access* to in the Location Security Setup page.

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 issues 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.

If you are using location security, the Maintain Location Groups and Edit Location Group pages are secured based on the location groups and privileges that you are authorized for in the Location Security Setup page. When searching for location groups, you will only be able to search for location groups you have at a minimum *read access* to in the Location Security Setup page. When editing location groups, you must have *update access* to the location groups in the Location Security Setup page. When deleting location groups, you must have *delete access* to the location groups in the Location Security Setup page.

When creating location groups you only need functional security access to the Create Location page. After you create and save the new location group, the system automatically creates the location security setup information for you and the new location group with *only read access* in the Location Security Setup page. In addition, when associating locations to a location group during the location group creation process, the locations that are available for selection are those that you have *update access* to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

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

Prerequisites

- ☐ Location security information must be set up if you are using location security.

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 screenshot displays the 'Maintain Location Groups' page within the Oracle Pedigree and Serialization Manager. The interface features a top navigation bar with tabs for Dashboard, Serials, Packaging, Transactions, System Setup, EPCIS Setup, and Audit Trail. A left-hand sidebar lists various tasks, including 'Maintain Location Groups'. The main content area is titled 'Maintain Location Groups' and includes a search section with the following fields: 'Location Group' (a dropdown menu), 'Location Group Description' (a text input), and 'Location' (a text input). There are buttons for 'Advanced', 'Saved Search', 'Display Location Groups', 'Search', 'Reset', and 'Save...'. Below the search fields, a section titled 'Search Results: Location Groups' shows a table with columns for 'Location Group', 'Location Group Description', 'Location', and 'Actions'. The table currently contains no data, with the message 'No data to display.' shown below the header.

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. If you are using location security, the location groups you can search for are restricted to those that you have at a minimum <i>read access</i> to in the Location Security Setup page. For more information on location security, see Location Security Overview, page 1-9.
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 appear.

3. Click the Search button.

Maintain Location Groups page (Basic Search)

Oracle Pedigree and Serialization Manager

Server Time Zone: UTC +00:00 About Sign Out Express

Dashboard Serials Packaging Transactions System Setup EPCIS Setup Audit Trail

Maintain Locations Maintain Location Groups Maintain Products Maintain Users Maintain User Groups Maintain Location Security Roles

Maintain Location Groups

☒ Search: Location Groups [Advanced](#) [Saved Search](#) [Display Location Groups](#)

Location Group: CA.1000
Location Group Description:
Location:

[Search](#) [Reset](#) [Save...](#)

Search Results: Location Groups

Actions: View [Details](#)

Location Group	Location Group Description	Location	Actions
CA.1000	California Location Group	Gilroy Site	Edit Delete
CA.1000	California Location Group	San Jose	Edit Delete

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

If you are using location security, all of the location groups that you have at a minimum *read access* to in the Location Security Setup page appear.

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)

ORACLE Pedigree and Serialization Manager Server Time Zone: UTC +00:00 About Sign Out opsm

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

Maintain Locations **Maintain Location Groups** Maintain Products Maintain Users Maintain User Groups Maintain Location Security Roles

☒ Search: Location Groups Basic Saved Search Display Location Groups

Location Group Equals

Location Group Description Starts with

Location Starts with

Search Reset Save... Add Fields

☒ Search Results: Location Groups

Actions View Details

Location Group	Location Group Description	Location	Actions
No data to display.			

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 If you are using location security, the location groups you can search for are restricted to those that you have at a minimum <i>read access</i> to in the Location Security Setup page. For more information on location security, see Location Security Overview, page 1-9.

Field Name	Description
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.
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 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 is removed from the search criteria.

5. (Optional) Enter search criteria for the additional fields.
6. Click the Search button.

Maintain Location Groups page (Advanced Search)

The screenshot shows the 'Maintain Location Groups' page in the Oracle Pedigree and Serialization Manager. The page has a top navigation bar with tabs: Dashboard, Serials, Packaging, Transactions, System Setup (selected), EPCIS Setup, and Audit Trail. Below this is a sub-navigation bar with tabs: Maintain Locations, Maintain Location Groups (selected), Maintain Products, Maintain Users, Maintain User Groups, and Maintain Location Security Roles. The main content area is titled 'Maintain Location Groups' and contains a search section. The search section has a 'Search: Location Groups' label and a 'Basic' button. Below this are three search criteria: 'Location Group' (Starts with CA), 'Location Group Description' (Starts with), and 'Location' (Starts with S). There are buttons for 'Search', 'Reset', 'Save...', and 'Add Fields'. Below the search section is a 'Search Results: Location Groups' section. It has an 'Actions' menu, a 'View' dropdown, and a 'Detach' icon. The results are displayed in a table with columns: Location Group, Location Group Description, Location, and Actions. The table contains one row: CA1000, California Location Group, San Jose, and an Actions icon.

Location Group	Location Group Description	Location	Actions
CA1000	California Location Group	San Jose	[Actions Icon]

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

If you are using location security, all of the location groups that you have at a minimum *read access* to in the Location Security Setup page appear.

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.

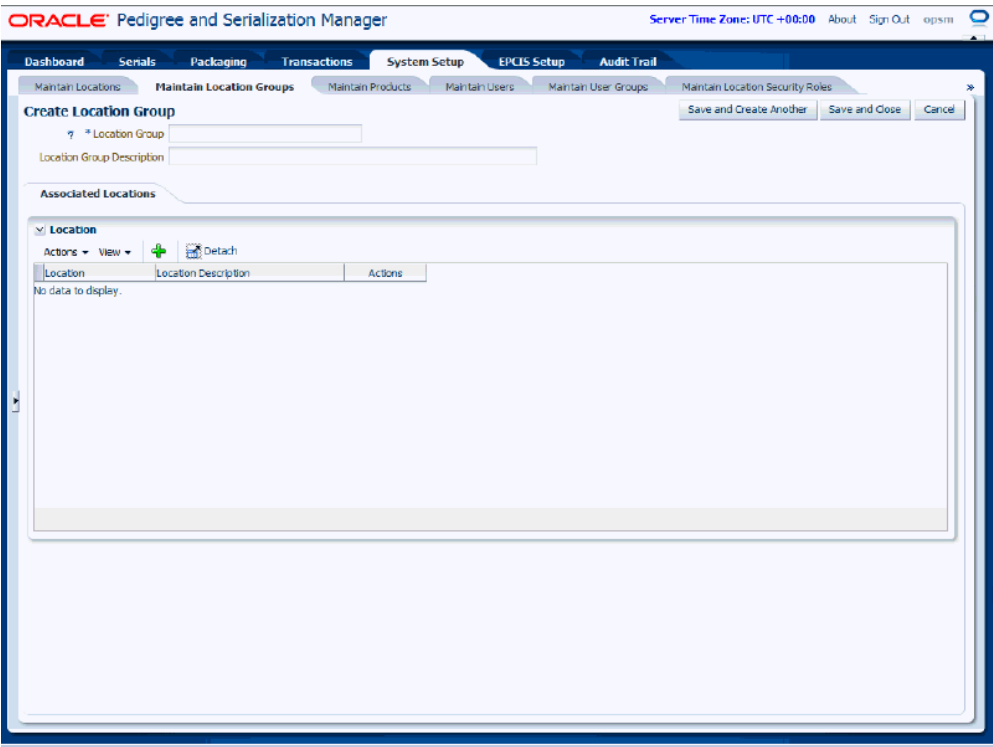
To Create Location Groups:

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.

If you are using location security, you can create a location group if you have functional security access to the Create Location Group page. After you create and save the new location group, the system automatically creates the location security

setup information for you and the location group with *only read access* in the Location Security Setup page.

Create Location Group page



The Create Location Group page appears.

3. Enter the following information:

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

Create Location Group page

The screenshot displays the 'Create Location Group' page in the Oracle Pedigree and Serialization Manager. The page has a top navigation bar with tabs for Dashboard, Serials, Packaging, Transactions, System Setup (selected), EPCIS Setup, and Audit Trail. Below the navigation bar, there are sub-tabs for Maintain Locations, Maintain Location Groups (selected), Maintain Products, Maintain Users, Maintain User Groups, and Maintain Location Security Roles. The main form area is titled 'Create Location Group' and contains two input fields: 'Location Group' with the value 'CA2000' and 'Location Group Description' with the value 'California Location Group'. To the right of these fields are three buttons: 'Save and Create Another', 'Save and Close', and 'Cancel'. Below the form is a section titled 'Associated Locations' which contains a table with the following structure:

Location	Location Description	Actions
No data to display.		

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

The screenshot shows the 'Create Location Group' page in the Oracle Pedigree and Serialization Manager. The page has a top navigation bar with tabs like Dashboard, Serials, Packaging, Transactions, System Setup, EPCIS Setup, and Audit Trail. The 'System Setup' tab is active, and the 'Maintain Location Groups' sub-tab is selected. The main form area has a 'Location Group' field with the value 'CA2000' and a 'Location Group Description' field with the value 'California Location Group'. Below the form is a table titled 'Associated Locations' with columns 'Location', 'Location Description', and 'Actions'. The table is currently empty.

A new row appears in the locations table.

- Enter the following information:

Field Name	Description
Location	Select a location. Deactivated locations do not appear in the list of available locations. If you are using location security, the locations you can select are restricted to those that you have <i>update access</i> to in the Location Security Setup page.
Location Description	The description of the location automatically displays after you select a location.

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

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

Create Location Group page

ORACLE Pedigree and Serialization Manager

Server Time Zone: UTC +00:00 About Sign Out opsm

Dashboard Serails Packaging Transactions System Setup EPCLS Setup Audit Trail

Maintain Locations Maintain Location Groups Maintain Products Maintain Users Maintain User Groups Maintain Location Security Roles

Create Location Group

* Location Group CA2000

Location Group Description California Location Group

Save and Create Another Save and Close Cancel

Associated Locations

Location	Location Description	Actions
Hollister Site		X
San Jose		X

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.

If you are using location security, the location groups you can edit are restricted to those that you *update access* to in the Location Security Setup page.

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

ORACLE Pedigree and Serialization Manager

Server Time Zone: UTC +00:00 About Sign Out opsm

Dashboard Serals Packaging Transactions System Setup EPCIS Setup Audit Trail

Maintain Locations Maintain Location Groups Maintain Products Maintain Users Maintain User Groups Maintain Location Security Roles

Edit Location Group

Location Group CA2000

Location Group Description California Location Group

Save and Close Cancel

Associated Locations

Location

Actions View + Detach

Location	Location Description	Actions
Hollister Site	Hollister Site Location	X
San Jose	San Jose Manufacturing	X

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)

Oracle Pedigree and Serialization Manager

Server Time Zone: UTC +00:00 About Sign Out eprints

Dashboard Serials Packaging Transactions System Setup EPCIS Setup Audit Trail

Maintain Locations Maintain Location Groups Maintain Products Maintain Users Maintain User Groups Maintain Location Security Roles

Edit Location Group

Location Group CA2000

Location Group Description California Location Group

Associated Locations

Location

Actions View + Detach

Location	Location Description	Actions
Hollister Site	Hollister Site Location	X
Gilroy Site	Gilroy Site Location	X

Save and Close Cancel

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

Note: Only active locations are available for selection. Any location whose deactivation date is on or prior to the date when you are trying to associate the location do 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.

If you are using location security, the location groups you can delete are restricted to those that you have *delete access* to in the Location Security Setup page.

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 enables 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 enables OPSM to determine the standards to use when generating serial numbers.

- Item cross-references for the product.

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

- Location overrides for the product.

This information enables overrides for a specific location. You can specify by location if you want tracking for internal shipments, returns, and receipts and whether OPSM creates the serial numbers in OPSM when a shipment transaction or receipt transaction occurs. You can also override the serialization control for a specific location.

If you are using location security, the Maintain Products, View Product, and Edit Product pages are secured based on the locations and location groups attached to the product details for the product that you are authorized for in the Location Security

Setup page. When searching for and viewing products, you can only search for and view product information associated to product detail locations or location groups that you have at a minimum *read access* to in the Location Security Setup page. When editing products, you must have *update access* to the product detail locations or location groups attached to the product in the Location Security Setup page. When deleting products, you must have *delete access* to the product detail locations or location groups attached to the product in the Location Security Setup page.

When creating products, you only need functional security access to the Create Product page but you can only associate the product details to locations or location groups that you have *update* access to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

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

Prerequisites

- ☐ Location security information must be set up if you are using location security.

To Search for Products (Basic Search):

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

Maintain Products page (Basic Search)

The screenshot shows the 'Maintain Products' page in the Oracle Pedigree and Serialization Manager. The page has a top navigation bar with tabs for Dashboard, Serials, Packaging, Transactions, System Setup (selected), EPCIS Setup, and Audit Trail. Below the navigation bar, there's a left sidebar with a 'Tasks' menu listing various maintenance tasks. The main content area is titled 'Maintain Products' and contains a 'Search: Products' section. This section has several input fields: Item Number, Product Code, Product Code Type (a dropdown), Product Code Variant, Product Name, and Manufacturer. To the right of these fields are additional fields: Packaging Unit, GTIN, Lowest Saleable Unit Quantity, Use Serial Ranges, Location Group, and Location. There are buttons for 'Advanced', 'Saved Search', 'Display Products', 'Search', 'Reset', and 'Save...'. Below the search fields is a 'Search Results: Products' section with a table header showing columns for Actions, Product Code, Product Name, Product Code Type, Product Code Variant, and Location. The table currently shows 'No data to display.' and has a 'Column Hidden' indicator at the bottom.

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

Field Name	Description
Location Group	(Optional) Enter the location group associated to the product. If you are using location security, the location groups you can search for are restricted to those that you have at a minimum <i>read access</i> to in the Location Security Setup page. For more information on location security, see Location Security Overview, page 1-9.
Location	(Optional) Enter the location associated to the product. If you are using location security, the locations you can search for are restricted to those that you have at a minimum <i>read access</i> to in the Location Security Setup page. For more information on location security, see Location Security Overview, page 1-9.

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

3. Click the Search button.

Maintain Products page (Basic Search)

The screenshot shows the 'Maintain Products' page in the Oracle Pedigree and Serialization Manager. The page has a top navigation bar with tabs: Dashboard, Serials, Packaging, Transactions, System Setup (selected), EPCIS Setup, and Audit Trail. Below this is a sub-navigation bar with tabs: Maintain Locations, Maintain Location Groups, Maintain Products (selected), Maintain Users, Maintain User Groups, and Maintain Location Security Roles. The main content area is titled 'Maintain Products' and contains a search section. The search section has a 'Search: Products' checkbox and an 'Advanced' button. Below the search section are input fields for Item Number, Product Code (0037), Product Code Type (NDC442), Product Code Variant, Product Name, Manufacturer, Packaging Unit, GTIN, Lowest Saleable Unit Quantity, Use Serial Ranges, Location Group, and Location (San Jose). There are 'Search', 'Reset', and 'Save...' buttons. Below the search section is a 'Search Results: Products' section. It has a table with columns: Actions, Product Code, Product Name, Product Code Type, Product Code Variant, Location, and Location Group. The table contains four rows of data. The first row is highlighted. Below the table is a 'Columns Hidden' section with a list of columns.

Actions	Product Code	Product Name	Product Code Type	Product Code Variant	Location	Location Group
	0037-2000-10	Headache Pain Relief	NDC442	NOVARIANT	San Jose	
	0037-2000-10	Headache Pain Relief	NDC442	NOVARIANT	San Jose	
	0037-2000-10	Headache Pain Relief	NDC442	NOVARIANT	San Jose	
	0037-3000-10	Sinus Clear	NDC442	NOVARIANT	San Jose	

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

If you are using location security, all of the products associated to product detail locations or location groups that you have at a minimum *read access* to in the Location Security Setup page appear.

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 keeps the values in the base criteria fields.

Maintain Products page (Advanced Search)

ORACLE Pedigree and Serialization Manager Server Time Zone: UTC +00:00 About Sign Out JD1-DLS

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

Maintain Locations Maintain Location Groups **Maintain Products** Maintain Users Maintain User Groups Maintain Location Security Roles

Search: Products Basic Saved Search Display Products

Item Number	Equals		GTIN	Starts with	
Product Code	Starts with		Lowest Saleable Unit Quantity	Equals	
Product Code Type	Equals		Use Serial Ranges	Equals	
Product Code Variant	Starts with		Custom Serial Method	Equals	
Product Name	Starts with		Location Group	Starts with	
Manufacturer	Starts with		Location	Starts with	
Packaging Unit	Equals				

Search Reset Save... Add Fields

Search Results: Products Actions View Detach

Actions	Product Code	Product Name	Product Code Type	Product Code Variant	Location	Location Group
No data to display.						

Columns Hidden: 1

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. The field operators are the same as that for the Item Number field. You can enter a partial product code value on which to search.
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.
Location Group	(Optional) Select the field operator and then enter the location group associated to the product. The field operators are the same as that for the Item Number field. If you are using location security, the location groups you can search for are restricted to those that you have at a minimum <i>read access</i> to in the Location Security Setup page. For more information on location security, see Location Security Overview, page 1-9.
Location	(Optional) Select the field operator and then enter the location associated to the product. The field operators are the same as that for the Item Number field. If you are using location security, the locations you can search for are restricted to those that you have at a minimum <i>read access</i> to in the Location Security Setup page. For more information on location security, see Location Security Overview, page 1-9.

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

- (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 is removed from the search criteria.

5. (Optional) Enter search criteria for the additional fields.
6. Click the Search button.

Maintain Products page (Advanced Search)

The screenshot shows the 'Maintain Products' page in the Oracle Pedigree and Serialization Manager. The page has a top navigation bar with tabs: Dashboard, Serials, Packaging, Transactions, System Setup (selected), EPCIS Setup, and Audit Trail. Below this is a sub-navigation bar with tabs: Maintain Locations, Maintain Location Groups, Maintain Products (selected), Maintain Users, Maintain User Groups, and Maintain Location Security Roles. The main content area is titled 'Maintain Products' and contains a 'Search: Products' section. This section has two columns of search criteria. The left column includes: Item Number (Equals), Product Code (Starts with), Product Code Type (Equals), Product Code Variant (Starts with), Product Name (Contains), Manufacturer (Starts with), and Packaging Unit (Equals). The right column includes: GTIN (Starts with), Lowest Saleable Unit Quantity (Equals), Use Serial Ranges (Equals), Custom Serial Method (Equals), Location Group (Starts with), and Location (Equals). Below the search criteria are buttons for Search, Reset, Save..., and Add Fields. Below the search section is a 'Search Results: Products' section. It has a table with columns: Actions, Product Code, Product Name, Product Code Type, Product Code Variant, Location, and Location Group. The table contains one row with the following data: Product Code: 0037-2000-10, Product Name: Headache Pain Relief, Product Code Type: NDC442, Product Code Variant: NOVARIANT, Location: San Jose, Location Group: San Jose. At the bottom of the page, there is a 'Columns Hidden' section with a value of 1.

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

If you are using location security, all of the products associated to product detail locations or location groups that you have at a minimum *read access* to in the Location Security Setup page appear.

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.

If you are using location security, you can create a new product if you have functional access to the Create Product page but you can only associate the product details to a location group or location that you have *update access* to in the Location Security Setup page.

Create Product page

The screenshot shows the 'Create Product' page in the Oracle Pedigree and Serialization Manager. The page has a top navigation bar with tabs: Dashboard, Serials, Packaging, Transactions, System Setup (selected), EPCIS Setup, and Audit Trail. Under 'System Setup', there are sub-tabs: Maintain Locations, Maintain Location Groups, Maintain Products (selected), Maintain Users, Maintain User Groups, and Maintain Location Security Roles. The 'Create Product' form includes fields for Product Code, Product Code Type, Product Code Variant (set to NOVARIANT), and Product Name. Below these are tabs for Regulatory Information, Serial Generation Details, Location Overrides, and Product Information User Fields. The Regulatory Information tab is active, showing fields for Owning Source System (set to EBIZ_01), Serialization Control (set to OPM Serialized), Manufacturer, Product Category, Dosage Form, Container Size, and Container Type. On the right, there are checkboxes for Controlled Substance, Record Internal Shipments, Record Internal Returns, Create Serials For Shipments, Pedigree Required, Record Internal Receipts, and Create Serials for Receipts. Buttons at the top right include 'Save and Create Another', 'Save and Close', and 'Cancel'.

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.
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 4-24.
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 or receipt. 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.

Field Name	Description
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.
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.

Field Name	Description
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.
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 creates 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 automatically creates a Pedigree for the Shipment transaction. Product Name, Strength, Manufacturer, Dosage Form, and Container Size are required when Pedigree Required is selected.
Record Internal Receipts 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 receipts from internal customers for this product.
Create Serials for Receipts check box	This check box setting appears by default from the Maintain System Parameters page. Select this check box if the system creates serials in the Oracle Pedigree and Serialization Manager system at the time of receipt.

Create Product page - Regulatory Information sub tab

The screenshot shows the 'Create Product' page in the Oracle Pedigree and Serialization Manager. The 'Regulatory Information' sub tab is selected. The page includes a top navigation bar with tabs like Dashboard, Serials, Packaging, Transactions, System Setup, EPCIS Setup, and Audit Trail. Below this, there are sub-tabs for Maintain Locations, Maintain Location Groups, Maintain Products (selected), Maintain Users, Maintain User Groups, and Maintain Location Security Roles. The main form area contains several fields and checkboxes. On the left, there are fields for Product Code (0037-3000-10), Product Code Type (NDC442), Product Code Variant (NOVARIANT), Owing Source System (EBIZ_01), Serialization Control (OPSM Serialized), Manufacturer (BH Manufacturing), Product Category (Analgesic), Dosage Form (TABLET), Container Size (60), and Container Type (Bottle). On the right, there is a Strength field (150mg) and a list of checkboxes: Controlled Substance (unchecked), Record Internal Shipments (checked), Record Internal Returns (checked), Create Serials For Shipments (checked), Pedigree Required (unchecked), Record Internal Receipts (checked), and Create Serials for Receipts (checked). At the top right of the form, there are buttons for 'Save and Create Another', 'Save and Close', and 'Cancel'.

6. Select the Serial Generation Details sub tab.

The system uses 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

The screenshot shows the Oracle Pedigree and Serialization Manager interface. The top navigation bar includes tabs for Dashboard, Serials, Packaging, Transactions, System Setup, EPCIS Setup, and Audit Trail. The 'System Setup' tab is active, and the 'Maintain Products' sub-tab is selected. The 'Create Product' form is displayed with the following fields:

- * Product Code: 0037-3000-10
- * Product Code Type: NDC442
- * Product Code Variant: NOVARIANT
- Product Name: Headache Pain Relief

Below the form, there are three main sections:

- Product Details:** Contains a table with columns: Owning Source System, * Packaging Unit, Location, Location Group, Lowest Saleable Unit Quantity, and Serial Type. The table is currently empty with the message 'No data to display.'
- Item Cross Reference:** Contains a table with columns: * Item Number, * Item Source, and Item Description. The table is currently empty with the message 'No data to display.'
- Item UOM Cross Reference:** Contains a table with columns: * Item Unit of Measure, * Related Packaging Unit, and Actions. The table is currently empty with the message 'No data to display.'

- 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.

- 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 4-24.
Packaging Unit	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).
Location	(Optional) Select the location for the product. You can select either a location or a location group for each product detail row. If you select a location, the Location Group field becomes unavailable for entry. If you are using location security, the locations you can select are restricted to those that you have <i>update access</i> to in the Location Security Setup page. For more information on location security, see Location Security Overview, page 1-9.

Field Name	Description
Location Group	(Optional) Select the location group for the product. You can select either a location or a location group for each product detail row. If you select a location group, the Location field becomes unavailable for entry. If you are using location security, the location groups you can select are restricted to those that you have update access to on the Location Security Setup page. For more information on location security, see Location Security Overview, page 1-9.
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.
Serial Type	Select the type of serial that is 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 4-24.

Field Name	Description
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.
NDC (National Drug Code) Number	(Optional) Enter the NDC number for the product. The NDC number cannot be more than 20 characters.
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.
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.

Field Name	Description
Product Unit Identifier	Displays the product unit identifier associated with the serial type group.
Overage	(Optional) Enter how many additional serials can be generated above the quantity/percent requested. Zero appears by default. You cannot enter a negative value. The Overage Type determines whether you 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 4-24.
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.
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

The screenshot shows the 'Create Product' page in the Oracle Pedigree and Serialization Manager. The 'Serial Generation Details' sub tab is active. The 'Product Details' section shows the product name 'Headache Pain Relief' and product code '0037-3000-10'. The 'Serial Generation Details' table has two rows: one for 'EBEZ_01' with a packaging unit of '2 Pkg Case' and location 'A1000', and another for 'EBEZ_01' with a packaging unit of 'Bottle' and location 'A1000'. Below the table are two empty cross-reference tables: 'Item Cross Reference' and 'Item UOM Cross Reference'.

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.

Field Name	Description
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 appears 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

ORACLE Pedigree and Serialization Manager Server Time Zone: UTC +00:00 About Sign Out

Dashboard Serials Packaging Transactions System Setup **EPICIS Setup** Audit Trail

Maintain Locations Maintain Location Groups **Maintain Products** Maintain Users Maintain User Groups Maintain Location Security Roles

Create Product Save and Create Another Save and Close Cancel

* Product Code: 0037-3000-10 Product Name: Headache Pain Relief
 * Product Code Type: NDC442
 * Product Code Variant: NOVARIANT

Regulatory Information **Serial Generation Details** Location Overrides Product Information User Fields

Product Details Actions View + Detach

Actions	Owning Source System	* Packaging Unit	Location	Location Group	Lowest Saleable Unit Quantity	Serial Type	Custom S Method
✖	EBEZ_01	2 Pkg Case		A1000	2	SGTIN-198	
✖	EBEZ_01	Bottle		A1000	1	SGTIN-198	

Item Cross Reference

* Item Number	* Item Source	Item Description
97008	EBEZ_02	Headache Pain
85132	EBEZ_01	Headache Pain

Item UOM Cross Reference

* Item Unit of Measure	* Related Packaging Unit	Actions
No data to display.		

- 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.

- 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 must 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

ORACLE Pedigree and Serialization Manager Server Time Zone: UTC +00:00 About Sign Out eprsm

Dashboard Serials Packaging Transactions **System Setup** EPICIS Setup Audit Trail

Maintain Locations Maintain Location Groups **Maintain Products** Maintain Users Maintain User Groups Maintain Location Security Roles

Create Product Save and Create Another Save and Close Cancel

* Product Code: 0037-3000-10 Product Name: Headache Pain Relief
 * Product Code Type: NDC442
 * Product Code Variant: NOVARIANT

Regulatory Information **Serial Generation Details** Location Overrides Product Information User Fields

Product Details

Actions View + Detach

Actions	Owning Source System	* Packaging Unit	Location	Location Group	Lowest Saleable Unit Quantity	Serial Type	Custom S Method
	EBEZ_01	2 Pkg Case		A1000	2	SGTIN-198	
	EBEZ_01	Bottle		A1000	1	SGTIN-198	

Item Cross Reference

Actions View + Detach

* Item Number	* Item Source	Item Description
97008	EBEZ_02	Headache Pain
85132	EBEZ_01	Headache Pain

Item UOM Cross Reference

Actions View + Detach

* Item Unit of Measure	* Related Packaging Unit	Actions
Each	BOTTLE	
Piece	BOTTLE	

13. Select the Location Overrides sub tab.

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

Create Product page - Location Overrides sub tab

The screenshot shows the Oracle Pedigree and Serialization Manager interface. The 'Create Product' page is active, with the 'Location Overrides' sub-tab selected. The form includes fields for Product Code (0037-3000-10), Product Code Type (NDC442), and Product Code Variant (NOVARIANT). The 'Location Overrides' section is expanded, showing a table with columns for Location, Record Internal Shipments, Record Internal Returns, Record Internal Receipts, Create Serials for Shipments, Create Serials for Receipts, * Serialization Control, and Actions. The table is currently empty, displaying 'No data to display.'

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. If you are using location security, the locations you can select are restricted to those that you have <i>update access</i> to in the Location Security Setup page. For more information on location security, see Location Security Overview, page 1-9.

Field Name	Description
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.
Record Internal Receipts check box	(Optional) Select this check box if you want the system to record receipts to internal customers for this product at this location.
Create Serials for Shipments check box	(Optional) Select this check box if the system creates 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 issues an exception.
Create Serials for Receipts check box	(Optional) Select this check box if the system creates serials in the Oracle Pedigree and Serialization Manager system at the time of receipt at this location. If serials are not sent in with the Receipts transaction, the system issues 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

ORACLE Pedigree and Serialization Manager Server Time Zone: UTC +00:00 About Sign Out opsm

Dashboard **Serials** **Packaging** **Transactions** **System Setup** **EPICIS Setup** **Audit Trail**

Maintain Locations **Maintain Location Groups** **Maintain Products** **Maintain Users** **Maintain User Groups** **Maintain Location Security Roles**

Create Product Save and Create Another Save and Close Cancel

* Product Code: 0037-3000-10 Product Name: Headache Pain Relief

* Product Code Type: NDC442

* Product Code Variant: NOVARIANT

Regulatory Information **Serial Generation Details** **Location Overrides** **Product Information User Fields**

Location Overrides

Actions: View + Detach

* Location	Record Internal Shipments	Record Internal Returns	Record Internal Receipts	Create Serials for Shipments	Create Serials for Receipts	* Serialization Control	Actions
Denver	☐	☐	☐	☐	☐	Externally Generated	✖

16. Select the Product Information User Fields sub tab.

Create Product page - Product Information User Fields sub tab

The screenshot shows the 'Create Product' page in the Oracle Pedigree and Serialization Manager. The 'Product Information User Fields' sub tab is active. The page includes a header with navigation tabs (Dashboard, Serials, Packaging, Transactions, System Setup, EPCS Setup, Audit Trail) and a sub-header with tabs (Maintain Locations, Maintain Location Groups, Maintain Products, Maintain Users, Maintain User Groups, Maintain Data Security Roles, Data Security Setup). The 'Create Product' section contains fields for Product Code (0037-2000-10), Product Code Type (NDC-442), Product Code Variant (NOVARIANT), and Product Name (Headache Pain Relief). The 'Product Information User Fields' section is divided into three expandable regions: Character, Numerics, and Date / Time. The Character region contains 15 user-defined fields (User Field 1 to User Field 15). The Numerics region contains 5 user-defined fields (User Number 1 to User Number 5). The Date / Time region contains 5 user-defined fields (User Date 1 to User Date 5). Buttons for 'Save and Create Another', 'Save and Close', and 'Cancel' are located at the top right of the form.

17. Enter user-defined data using any of the fields in the Character, Numerics, 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.

If you are using location security, the products you can edit are restricted to those products attached to a product detail location or location group that you have *update access* to in the Location Security Setup page.

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 screenshot shows the 'Edit Product' page in the Oracle Pedigree and Serialization Manager. The page has a top navigation bar with tabs: Dashboard, Serials, Packaging, Transactions, System Setup, EPCIS Setup, and Audit Trail. Below this is a sub-navigation bar with tabs: Maintain Locations, Maintain Location Groups, Maintain Products, Maintain Users, Maintain User Groups, and Maintain Location Security Roles. The 'Maintain Products' tab is selected. The main content area is titled 'Edit Product' and contains several tabs: Regulatory Information, Serial Generation Details, Location Overrides, and Product Information User Fields. The 'Regulatory Information' tab is active. It displays the following fields: Product Code (0037-3000-10), Product Code Variant (NOVARIANT), Product Code Type (NDC442), Product Name (Headache Pain Relief), Owing Source System (EBIZ_01), Serialization Control (OPSM Serialized), Manufacturer (B1 Manufacturing), Product Category (Analgesic), Dosage Form (TABLET), Container Size (60), Container Type (Bottle), and Strength (150mg). There are also checkboxes for: Controlled Substance, Record Internal Shipments, Record Internal Returns, Create Serials for Shipments, Pedigree Required, Record Internal Receipts, and Create Serials for Receipts. The 'Save and Close' and 'Cancel' buttons are visible in the top right corner.

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.
If you are using location security, the products you can delete are restricted to those products attached to a product detail location or location group that you have *delete*

access to in the Location Security Setup page

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 are using location security, you can only delete a product if you have delete access to all of the product detail records within that product in the Location Security Setup page.

Note: If you try to delete a product that has associated transactions, serials, or lots the system issues 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 for which you want to delete serial generation details and click the Search button.

If you are using location security, the products you can delete serial generation details for are restricted to those products attached to a location or location group that you have *update access* to in the Location Security Setup page.

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

3. Select the product in the table for which you want to delete the serial generation details.
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.

If you are using location security, you can only delete a product detail row if you have *delete access* to the associated location or location group in the Location Security Setup page.

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 can 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 for which you want to delete location overrides and click the Search button.

If you are using location security, the products you can delete location overrides for are restricted to those products attached to a location or location group that you have *update access* to in the Location Security Setup page.

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

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

If you are using location security, you can only delete location overrides for locations that you have *delete access* to in the Location Security Setup page.

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 are 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.

If you are using location security in OPSM, when creating or editing a product using the Define Item and Product Cross Reference page in OPSM, the location or location group and the location overrides information you can select is based on the locations or location groups you have *update access* to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

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 4-3.

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.

Prerequisites

- ☐ Location security information must be set up if you are using location security.

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 appears.

Define Product and Item Cross Reference page

ORACLE Pedigree and Serialization Manager

About Sign Out opsm

Dashboard Serials Packaging Transactions System Setup EPCIS Setup Audit Trail

Tasks

- Maintain Locations
- Maintain Location Groups
- Maintain Products
- Maintain Users
- Maintain User Groups
- Maintain Location Security Roles
- Location Security Setup
- Product Synchronization
- Define Product and Item Cross Reference**
- Maintain Serial Type Groups
- Maintain Serial Ranges
- Maintain Serial Destinations
- View Serial Destination Rules
- Maintain Lookups
- Maintain System Parameters

Product Synchronization Define Product and Item Cross Reference Maintain Serial Type Groups

Product Location Override Save and Continue Cancel

Define Product and Item Cross Reference

Item Cross Reference

Item Number: 80120 Source System: EBIZ_01

Item Description: Restyleme Tablets Unit Of Measure: BTL

Product Definition

Product Code: Product Code Type: Product Code Variant: NOVARIANT

Product Name: Manufacturer: Product Category: Serial Control: Controlled Substance: Pedigree Control:

Owning Source System: Dosage Form: Strength: Container Size: Container Type: Record Internal Shipment: Create Serials For Shipment: Record Internal Return:

Product Packaging and Serialization

Packaging Unit: Serial Type: SGTIN-198 Overage: 0 Overage Type: Percent

Owning Source System: EPC Company Prefix: GTIN: Lowest Saleable Unit: Quantity: Location: Location Group:

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 automatically creates 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 4-24.
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 4-24.
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 4-24.
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 4-24.
Overage	(Optional) Enter how many additional serials must be generated above the quantity/percent requested. Zero appears by default. You cannot enter a negative value. The Overage Type determines whether you 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 4-24.
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.
Location	(Optional) Select the location for the product. You can select either a location or a location group for the product. If you select a location, the Location Group field becomes unavailable for entry. If you are using location security, the locations you can select are restricted to those that you have <i>update access</i> to in the Location Security Setup page. For more information on location security, see Location Security Overview, page 1-9.
Location Group	(Optional) Select the location group for the product. You can select either a location or a location group for the product. If you select a location group, the Location field becomes unavailable for entry. If you are using location security, the location groups you can select are restricted to those that you have <i>update access</i> to in the Location Security Setup page. For more information on location security, see Location Security Overview, page 1-9.

Define Product and Item Cross Reference page

ORACLE Pedigree and Serialization Manager

About Sign Out epsm

Define Product and Item Cross Reference

Product Location Override Save and Continue Cancel

Item Cross Reference

Item Number: 80120 Source System: EBIZ_01

Item: Restylane Tablets Unit Of Measure: BTL

Product Definition

Product Code: 6202-5616-10 Owning Source System: EBIZ_01

Product Code Type: NDC442 Dosage Form: TABLET

Product Code Variant: NOVARIANT Strength: 150mg

Product Name: Restylane Tablets Container Size: 60

Manufacturer: J.L. Manufacturing Container Type: Bottle

Product Category: Analgesic Record Internal Shipment: ☒

Serial Control: Externally Generated Create Serials For Shipment: ☒

Controlled Substance: ☐ Record Internal Return: ☒

Pedigree Control: ☐

Product Packaging and Serialization

Packaging Unit: Bottle Owning Source System: EBIZ_01

Serial Type: SGTIN-96 EPC Company Prefix: 456666

Overage: 2 GTIN: 777777888888

Overage Type: Quantity * Lowest Saleable Unit: 1

Use Range Control: ☒ EPC Filter: Reserved Location Group: GRP1

Label Print Format: 2D Barcode

- Click the Save and Continue button.

Define Product and Item Cross Reference page

ORACLE Pedigree and Serialization Manager

About Sign Out opsm

Define Product and Item Cross Reference

80120 was saved successfully. [Product Location Override] [Save and Continue] [Cancel]

Item Cross Reference

Item Number: 80120 Source System: EBIZ_01
Item: Restylane Tablets Unit Of Measure: BTL

Product Definition [Reset] [Select Existing Product]

Product Code: 6202-5616-10 Owning Source System: EBIZ_01
Product Code Type: NDC442 Dosage Form: TABLET
Product Code Variant: NO-VARIANT Strength: 150mg
Product Name: Restylane Tablets Container Size: 60
Manufacturer: J.L. Manufacturing Container Type: Bottle
Product Category: Analgesic Record Internal Shipment: ☒
Serial Control: Externally Generated Create Serials For Shipment: ☒
Controlled Substance: ☐ Record Internal Return: ☒
Pedigree Control: ☐

Product Packaging and Serialization [Reset]

Packaging Unit: Bottle Owning Source System: EBIZ_01
Serial Type: SGTIN-96 EPC: 456666
Overage: 2 Overage Type: Quantity Location: GRP1
Use Range Control: ☒ EPC Filter: Reserved
Label Print Format: 2D Barcode

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 screenshot shows the Oracle Pedigree and Serialization Manager interface. The top navigation bar includes links for Dashboard, Serials, Packaging, Transactions, System Setup, EPCIS Setup, and Audit Trail. The System Setup tab is active, and the Product Process Controls and Location Overrides page is displayed. The page has a title bar with 'Save and Close' and 'Cancel' buttons. The main content area is divided into two sections: Product Process Controls and Location Overrides. The Product Process Controls section contains a 'Serialization Control' dropdown menu set to 'Externally Generated', and three checkboxes: 'Record Internal Shipments' (checked), 'Record Internal Returns' (checked), and 'Create Serials for Shipments' (checked). The Location Overrides section has a table with columns: Location, Record Internal Shipments, Record Internal Returns, Create Serials for Shipments, Serialization Control, and Action. The table is currently empty, displaying 'No data to display.' Below the table is a large empty text area.

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.

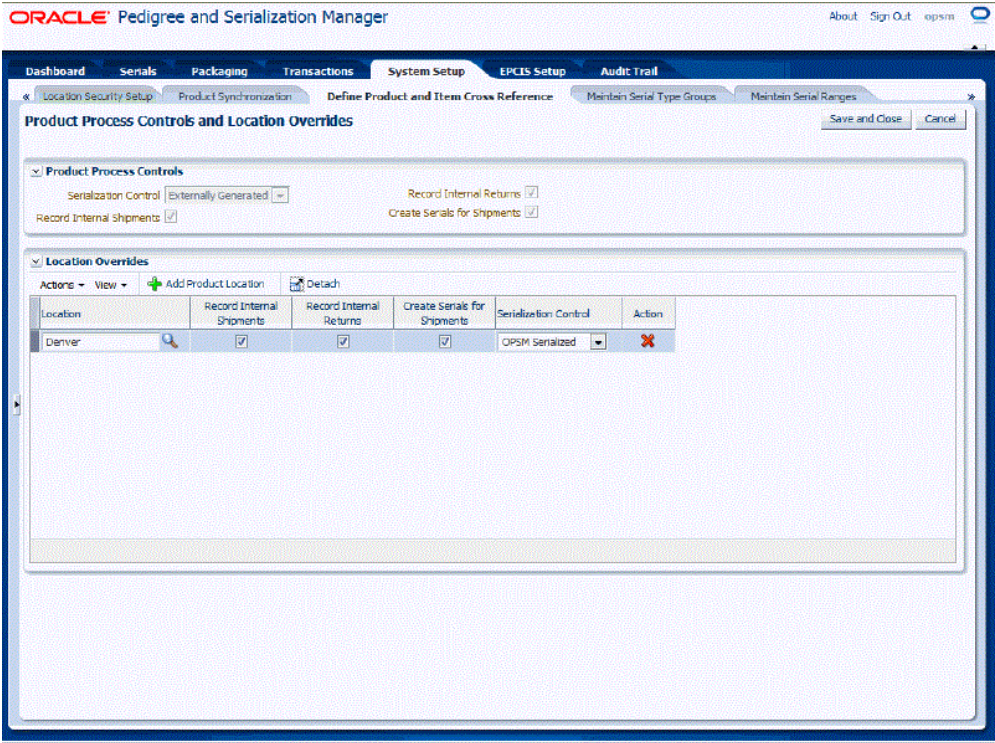
7. Select Add Product Location from the Actions menu or click the Add Product Location ("+" plus sign) icon located at the top of the Location Overrides region.

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. If you are using location security, the locations you can select are restricted to those that you have <i>update access</i> to in the Location Security Setup page. For more information on location security, see Location Security Overview, page 1-9.
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 creates 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 issues 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 4-87.

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 appears.

Define Product and Item Cross Reference page

ORACLE Pedigree and Serialization Manager

About Sign Out eproc

The screenshot shows the 'Define Product and Item Cross Reference' page in the Oracle Pedigree and Serialization Manager. The page is divided into three main sections: Item Cross Reference, Product Definition, and Product Packaging and Serialization.

Item Cross Reference:

- Item Number: 80120
- Item Description: Restylane Tablets
- Source System: EBLZ_01
- Unit Of Measure: BTU

Product Definition:

- Product Code: (empty)
- Product Code Type: (dropdown)
- Product Code Variant: NOVARIANT
- Product Name: (empty)
- Manufacturer: (empty)
- Product Category: (dropdown)
- Serial Control: (dropdown)
- Controlled Substance: ☐
- Pedigree Control: ☐
- Owning Source System: (dropdown)
- Dosage Form: (dropdown)
- Strength: (empty)
- Container Size: (empty)
- Container Type: (dropdown)
- Record Internal Shipment: ☒
- Create Serials For Shipment: ☒
- Record Internal Return: ☐

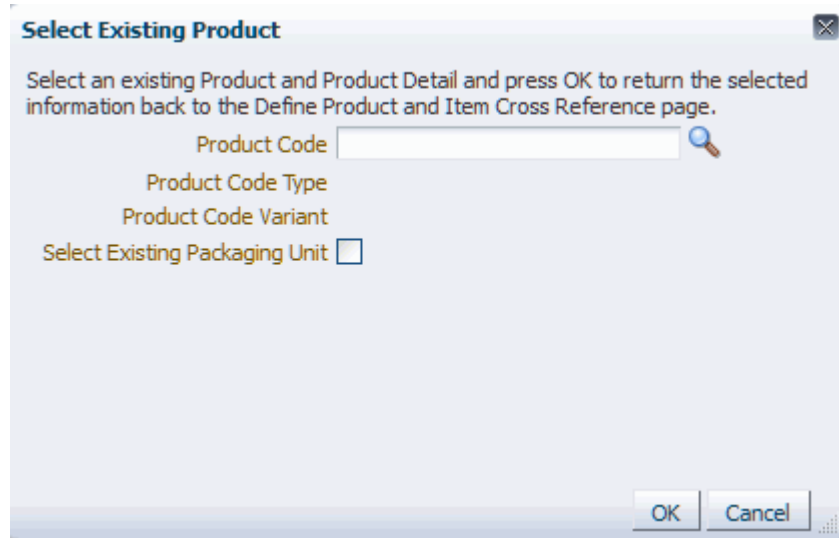
Product Packaging and Serialization:

- Packaging Unit: (dropdown)
- Serial Type: SGTIN-158
- Overage: 0
- Overage Type: Percent
- Use Range Control: ☒
- Owning Source System: (dropdown)
- EPC Company Prefix: (empty)
- GTIN: (empty)
- EPC Filter: (dropdown)
- Label Print Format: (dropdown)
- * Lowest Saleable Unit Quantity: 0
- Location Group: GRP1

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 appear.

Search and Select: Product Code dialog box

Search and Select: Product Code

▼ Search Advanced

Product Code Unformatted

Product Code 6202-5616-10

Product Name

Product Category ▼

Manufacturer

Item Number

Item Source ▼

Item Description

Search Reset

Product Code	Product Code Type
6202-5616-10	NDC442
6202-5616-10	NDC442

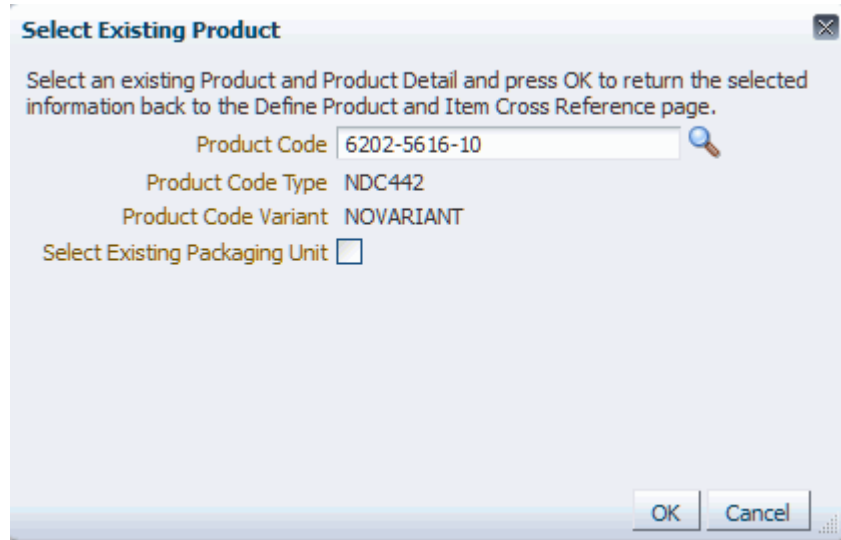
< >

OK Cancel

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



Select Existing Product

Select an existing Product and Product Detail and press OK to return the selected information back to the Define Product and Item Cross Reference page.

Product Code 6202-5616-10

Product Code Type NDC442

Product Code Variant NOVARIANT

Select Existing Packaging Unit ☐

OK Cancel

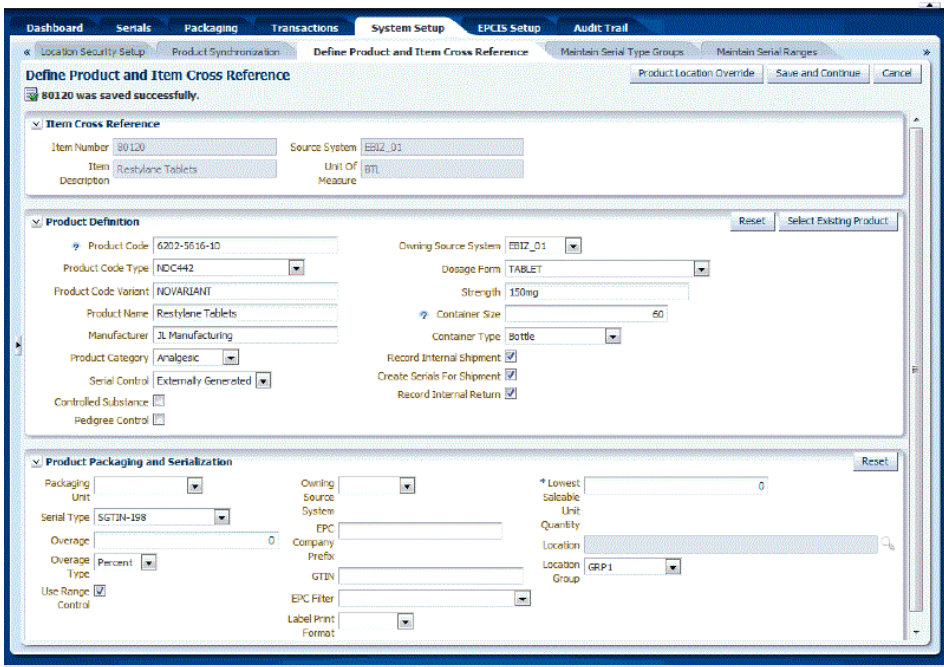
The Select Existing Product dialog box reappears.

4. Click the OK button.

Define Product and Item Cross Reference page

ORACLE Pedigree and Serialization Manager

About Sign Out 



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 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

Select Existing Product

Select an existing Product and Product Detail and press OK to return the selected information back to the Define Product and Item Cross Reference page.

Product Code 

Product Code Type

Product Code Variant

Packaging Unit

Select Existing Packaging Unit ☒

OK Cancel

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 appear.

Search and Select Product Code dialog box

Search and Select: Product Code

☒ Search Advanced

Product Code

Product Code Type

Product Code Variant

Packaging Unit

Product Name

Product Category

Manufacturer

Search Reset

Packaging Unit	Product Code
BOTTLE	6202-5616-10

OK Cancel

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

Select Existing Product

Select an existing Product and Product Detail and press OK to return the selected information back to the Define Product and Item Cross Reference page.

Product Code 6202-5616-10

Product Code Type NDC442

Product Code Variant NOVARIANT

Packaging Unit BOTTLE

Select Existing Packaging Unit ☒

OK Cancel

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

ORACLE Pedigree and Serialization Manager

About Sign Out Logout

Define Product and Item Cross Reference

Item Cross Reference

Item Number: 80120
Item Description: Restylane Tablets
Source System: EBITZ_D1
Unit Of Measure: OTL

Product Definition

Product Code: 6202-5516-10
Product Code Type: NDC442
Product Code Variant: NOVARIANT
Product Name: Restylane Tablets
Manufacturer: JL Manufacturing
Product Category: Analgesic
Serial Control: Externally Generated
Controlled Substance: ☐
Pedigree Control: ☐

Owing Source System: EBITZ_D1
Dosage Form: TABLET
Strength: 150mg
Container Size: 60
Container Type: Bottle
Record Internal Shipment: ☒
Create Serials For Shipment: ☒
Record Internal Return: ☒

Product Packaging and Serialization

Packaging Unit: Bottle
Serial Type: SGTIN-96
Overage: 2
Overage Quantity: 2
Use Range Control: ☒

Owing Source System: EBITZ_D1
EPC Company Prefix: 456666
GTIN: 7777777888888
EPC Filter: Reserved
Label Print Format: 2D Barcode

* Lowest Saleable Unit: 1
Quantity:
Location:
Location Group: GRP1

Buttons: Product Location Override, Save and Continue, Cancel, Reset, Select Existing Product

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

ORACLE Pedigree and Serialization Manager

About Sign Out opsm

Dashboard Serials Packaging Transactions System Setup EPCS Setup Audit Trail

Location Security Setup Product Synchronization Define Product and Item Cross Reference Maintain Serial Type Groups Maintain Serial Ranges

Define Product and Item Cross Reference

80120 was saved successfully.

Product Location Override Save and Continue Cancel

Item Cross Reference

Item Number: 80120 Source System: EBIZ_01

Item Description: Restylane Tablets Unit Of Measure: BTL

Product Definition

Product Code: 6202-5616-10 Owning Source System: EBIZ_01

Product Code Type: NDC442 Dosage Form: TABLET

Product Code Variant: NOVARIANT Strength: 150mg

Product Name: Restylane Tablets Container Size: 60

Manufacturer: J.L. Manufacturing Container Type: Bottle

Product Category: Analgesic Record Internal Shipment: ☒

Serial Control: Externally Generated Create Serials For Shipment: ☒

Controlled Substance: ☐ Record Internal Return: ☒

Pedigree Control: ☐

Product Packaging and Serialization

Packaging Unit: Bottle Owning Source System: EBIZ_01

Serial Type: SGTIN-96 EPC Company Prefix: 456666

Overage: 2 GTIN: 777777888888

Overage Type: Quantity EPC Filter: Reserved

Use Range Control: ☒ Label Print Format: 2D Barcode

* Lowest Saleable Unit: 1

Quantity: [Field]

Location: [Field]

Location Group: GRP1

Reset Select Existing Product

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 at the top of the page.

Product Process Controls and Location Overrides page

The screenshot shows the Oracle Pedigree and Serialization Manager interface. The top navigation bar includes links for Dashboard, Serials, Packaging, Transactions, System Setup, EPCIS Setup, and Audit Trail. The System Setup tab is active, and the Product Process Controls and Location Overrides page is displayed. The page has a title bar with 'Save and Close' and 'Cancel' buttons. The main content area is divided into two sections: Product Process Controls and Location Overrides. The Product Process Controls section contains a 'Serialization Control' dropdown menu set to 'Externally Generated', and three checkboxes: 'Record Internal Shipments' (checked), 'Record Internal Returns' (checked), and 'Create Serials for Shipments' (checked). The Location Overrides section has a table with columns: Location, Record Internal Shipments, Record Internal Returns, Create Serials for Shipments, Serialization Control, and Action. The table is currently empty, with a message 'No data to display.' below it. The table header row is highlighted in blue.

Location	Record Internal Shipments	Record Internal Returns	Create Serials for Shipments	Serialization Control	Action
No data to display.					

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.

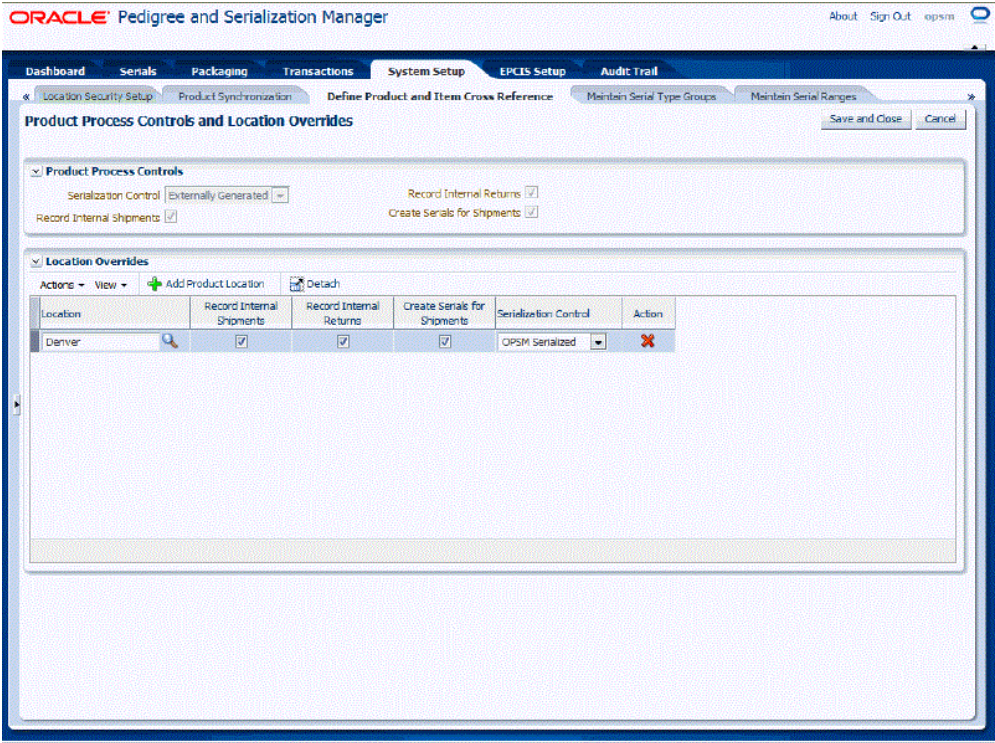
9. Select Add Product Location from the Actions menu or click the Add Product Location ("+" plus sign) icon located at the top of the Location Overrides region.

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. If you are using location security, the locations you can select are restricted to those that you have <i>update access</i> to in the Location Security Setup page. For more information on location security, see Location Security Overview, page 1-9.
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 creates 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 issues 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 4-87.

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 appears.

Define Product and Item Cross Reference page

ORACLE Pedigree and Serialization Manager

About Sign Out eproc

Define Product and Item Cross Reference

Item Cross Reference

Item Number: 80120
Item Description: Restylane Tablets
Source System: EBIZ_01
Unit of Measure: BTL

Product Definition

Product Code: 6202-5616-10
Product Code Type: NDC442
Product Code Variant: NOVARIANT
Product Name: Restylane Tablets
Manufacturer: J.L. Manufacturing
Product Category: Analgesic
Serial Control: Externally Generated
Controlled Substance: ☐
Pedigree Control: ☐
Owning Source System: EBIZ_01
Dosage Form: TABLET
Strength: 150mg
Container Size: 60
Container Type: Bottle
Record Internal Shipment: ☒
Create Serials For Shipment: ☒
Record Internal Return: ☒

Product Packaging and Serialization

Packaging Unit: Bottle
Serial Type: SGTIN-96
Overage: 2
Overage Type: Quantity
Use Range Control: ☒
Owning Source System: EBIZ_01
EPC: 456666
Company Prefix: 777777888888
GTIN: 777777888888
EPC Filter: Reserved
Label Print Format: 2D Barcode
* Lowest Saleable Unit: 1
Quantity:
Location: GRP1
Location Group:

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)

ORACLE Pedigree and Serialization Manager

About Sign Out opsm

Define Product and Item Cross Reference

80120 was saved successfully.

Item Cross Reference

Item Number: 80120 Source System: EBIZ_01
Item: Restylane Tablets Unit Of Measure: BTL

Product Definition

Product Code: 6202-5000-30 Owning Source System: EBIZ_01
Product Code Type: NDC442 Dosage Form: TABLET
Product Code Variant: NO-VARIANT Strength: 150mg
Product Name: Restylane Tablets Container Size: 60
Manufacturer: J.L. Manufacturing Container Type: Bottle
Product Category: Analgesic Record Internal Shipment: ☒
Serial Control: Externally Generated Create Serials For Shipment: ☒
Controlled Substance: ☐ Record Internal Return: ☒
Pedigree Control: ☐

Product Packaging and Serialization

Packaging Unit: Bottle Owning Source System: EBIZ_01
Serial Type: SGTIN-96 EPC Company Prefix: 456666
Overage: 2 Quantity: 1
Overage Type: Quantity Location: GRP1
Use Range Control: ☒ EPC Filter: Reserved
Label Print Format: 2D Barcode

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

- Click the Product Location Override button at the top of the page.

Product Process Controls and Location Overrides page

The screenshot displays the 'Product Process Controls and Location Overrides' page in the Oracle Pedigree and Serialization Manager. The page has a top navigation bar with tabs: Dashboard, Serials, Packaging, Transactions, System Setup (selected), EPCIS Setup, and Audit Trail. Below this is a sub-navigation bar with tabs: Location Security Setup, Product Synchronization, Define Product and Item Cross Reference (selected), Maintain Serial Type Groups, and Maintain Serial Ranges. The main content area is titled 'Product Process Controls and Location Overrides' and includes 'Save and Close' and 'Cancel' buttons.

Product Process Controls

Serialization Control: Externally Generated
Record Internal Shipments: ☒
Record Internal Returns: ☒
Create Serials for Shipments: ☒

Location Overrides

Actions: View, Add Product Location, Detach

Location	Record Internal Shipments	Record Internal Returns	Create Serials for Shipments	Serialization Control	Action
Denver	☒	☒	☒	OPSM Serialized	

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)

The screenshot shows the Oracle Pedigree and Serialization Manager (OPSM) interface. The main title is "Product Process Controls and Location Overrides". Below the title, there are two sections: "Product Process Controls" and "Location Overrides".

Product Process Controls:

- Serialization Control: Externally Generated (dropdown)
- Record Internal Returns: ☒
- Record Internal Shipments: ☒
- Create Serials for Shipments: ☒

Location Overrides:

Actions: View, Add Product Location, Detail

Location	Record Internal Shipments	Record Internal Returns	Create Serials for Shipments	Serialization Control	Action
Auburn	☐	☐	☐	OPSM Serialized	
Denver	☒	☒	☒	OPSM Serialized	

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 4-87.

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 initiate a process that performs 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 4-3.

For more information on defining Product Synchronization scenarios, see *Defining Product Synchronization, Lot Synchronization, and Work Order Serialization Scenarios*, page 4-289.

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

The screenshot shows the Oracle Pedigree and Serialization Manager interface. The top navigation bar includes links for Dashboard, Serials, Packaging, Transactions, System Setup, EPCIS Setup, and Audit Trail. The left sidebar lists various tasks under the 'Product Synchronization' section, including 'Maintain Locations', 'Maintain Location Groups', 'Maintain Products', 'Maintain Users', 'Maintain User Groups', 'Maintain Location Security Roles', 'Location Security Setup', 'Maintain Serial Type Groups', 'Maintain Serial Ranges', 'Maintain Serial Destinations', 'View Serial Destination Rules', 'Maintain Lookups', and 'Maintain System Parameters'. The main content area is titled 'Product Synchronization' and features a 'Search: Job Instances' section with input fields for 'Job Instance Id', 'Job Status', 'Created By', and 'Creation Date'. A 'Submit New Instance' button is located in the top right corner. Below the search section, there are two expandable panels: 'Search Results: Job Instances' and 'Job Instance Messages'. The 'Search Results' panel shows a table with columns 'Job Instance Id', 'Job Status', 'Creation Date', and 'Created By', but it currently displays 'No data to display.' The 'Job Instance Messages' panel also shows 'No data to display.'

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 <i>Extract Items</i>. 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

Product Synchronization

Select Product Synchronization options, then press OK to synchronize products. Press Cancel to exit without synchronizing.

Synchronization Action: Extract Items

Extract Scenario Name: EBS Full

Source System: EBIZ_01

OK Cancel

- 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 invokes an Oracle Data Integrator (ODI) application to extract item information from an external system. The item information that is extracted from the source system is uploaded into the target OPSM Products Interface table (PAS_S_PRODUCT_INTERFACE).

- 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 Items into OPSM:

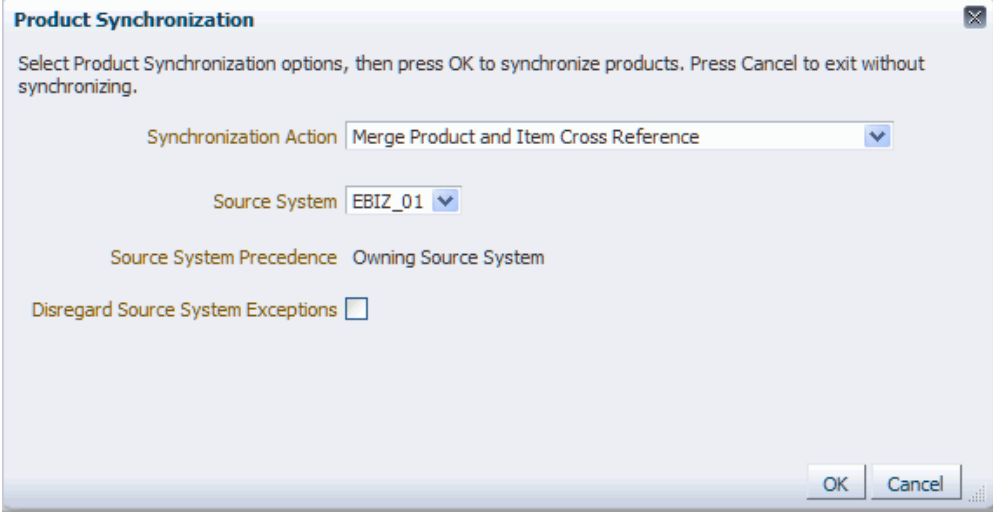
1. Navigate to the PAS_S_PRODUCT_INTEFACE table.
2. Enrich the data in the table with OPSM specific product information.
Enter an action code of MERGE and enter OPSM product data for each item number listed in the table.
3. Navigate to the Product Synchronization page, page A-2.
4. Click the Submit New 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 <i>Merge Item and Product Cross Reference</i>. 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 do not display in the Job Instance Message area in the bottom part of the page. The record is 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 records an error every time a source system precedence issue occurs and the messages display in the Job Instance Message area. The records that are in error remain in the Product Interface table.

Product Synchronization dialog box

The image shows a 'Product Synchronization' dialog box. It has a title bar with a close button. The main text says: 'Select Product Synchronization options, then press OK to synchronize products. Press Cancel to exit without synchronizing.' Below this, there are three fields: 'Synchronization Action' with a dropdown menu showing 'Merge Product and Item Cross Reference', 'Source System' with a dropdown menu showing 'EBIZ_01', and 'Source System Precedence' with a text field containing 'Owning Source System'. There is also a checkbox labeled 'Disregard Source System Exceptions' which is currently unchecked. At the bottom right, there are 'OK' and 'Cancel' buttons.

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 displays 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 4-87.

To Extract and Merge Item Information from an External System:

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

Product Synchronization page

ORACLE Pedigree and Serialization Manager Server Time Zone: UTC +00:00 About Sign Out opsm

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

« Maintain Location Security Roles Location Security Setup **Product Synchronization** Maintain Serial Type Groups Maintain Serial Ranges »

Product Synchronization Submit New Instance

✓ Search: Job Instances Advanced Saved Search Display All Job Instances

Job Instance Id Created By
Job Status Creation Date

Search Reset Save...

✓ Search Results: Job Instances

Actions View

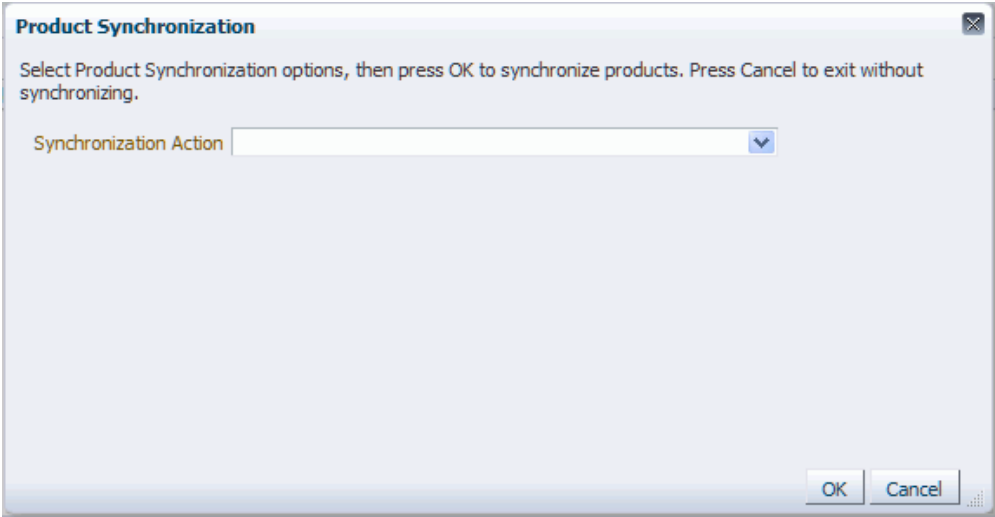
Job Instance Id	Job Status	Creation Date	Created By	Message Severity
No data to display.				

✓ Job Instance Messages

Message	Message Severity
No data to display.	

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.

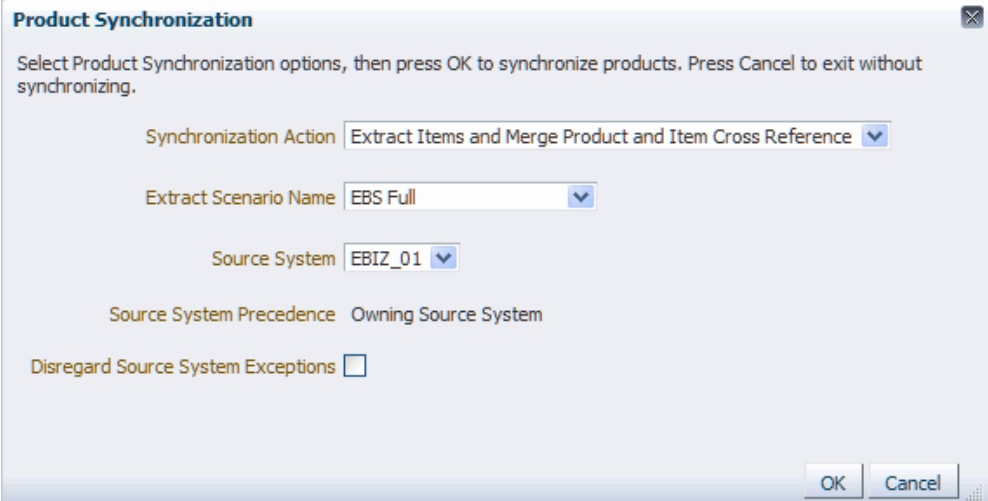
3. Enter the following options for the Product Synchronization process:

Field Name	Description
Synchronization Action	Select <i>Extract Items and Merge Product and Item Cross Reference</i>. 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 do not display in the Job Instance Message area in the bottom part of the page. The record is 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 records an error every time a source system precedence issue occurs and the messages display in the Job Instance Message area. The records that are in error remain in the Product Interface table.

Product Synchronization dialog box

The image shows a 'Product Synchronization' dialog box. It has a title bar with a close button. The main area contains instructions: 'Select Product Synchronization options, then press OK to synchronize products. Press Cancel to exit without synchronizing.' Below this are several controls: 'Synchronization Action' is a dropdown menu set to 'Extract Items and Merge Product and Item Cross Reference'; 'Extract Scenario Name' is a dropdown menu set to 'EBS Full'; 'Source System' is a dropdown menu set to 'EBIZ_01'; 'Source System Precedence' is a text label followed by 'Owning Source System'; and 'Disregard Source System Exceptions' is an unchecked checkbox. At the bottom right are 'OK' and 'Cancel' buttons.

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 invokes an Oracle Data Integrator (ODI) application to extract item information from an external system. The item information that is extracted from the source system is 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 displays 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 4-87.

Maintaining Users

Use the Maintain Users page in Oracle Pedigree and Serialization Manager (OPSM) to maintain users. After you create users you can:

- Associate the users with locations as location contacts.

For information on defining location contacts, see *Maintaining Locations*, page 4-47.

- Associate the users with Electronic Product Code Information Services (EPCIS) policies.

The users and their associated EPCIS policies 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.

For information on the EPCIS Repository, see the *Electronic Product Code Information Services Repository Overview*, page 2-1.

- Define location security by user.

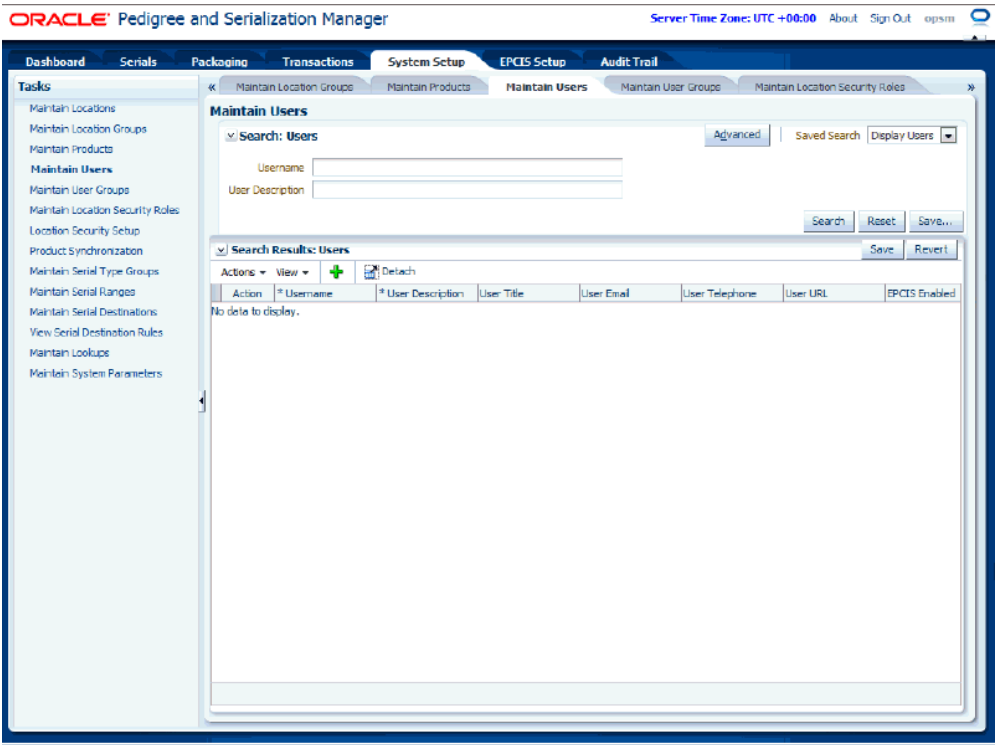
For information on defining location security, see *Maintaining Location Security*, page 4-214.

Use these procedures to search (basic and advanced), add, 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 both of these fields:

Field Name	Description
Username	(Optional) Enter the username.
Description	(Optional) Enter the user description.

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

3. Click the Search button.

Maintain Users page (Basic Search)

ORACLE Pedigree and Serialization Manager Server Time Zone: UTC +00:00 About Sign Out opsm

Dashboard Serials Packaging Transactions **System Setup** EPCS Setup Audit Trail

« Maintain Location Groups Maintain Products **Maintain Users** Maintain User Groups Maintain Location Security Roles Location Security Setup »

Maintain Users

☒ Search: Users Advanced Saved Search Display Users ▼

Username:
 User Description:

Search Reset Save...

Search Results: Users Save Revert

Actions View + Detach

Action	* Username	* User Description	User Title	User Email	User Telephone	User URL	EPCS Enabled
	mwinkler	Michelle Winkler	Sales Manager	mwinkler@yahoo.c	303-666-8888		☐
	mbrown	Martha Brown	Lead - Manufactur	mbrown@pnh.com	1-888-789-9090	www.user.org	☒
	monika	monika					☐
	markjones	Mark Jones	Lead				☐
	marksmith	Mark Smith	Lead				☐
	mwinkler2	Mike Winkler	Sales Manager	m.winkler@yahoo.	303-334-4004	www.action.org	☐
	Makenna Jones	Makenna Jones	MFg Supervisor	makenna.jones@d	444-666-7878	www.daytona.com	☐
	MUONES	MARY JONES	SALES	MUONES@YAHOO.	303-334-4009		☐
	MICHELLE WINKLER	MICHELLE WINKLER	SALES MANAGER	MWINKLER@YAHIC	3033344004	WWW.ACTION.ORG	☐
	MSMITH	MARY SMITH	PPRES	MSMITH@YAHOO.	3033344005		☐

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

- Click the Advanced button to perform an advanced search.

To Search for Users (Advanced Search):

- Navigate to the Maintain Users page, page A-2.
- Click the Advanced button.

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

Maintain Users (Advanced Search)

ORACLE Pedigree and Serialization Manager

Server Time Zone: UTC +00:00AboutSign Outopsm

DashboardSerialsPackagingTransactionsSystem SetupEPCIS SetupAudit Trail

Maintain Location GroupsMaintain ProductsMaintain UsersMaintain User GroupsMaintain Location Security RolesLocation Security Setup

Search: Users

BasicSaved SearchDisplay Users

UsernameStarts with

User DescriptionStarts with

SearchResetSave...Add Fields

Search Results: Users

SaveRevert

ActionsView+Detach

Action	* Username	* User Description	User Title	User Email	User Telephone	User URL	EPCIS Enabled
No data to display.							

- 3. In the Search: Users region, enter the search criteria for the users using one or both of these fields:

Field Name	Description
Username	(Optional) Select the field operator and then enter the username. 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
Description	(Optional) Select the field operator and then enter the user description. The field operators are the same as that for the Username field.

Otherwise, you can click the Search button without entering any search criteria and all available users 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 is removed from the search criteria.

5. (Optional) Enter search criteria for the additional fields.
6. Click the Search button.

Maintain Users (Advanced Search)

The screenshot shows the 'Maintain Users' page in the Oracle Pedigree and Serialization Manager. The page has a navigation bar with tabs: Dashboard, Serials, Packaging, Transactions, System Setup, EPCIS Setup, and Audit Trail. Under 'System Setup', there are sub-tabs: Maintain Location Groups, Maintain Products, Maintain Users (selected), Maintain User Groups, Maintain Location Security Roles, and Location Security Setup. The 'Maintain Users' section has a 'Search: Users' area with two criteria: 'Username' (Starts with 'm') and 'User Description' (Starts with 'Mary'). There are buttons for 'Basic', 'Saved Search', and 'Display Users'. Below the search area is a 'Search Results: Users' section with a table of results. The table has columns: Action, Username, User Description, User Title, User Email, User Telephone, User URL, and EPCIS Enabled. Two users are listed: MJONES and MSMITH.

Action	Username	User Description	User Title	User Email	User Telephone	User URL	EPCIS Enabled
	MJONES	MARY JONES	SALES	MJONES@YAHOO.	303-334-4009		☐
	MSMITH	MARY SMITH	PPRES	MSMITH@YAHOO.	3033344005		☐

All of the users that match the search criteria appear in the Search Results: Users 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.

To Create Users:

1. Navigate to the Maintain Users page, page A-2.
2. Select Add from the Actions menu or click the Add User icon located at the top of the Search Results: Users region.

Maintain Users page

The screenshot shows the 'Maintain Users' page in the Oracle Pedigree and Serialization Manager. The page has a navigation bar with tabs for Dashboard, Serials, Packaging, Transactions, System Setup (selected), EPCIS Setup, and Audit Trail. Under 'System Setup', there are sub-tabs: Maintain Location Groups, Maintain Products, Maintain Users (selected), Maintain User Groups, Maintain Location Security Roles, and Location Security Setup. The main content area is titled 'Maintain Users' and contains a search form with fields for 'Username' and 'User Description'. Below the search form is a table titled 'Search Results: Users' with columns: Action, Username, User Description, User Title, User Email, User Telephone, User URL, and EPCIS Enabled. A new row is visible in the table, indicating a new user has been added.

A new row appears in the Search Results: Users table.

3. Enter the following information:

Field Name	Description
Username	Enter the user name.
Description	Enter a description for the user.
User Title	(Optional) Enter a title for the user.

Field Name	Description
User Email	(Optional) Enter an e-mail address for the user.
User Telephone	(Optional) Enter a telephone number for the user.
User URL	(Optional) Enter a URL for the user.
EPCIS Enabled check box	Select this check box if the user is EPCIS enabled. If the user is not EPCIS enabled, the security validation for the EPCIS Query web service fails and no data will be returned.

4. Repeat steps 2 - 3 until all users have been created.

Maintain Users page

ORACLE Pedigree and Serialization Manager

Server Time Zone: UTC +00:00 About Sign Out opsm

Dashboard Serials Packaging Transactions System Setup EPCS Setup Audit Trail

Maintain Location Groups Maintain Products Maintain Users Maintain User Groups Maintain Location Security Roles Location Security Setup

Maintain Users

☒ Search: Users Advanced Saved Search Display Users

Username

User Description

Search Reset Save...

☒ Search Results: Users Save Revert

Actions View + Detach

Action	* Username	* User Description	User Title	User Email	User Telephone	User URL	EPCS Enabled
	mabrown	Martha Brown	Manager	labrown@mfq.com	1-888-9090	www.user.org	☒

5. Click the Save button.

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. Modify any of the existing details associated with the user. You cannot modify the Username field.
4. Click the Save button.

To Delete Users:

1. Navigate to the Maintain Users page, page A-2.
2. Enter search criteria for the users that 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 Action 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. All associations to this user are also removed including associations to EPCIS policies, location contacts, and location security setup.

Maintaining User Groups

Use the Maintain Users Groups page in Oracle Pedigree and Serialization Manager to maintain user groups.

Use these procedures to search for (basic and advanced), view, create, edit, and delete user groups:

Prerequisites

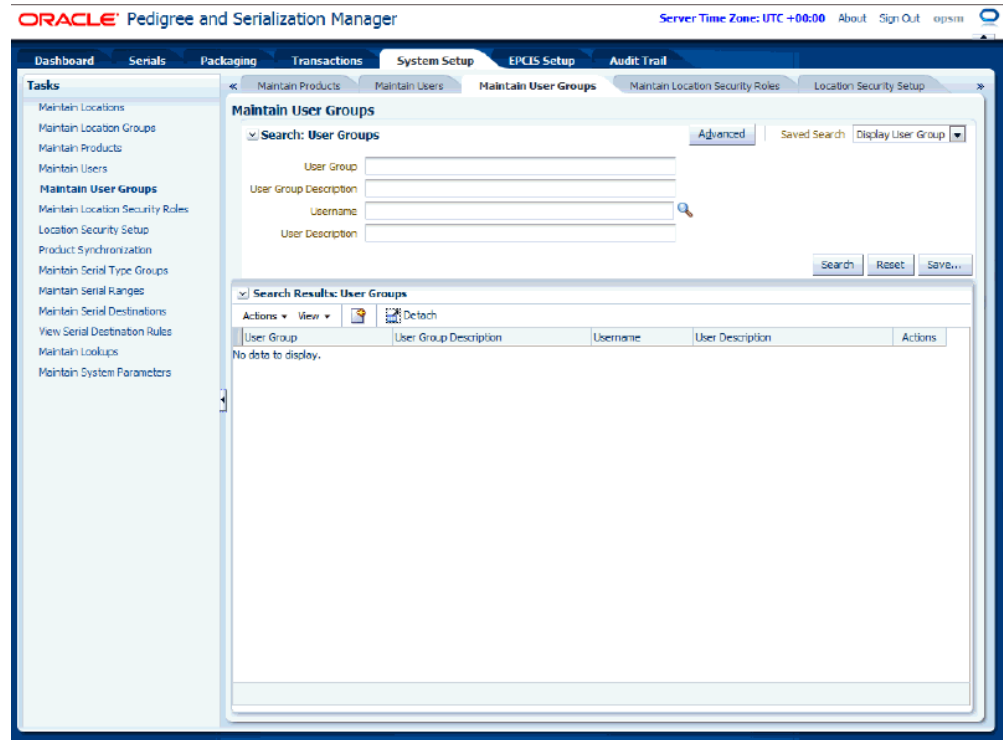
- ☐ Users have been created.

For information on creating users, see Maintaining Users, page 4-173.

To Search for User Groups (Basic Search):

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

Maintain User Groups page (Basic Search)



The Maintain User Groups page appears.

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

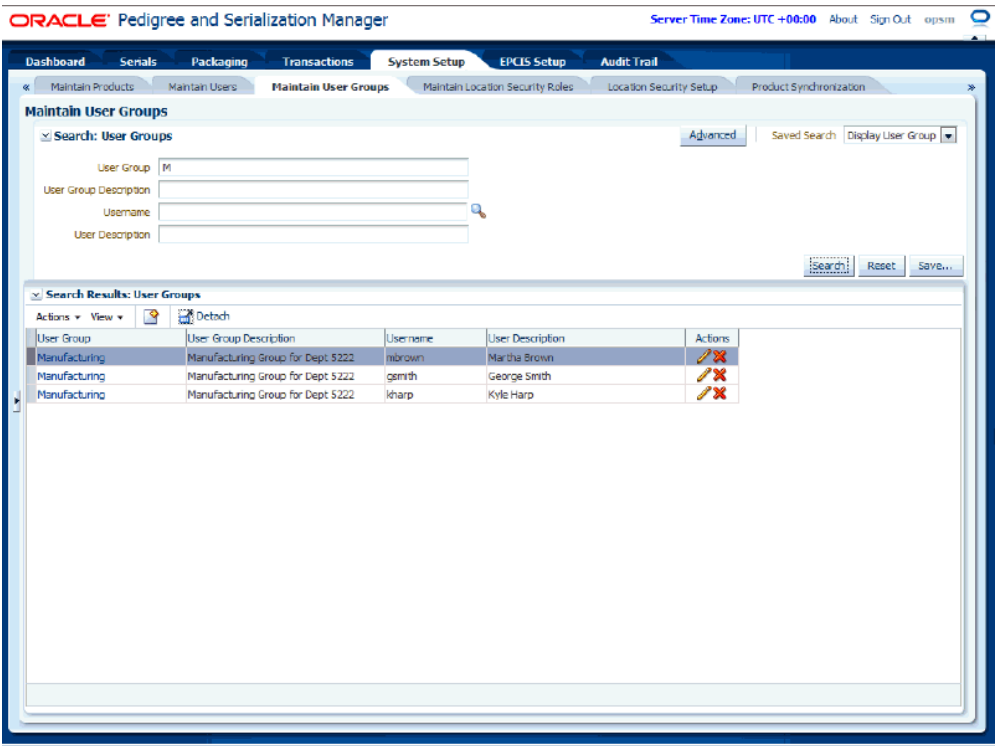
Field Name	Description
User Group	(Optional) Enter the user group.
User Group Description	(Optional) Enter the description for the user group.
Username	(Optional) Select the username. Users are created using the Maintain Users page.
Description	(Optional) Enter the user description.

Otherwise, you can click the Search button without entering any search criteria and

all available user groups appear.

- 3. Click the Search button.

Maintain User Groups (Basic Search)



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

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

To Search for User Groups (Advanced Search):

- 1. Navigate to the Maintain User Groups page, page A-2.
- 2. Click the Advanced button.

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

Maintain User Groups page (Advanced Search)

The screenshot displays the Oracle Pedigree and Serialization Manager interface. The top navigation bar includes links for Dashboard, Serials, Packaging, Transactions, System Setup (active), EPCIS Setup, and Audit Trail. The System Setup section contains sub-tabs: Maintain Products, Maintain Users, Maintain User Groups (active), Maintain Location Security Roles, Location Security Setup, and Product Synchronization. The main content area is titled 'Maintain User Groups' and features a 'Search: User Groups' section. This section includes a 'Basic' tab, a 'Saved Search' button, and a 'Display User Group' dropdown. Below these are four search criteria fields: 'User Group' (Starts with), 'User Group Description' (Starts with), 'Username' (Equals), and 'User Description' (Starts with). Each field has a dropdown menu for the operator and a text input for the value. To the right of the fields is a magnifying glass icon. Below the search fields are buttons for 'Search', 'Reset', 'Save...', and 'Add Fields'. The 'Search Results: User Groups' section is visible below the search fields, showing a table with columns: User Group, User Group Description, Username, User Description, and Actions. The table currently displays 'No data to display.'

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

Field Name	Description
User Group	(Optional) Select the field operator and then enter the user 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
User Group Description	(Optional) Select the field operator and then enter the user group description. The field operators are the same as that for the User Group field.

Field Name	Description
Username	(Optional) Select the field operator and then select the username. The field operators are the same as that for the User Group field. Users are created using the Maintain Users page.
Description	(Optional) Select the field operator and then enter the user description. The field operators are the same as that for the Username field.

Otherwise, you can click the Search button without entering any search criteria and all available user groups 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 is removed from the search criteria.

5. (Optional) Enter search criteria for the additional fields.
6. Click the Search button.

Maintain User Groups page (Advanced Search)

Oracle Pedigree and Serialization Manager

Server Time Zone: UTC +00:00 About Sign Out express

Dashboard Serials Packaging Transactions System Setup EPCIS Setup Audit Trail

« Maintain Products Maintain Users Maintain User Groups Maintain Location Security Roles Location Security Setup Product Synchronization »

Maintain User Groups

Search: User Groups Basic Saved Search Display User Group

User Group Starts with Pla

User Group Description Starts with

Username Equals mbrown

User Description Starts with

Search Reset Save... Add Fields

Search Results: User Groups

Actions View Detach

User Group	User Group Description	Username	User Description	Actions
Manufacturing	Manufacturing Group for Dept: 3222	mbrown	Martha Brown	

All of the user groups that match the search criteria appear in the Search Results: User Groups 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.

To View User Group Detail Information:

1. Navigate to the Maintain User Groups page, page A-2.
2. Enter search criteria for the user groups you want to view and click the Search button.

Maintain User Groups page

ORACLE Pedigree and Serialization Manager Server Time Zone: UTC +00:00 About Sign Out opsm

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

« Maintain Products Maintain Users **Maintain User Groups** Maintain Location Security Roles Location Security Setup Product Synchronization »

Maintain User Groups

☒ Search: User Groups Basic Saved Search Display User Group ▼

User Group Starts with ▼ P/a

User Group Description Starts with ▼

Username Equals

User Description Starts with ▼

Search Reset Save... Add Fields ▼

Search Results: User Groups

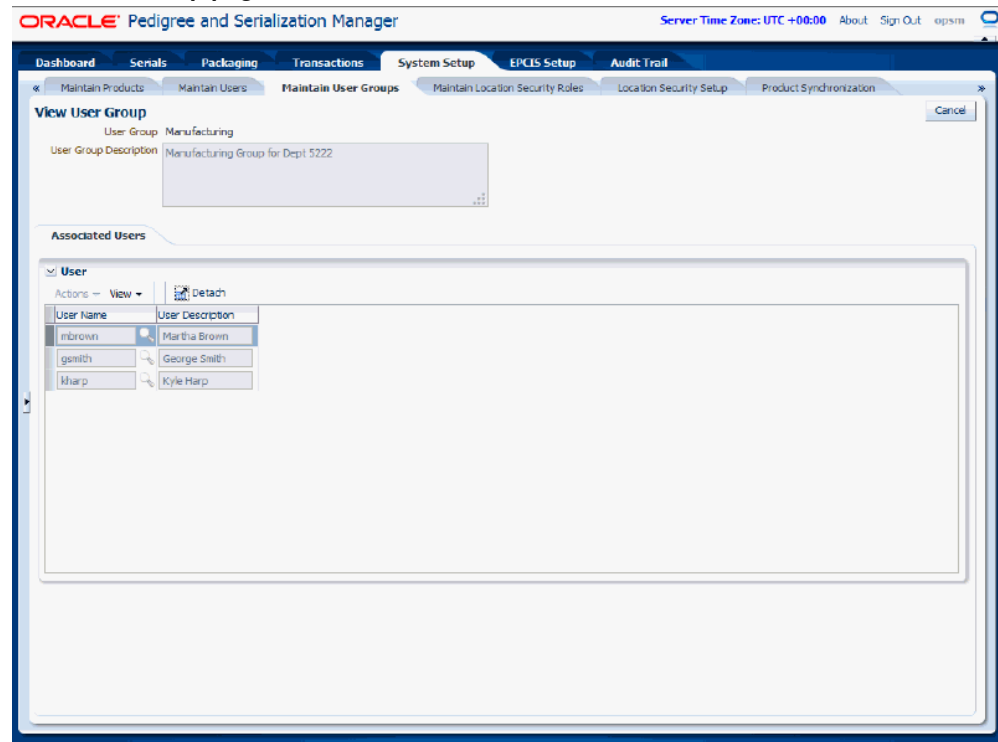
Actions ▼ View ▼ Details

User Group	User Group Description	Username	User Description	Actions
Manufacturing	Manufacturing Group for Dept 5222	nbrown	Martha Brown	
Manufacturing	Manufacturing Group for Dept 5222	gsmith	George Smith	
Manufacturing	Manufacturing Group for Dept 5222	kharp	Kyle Harp	

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

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

View User Group page



The View User Group page appears displaying the user group and its associated users.

4. Click the Cancel button to return to the Maintain User Groups page.

To Create User Groups:

1. Navigate to the Maintain User Groups page, page A-2.
2. Select Create from the Actions menu or click the Create User Group icon located at the top of the Search Results: User Groups region.

Create User Group page

The Create User Group page appears.

3. Enter the following:

Field Name	Description
User Group	Enter the name for the user group.
User Group Description	(Optional) Enter the user group description.

Create User Group page

ORACLE Pedigree and Serialization Manager

Server Time Zone: UTC +00:00 About Sign Out eprsm

Dashboard Serials Packaging Transactions System Setup EPCIS Setup Audit Trail

« Maintain Products Maintain Users Maintain User Groups Maintain Location Security Roles Location Security Setup Product Synchronization »

Create User Group

User Group: Quality Assurance Group

User Group Description: Quality Assurance Group

Save and Create Another Save and Close Cancel

Associated Users

User

Actions View + Attach Detach

User Name	User Description	Actions

4. Maintain users associated to the user group:

To Add Associated Users

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

Create User Group page

The screenshot shows the 'Create User Group' page in the Oracle Pedigree and Serialization Manager. The page has a navigation bar with tabs: Dashboard, Serials, Packaging, Transactions, System Setup (selected), EPCIS Setup, and Audit Trail. Under 'System Setup', there are sub-tabs: Maintain Products, Maintain Users, Maintain User Groups (selected), Maintain Location Security Roles, Location Security Setup, and Product Synchronization. The main form area is titled 'Create User Group' and contains two text input fields: 'User Group' and 'User Group Description', both with the value 'Quality Assurance Group'. To the right of these fields are buttons: 'Save and Create Another', 'Save and Close', and 'Cancel'. Below the form is a section titled 'Associated Users' which contains a table. The table has a header row with 'User Name', 'User Description', and 'Actions'. The table body is currently empty.

A new row appears in the User table.

- Enter the following information:

Field Name	Description
User Name	Select the user name for the user you want to add to the location group.
User Description	The description for the user appears by default from the user name selected.

- Repeat steps 1-2 until all of the users are associated to the user group.

Create User Group page

Oracle Pedigree and Serialization Manager

Server Time Zone: UTC +00:00 About Sign Out epssm

Dashboard Serials Packaging Transactions System Setup EPCIS Setup Audit Trail

Maintain Products Maintain Users Maintain User Groups Maintain Location Security Roles Location Security Setup Product Synchronization

Create User Group

* User Group: Quality Assurance Group

User Group Description: Quality Assurance Group

Associated Users

User Name	User Description	Actions
gsmith	George Smith	X
mbrown	Martha Brown	X

Save and Create Another Save and Close Cancel

To Delete Associated Users

1. Select the user in the table that you want to delete.
2. Select Delete in the Actions menu or click the Delete User Association icon in the Actions column of the user table.

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

3. Click the Yes button.

The associated user is deleted from the user group.

5. Save your work. Choose one of these options:
 - Click the Save and Close button to save this user group and return back to the Maintain User Groups page.
 - Click Save and Create Another button to save this user group and to stay on this page so you can create another user group. The system displays a message that the user group was created successfully and it clears all of the values in the fields.

To Edit User Groups:

1. Navigate to the Maintain User Groups page, page A-2.
2. Enter search criteria for the user groups you want to edit and click the Search button.

Maintain User Groups page

The screenshot displays the 'Maintain User Groups' page in the Oracle Pedigree and Serialization Manager. The page has a top navigation bar with tabs: Dashboard, Serials, Packaging, Transactions, System Setup (selected), EPCIS Setup, and Audit Trail. Below this is a sub-navigation bar with tabs: Maintain Products, Maintain Users, Maintain User Groups (selected), Maintain Location Security Roles, Location Security Setup, and Product Synchronization. The main content area is titled 'Maintain User Groups' and includes a search section with fields for User Group, User Group Description, Username, and User Description. A search button is located at the bottom right of the search section. Below the search section is a 'Search Results: User Groups' table. The table has columns for User Group, User Group Description, Username, User Description, and Actions. Two rows are displayed in the table, both for 'Quality Assurance Group'.

User Group	User Group Description	Username	User Description	Actions
Quality Assurance Group	Quality Assurance Group	mbrown	Martha Brown	 
Quality Assurance Group	Quality Assurance Group	gsmith	George Smith	 

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

3. Select the user group in the table that you want to edit.
4. Select Edit in the Actions menu or click the Edit User Group icon associated with the user group in the Actions column of the results table.

Edit User Group page

The screenshot displays the 'Edit User Group' page in the Oracle Pedigree and Serialization Manager. The page is titled 'Edit User Group' and shows the 'Quality Assurance Group' selected. The 'User Group Description' is 'Quality Assurance Group'. Below this, there is a section for 'Associated Users' which contains a table with two rows of user information.

User Name	User Description	Actions
genith	George Smith	
mbrown	Martha Brown	

The Edit User Group page appears displaying all of the existing information for the user group.

5. Edit any of the user group fields. You can edit the user group description and associated users pertaining to the user group.

Edit User Group page

Oracle Pedigree and Serialization Manager

Server Time Zone: UTC +00:00 About Sign Out opsm

Dashboard Serials Packaging Transactions System Setup EPCIS Setup Audit Trail

Maintain Products Maintain Users Maintain User Groups Maintain Location Security Roles Location Security Setup Product Synchronization

Edit User Group

User Group: Quality Assurance Group

User Group Description: Quality Assurance Group

Associated Users

User Name	User Description	Actions
kharp	Kyle Harp	X
mbrown	Martha Brown	X
genith	George Smith	X

This page shot reflects the addition of a new user to the user group.

6. Click the Save and Close button to save the changes you made to the user group information and to return back to the Maintain User Groups page.

To Delete User Groups:

1. Navigate to the Maintain User Groups page, page A-2.
2. Enter search criteria for the user groups you want to delete and click the Search button.

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

3. Select the user group in the table that you want to delete.
4. Select Delete in the Actions menu or click the Delete User Group icon associated with the user group in the Actions column of the results table.

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

5. Click the Yes button.

The user group is deleted from the system and any user associations are also deleted.

Maintaining Location Security Roles

Using the Maintain Location Security Roles page you can maintain location security roles and the users or user groups associated to those location security roles. This is one of the steps in defining location security for a user or user group.

Use these procedures to search (basic and advanced), view, create, edit, and delete location security roles:

Prerequisites

- ☐ Users and User Groups have been created.

For information, see Maintaining Users, page 4-173 and Maintaining User Groups, page 4-182.

To Search for Location Security Roles (Basic Search):

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

Maintain Location Security Roles page (Basic Search)

The screenshot shows the Oracle Pedigree and Serialization Manager interface. The top navigation bar includes 'Dashboard', 'Serials', 'Packaging', 'Transactions', 'System Setup', 'EPCIS Setup', and 'Audit Trail'. The 'System Setup' tab is active, and the 'Maintain Location Security Roles' sub-tab is selected. On the left, a 'Tasks' sidebar lists various maintenance tasks, with 'Maintain Location Security Roles' highlighted. The main content area is titled 'Maintain Location Security Roles' and contains a search section. The search section has a 'Search: Location Security Roles' header with an 'Advanced' button and a 'Saved Search' dropdown. Below this are six input fields: 'Location Security Role', 'Location Security Role Description', 'Username', 'User Description', 'User Group', and 'User Group Description'. To the right of the 'Username' and 'User Group' fields are magnifying glass icons. At the bottom of the search section are 'Search', 'Reset', and 'Save...' buttons. Below the search section is a 'Search Results: Location Security Roles' section. It includes a table with columns: 'Location Security Role', 'Location Security Role Description', 'Username', 'User Description', 'User Group', 'User Group Description', and 'Actions'. The table is currently empty, showing 'No data to display.'

The Maintain Location Security Roles page appears.

2. In the Search: Location Security Roles region, enter the search criteria for the location security roles using one or more of these fields:

Field Name	Description
Location Security Role	(Optional) Enter the location security role.
Location Security Role Description	(Optional) Enter the description of the location security role.
Username	(Optional) Select the username associated to the location security role.
User Description	(Optional) Enter the user description associated to the location security role.
User Group	(Optional) Select the user group associated to the location security role.

Field Name	Description
User Group Description	(Optional) Enter the user group description associated to the location security role.

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

3. Click the Search button.

Maintain Location Security Roles page (Basic Search)

Oracle Pedigree and Serialization Manager Server Time Zone: UTC +00:00 About Sign Out opsm

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

« Maintain Users Maintain User Groups **Maintain Location Security Roles** Location Security Setup Product Synchronization Maintain Serial Type Groups »

Maintain Location Security Roles

✓ Search: Location Security Roles Advanced Saved Search Display Location Security Roles

Location Security Role Global User

Location Security Role Description

Username

User Description

User Group

User Group Description

Search Reset Save...

✓ Search Results: Location Security Roles

Actions View Detach

Location Security Role	Location Security Role Description	Username	User Description	User Group	User Group Description	Actions
Global User	Global Administration	kharp	Kyle Harp			✎ ✖
Global User	Global Administration	bharp	Brian Harp			✎ ✖
Global User	Global Administration			Manufacturing	Manufacturing Group	✎ ✖

All of the location security roles that match the search criteria appear in the Search Results: Location Security Roles region in a table format.

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

To Search for Location Security Roles (Advanced Search):

1. Navigate to the Maintain Location Security Roles page, page A-2.
2. Click the Advanced button.

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

Maintain Location Security Roles page (Advanced Search)

The screenshot shows the Oracle Pedigree and Serialization Manager interface. The top navigation bar includes links for Dashboard, Serials, Packaging, Transactions, System Setup (selected), EPCIS Setup, and Audit Trail. The System Setup sub-menu is open, showing options like Maintain Users, Maintain User Groups, Maintain Location Security Roles (selected), Location Security Setup, Product Synchronization, and Maintain Serial Type Groups. The main content area is titled 'Maintain Location Security Roles' and features a search section with a 'Basic' tab and a 'Saved Search' dropdown. The search criteria section includes six fields: Location Security Role, Location Security Role Description, Username, User Description, User Group, and User Group Description, each with a 'Starts with' dropdown and a search icon. Below the search criteria is a 'Search Results' section with a table header: Location Security Role, Location Security Role Description, Username, User Description, User Group, User Group Description, and Actions. The table currently displays 'No data to display.'

3. In the Search: Location Security Roles region, enter the search criteria for the location security roles using one or more of these fields:

Field Name	Description
Location Security Role	(Optional) Select the field operator and then enter the location security role. 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 Security Role Description	(Optional) Select the field operator and then enter the description of the location security role. The field operators are the same as that for the Location Security Role field.

Field Name	Description
Username	(Optional) Select the field operator and then select the username associated to the location security role. The field operators are the same as that for the Location Security Role field.
User Description	(Optional) Select the field operator and then enter the user description associated to the location security role. The field operators are the same as that for the Location Security Role field.
User Group	(Optional) Select the field operator and then select the user group associated to the location security role. The field operators are the same as that for the Location Security Role field.
User Group Description	(Optional) Select the field operator and then enter the user group description associated to the location security role. The field operators are the same as that for the Location Security Role field.

Otherwise, you can click the Search button without entering any search criteria and all available location security roles 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 is removed from the search criteria.

5. (Optional) Enter search criteria for the additional fields.
6. Click the Search button.

Maintain Location Security Roles page (Advanced Search)

Oracle Pedigree and Serialization Manager Server Time Zone: UTC +00:00 About Sign Out

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

« Maintain Users Maintain User Groups **Maintain Location Security Roles** Location Security Setup Product Synchronization Maintain Serial Type Groups »

Maintain Location Security Roles

✓ Search: Location Security Roles Basic Saved Search Display Location Security Roles

Location Security Role Starts with global

Location Security Role Description Starts with

Username Equals

User Description Starts with

User Group Starts with m

User Group Description Starts with

Search Reset Save... Add Fields

✓ Search Results: Location Security Roles

Actions View Detach

Location Security Role	Location Security Role Description	Username	User Description	User Group	User Group Description	Actions
Global User	Global Administration			Manufacturing	Manufacturing Group	

All of the location security roles that match the search criteria appear in the Search Results: Location Security Roles region in a table format.

- 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 View Location Security Roles:

- Navigate to the Maintain Location Security Roles page, page A-2.
- Enter search criteria for the location security roles you want to view and click the Search button.

Maintain Location Security Roles page

ORACLE Pedigree and Serialization Manager Server Time Zone: UTC +00:00 About Sign Out opsm

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

« Maintain Users Maintain User Groups **Maintain Location Security Roles** Location Security Setup Product Synchronization Maintain Serial Type Groups »

☒ Search: Location Security Roles Advanced Saved Search Display Location Security Roles

Location Security Role: Global User

Location Security Role Description:

Username:

User Description:

User Group:

User Group Description:

Search Reset Save...

☒ Search Results: Location Security Roles

Actions View

Location Security Role	Location Security Role Description	Username	User Description	User Group	User Group Description	Actions
Global User	Global Administration	kharp	Kyle Harp			
Global User	Global Administration	bharp	Brian Harp			
Global User	Global Administration			Manufacturing	Manufacturing Group	

All of the location security roles that match the search criteria appear in the Search Results: Location Security Roles region in a table format.

- Click the Location Security Role link in the table for the location security role you want to view.

View Location Security Role page

ORACLE Pedigree and Serialization Manager

Server Time Zone: UTC +00:00 About Sign Out eprsm

Dashboard Serials Packaging Transactions System Setup EPCIS Setup Audit Trail

Maintain Users Maintain User Groups Maintain Location Security Roles Location Security Setup Product Synchronization Maintain Serial Type Groups

View Location Security Role

Location Security Role: Global User

Location Security Role Description: Global Administration User

☒ Associated Users and User Groups

Actions View Detail

Username	User Description	User Group	User Group Description
kharp	Kyle Harp		
bharp	Brian Harp		
		Manufacturing	Manufacturing Gro

The View Location Security page appears displaying the location security role and its associated users and user groups.

4. Click the Cancel button to return to the Maintain Location Security Roles page.

To Create Location Security Roles:

1. Navigate to the Maintain Location Security Roles page, page A-2.
2. Select Create from the Actions menu or click the Create Location Security Role icon located at the top of the Search Results: Location Security Roles region.

Create Location Security Role page

The Create Location Security Role page appears.

3. Enter the following:

Field Name	Description
Location Security Role	Enter the location security role.
Location Security Role Description	(Optional) Enter a description for the location security role.

Create Location Security Role page

ORACLE Pedigree and Serialization Manager

Server Time Zone: UTC +00:00 About Sign Out eprsm

Dashboard Serials Packaging Transactions System Setup EPCIS Setup Audit Trail

Maintain Users Maintain User Groups Maintain Location Security Roles Location Security Setup Product Synchronization Maintain Serial Type Groups

Create Location Security Role

Location Security Role Administrator

Location Security Role Description Administrator Role

Save and Create Another Save and Close Cancel

Associated Users and User Groups

Actions View + Detail

Username	User Description	User Group	User Group Description	Actions

4. Associate users and user groups to the location security role.

To Associate Users and User Groups to the Location Security Role

1. Select Add from the Actions menu or click the Add User or User Group Association icon located at the top of the Associated Users and User Groups region.

A new row appears in the Associated Users and User Groups table.

Create Location Security Role page

2. Enter the following information:

Field Name	Description
Username	Select the username you want to associate with the location security role. Note: You can only associate a username or user group for each row. If you select a Username, the User Group and User Group Description field becomes unavailable for entry. If you select a User Group, the Username and User Description fields becomes unavailable for entry.
User Description	The user description appears by default from the username you selected.

Field Name	Description
User Group	Select the user group you want to associate to the location security role. Note: You can only associate a username or user group for each row. If you select a Username, the User Group and User Group Description field becomes unavailable for entry. If you select a User Group, the Username and User Description fields becomes unavailable for entry.
User Group Description	The user group description appears by default from the user group you selected.

3. Repeat steps 1-2 until all of the users or user groups are added.

Create Location Security Role page

ORACLE Pedigree and Serialization Manager

Server Time Zone: UTC +00:00 About Sign Out epssm

Dashboard Serials Packaging Transactions System Setup EPCIS Setup Audit Trail

Maintain Users Maintain User Groups Maintain Location Security Roles Location Security Setup Product Synchronization Maintain Serial Type Groups

Create Location Security Role

* Location Security Role: Administrator

Location Security Role Description: Administrator Role

Save and Create Another Save and Close Cancel

Associated Users and User Groups

Actions View + Detach

Username	User Description	User Group	User Group Description	Actions
kharp	Kyle Harp			X
		Manufacturing	Manufacturing Group	X

To Delete Users or User Groups

1. Select the username or user group in the table that you want to delete.
2. Select Delete in the Actions menu or click the Delete User or User Group icon in the Actions column of the Associated Users and User Groups table.

The system displays a message asking if you are sure you want to delete this user or user group association to the location security role.

3. Click the Yes button.

The user or user group association to the location security role is deleted from the system. The location security role itself is not deleted.

5. Save your work. Choose one of these options:
 - Click the Save and Close button to save this location security role and return back to the Maintain Location Security Role page.
 - Click the Save and Create Another button to save this location security role and to stay on this page so you can create another location security role. The system displays a message that the location security role was saved successfully and it clears all of the values in the fields.

To Edit Location Security Roles:

1. Navigate to the Maintain Location Security Roles page, page A-2.
2. Enter search criteria for the location security roles you want to edit and click the Search button.

All of the location security roles that match the search criteria appear in the Search Results: Location Security Roles table.

3. Select the location security role in the table that you want to edit.
4. Select Edit from the Actions menu or click the Edit Location Security Role icon associated with the location security role in the Actions column of the results table.

Edit Location Security Role page

ORACLE Pedigree and Serialization Manager

Server Time Zone: UTC +00:00 About Sign Out opsm

Dashboard Serials Packaging Transactions System Setup EPCIS Setup Audit Trail

Maintain Users Maintain User Groups Maintain Location Security Roles Location Security Setup Product Synchronization Maintain Serial Type Groups

Edit Location Security Role

Location Security Role Administrator

Location Security Role Description Administrator Role

Save and Close Cancel

Associated Users and User Groups

Actions View + Details

Username	User Description	User Group	User Group Description	Actions
kharp	Kyle Harp			
		Manufacturing	Manufacturing Gro	

The Edit Location Security Role page appears.

5. Edit any of the location security role fields. You can edit the location security role description and add and delete the users or user groups associated to the location security role.

Edit Location Security Role page

Oracle Pedigree and Serialization Manager

Server Time Zone: UTC +00:00 About Sign Out opsm

Dashboard Serials Packaging Transactions System Setup EPCS Setup Audit Trail

Maintain Users Maintain User Groups Maintain Location Security Roles Location Security Setup Product Synchronization Maintain Serial Type Groups

Edit Location Security Role

Location Security Role Administrator

Location Security Role Description Administrator Role - Northern region

Save and Close Cancel

Associated Users and User Groups

Actions View + Detail

Username	User Description	User Group	User Group Description	Actions
bharp	Brian Harp			X
kharp	Kyle Harp			X
		Manufacturing	Manufacturing Gro	X

In this page shot the location security role description was modified and another user (Brian Harp) was added to the Administrator location security role.

6. Click the Save and Close button to save the changes you made to the location security role information and to return back to the Maintain Location Security Roles page.

To Delete Location Security Roles:

1. Navigate to the Maintain Location Security Roles page, page A-2.
2. Enter search criteria for the location security roles you want to delete and click the Search button.

All of the location security roles that match the search criteria appear in the Search Results: Location Security Roles table.

3. Select the location security role in the table that you want to delete.
4. Select Delete in the Actions menu or click the Delete Location Security Role icon associated with the location security role in the Actions column of the results table.

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

this location security role.

5. Click the Yes button.

The location security role is deleted from the system and any user or user groups associations are also deleted.

Maintaining Location Security

Using the Location Security Setup page you can maintain location security definitions.

Use these procedures to search (basic and advanced), add, edit, and delete location security definitions.

Prerequisites

- ☐ The following have been created:

- Users

For information on creating users, see *Maintaining Users*, page 4-173.

- User groups

For information on creating user groups, see *Maintaining User Groups*, page 4-182.

- Location security roles

For information on creating location security roles, see *Maintaining Location Security Roles*, page 4-198.

- Locations

For information on creating locations, see *Maintaining Locations*, page 4-47.

- Location groups

For information on creating location groups, see *Maintaining Location Groups*, page 4-73.

To Search for Location Security Definitions (Basic Search):

1. Navigate to the Location Security Setup page, page A-2.

Location Security Setup page (Basic Search)

The screenshot shows the Oracle Pedigree and Serialization Manager interface. The top navigation bar includes links for Dashboard, Serials, Packaging, Transactions, System Setup, EPCIS Setup, and Audit Trail. The left sidebar lists various tasks, with 'Location Security Setup' highlighted. The main content area is titled 'Location Security Setup' and contains a search section. The search criteria section has four input fields: 'Security Access Level' (a dropdown menu), 'Security Access Level value' (a text field), 'Access Assignment' (a dropdown menu), and 'Access Assignment value' (a text field). There are also buttons for 'Advanced', 'Saved Search', 'Display Location Security', 'Search', 'Reset', and 'Save...'. Below the search criteria is a section for 'Search Results: Location Security' which includes a table with the following columns: 'Security Access Level', 'Security Access Level value', 'Level Value Description', 'Access Assignment', and 'Access Assignment value'. The table is currently empty, and the text 'No data to display.' is shown below it.

The Location Security Setup page appears.

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

Field Name	Description
Security Access Level	(Optional) Select the location security access level. Levels are: • Location Security Role • OPSM User • Location Security User Group

Field Name	Description
Access Assignment	(Optional) Select the access assignment. Values are: • Location • Location Groups
Security Access Level Value	(Optional) Enter the value for the security access level.
Access Assignment Value	(Optional) Enter the value for access assignment.
Level Value Description	(Optional) Enter the level value description.
Assignment Value Description	(Optional) Enter the assignment value description.

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

3. Click the Search button.

Location Security Setup page (Basic Search)

Oracle Pedigree and Serialization Manager Server Time Zone: UTC +00:00 About Sign Out opsm

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

Maintain User Groups Maintain Location Security Roles **Location Security Setup** Product Synchronization Maintain Serial Type Groups

Search: Location Security Advanced Saved Search Display Location Security

Security Access Level Location Security Role Security Access Level Value Global User Level Value Description
Access Assignment Access Assignment Value Assignment Value Description

Search Reset Save...

Search Results: Location Security Save Revert

Actions View + Add Detach

* Security Access Level	* Security Access Level Value	Level Value Description	* Access Assignment	* Access Assignment Value	Assignment Value Description	Read	Update	Delete	Actions
Location Security	Global User	Global Administration User	Location	Girov Site	Girov Site Location	☒	☒	☐	☒
Location Security	Global User	Global Administration User	Location Group	A0001	A0001 Location Group	☒	☒	☐	☒

All of the location security definitions that match the search criteria appear in the Search Results: Location Security region in a table format.

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

To Search for Location Security Definitions (Advanced Search):

1. Navigate to the Location Security Setup page, page A-2.
2. Click the Advanced button.

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

Location Security Setup (Advanced Search)

ORACLE Pedigree and Serialization Manager

Server Time Zone: UTC +00:00AboutSign OutJ011-DLS

DashboardSerialsPackagingTransactionsSystem SetupEPCIS SetupAudit Trail

«Maintain User GroupsMaintain Location Security RolesLocation Security SetupProduct SynchronizationMaintain Serial Type Groups»

Location Security Setup

Search: Location Security

BasicSaved SearchDisplay Location Security

Security Access LevelEqualsSecurity Access Level ValueStarts withLe

Access AssignmentEqualsAccess Assignment ValueStarts withAssign

SearchResetSave...Add Fields

Search Results: Location Security

SaveRevert

ActionsViewAddNewDetach

Security Access Level	* Security Access Level Value	Level Value Description	Access Assignment	* Access Assignment Value	Assignment Value Description	Read	Update	Delete	Actions
No data to display.									

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

Field Name	Description
Security Access Level	(Optional) Select the field operator and then select the location security access level. Levels are: • Location Security Role • OPSM User • Location Security User 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

Field Name	Description
Access Assignment	(Optional) Select the field operator and then select the access assignment. Values are: • Location • Location Groups The field operators are the same as that for the Security Access Level field.
Security Access Level Value	(Optional) Select the field operator and then enter the value for the security access level. The field operators are the same as that for the Security Access Level field.
Access Assignment Value	(Optional) Select the field operator and then enter the value for access assignment. The field operators are the same as that for the Security Access Level field.
Level Value Description	(Optional) Select the field operator and then enter the level value description. The field operators are the same as that for the Security Access Level field.
Assignment Value Description	(Optional) Select the field operator and then enter the assignment value description. The field operators are the same as that for the Security Access Level field.

Otherwise, you can click the Search button without entering any search criteria and all available location security definitions 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 is removed from the search criteria.

5. (Optional) Enter search criteria for the additional fields.
6. Click the Search button.

Location Security Setup page (Advanced Search)

Search: Location Security

Security Access Level: Equals Data Security Role: Security Access Level Value: Starts with: G Le
Access Assignment: Equals Access Assignment Value: Starts with: Assignm

Search Reset Save... Add Fields

Search Results: Location Security

Security Access Level	* Security Access Level Value	Level Value Description	Access Assignment	* Access Assignment Value	Assignment Value Description	Read	Update	Delete	Actions
Data Security	Global User	Global Administrabi	Location	Girey	Girey California	☒	☐	☐	☒
Data Security	Global User	Global Administrabi	Location	Morgan Hill	Morgan Hill Locabo	☒	☒	☐	☒
Data Security	Global User	Global Administrabi	Location Group	CA Location Gro	CA Location Group	☒	☒	☒	☒

All of the location security definitions that match the search criteria appear in the Search Results: Location Security region in a table format.

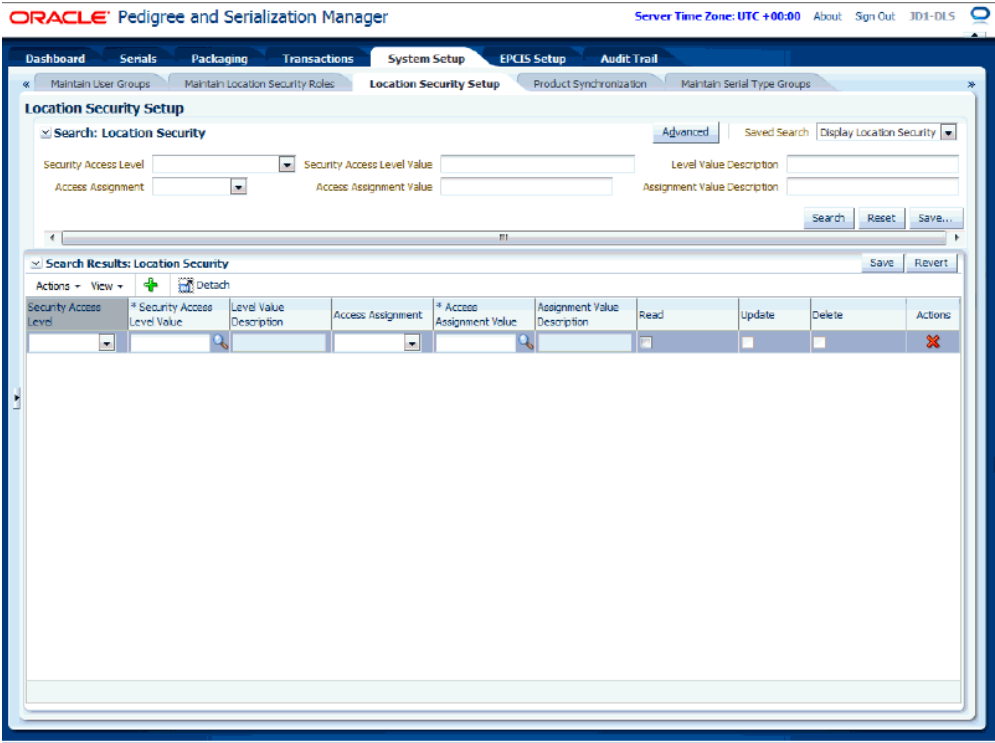
7. Click the Basic button to have the page hide the advanced search criteria fields and re-display the basic search criteria fields.

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

To Add Location Security Definitions:

1. Navigate to the Location Security Setup page, page A-2.
2. Select Add from the Actions menu or click the Add Location Security icon located at the top of the Search Results: Location Security table.

Location Security Setup page



A new row appears in the Search Results: Location Security table.

3. Enter the following:

Field Name	Description
Security Access Level	Select a security access level. Values are: - Location Security Role - OPSM User - Location Security User Group

Field Name	Description
Security Access Level Value	Select the security access level value. The values available for selection depend on the Security Access Level that was selected. If you select a security access level of <i>Location Security Role</i> you can select a location security role in this field. If you select a security access level of <i>OPSM User</i> you can select a username in this field. If you select a security access level of <i>Location Security User Group</i> you can select a user group in this field.
Level Value Description	The Level Value Description field appears by default from the Security Access Level Value that was selected.
Access Assignment	Select the access assignment. Values are: • Location • Location Group
Access Assignment Value	Select the access assignment value. The values available for selection depend on the Access Assignment that was selected. If you select a access assignment of <i>Location</i> you can select a location in this field. If you select a access assignment of <i>Location Group</i> you can select a location group in this field.
Assignment Value Description	The Assignment Value Description field appears by default from the Access Assignment value that was selected.

Field Name	Description
Read check box	Select the Read check box if you want the read privilege for this security access level and access assignment. Note: You must enter at a minimum the read privilege for each security access level and access assignment.
Update check box	Select the Update check box if you want the update privilege for this security access level and access assignment.
Delete check box	Select the Delete check box if you want the delete privilege for this security access level and access assignment.

4. Repeat steps 2-3 until all of the location security definitions are added.

Location Security Setup page

ORACLE Pedigree and Serialization Manager Server Time Zone: UTC +00:00 About Sign Out JD1-DLS

Dashboard Serials Packaging Transactions **System Setup** EPCS Setup Audit Trail

« Maintain User Groups Maintain Location Security Roles **Location Security Setup** Product Synchronization Maintain Serial Type Groups »

Location Security Setup

Search: Location Security Advanced Saved Search Display Location Security

Security Access Level Security Access Level Value Level Value Description
Access Assignment Access Assignment Value Assignment Value Description

Search Results: Location Security Save Revert

Actions View

Security Access Level	* Security Access Level Value	Level Value Description	Access Assignment	* Access Assignment Value	Assignment Value Description	Read	Update	Delete	Actions
Data Security	Global User	Global Administrator	Location Group	CA Location Group	CA Location Group	☒	☒	☒	☒
Data Security	Global User	Global Administrator	Location	Morgan Hill	Morgan Hill Location	☒	☒	☒	☒
Data Security	Global User	Global Administrator	Location	Gilroy	Gilroy California	☒	☒	☒	☒

- Click the Save button.

To Edit Location Security Definitions:

- Navigate to the Location Security Setup page, page A-2.
- Enter search criteria for the location security definitions that you want to edit and click the Search button.

All of the location security definitions that matches the search criteria appears in the Search Results: Location Security table.

- Modify any of the existing details associated with the location security definitions.
- Click the Save button.

To Delete Location Security Definitions:

- Navigate to the Location Security Setup page, page A-2.
- Enter search criteria for the location security definitions that you want to delete and click the Search button.

All of the location security definitions that match the search criteria appear in the Search Results: Location Security table.

3. Select the location security definition in the table that you want to delete.
4. Select Delete in the Actions menu or click the Delete icon associated with the location security definition in the Actions column of the results table.

The system displays a message stating are you sure you want to delete this location security definition?

5. Click the Yes button.

The location security definition is deleted from the system.

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 4-245.

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, GTIN, or Custom 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 a PUID equal Product, Product Packaging Unit or a Custom (user-defined) code when the serial is not GTIN based. Choose based on business need to serialize uniquely by Product, Product Packaging Unit, or a Custom (user-defined) code.

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	0037045610NDC 442	00003702091000 000001
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 Number

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

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

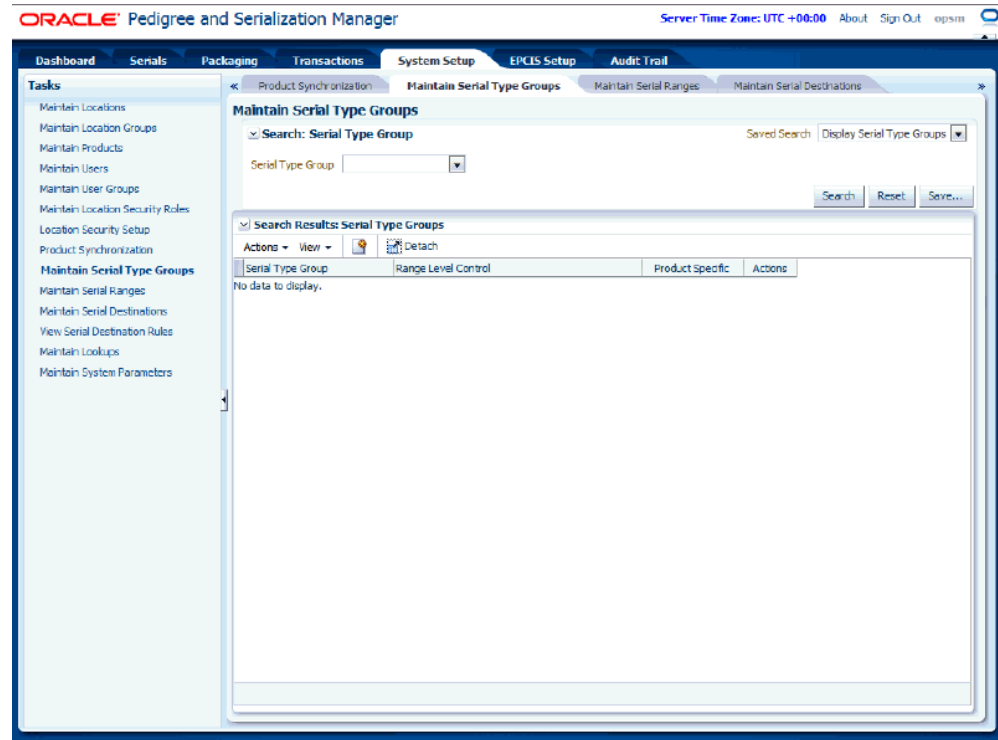
- ☐ Serial Types (PAS_SERIAL_TYPE) and Serial Type Groups (PAS_SERIAL_TYPE_GROUP) have been previously created using the Maintain Lookups page.

For more information, see *Maintaining Lookups*, page 4-5.

To Search for Serial Type Groups:

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

Maintain Serial Type Groups page

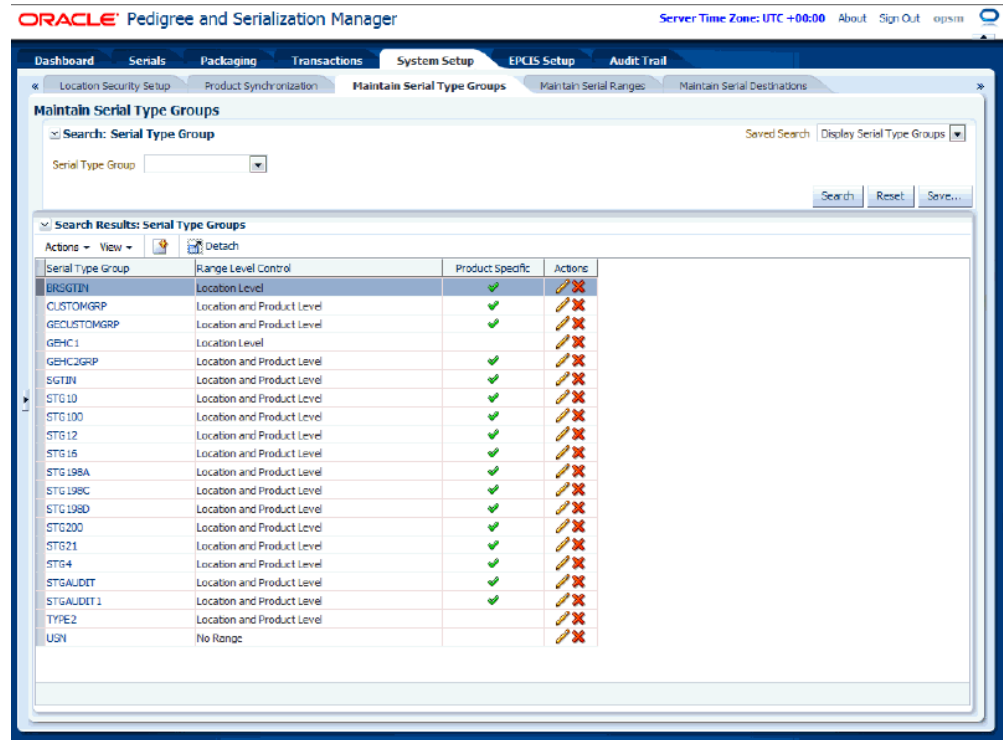


-
2. (Optional) In the Search: Serial Type Group region, select the Serial Type Group you want to search for using the Serial Type Group field.

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

Field Name	Description
Actions	Displays the Edit Serial Type Group and Delete Serial Type Group icons.

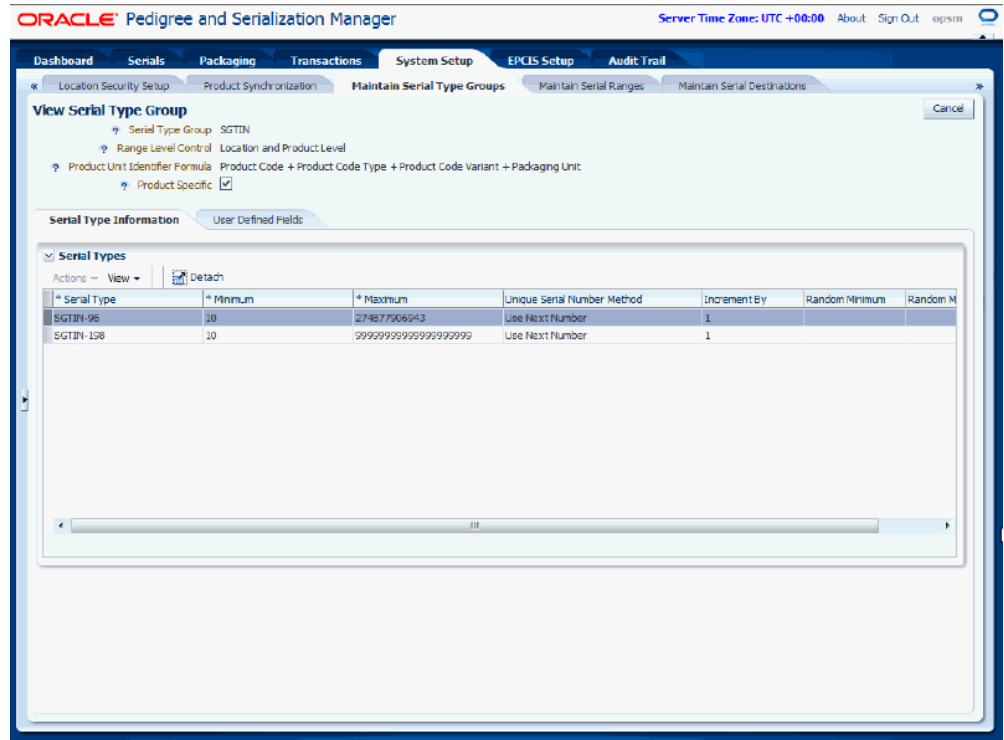
To View Serial Type Group Information:

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



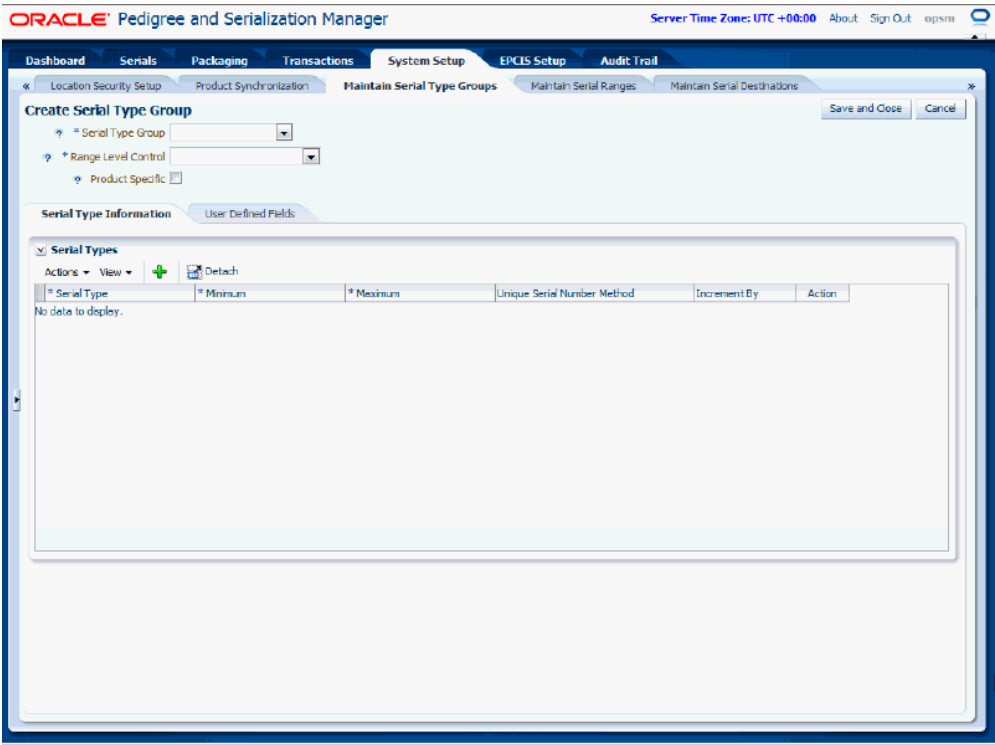
The View Serial Type Group page appears.

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 <i>Location and Product Level</i> 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 <i>Location and Product Level</i> 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, GTIN, or Custom level. Select the Product Unit Identifier Formula for the serial type group. Formulas are: • Custom (user-defined formula enabling you to populate the PUID field with any code that you want) • 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 <i>Location Level</i> range level control is specified, each unique product grouping identified by the PUID will be allocated a separate set of unique numbers. • <i>Location and Product Level</i> range level control can be selected. Product Specific check box is clear: • The product is not required for the creation of serials. • When <i>Location Level</i> range level control is specified, all products share the same set of unique numbers. The Product Specific check box must 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 <i>Location and Product Level</i> the Product Unit Identifier Formula field is required and the Product Specific check box must be selected. The Product Unit Identifier Formula field becomes available after the Product Specific check box is selected or after the range level control of <i>Location and Product Level</i> is selected.

Create Serial Type Group page

ORACLE Pedigree and Serialization Manager

Server Time Zone: UTC +00:00 About Sign Out

Dashboard Serials Packaging Transactions System Setup EPCIS Setup Audit Trail

Location Security Setup Product Synchronization Maintain Serial Type Groups Maintain Serial Ranges Maintain Serial Destinations

Create Serial Type Group

* Serial Type Group: STG200

* Range Level Control: Location and Product Level

* Product Unit Identifier Formula: GTIN

* Product Specific: ☒

Serial Type Information User Defined Fields

Serial Types

Actions View + Detach

* Serial Type	* Minimum	* Maximum	Unique Serial Number Method	Increment By	Action
No data to display.					

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.

Create Serial Type Group page

ORACLE Pedigree and Serialization Manager

Server Time Zone: UTC +00:00 About Sign Out opsm

Dashboard Serials Packaging Transactions System Setup EPCIS Setup Audit Trail

Location Security Setup Product Synchronization Maintain Serial Type Groups Maintain Serial Ranges Maintain Serial Destinations

Create Serial Type Group

* Serial Type Group STG200

* Range Level Control Location and Product Level

* Product Unit Identifier Formula GTIN

* Product Specific ☒

Serial Type Information User Defined Fields

Serial Types

Actions View + Detach

* Serial Type	* Minimum	* Maximum	Unique Serial Number Method	Increment By	Action
	1		Use Next Number	1	

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.

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

Create Serial Type Group page - Serial Type Information sub tab

ORACLE Pedigree and Serialization Manager Server Time Zone: UTC +00:00 About Sign Out opsm

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

Location Security Setup Product Synchronization **Maintain Serial Type Groups** Maintain Serial Ranges Maintain Serial Destinations

Create Serial Type Group Save and Close Cancel

* Serial Type Group: STG200

* Range Level Control: Location and Product Level

* Product Unit Identifier Formula: GTIN

* Product Specific: ☒

Serial Type Information User Defined Fields

Serial Types

Actions View + Detach

* Serial Type	* Minimum	* Maximum	Unique Serial Number Method	Increment By	Action
ST200A	1	999999999	Use Next Number	1	

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

The screenshot shows the Oracle Pedigree and Serialization Manager interface. The top navigation bar includes 'Dashboard', 'Serials', 'Packaging', 'Transactions', 'System Setup', 'EPICIS Setup', and 'Audit Trail'. The 'System Setup' tab is active, and the 'Maintain Serial Type Groups' sub-tab is selected. The 'Create Serial Type Group' form is displayed with the following fields:

- * Serial Type Group: STG200
- * Range Level Control: Location and Product Level
- * Product Unit Identifier Formula: GTIN
- * Product Specific: ☒

Below these fields are two tabs: 'Serial Type Information' and 'User Defined Fields'. The 'User Defined Fields' tab is active, showing three sections:

- Character**: User Field 1 (STG200), User Field 2, User Field 3, User Field 4, User Field 5.
- Numeric**: User Number 1, User Number 2, User Number 3, User Number 4, User Number 5.
- Date / Time**: User Date 1, User Date 2, User Date 3, User Date 4, User Date 5.

At the top right of the form, there are 'Save and Close' and 'Cancel' buttons.

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

Oracle Pedigree and Serialization Manager

Server Time Zone: UTC +00:00 About Sign Out opsm

Dashboard Serials Packaging Transactions System Setup EPCIS Setup Audit Trail

Location Security Setup Product Synchronization Maintain Serial Type Groups Maintain Serial Ranges Maintain Serial Destinations

Edit Serial Type Group

Serial Type Group: STG200

Range Level Control: Location and Product Level

Product Unit Identifier Formula: GTJN

Product Specific: ☒

Serial Type Information User Defined Fields

Serial Types

Minimum	Maximum	Unique Serial Number Method	Increment By	Random Minimum	Random Maximum	Action
1	999999999	Use Next Number	1			

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 issues 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 4-244.

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 prevents 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.

If you are using location security, the Maintain Serial Ranges page is secured based on the locations, location groups, and associated privileges that you are authorized to use based on the location security setup. It also looks at the location or location group associated to the product detail (if there is one) on the serial range.

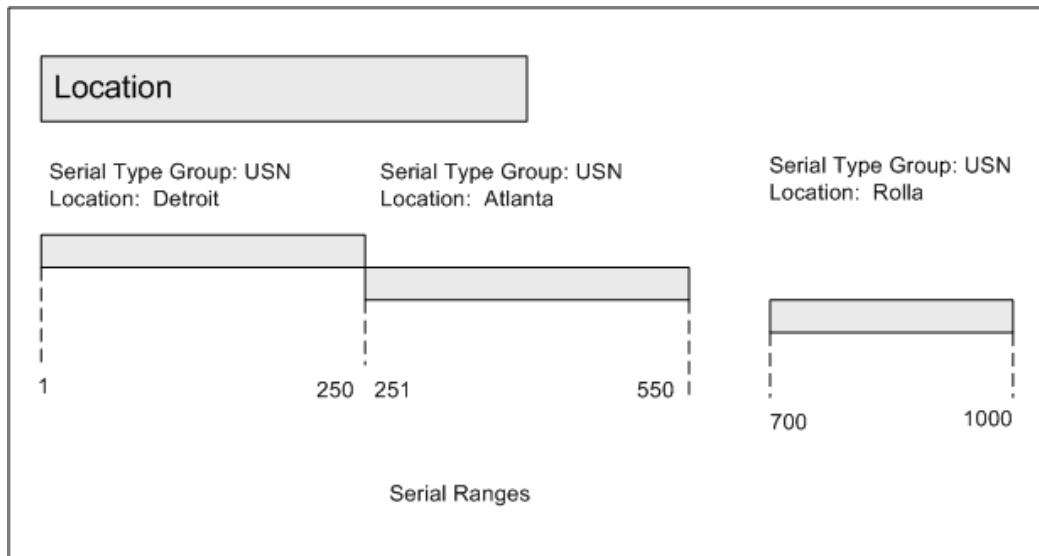
You do need to define a serial type group for the OPSM system to be able to generate serial numbers. The serial type group provides the parameters for how the serial ranges should be defined.

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 bypasses 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 establishes the available range of serials.

3. If a serial range that matches the serial type group and location is not found, the system issues 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.

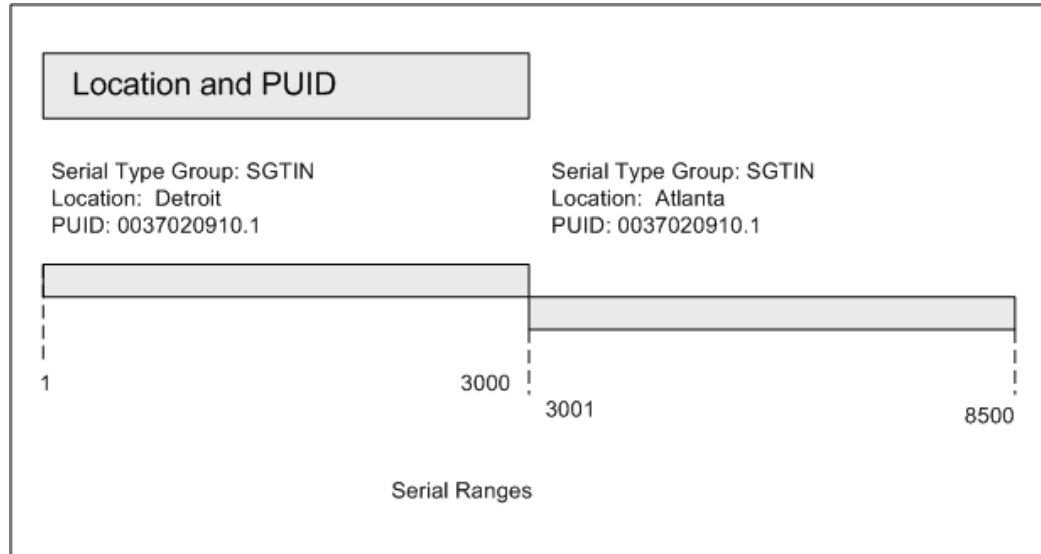
Defining Serial Ranges by Location and Product Unit Identifier

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 fails.

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 bypasses 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 issues 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 establishes the available range of serials.
4. If a serial range that matches the Serial Type Group, Location, and PUID is not found, the system issues 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.

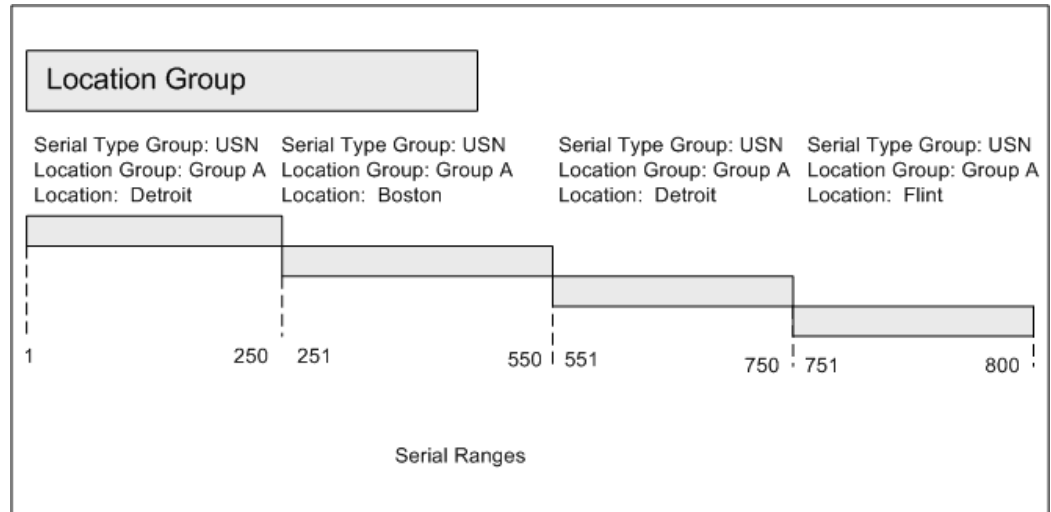
Defining Serial Ranges by Location Group

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 bypasses 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 establishes the available range of serials.
3. If a serial range that matches the serial type group and location group is not found, the system issues 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.

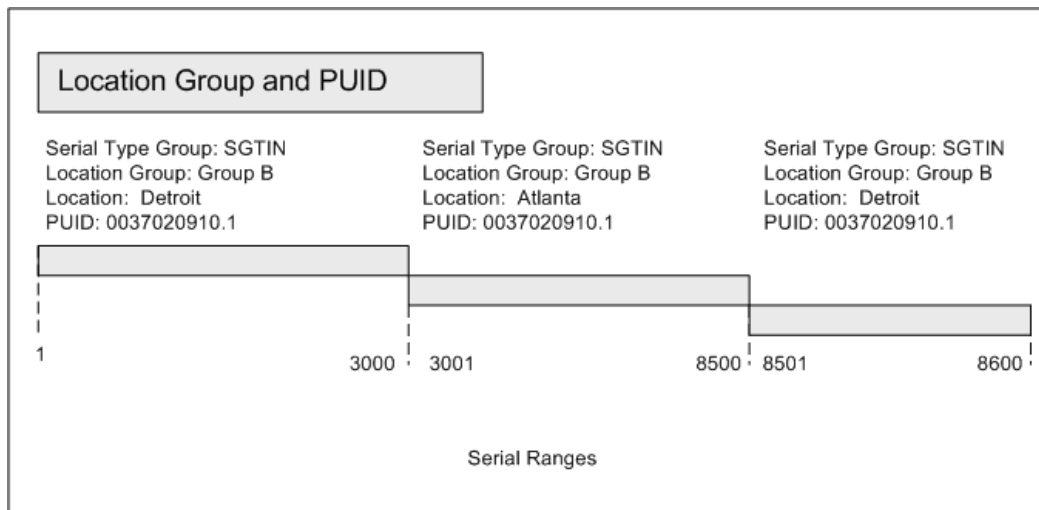
Defining Serial Ranges by Location Group and Product Unit Identifier

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 fails.

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 bypasses 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 issues 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 establishes 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 issues 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:

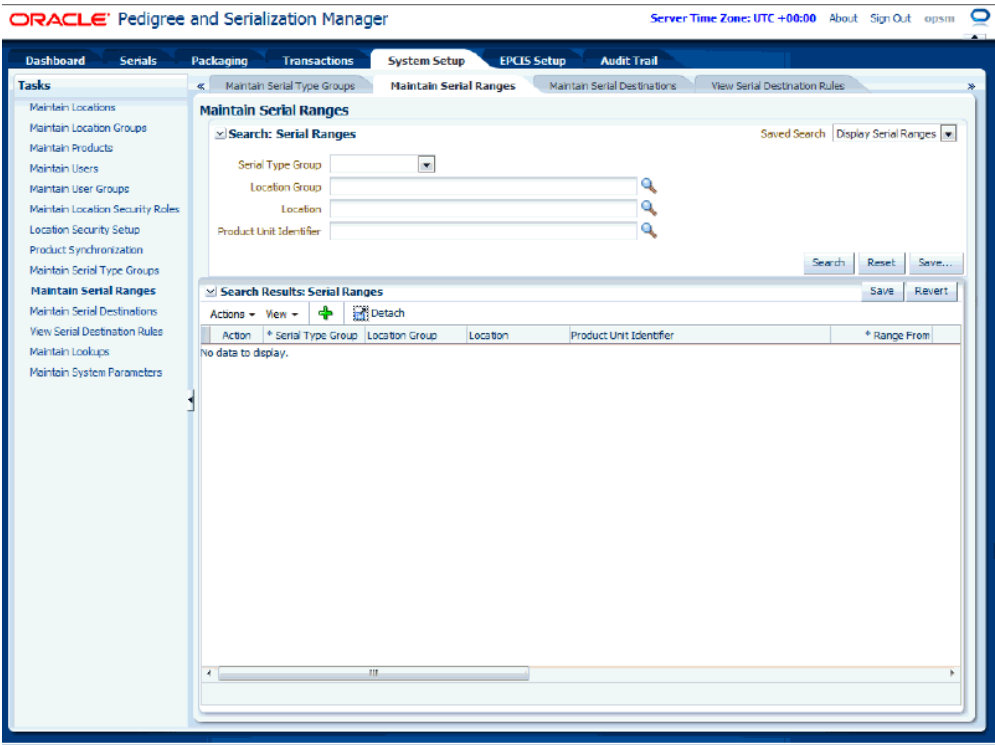
Prerequisites

- ☐ 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 4-226.
- ☐ At least one serial type has been defined for the serial type group.
- ☐ Working knowledge of Serial Type Groups and Product Unit Identifiers (PUIs) before setting up serial ranges. For more information, see *Maintaining Serial Type Groups and Serial Types*, page 4-226
- ☐ Locations or Location Groups have been previously created using the Location or Location Group pages. For more information, see *Maintaining Locations*, page 4-47 or *Maintaining Location Groups*, page 4-73.
- ☐ Location security information must be set up if you are using location security.
For more information on location security, see *Location Security Overview*, page 1-9.

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:

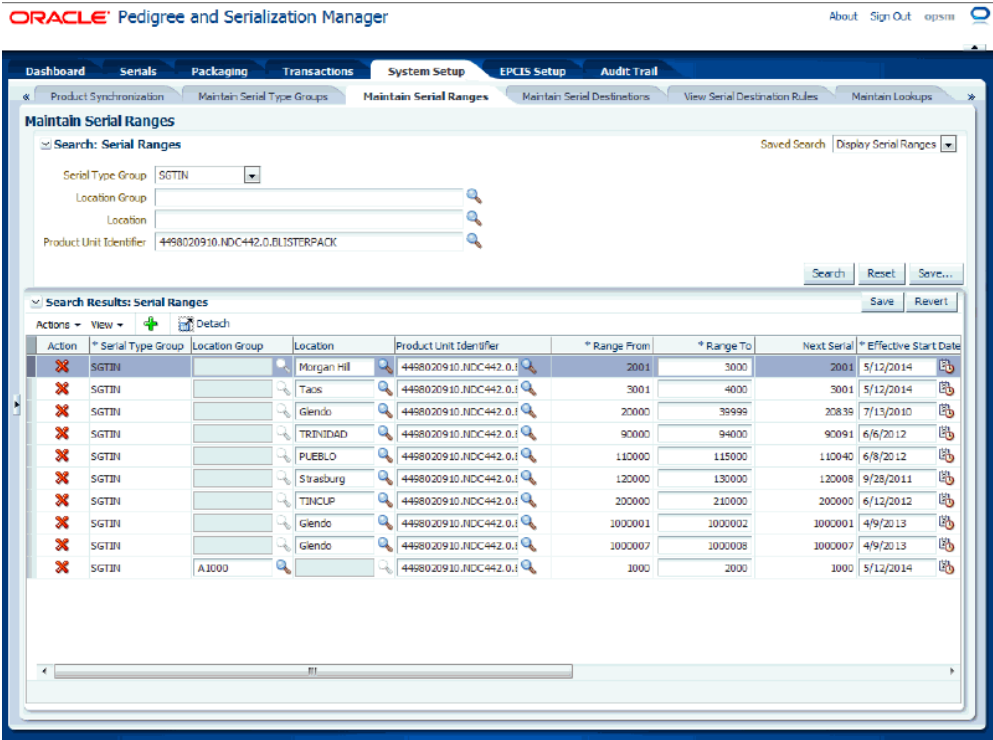
Field Name	Description
Serial Type Group	(Optional) Select the serial type group for the serial range.
Location Group	(Optional) Select the location group for the serial range. If you are using location security, the location groups you can search for are restricted to those that you have at a minimum <i>read access</i> to in the Location Security Setup page.

Field Name	Description
Location	(Optional) Select the location for the serial range. If you are using location security, the locations you can search for are restricted to those that you have at a minimum <i>read access</i> to in the Location Security Setup page.
Product Unit Identifier	(Optional) Select the product unit identifier for the serial range. If you are using location security, you'll only see a list of PUIDs for product details you have at a minimum <i>read access</i> to in the Location Security Setup page.

Otherwise, you can click the Search button without entering any search criteria and all available serial ranges 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.

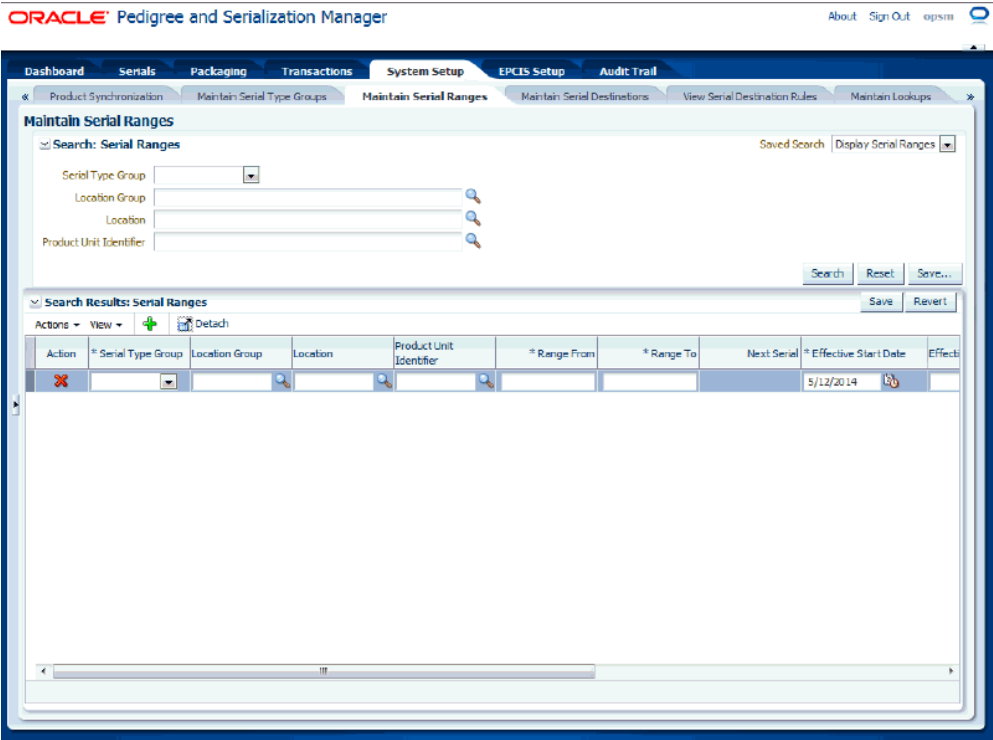
Field Name	Description
Location Group	Displays the location group for the serial range. Note: Serial ranges are either associated with a location or a location group but not both at the same time. If a location group displays for a serial range then the location field is not available and vice versa.
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.

Field Name	Description
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. If you are using location security, the location groups you can add are restricted to those that you have <i>update access</i> to in the Location Security Setup page.
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. If you are using location security, the locations you can add are restricted to those that you have <i>update access</i> to in the Location Security Setup page.
Product Unit Identifier	Select the Product Unit Identifier for this serial range. For example, Electronic Product Code (EPC) Number. If you are using location security, you'll only see a list of PUIDs for product details you have <i>update access</i> to in the Location Security Setup page.

Field Name	Description
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 <i>Location Level</i>, 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 <i>Location and Product Level</i>, 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.
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.

Field Name	Description
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.

- Repeat steps 2-3 until all serial ranges have been added.
- Click the Save button to save the serial ranges.

Maintain Serial Ranges page - Add Action

ORACLE Pedigree and Serialization Manager

About Sign Out opsm

Dashboard Serials Packaging Transactions System Setup EPCIS Setup Audit Trail

Product Synchronization Maintain Serial Type Groups Maintain Serial Ranges Maintain Serial Destinations View Serial Destination Rules Maintain Lookups

Maintain Serial Ranges

Search: Serial Ranges Saved Search Display Serial Ranges

Serial Type Group Location Group Location Product Unit Identifier

Search Reset Save...

Search Results: Serial Ranges Save Revert

Action	* Serial Type Group	Location Group	Location	Product Unit Identifier	* Range From	* Range To	Next Serial	* Effective Start Date	Effective End Date
✖	SGTIN		Taco	4498020910.JNC	3001	4000		5/12/2014	5/12/2014
✖	SGTIN		Morgan Hill	4498020910.JNC	2001	3000	2000	5/12/2014	5/12/2014
✖	SGTIN	A1000		4498020910.JNC	1000	2000	1000	5/12/2014	5/12/2014

- Click the Revert button to have the system reverse all of the changes you have made.

The system re-displays 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.

If you are using location security, the location groups, locations, and product unit identifiers you can edit are restricted to those that you *update access* to in the Location Security Setup page.

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.

If you are using location security, the location groups, locations, or product unit identifiers you can delete are restricted to those that you have *delete access* to in the Location Security Setup page.

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.

If you are using location security, you can only delete records where you have delete access for the location, location group on the serial range and delete access for the location associated to the PUID (product detail).

The system displays a message asking if you are sure you 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 for serial destinations.

You can define serial destination rules for each serial destination. You can create destination rules for a transaction type, location, and product code. The system then uses these rules 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 checks to see if there are any destination rules set up for the transaction. If it finds a destination rule, the system transmits the transacted serials to the destination specified. The system creates 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.

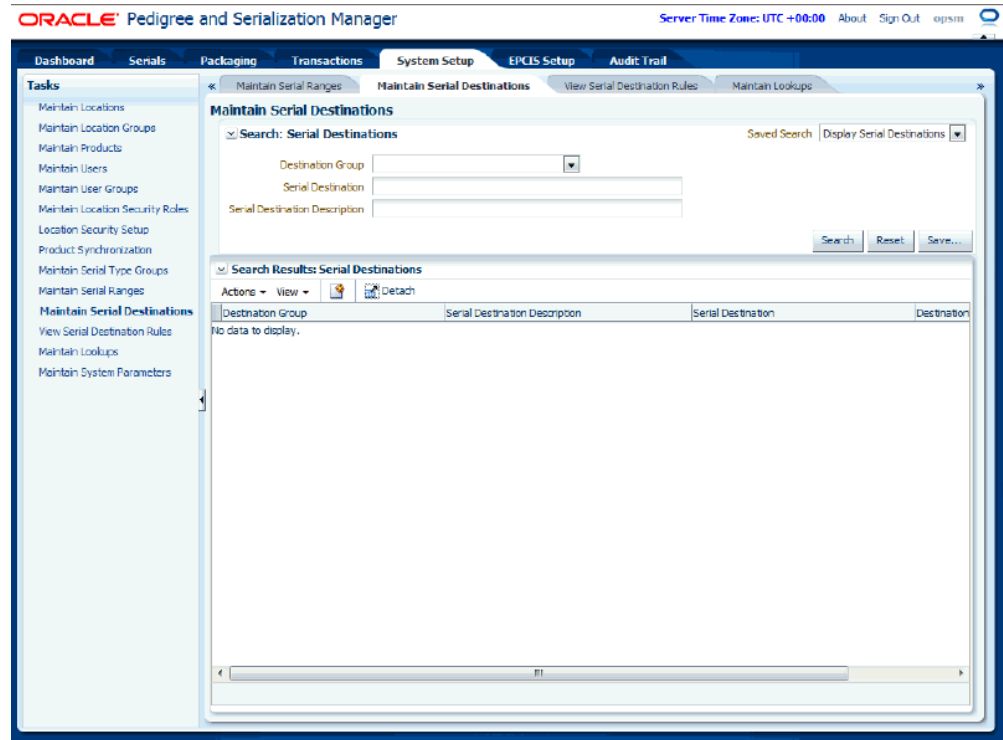
The moment the system finds a match at any of the above 4 levels going from most specific to least specific, it stops looking any further.

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

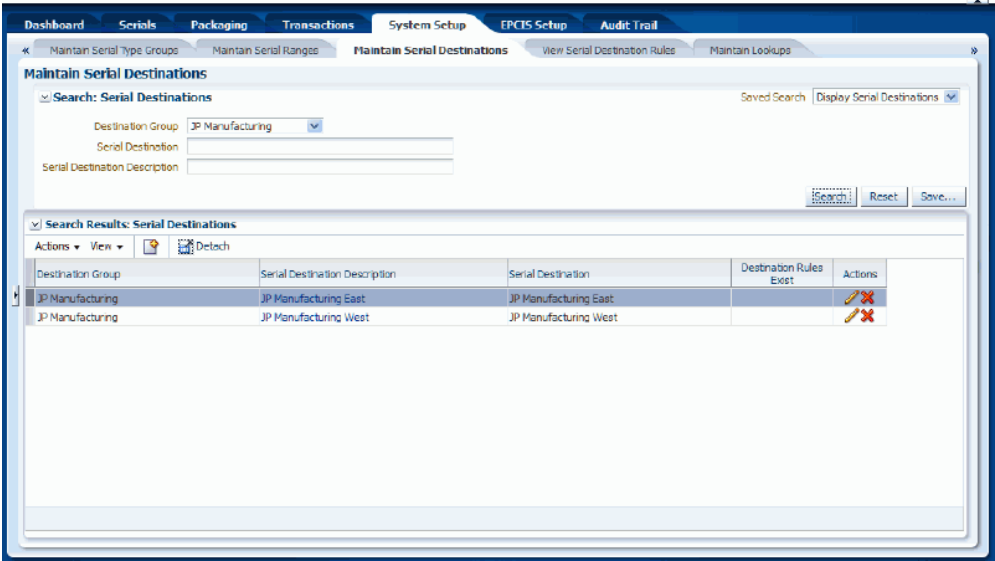


2. In the Search: Serial Destinations region, enter the search criteria for the serial destinations using one or all of these fields:

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 appear.

3. Click the Search button.



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 displays 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 4-271 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

ORACLE Pedigree and Serialization Manager

About Sign Out opsm

The screenshot shows the 'View Serial Destination' page. At the top, there are tabs for 'Serial Destination Details' and 'User Defined Fields'. The 'Serial Destination Details' tab is active, displaying the following information:

- Serial Destination: JP Manufacturing East
- Serial Destination Description: JP Manufacturing East
- Destination Group: JP Manufacturing
- Communication Method: Web Service
- Schema: 1
- Schema Version:
- Contact Name: John Smith
- Contact Phone: 408-767-0000
- Contact E-mail: jsmith@janfig.com

Below this information is a 'Destination Rules' section. It contains a table with the following data:

#	Transaction Type	Location	Product Code	* Effective Start Date	Effective End Date	User Field 1	User Field 2	User Field 3
1	Import Serials	Denver	0037-0224-10	2/11/2013	2/11/2014			
2	Return	Denver	0037-0224-10	2/11/2013	2/11/2014			
3	Shipment	Denver	0037-0224-10	2/11/2013	2/11/2014			

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

ORACLE[®] Pedigree and Serialization Manager

About Sign Out opsm

The Create Serial Destination page appears displaying Serial Destination Details and User Defined Fields tabs.

3. Enter the following information in the Serial Destination Details tab:

Field Name	Description
Serial Destination	Enter a destination. This must 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.
Communication Method	Select the method of communication for this destination. Communication Methods are: File Exchange and Web Service.

Field Name	Description
Schema	(Optional) Enter the schema for the destination. Schemas are the format of the xml that OPSM is sending. The consuming Web Service needs 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

ORACLE[®] Pedigree and Serialization Manager

About Sign Out epsm

The screenshot displays the 'Create Serial Destination' page within the Oracle Pedigree and Serialization Manager. The page is divided into several tabs: 'Dashboard', 'Serials', 'Packaging', 'Transactions', 'System Setup', 'EPCIS Setup', and 'Audit Trail'. The 'System Setup' tab is active, and the 'Maintain Serial Destinations' sub-tab is selected. The 'Serial Destination Details' sub-tab is also active, showing a form with the following fields:

- * Serial Destination: JP Manufacturing East
- * Serial Destination Description: JP Manufacturing East
- * Destination Group: JP Manufacturing (dropdown menu)
- * Communication Method: Web Service (dropdown menu)
- Schema: 1
- Schema Version: (empty field)
- Contact Name: John Smith
- Contact Phone: 408-787-0000
- Contact E-mail: jsmith@jpmfg.com

Buttons for 'Save and Create Another', 'Save and Close', and 'Cancel' are visible at the top right of the form area.

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

The screenshot shows the Oracle Pedigree and Serialization Manager interface. The top navigation bar includes links for Dashboard, Serials, Packaging, Transactions, System Setup, EPCIS Setup, and Audit Trail. The 'System Setup' tab is active, and the 'Maintain Serial Destinations' sub-tab is selected. The 'Create Serial Destination' page is displayed, with the 'User Defined Fields' sub-tab active. The page contains three sections for defining user fields: Character, Numeric, and Date / Time. Each section has five input fields labeled 'User Field 1' through 'User Field 5' (or 'User Number' and 'User Date' for the respective sections). The 'Character' section has a dropdown menu set to 'Character'. The 'Numeric' section has a dropdown menu set to 'Numeric'. The 'Date / Time' section has a dropdown menu set to 'Date / Time'. At the top right of the page, there are buttons for 'Save and Create Another', 'Save and Close', and 'Cancel'.

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 screenshot shows the 'Edit Serial Destination' page in the Oracle Pedigree and Serialization Manager. The page has a top navigation bar with tabs: Dashboard, Serials, Packaging, Transactions, System Setup, EPCIS Setup, and Audit Trail. Below this is a sub-navigation bar with tabs: Maintain Serial Type Groups, Maintain Serial Ranges, Maintain Serial Destinations (selected), View Serial Destination Rules, and Maintain Lookups. The main content area is titled 'Edit Serial Destination' and has buttons for Save, Save and Close, and Cancel. It is divided into two sections: 'Serial Destination Details' and 'Destination Rules'.

Serial Destination Details:

- Serial Destination: JP Manufacturing East
- Serial Destination Description: JP Manufacturing East
- Destination Group: JP Manufacturing
- Communication Method: Web Service
- Schema: 1
- Schema Version:
- Contact Name: John Smith
- Contact Phone: 408-787-0000
- Contact E-mail: jsmith@jpmfg.com

Destination Rules:

Action	Transaction Type	Location	Product Code	* Effective Start Date	Effective End Date	User Field 1	User Field 2
✖ Import Serials	✓	Denver	0037-0224-10	2/11/2013	2/11/2014		
✖ Return	✓	Denver	0037-0224-10	2/11/2013	2/11/2014		
✖ Shipment	✓	Denver	0037-0224-10	2/11/2013	2/11/2014		

At the bottom of the table, it says 'Columns Hidden: 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 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 4-271
- To Edit Destination Rules for a Serial Destination, page 4-276
- To Delete Destination Rules for a Serial Destination, page 4-276

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 issues 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 4-276 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

ORACLE[®] Pedigree and Serialization Manager

About Sign Out opsm

The screenshot shows the 'Edit Serial Destination' page in the Oracle Pedigree and Serialization Manager. The page has a navigation bar at the top with tabs: Dashboard, Serials, Packaging, Transactions, System Setup, EPCIS Setup, and Audit Trail. The 'System Setup' tab is active, and within it, the 'Maintain Serial Destinations' sub-tab is selected. The main content area is titled 'Edit Serial Destination' and contains two tabs: 'Serial Destination Details' (active) and 'User Defined Fields'. The 'Serial Destination Details' tab displays the following fields:

- * Serial Destination: JP Manufacturing East
- * Serial Destination Description: JP Manufacturing East
- * Destination Group: JP Manufacturing (dropdown)
- * Communication Method: Web Service (dropdown)
- Schema: 1
- Schema Version: (empty)
- Contact Name: John Smith
- Contact Phone: 408-707-0000
- Contact E-mail: jsmith@jpmfg.com

Below these fields is the 'Destination Rules' region. It has a header with 'Actions', 'View', and a '+ Add' button. Below the header is a table with the following columns: Action, Transaction Type, Location, Product Code, Effective Start Date, Effective End Date, User Field 1, and User Field 2. The table is currently empty, with the text 'No data to display.' at the bottom.

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 4-265 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

ORACLE Pedigree and Serialization Manager

About Sign Out opsm

The screenshot shows the 'Edit Serial Destination' page in the Oracle Pedigree and Serialization Manager. The page has a navigation bar with tabs: Dashboard, Serials, Packaging, Transactions, System Setup, EPICIS Setup, and Audit Trail. The 'System Setup' tab is active, and the 'Maintain Serial Destinations' sub-tab is selected. The page contains a form for 'Serial Destination Details' and a table for 'Destination Rules'.

Serial Destination Details

* Serial Destination: JP Manufacturing East
* Serial Destination Description: JP Manufacturing East
* Destination Group: JP Manufacturing
* Communication Method: Web Service
Schema: 1
Schema Version:
Contact Name: John Smith
Contact Phone: 408-787-0000
Contact E-mail: jsmith@perfig.com

Destination Rules

Action	* Transaction Type	Location	Product Code	* Effective Start Date	Effective End Date	User Field 1	User Field 2
				2/11/2013			

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: • Commission Serials • Decommission Serials • Serial Generation • Import Serials • Receipt • Reserve Serials • Return • Edit Serials • 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.
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.

Field Name	Description
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

ORACLE Pedigree and Serialization Manager

Dashboard Serials Packaging Transactions System Setup **FPCTS Setup** Audit Trail

Maintain Serial Type Groups Maintain Serial Ranges **Maintain Serial Destinations** View Serial Destination Rules Maintain Lookups

Edit Serial Destination Save Save and Close Cancel

Serial Destination Details User Defined Fields

* Serial Destination JP Manufacturing East

* Serial Destination Description JP Manufacturing East

* Destination Group JP Manufacturing

* Communication Method Web Service

Schema 1

Schema Version

Contact Name John Smith

Contact Phone 408-787-0000

Contact E-mail jsmith@perfig.com

Destination Rules

Action	Transaction Type	Location	Product Code	* Effective Start Date	Effective End Date	User Field 1	User Field 2
✗ Import Serials	Import Serials	Denver	0037-0224-10	2/11/2013	2/11/2014		
✗ Return	Return	Denver	0037-0224-10	2/11/2013	2/11/2014		
✗ Shipment	Shipment	Denver	0037-0224-10	2/11/2013	2/11/2014		

Columns Hidden 2

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)

ORACLE Pedigree and Serialization Manager Server Time Zone: UTC +00:00 About Sign Out

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

Tasks

- Maintain Locations
- Maintain Location Groups
- Maintain Products
- Maintain Users
- Maintain User Groups
- Maintain Location Security Rules
- Location Security Setup
- Product Synchronization
- Maintain Serial Type Groups
- Maintain Serial Ranges
- Maintain Serial Destinations
- View Serial Destination Rules**
- Maintain Lookups
- Maintain System Parameters

View Serial Destination Rules

Search: Serial Destination Rules Advanced Saved Search Display Serial Destination Rules

Destination Group Product Name

Transaction Type Effective Start Date

Location Effective End Date

Item Number Serial Destination

Product Code

Search Reset Save...

Search Results: Serial Destination Rules

View Details

Destination Group	Transaction Type	Location	Product Code	Product Name
No data to display.				

Columns Hidden 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: • Commission Serials • Decommission Serials • Serial Generation • Import Serials • Receipt • Reserve Serials • Return • Edit Serials • 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.

Field Name	Description
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 appear.

3. Click the Search button.

View Serial Destination Rules page (Basic Search)

ORACLE[®] Pedigree and Serialization Manager

Dashboard | Serials | Packaging | Transactions | System Setup | **EPICIS Setup** | Audit Trail

Maintain Serial Ranges | Maintain Serial Destinations | **View Serial Destination Rules** | Maintain Lookups | Maintain System Parameters

View Serial Destination Rules

Search: Serial Destination Rules [Advanced] [Saved Search] [Display Serial Destination Rules]

Destination Group: JP Manufacturing | Transaction Type: Import Serials | Location: Denver | Item Number: | Product Code: | Product Name: | Effective Start Date: | Effective End Date: | Serial Destination: |

[Search] [Reset] [Save...]

Search Results: Serial Destination Rules

View: [Grid] [Details]

Destination Group	Transaction Type	Location	Product Code	Product Name	Effective Start Date
JP Manufacturing	Import Serials	Denver	0037-0224-10	Deconsol	2/11/2013
JP Manufacturing	Import Serials	Denver	0037-0224-10	Deconsol	2/11/2013

Columns Hidden: 2

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.
Transaction Type	Displays the transaction type associated with the rule. Transaction types are: • Commission Serials • Decommission Serials • Serial Generation • Import Serials • Receipt • Reserve Serials • Return • Edit Serials • 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.

Field Name	Description
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 keeps the values in the base criteria fields.

View Serial Destination Rules (Advanced Search)

ORACLE[®] Pedigree and Serialization Manager

About Sign Out opsm

View Serial Destination Rules

Search: Serial Destination Rules

Destination Group: Equals
Transaction Type: Equals
Location: Equals
Item Number: Equals
Product Code: Equals
Product Name: Starts with
Product Code Type: Equals
Product Code Variant: Starts with
Effective Start Date: Equals
Effective End Date: Equals
Serial Destination: Starts with

Search Reset Save... Add Fields

Search Results: Serial Destination Rules

View Details

Destination Group	Transaction Type	Location	Product Code	Product Name	Effective Start Date
No data to display.					

Column Hidden 2

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: • Commission Serials • Decommission Serials • Serial Generation • Import Serials • Receipt • Reserve Serials • Return • Edit Serials • 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.

Field Name	Description
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.
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.

Field Name	Description
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.
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 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 is 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)

Search Criteria:

Destination Group	Equals	JP Manufacturing
Transaction Type	Equals	Import Serials
Location	Starts with	D
Item Number	Equals	
Product Code	Equals	
Product Name	Starts with	D

Search Results: Serial Destination Rules

Destination Group	Transaction Type	Location	Product Code	Product Name	Effective Start Date
JP Manufacturing	Import Serials	Denver	0037-0224-10	Deconsal	2/11/2013
JP Manufacturing	Import Serials	Denver	0037-0224-10	Deconsal	2/11/2013

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.

Setting Up the Electronic Product Code Information Services Repository

This chapter covers the following topics:

- Understanding the Electronic Product Code Information Services Repository Setup Process
- Maintaining Electronic Product Code Information Services Preferences
- Maintaining Policies

Understanding the Electronic Product Code Information Services Repository Setup Process

Before you can capture Electronic Product Code Information Services (EPCIS) events and post them to the EPCIS repository or query the EPCIS repository you must first set up the EPCIS repository preferences and policies. The EPCIS Capture and the EPCIS Query web services use this setup information during their processing of data.

For more information on the Capture and Query web services, see *Web Services and PL/SQL 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.

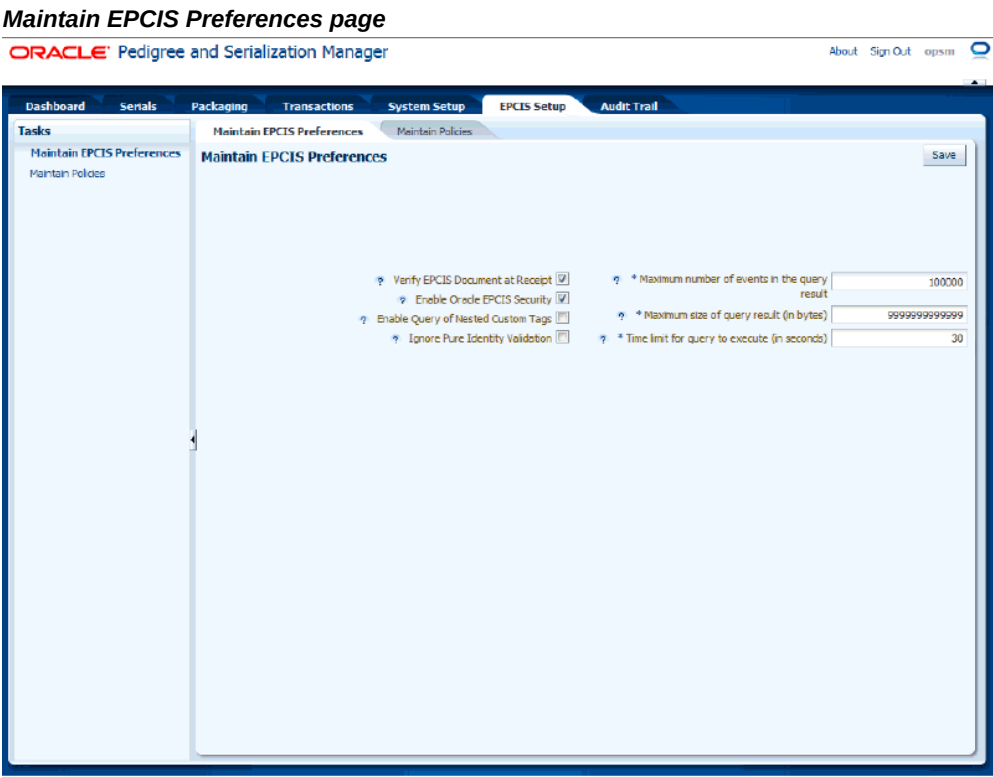
Maintaining Electronic Product Code Information Services Preferences

Before you can begin to interact with the Electronic Product Code Information Services (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.



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

Oracle Pedigree and Serialization Manager

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

Maintain EPCIS Preferences | Maintain Policies

Maintain EPCIS Preferences [Save]

- Verify EPCIS Document at Receipt ☒
- Enable Oracle EPCIS Security ☒
- Enable Query of Nested Custom Tags ☐
- Ignore Pure Identity Validation ☐
- * Maximum number of events in the query result: 5000
- * Maximum size of query result (in bytes): 50000000
- * Time limit for query to execute (in seconds): 60

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 throws 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 allows 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 is not returned. 50 appears by default. If you enter zero or a negative value upon saving the system changes 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 is not returned. 50000000 appears by default. If you enter zero or a negative value upon saving the system changes 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 is not returned. 30 appears by default. If you enter zero or a negative value upon saving the system changes 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 and there associated users used by the Electronic Product Code Information Services (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 for (basic and advanced), view, 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)

The screenshot shows the 'Maintain Policies' page in the Oracle Pedigree and Serialization Manager. The page has a sidebar on the left with 'Tasks' and a main content area. The main content area has a 'Maintain Policies' section with search criteria fields: 'Policy Name', 'Policy Description', 'Username', and 'User Description'. There are buttons for 'Search', 'Reset', and 'Save...'. Below the search fields are two result tables: 'Search Results: Policies' and 'Search Results: Associated Users'. Both tables are currently empty, showing 'No data to display.'

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

Field Name	Description
Policy Name	(Optional) Enter the policy name.
Policy Description	(Optional) Enter the policy description.
Username	(Optional) Enter the username associated with the policy.
User Description	(Optional) Enter the description for the user associated with the policy.

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

3. Click the Search button.

Maintain Policies page (Basic Search)

The screenshot shows the 'Maintain Policies' page in the Oracle Pedigree and Serialization Manager. The page has a navigation bar with tabs: Dashboard, Serials, Packaging, Transactions, System Setup, EPCIS Setup, and Audit Trail. The 'EPCIS Setup' tab is active, and the 'Maintain Policies' sub-tab is selected. The page is divided into three main sections: Search Criteria, Search Results: Policies, and Search Results: Associated Users.

Search Criteria:

Policy Name: Policy 500
Policy Description:
Username:
User Description:
Buttons: Search, Reset, Save...

Search Results: Policies:

Policy Name	Policy Description	Enabled	Actions
Policy 500	Policy 500	✓	✗ ✗
Policy 500	Policy 500	✓	✗ ✗

Search Results: Associated Users:

#	Username	User Description	Actions
1	kharp	Kyle Harp	✗
2	bharp	Brian Harp	✗

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

Plus, the Search Results: Associated Users region appears at the bottom of the page. Using this region you can view and maintain the users associated to the policies. When you select a policy in the Search Results: Policies table the system automatically displays the users associated to that policy in the Search Results: Associated Users region.

Users are created using the Maintain Users page.

For information on creating users, see Maintaining Users, page 4-173.

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 keeps the values in

the base criteria fields.

Maintain Policies page (Advanced Search)

ORACLE Pedigree and Serialization Manager About Sign Out opsm

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

Maintain EPCIS Preferences **Maintain Policies**

Maintain Policies

☒ Search: Policies Basic | Saved Search | Display Policies ▼

Policy Name Starts with ▼ Username Starts with ▼
Policy Description Starts with ▼ User Description Starts with ▼

Search Reset Save... Add Fields ▼

☒ Search Results: Policies Save Revert

Actions ▼ View ▼   Detach

Policy Name	Policy Description	Enabled	Actions
No data to display.			

☒ Search Results: Associated Users Save Revert

Actions ▼ View ▼   Detach

Username	User Description	Actions
No data to display.		

3. In the Search: Policies region, enter the search criteria for the policies using one or more 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.

Field Name	Description
Username	(Optional) Select the field operator and then enter the username associated with the policy. The field operators are the same as that for the Policy Name field.
User Description	(Optional) Select the field operator and then enter the description for the user associated with the policy. 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 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 is removed from the search criteria.

5. (Optional) Enter search criteria for the additional fields.
6. Click the Search button.

Maintain Policies page (Advanced Search)

ORACLE Pedigree and Serialization Manager

About Sign Out opsm

The screenshot displays the 'Maintain Policies' page with the following sections:

- Search: Policies**
 - Policy Name: Equals Policy 500
 - Policy Description: Starts with
 - Username: Contains harp
 - User Description: Starts with
 - Buttons: Search, Reset, Save..., Add Fields
- Search Results: Policies**

Policy Name	Policy Description	Enabled	Actions
Policy 500	Policy 500	✓	[Edit] [Delete]
Policy 500	Policy 500	✓	[Edit] [Delete]
- Search Results: Associated Users**

Username	User Description	Actions
kharp	Kyle Harp	[Delete]
eharp	Erin Harp	[Delete]

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

Plus, the Search Results: Associated Users region appears at the bottom of the page. Using this region you can view and maintain the users associated to the policies. When you select a policy in the Search Results: Policies table the system automatically displays the users associated to that policy in the Search Results: Associated Users region.

Users are created using the Maintain Users page.

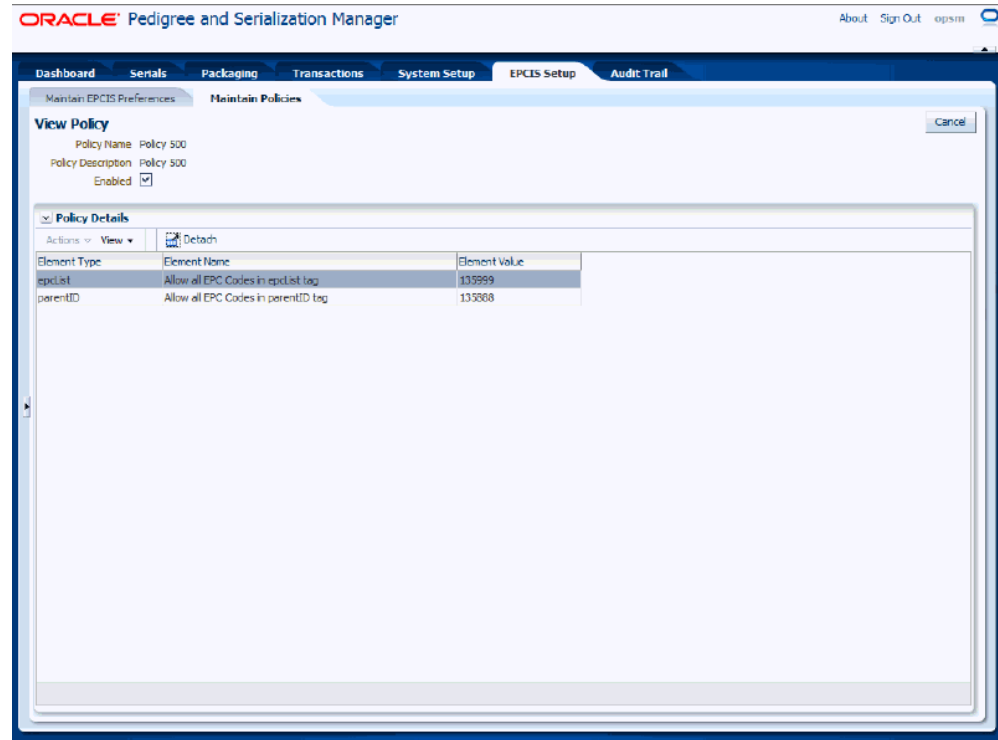
For information on creating users, see Maintaining Users, page 4-173.

To View Policies:

1. Navigate to the Maintain Policies page, page A-2.
2. Enter search criteria for the policies you want to view and click the Search button.

All of the policies that match the search criteria appear in the Search Results: Policies table.
3. Click the Policy Name link for the policy in the table that you want to view.

View Policy page



The View Policy page appears displaying the policy details.

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

Oracle Pedigree and Serialization Manager

Dashboard Serials Packaging Transactions System Setup EPCIS Setup Audit Trail

Maintain EPCIS Preferences Maintain Policies

Create Policy Save Cancel

* Policy Name
Policy Description
Enabled ☒

Policy Details

Actions View + Detach

Element Type	Element Name	Element Value	Actions

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

The screenshot shows the 'Create Policy' page in the Oracle Pedigree and Serialization Manager. The page has a top navigation bar with links like 'Dashboard', 'Serials', 'Packaging', 'Transactions', 'System Setup', 'EPCIS Setup', and 'Audit Trail'. The 'EPCIS Setup' tab is active. Below the navigation bar, there are two tabs: 'Maintain EPCIS Preferences' and 'Maintain Policies'. The 'Maintain Policies' tab is selected. The main content area is titled 'Create Policy' and contains a form with the following fields:

- * Policy Name: Policy 500
- Policy Description: Policy 500
- Enabled: ☒

At the top right of the form are 'Save' and 'Cancel' buttons. Below the form is a 'Policy Details' section. It has a 'Policy Details' header with a dropdown menu set to 'View'. To the right of the dropdown are two icons: a green plus sign (Add Policy Element) and a red minus sign (Detach). Below these icons is a table with the following columns: 'Element Type', 'Element Name', 'Element Value', and 'Actions'.

Element Type	Element Name	Element Value	Actions

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

ORACLE Pedigree and Serialization Manager About Sign Out opsm

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

Maintain EPCIS Preferences **Maintain Policies** Save Cancel

Create Policy

* Policy Name Policy 500
Policy Description Policy 500
Enabled ☒

Policy Details

Actions View   Detach

Element Type	Element Name	Element Value	Actions
			

A new row appears in the Policy Details table.

2. Enter the following information:

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 Name	The name of the element displays after you select an Element Type. You cannot update this field.
Element Value	Enter an element value. Values must be a 6-12 digit number or an asterisk (*).

- Repeat steps 1 through 2 until you have added all of the policy details for the policy.

Note: At least one Policy Detail record is required for each policy.

Create Policy page

Oracle Pedigree and Serialization Manager

Dashboard Serials Packaging Transactions System Setup EPCIS Setup Audit Trail

Maintain EPCIS Preferences Maintain Policies

Create Policy

* Policy Name Policy 500

Policy Description Policy 500

Enabled ☒

Save Cancel

Policy Details

Actions View + Detach

Element Type	Element Name	Element Value	Actions
parentID	Allow all EPC Codes in parentID tag	135368	
epclst	Allow all EPC Codes in epclst tag	135000	

To Delete Policy Details

1. Select the policy detail (Element Type, Element Name, 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.

The policy detail row is deleted from the policy.

5. Click the Save button to save the policy and to return back to the Maintain Policies page.

To Add Users to a Policy:

Before you can add users to a policy you must have already created the users.

For information on creating users, see Maintaining Users, page 4-173.

1. Navigate to the Maintain Policies page, page A-2.
2. Enter search criteria for the policies you want to add users to and click the Search button.

Maintain Policies page

The screenshot shows the 'Maintain Policies' page in the Oracle Pedigree and Serialization Manager. The page has a navigation bar with tabs: Dashboard, Serials, Packaging, Transactions, System Setup, EPCIS Setup, and Audit Trail. The 'EPCIS Setup' tab is active, and the 'Maintain Policies' sub-tab is selected. The page is divided into three main sections:

- Search: Policies**: Contains input fields for 'Policy Name' (policy 500), 'Policy Description', 'Username', and 'User Description'. There are buttons for 'Advanced', 'Saved Search', 'Display Policies', 'Search', 'Reset', and 'Save...'. The 'Policy Name' field is populated with 'policy 500'.
- Search Results: Policies**: A table showing the results of the search. The table has columns: Policy Name, Policy Description, Enabled, and Actions. The first row shows 'Policy 500', 'Policy 500', a green checkmark, and an edit/delete icon.
- Search Results: Associated Users**: A section for displaying users associated with the selected policy. It has a table with columns: Username, User Description, and Actions. The table is currently empty, with the text 'No data to display.' below it.

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 add users to.

The Search Results: Associated Users region displays the users that are associated to the policy that you selected. If there are no users associated to the policy the region does not contain any information.

4. Select Add from the Actions menu or click the Add User ("+" plus sign) icon located at the top of the Search Results: Associated Users region.

[About](#) [Sign Out](#) [opsm](#)

A blank row appears in the associated users table.

- Setting Up the Electronic Product Code Information Services Repository 5-19

Maintain Policies page

ORACLE Pedigree and Serialization Manager About Sign Out opsm

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

Maintain EPCIS Preferences **Maintain Policies**

Maintain Policies

Search: Policies Advanced Saved Search Display Policies

Policy Name: policy 500 Username:
Policy Description: User Description:
Search Reset Save...

Search Results: Policies

Actions View Detach

Policy Name	Policy Description	Enabled	Actions
Policy 500	Policy 500		

Search Results: Associated Users Save Revert

Actions View + Detach

Username	User Description	Actions
bharp	Brian Harp	
kharp	Kyle Harp	

7. Click the Save button.

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

ORACLE Pedigree and Serialization Manager About Sign Out opsm

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

Maintain EPCIS Preferences **Maintain Policies**

Edit Policy Save Cancel

Policy Name: Policy 500
Policy Description: Policy 500
Enabled: ☒

Policy Details

Actions: View + Detach

Element Type	Element Name	Element Value	Actions
epc:ust	Allow all EPC Codes in epc:ust tag	135000	✖
parentID	Allow all EPC Codes in parentID tag	135888	✖

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 (Element Value Changed)

Oracle Pedigree and Serialization Manager

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

Maintain EPCIS Preferences **Maintain Policies**

Edit Policy Save Cancel

Policy Name Policy 500

Policy Description Policy 500

Enabled ☒

Policy Details

Actions View + Detach

Element Type	Element Name	Element Value	Actions
epcuid	Allow all EPC Codes in epcuid tag	135999	
parentid	Allow all EPC Codes in parentid tag	135888	

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 has users associated to it. You either need to delete the associated users or assign a new policy to the users and then you can delete the policy.

For more information on deleting users associated to a policy, see Procedure: To Delete Users Associated to a Policy, page 5-23.

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.

To Delete Users Associated to a Policy:

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

2. Enter search criteria for the policies you want to delete users from 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 delete users from.

The Search Results: Associated Users region displays the users that are associated to the policy. If there are no users associated to a policy the region does contain any information.

4. Select the user in the Search Results: Associated Users region table that you want to delete.

5. Select Delete from the Actions menu or click the Delete icon associated to the user in the Actions column of the associated users results table.

A message appears asking if you are sure you want to delete this user from the policy.

6. Click the Yes button.

The user is deleted from the policy.

Part 3

Managing Lots and Serials

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, received, or returned.

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.

OPSM also gives you the option to secure lot information based on the lot locations attached to the lots. If you choose to use location security, the Maintain Lots, Create Lot, Edit Lot, and View Lot pages are secured based on the locations attached to the lots that you are authorized for in the Location Security Setup page. When searching for and viewing lots, you will only be able to search for lots and view lot information associated to the lot locations you have at a minimum *read access* to in the Location Security Setup page. When creating lots or editing lots, you will only be able to create lots or edit lots associated to the locations that you have *update access* to in the Location Security Setup page and you will only be able to select product codes associated to the product detail locations or location groups you have *update access* to in the Location Security Setup page. When deleting lots, you will only be able to delete lots associated to the locations that you have *delete access* to in the Location Security Setup page. If you are using location security and create a lot without a location, the only user who will be able to search for and maintain that lot in the future is a super user (a user that has been defined with all of the OPSM roles and has access to the Maintain Users page in OPSM).

For more information on location security, see Location Security Overview, page 1-9.

Lot information can be created in OPSM using one of these methods:

- Using the Maintain Lots page in OPSM. Lot information can be created, edited, 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 6-15.
 - Creating Lots, page 6-16.
 - Editing Lots, page 6-21.
 - Deleting Lots, page 6-24.
- 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 6-25.

- Using the Lot Web Services in OPSM. Lot information can be merged.

For more information, see Lot Web Services, page 14-7.

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 6-41.
- *Oracle Serialization and Tracking Process Integration Pack for Oracle Pedigree and Serialization Manager and Oracle E-Business Suite 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 6-25.
- *Oracle Serialization and Tracking Process Integration Pack for Oracle Pedigree and Serialization Manager and Oracle E-Business Suite 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.

If you are using location security, you will only be able to search for lots associated to the lot locations you have at a minimum *read access* to in the Location Security Setup page. Lots that were defined without locations can only be accessed by a super user.

For more information on location security, see Location Security Overview, page 1-9.

Use these procedures to search for lots:

Prerequisites

- ☐ Location security information must be set up if you are using location security.

To Search for Lots (Basic Search):

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

Maintain Lots page (Basic Search)

The screenshot displays the 'Maintain Lots' page in the Oracle Pedigree and Serialization Manager. The page has a top navigation bar with tabs for Dashboard, Serials, Packaging, Transactions, System Setup, EPCIS Setup, and Audit Trail. The 'Serials' tab is active, and the 'Maintain Lots' sub-tab is selected. On the left, a 'Tasks' sidebar lists various actions like 'Maintain Serials', 'Commission Serials', 'Maintain Lots', 'Lot Synchronization', 'Work Order Serialization', 'Maintain Serial Generation Requests', and 'Web Service Exceptions'. The main content area is titled 'Maintain Lots' and contains a search form. The search form has a 'Search: Lots' section with fields for Lot Number, Parent Lot, Location, Item Number, Product Code, Product Name, Packaging Unit, Lot Source, Origination Date, and Expiration Date. There are also buttons for 'Advanced', 'Saved Search', 'Display Lots', 'Search', 'Reset', and 'Save...'. Below the search form is a 'Search Results: Lots' section with a table header and a 'No data to display' message.

Lot Number	Location	Product Code	Product Name	Packaging Unit	Parent Lot
No data to display.					

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. Partial lot numbers can be entered. If you enter a partial lot number the system will display all the lots that start with that partial lot number in the Search Results region. If you are using location security, you will only be able to search for lot numbers that are associated to locations that you have at a minimum <i>read access</i> to in the Location Security Setup page. For more information on location security, see Location Security Overview, page 1-9.
Parent Lot	Enter the parent lot associated with the lot number.
Location	Select the location associated with the lot number. If you are using location security, you will only be able select locations that you have at a minimum <i>read access</i> to in the Location Security Setup page. For more information on location security, see Location Security Overview, page 1-9.
Product Code	Select the product code associated with the lot number.

Maintain Lots page (Basic Search)

The screenshot shows the 'Maintain Lots' page in the Oracle Pedigree and Serialization Manager. The page has a top navigation bar with tabs for Dashboard, Serials, Packaging, Transactions, System Setup, EPCIS Setup, and Audit Trail. The 'Serials' tab is selected, and the 'Maintain Lots' sub-tab is active. The search form includes fields for Lot Number (G450), Parent Lot, Location (San Jose), Item Number, Product Code, Product Name, Packaging Unit, Lot Source, Origination Date, and Expiration Date. The 'Search: Lots' section is active, and the 'Search Results: Lots' section shows 'No data to display.'

- (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)

ORACLE Pedigree and Serialization Manager Server Time Zone: UTC +00:00 About Sign Out JD1-DLS

Dashboard **Serials** Packaging Transactions System Setup EPICIS Setup Audit Trail

Maintain Serials Commission Serials **Maintain Lots** Lot Synchronization Work Order Serialization Maintain Serial Generation Requests

Maintain Lots

☒ Search: Lots Advanced Saved Search Display Lots

** Lot Number: G450 Packaging Unit:

** Parent Lot: Lot Source:

** Location: San Jose Origination Date:

Item Number: Expiration Date:

** Product Code: ** At least one is required

Product Name:

Search Reset Save...

Search Results: Lots

Actions View

Lot Number	Location	Product Code	Product Name	Packaging Unit	Parent Lot	Origination Date	Expiration Date
G450-900-100	San Jose	0037-2000-10	Headache Pain Relief	2 Pkg Box	G450-900	9/11/2014	9/11/2015
G450-900-300	San Jose	0037-2000-10	Headache Pain Relief	Box	G450-900	10/11/2014	10/11/2015
G450-800-100	San Jose	0037-2000-10	Headache Pain Relief	2 Pkg Box	G450-800	1/1/2015	12/31/2015

Columns Hidden: 3

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.

If you are using location security, all of the lots with a lot location that you have at a minimum *read access* to in the Location Security Setup page will display. The Edit Lot icon and Delete Lot icon in the actions column will be available if you have *update and delete access* to the lot location associated to the lot in the Location Security Setup page. Otherwise, the icons will not be available. In addition, the Edit and Delete options in the Actions menu are available if you have *update and delete access* to the lot location in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

- 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)

The screenshot displays the 'Maintain Lots' page within the Oracle Pedigree and Serialization Manager. The page is titled 'Maintain Lots' and includes a search bar with a 'Search' button. Below the search bar, there are several search criteria fields organized into two columns. The left column includes fields for Lot Number, Parent Lot, Location, Item Number, Product Code, and Product Name, each with a dropdown menu for the search type (e.g., 'Starts with', 'Equals'). The right column includes fields for Product Code Type, Product Code Variant, Packaging Unit, Lot Source, Origination Date, and Expiration Date, also with dropdown menus. A 'Search' button is located at the bottom right of the search criteria section. Below the search criteria, there is a table for search results. The table has columns for Lot Number, Location, Product Code, Product Name, Packaging Unit, Parent Lot, Origination Date, and Expiration Date. The table is currently empty, displaying the message 'No data to display.'

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 If you are using location security, you will only be able to search for lot numbers that are associated to locations that you have at a minimum <i>read access</i> to in the Location Security Setup page. For more information on location security, see Location Security Overview, page 1-9.

Field Name	Description
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 select the location associated with the lot number. The field operators are the same as that for the Lot Number field. If you are using location security, you will only be able select locations that you have at a minimum <i>read access</i> to in the Location Security Setup page. For more information on location security, see Location Security Overview, page 1-9.
Product Code	Select the field operator and then select 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.
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.

Field Name	Description
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.
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)

The screenshot shows the 'Maintain Lots' page in the Oracle Pedigree and Serialization Manager. The page has a navigation bar with tabs: Dashboard, Serials, Packaging, Transactions, System Setup, EPCIS Setup, and Audit Trail. The 'Packaging' tab is selected, and the 'Maintain Lots' sub-tab is active. The page title is 'ORACLE Pedigree and Serialization Manager' and the server time zone is 'UTC +00:00'.

The 'Maintain Lots' section includes a search criteria form with the following fields:

- Search: Lots** (Basic, Saved Search, Display Lots)
- ** Lot Number**: Starts with (G450)
- ** Parent Lot**: Starts with
- ** Location**: Equals (San Jose)
- Item Number**: Equals
- ** Product Code**: Equals
- Product Name**: Starts with
- Product Code Type**: Equals
- Product Code Variant**: Starts with
- Packaging Unit**: Equals (2 Pkg Box)
- Lot Source**: Equals
- Origination Date**: Equals
- Expiration Date**: Equals

Buttons: Search, Reset, Save..., Add Fields.

The **Search Results: Lots** section displays a table with the following data:

Lot Number	Location	Product Code	Product Name	Packaging Unit	Parent Lot	Origination Date	Expiration Date
G450-900-100	San Jose	0037-2000-10	Headache Pain Relief	2 Pkg Box	G450-900	9/11/2014	9/11/2015
G450-800-100	San Jose	0037-2000-10	Headache Pain Relief	2 Pkg Box	G450-800	1/1/2015	12/31/2015

Columns Hidden: 3

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.

If you are using location security, all of the lots with a lot location that you have at a minimum *read access* to in the Location Security Setup page will display. The Edit Lot icon and Delete Lot icon in the actions column will be available if you have *update and delete access* to the lot location associated to the lot in the Location Security Setup page. Otherwise, the icons will not be available. In addition, the Edit and Delete options in the Actions menu are also available if you have *update and delete access* to the lot location in the Location Security Setup page.

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.

If you are using location security, you will only be able to view lot detail information for lots associated to the lot locations that you have at a minimum *read access* to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

Use this procedure to view lot detail information:

Prerequisites

- ☐ Location security information must be set up if you are using location security.

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.

If you are using location security, you will only be able to search for and view lots associated to the lot locations you have at a minimum *read access* to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

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

ORACLE Pedigree and Serialization Manager

About Sign Out opsm

Dashboard Serials Packaging Transactions System Setup EPCIS Setup Audit Trail

Maintain Serials Commission Serials Maintain Lots Lot Synchronization Work Order Serialization Maintain Serial Generation Requests

View Lot

Lot Details User Defined Fields

Lot Number: G450-900-898
Location: Denver
Lot Source: OPSM
Product Code: 0037-0223-11
Product Name: NoPain 200mg blister pack tablet
Product Code Type: NDC442
Product Code Variant: NOVARIANT
Packaging Unit: Blister Pack
Parent Lot: G450-900-800
Origination Date: 1/1/2013
Expiration Date: 12/31/2013
Best By Date: 6/1/2013
Sell By Date: 6/1/2013
Retest Date: 10/1/2013

Cancel

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.

If you are using location security, you can create a lot if you have functional access to the Create Lot page but you can only associate it to a location that you have *update access* to in the Location Security Setup page. In addition, the product codes you can select to associate to the lots are based on product detail locations or location groups that you have *update access* to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

Use this procedure to create lots:

Prerequisites

- ☐ Location security information must be set up if you are using location security.

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.

Create Lot page

The Create Lot page appears.

3. Enter the following information:

Field Name	Description
Lot Number	Enter the lot number.

Field Name	Description
Location	(Optional) Select the location for the lot. If you are using location security, you will only be able to select locations that you have <i>update access</i> to in the Location Security Setup page. If you are using location security, and define a lot without a location only a super user will be able to access that lot. For more information on location security, see Location Security Overview, page 1-9.
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. If you are using location security, you will only be able to select product codes that are associated to product detail locations or location groups that you have <i>update access</i> to in the Location Security Setup page. For more information on location security, see Location Security Overview, page 1-9.
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.

Field Name	Description
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.
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

The screenshot shows the 'Create Lot' page in the Oracle Pedigree and Serialization Manager. The 'Lot Details' tab is selected, and the 'User Defined Fields' section is active. The form contains the following fields and values:

Field	Value
Lot Number	X455-900-10
Location	Denver
Lot Source	OPSM
Product Code	0037-0223-11
Product Name	NoPain 200mg blister pack tablet
Product Code Type	NDC442
Product Code Variant	NOVARTANT
Packaging Unit	BLISTERPACK
Parent Lot	X455-900-A
Origination Date	1/1/2013
Expiration Date	5/31/2013
Best By Date	3/1/2013
Sell By Date	4/1/2013
Re-test Date	3/15/2013

Buttons at the top right of the form include 'Save and Create Another', 'Save and Close', and 'Cancel'.

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

The screenshot displays the 'Create Lot' page in the Oracle Pedigree and Serialization Manager (OPSM) application, specifically the 'User Defined Fields' tab. The interface is organized into a top navigation bar, a left sidebar, and a main content area. The top navigation bar includes links for Dashboard, Serials, Packaging, Transactions, System Setup, EPCIS Setup, and Audit Trail. The left sidebar lists Maintain Serials, Commission Serials, and Maintain Lots. The main content area is titled 'Create Lot' and contains a 'User Defined Fields' section. This section is divided into three categories: Character, Numeric, and Date / Time. The Character category has 15 input fields, with the first field containing the text 'Manufacturing'. The Numeric category has 5 input fields, with the first field containing the text '111,114'. The Date / Time category has 5 input fields, each with a calendar icon to its right. At the top right of the main content area, there are three buttons: 'Save and Create Another', 'Save and Close', and 'Cancel'.

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.

If you are using location security, you will only be able to edit lots associated to the lot

locations you have *update access* to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

Use this procedure to edit lots:

Prerequisites

- ☐ Location security information must be set up if you are using location security.

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.

If you are using location security, you will only be able to edit lots associated to locations that you have *update access* to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

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.

If you are using location security, the Edit Lot icon and Edit option in the Actions menu are only available if you have *update access* to the location associated to the lot in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

Edit Lot page - Lot Details sub tab

The screenshot shows the Oracle Pedigree and Serialization Manager interface. The top navigation bar includes 'Dashboard', 'Serials', 'Packaging', 'Transactions', 'System Setup', 'EPCIS Setup', and 'Audit Trail'. Below this, a sub-navigation bar shows 'Maintain Serials', 'Commission Serials', 'Maintain Lots' (selected), 'Lot Synchronization', 'Work Order Serialization', and 'Maintain Serial Generation Requests'. The main window is titled 'Edit Lot' and has a 'Save and Close' button and a 'Cancel' button. The 'Lot Details' sub tab is active, showing 'User Defined Fields'. The fields displayed are:

Lot Number	X456-900-10
Location	Denver
Lot Source	OPSM
Product Code	0037-0223-11
Product Name	No-Pain 200mg blister pack tablet
Product Code Type	NDC442
Product Code Variant	NOVARIANT
Packaging Unit	Blister Pack
Parent Lot	X456-900-4
Origination Date	1/1/2013
Expiration Date	5/31/2013
Best By Date	3/1/2013
Sell By Date	4/1/2013
Retest Date	3/15/2013

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.

If you are using location security, you will only be able to delete lots associated to the lot locations you have *delete access* to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

Use this procedure to delete lots:

Prerequisites

- ☐ Location security information must be set up if you are using location security.

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.

If you are using location security, you will only be able to delete lots associated to locations that you have *delete access* to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

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.

If you are using location security, the Delete Lot icon and Delete option in the Actions menu are only available if you have *delete access* to the location associated to

the lot in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

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 4-289.

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

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

ORACLE Pedigree and Serialization Manager About Sign Out opsm

Dashboard Serials Packaging Transactions System Setup EPCIS Setup Audit Trail

Tasks
Maintain Serials
Commission Serials
Maintain Lots
Lot Synchronization
Work Order Serialization
Maintain Serial Generation Requests
Web Service Exceptions

Commission Serials Maintain Lots **Lot Synchronization** Work Order Serialization Maintain Serial Generation Requests

Submit New Instance

Search: Job Instances Advanced Saved Search Display All Job Instances

Job Instance Id Created By
Job Status Creation Date

Search Reset Save...

Search Results: Job Instances

Actions View

Job Instance Id	Job Status	Creation Date	Created By
No data to display.			

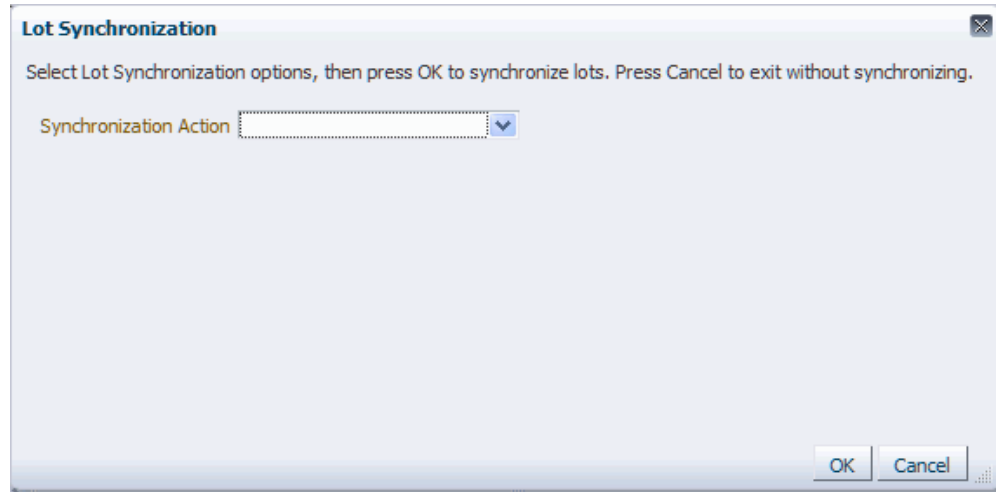
Job Instance Messages

Message

No data to display.

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 <i>Extract Lots and Merge Lots</i> . 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

Lot Synchronization

Select Lot Synchronization options, then press OK to synchronize lots. Press Cancel to exit without synchronizing.

Synchronization Action: Extract Lots and Merge Lots

Extract Scenario Name: EBS Discrete Full

Source System: EBIZ_01

Purge Interface Table: ☐

OK Cancel

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 6-15.

To Extract Lot Information from an External System:

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

Lot Synchronization page

ORACLE Pedigree and Serialization Manager About Sign Out opsm

Dashboard Serials Packaging Transactions System Setup **Lot Synchronization** EPCIS Setup Audit Trail

Tasks
Maintain Serials
Commission Serials
Maintain Lots
Lot Synchronization
Work Order Serialization
Maintain Serial Generation Requests
Web Service Exceptions

Commission Serials Maintain Lots **Lot Synchronization** Work Order Serialization Maintain Serial Generation Requests

Submit New Instance

Search: Job Instances Advanced Saved Search Display All Job Instances

Job Instance Id Created By
Job Status Creation Date

Search Reset Save...

Search Results: Job Instances

Actions View

Job Instance Id	Job Status	Creation Date	Created By
No data to display.			

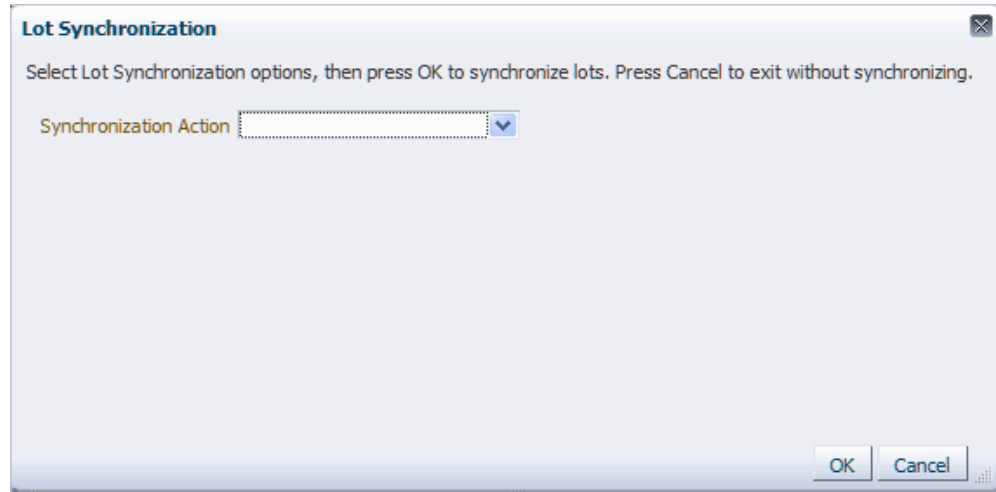
Job Instance Messages

Message

No data to display.

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 <i>Extract Lots</i> . 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

Lot Synchronization

Select Lot Synchronization options, then press OK to synchronize lots. Press Cancel to exit without synchronizing.

Synchronization Action: Extract Lots

Extract Scenario Name: EBS Discrete Full

Source System: EBIZ_01

Purge Interface Table: ☐

OK Cancel

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 <i>Merge Lots</i> . 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

Lot Synchronization

Select Lot Synchronization options, then press OK to synchronize lots. Press Cancel to exit without synchronizing.

Synchronization Action: Merge Lots

Source System: EBIZ_01

Purge Interface Table: ☐

OK Cancel

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.

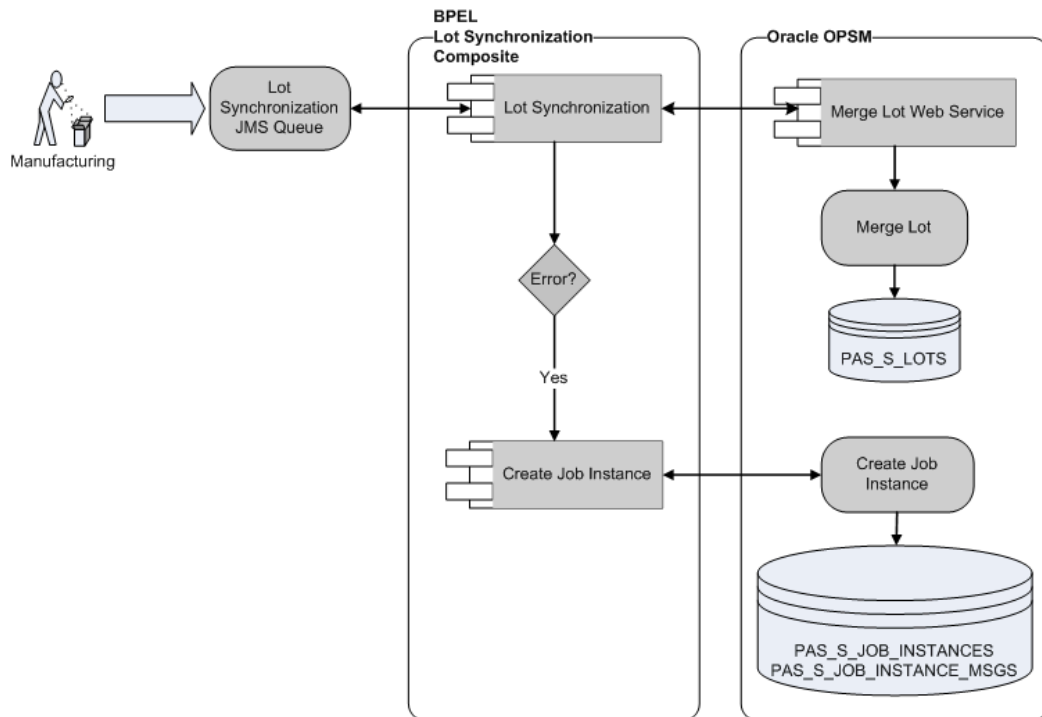
For more information on the Maintaining Lots page, see *Viewing Lot Detail Information*, page 6-15.

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.

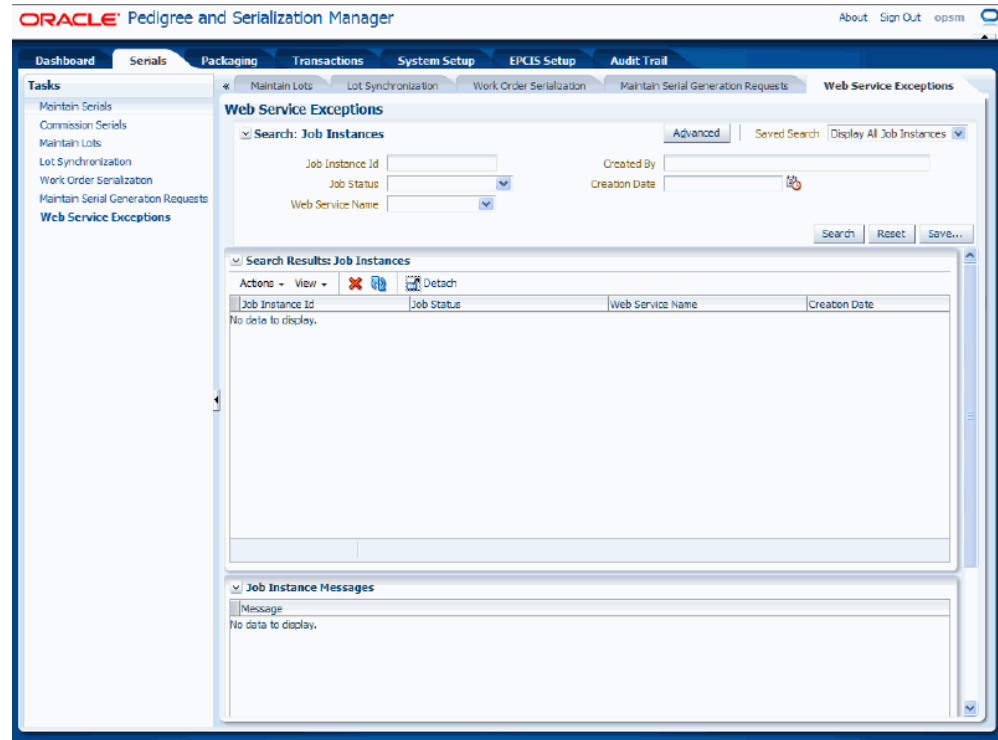
The Oracle Serialization and Tracking Integration Pack for Oracle Pedigree and Serialization Manager and Oracle E-Business Suite 3.1 provides the JMS Producer as part of the integration pack.

For more information on integrating Oracle E-Business Suite with OPSM, see *Oracle Serialization and Tracking Process Integration Pack for Oracle Pedigree and Serialization Manager and Oracle E-Business Suite 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 <i>mergeLot</i> 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

Web Service Exceptions

Search: Job Instances

Job Instance Id:

Job Status:

Web Service Name:

Created By:

Creation Date:

Search Results: Job Instances

Job Instance Id	Job Status	Web Service Name	Creation Date	Created By
6037224	Error(s) Exist	mergelot	7/31/2012 11:23 AM	opsm_lot_synch
6037223	Error(s) Exist	mergelot	7/31/2012 11:03 AM	opsm_lot_synch
6032218	Error(s) Exist	mergelot	2/21/2012 12:09 PM	opsm_lot_synch
6030217	Error(s) Exist	mergelot	1/19/2012 12:56 PM	opsm_lot_synch
6015189	Error(s) Exist	mergelot	10/3/2011 12:19 PM	opsm_lot_synch
6015178	Error(s) Exist	mergelot	10/3/2011 9:44 AM	opsm_lot_synch
6014175	Error(s) Exist	mergelot	9/29/2011 10:43 AM	opsm_lot_synch
6014157	Error(s) Exist	mergelot	9/29/2011 8:51 AM	opsm_lot_synch
6014150	Error(s) Exist	mergelot	9/27/2011 2:17 PM	opsm_lot_synch

Job Instance Messages

Message: No data to display.

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

ORACLE Pedigree and Serialization Manager

About Sign Out opsm

Dashboard Serials Packaging Transactions System Setup EPICIS Setup Audit Trail

Commission Serials Maintain Lots Lot Synchronization Work Order Serialization Maintain Serial Generation Requests Web Service Exceptions

Web Service Exceptions

Search: Job Instances Advanced Saved Search Display All Job Instances

Job Instance Id Created By
Job Status Creation Date
Web Service Name mergeLot

Search Reset Save...

Search Results: Job Instances

Job Instance Id	Job Status	Web Service Name	Creation Date	Created By
6037224	Error(s) Exist	mergeLot	7/31/2012 11:23 AM	opsm_lot_synch
6037223	Error(s) Exist	mergeLot	7/31/2012 11:03 AM	opsm_lot_synch
6032210	Error(s) Exist	mergeLot	2/21/2012 12:09 PM	opsm_lot_synch
6030217	Error(s) Exist	mergeLot	1/19/2012 12:56 PM	opsm_lot_synch
6015189	Error(s) Exist	mergeLot	10/3/2011 12:19 PM	opsm_lot_synch
6015178	Error(s) Exist	mergeLot	10/3/2011 9:44 AM	opsm_lot_synch
6014175	Error(s) Exist	mergeLot	9/29/2011 10:43 AM	opsm_lot_synch
6014157	Error(s) Exist	mergeLot	9/29/2011 8:51 AM	opsm_lot_synch
6014150	Error(s) Exist	mergeLot	9/27/2011 2:17 PM	opsm_lot_synch

Rows Selected 1

Job Instance Messages

Message	Message Severity
An exception has occurred while attempting to perform a lot synchronization. Please review the incoming message from the external transaction system for Lot Number 73112-2, Lot Source EBIZ_01, Location M1, Item Number IC1001, and Product Code .	Error
An exception has occurred while processing the mergeLot web service. The exception is as follows: JBO-INVALID_PRODUCT_ITEM: The combination of item number IC1001 and item source EBIZ_01 does not exist in OPSM. Change the item information or add the item information in OPSM....	Error
Please review composite instance 450052 using the Oracle Enterprise Manager application for more details.	Error

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.

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 Order Oracle Serialization from an External System*, page 7-30.

- Using the Serial Generation Request web service in OPSM.

For more information on the Serial Generation Request web service, see *Web Services and PL/SQL Services Overview*, page 14-1.

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

OPSM also gives you the option to secure serial generation requests based on the serial

generation request location. If you choose to use location security, the Maintain Serial Generation Requests page and Create Serial Generation Request page are secured based on the serial generation request locations you are authorized to use in the Location Security Setup page. When searching for serial generation requests you will only be able to search for serial generation requests associated to serial generation request locations you have at a minimum *read access* to in the Location Security Setup page. When creating and submitting serial generation requests, you will only be able to create and submit serial generation requests if you have the following:

- *Update access* to the serial generation requests location in the Location Security Setup page.
- *Update access* to the product detail location or location group associated to the product code on the serial generation request in the Location Security Setup page.
- *Update access* to the lot location associated to the lot number on the serial generation request in the Location Security Setup page.

When deleting serial generation requests, you will only be able to delete serial generation requests associated to serial generation request locations that you have *delete access* to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

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 maximum 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 Serial Generation Request web service.

For more information on creating serial generation requests, see *Creating Serial Generation Requests*, page 7-17, *Performing Work Order Serialization from an External System*, page 7-30, and *Web Services and PL/SQL Services Overview*, page 14-1.

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 7-26.

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 7-26.

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 7-14.

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 7-52.

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 7-29.

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, created by, and creation date.

If you are using location security, you will only be able to search for serial generation requests associated to the serial generation request locations you have at a minimum *read access* to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

Use this procedure to search for serial generation requests:

Prerequisites

- ☐ Location security information must be set up if you are using location security.

To Search for Serial Generation Requests:

1. Navigate to the Maintain Serial Generation Requests page, page A-2.

Maintain Serial Generation Requests page

The screenshot displays the 'Maintain Serial Generation Requests' page in the Oracle Pedigree and Serialization Manager. The page features a top navigation bar with tabs for Dashboard, Serials, Packaging, Transactions, System Setup, EPCIS Setup, and Audit Trail. A left-hand navigation pane lists various tasks, with 'Maintain Serial Generation Requests' currently selected. The main content area is divided into several sections: a search criteria section titled 'Search: Serial Generation Requests' with fields for Generation Request Method, Generation Status, Location, Product Code, Created By, and Creation Date; a search results section titled 'Search Results: Serial Generation Requests' which is currently empty and shows 'No data to display.'; and a section for 'Serial Generation Messages' which is also empty. The search results section includes a table with columns for Generation Request Method, Generation Status, Creation Date, Created By, Message Severity, and Product Code.

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. If you are using location security, you will only be able select locations that you have at a minimum <i>read access</i> to in the Location Security Setup page. For more information on location security, see Location Security Overview, page 1-9.
Product Code	(Optional) Select the product code associated with the serial generation requests.

Field Name	Description
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.

- Click the Search button.

Maintain Serial Generation Requests page

The screenshot displays the 'Maintain Serial Generation Requests' page in the Oracle Pedigree and Serialization Manager. The page includes a search section with the following criteria:

- Generation Request Method: User Interface
- Generation Status: Successful Generation
- Location: (empty)
- Product Code: (empty)
- Created By: (empty)
- Creation Date: (empty)

The search results are displayed in a table format:

Generation Request Method	Generation Status	Creation Date	Created By	Message Severity	Product Code	Requested Quantity	Generated Quantity
User Interface	Successful Generation	5/20/2013	jdupuy		11091960110919	5	5
User Interface	Successful Generation	5/20/2013	jleiker		0007-0011-00	5	5
User Interface	Successful Generation	5/20/2013	opsm		0037-0224-10	10	10
User Interface	Successful Generation	5/20/2013	jdupuy		105810601-3	5	5
User Interface	Successful Generation	5/20/2013	jdupuy		5995-5995-95	1	1
User Interface	Successful Generation	5/17/2013	jdupuy		8777-4545-66	1	1
User Interface	Successful Generation	5/16/2013	jdupuy		11096011096011	1	1
User Interface	Successful Generation	5/16/2013	jdupuy		11096011096011	1	1
User Interface	Successful Generation	5/16/2013	jdupuy		11096011096011	1	1
User Interface	Successful Generation	5/15/2013	jleiker		1001CP-95	3	3
User Interface	Successful Generation	5/15/2013	hrakhu		1440187005	20	20

Below the table, there is a section for 'Serial Generation Messages' which currently shows 'No data to display.'

All of the serial generation requests that match the search criteria appear in the Search Results: Serial Generation Requests region in a table format.

If you are using location security, all of the serial generation requests with a serial generation request location that you have at a minimum *read access* to in the Location Security Setup page will display. The Submit Serial Generation Request icon and the Submit action are always available but you will only be able to submit a serial generation request if you have *update access* to the serial generation request

location associated to the serial generation request in the Location Security Setup page. Otherwise, you will receive a message that you do not have the correct privilege. The Delete icon and the Delete action are always available but you will only be able to delete a serial generation request if you have *delete access* to the serial generation request location associated to the serial generation request in the Location Security Setup page. Otherwise, you will receive a message that you do not have the correct privilege.

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
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 username that created the serial generation request.

Field Name	Description
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.
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.

Field Name	Description
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.
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.

Field Name	Description
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.
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.

Field Name	Description
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.
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.

If you are using location security, you will only be able to search for and view request messages for serial generation requests associated to the serial generation request locations you have at a minimum *read access* to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

Use this procedure to view serial generation request messages:

Prerequisites

- ☐ Location security information must be set up if you are using location security.

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.

If you are using location security, you will only be able to search for and view request messages for serial generation requests associated to the serial generation request locations you have at a minimum *read access* to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

3. Click the Search button.

Maintain Serial Generation Requests page

ORACLE Pedigree and Serialization Manager

About Sign Out epms

Dashboard Serials Packaging Transactions System Setup EPCIS Setup Audit Trail

Commission Serials Maintain Lots Lot Synchronization Work Order Serialization Maintain Serial Generation Requests Web Service Exceptions

Maintain Serial Generation Requests

Search: Serial Generation Requests

Generation Request Method: User Interface Location: Product Code: Created Document: Created By: Lot Number: Creation Date:

Search Reset Save...

Search Results: Serial Generation Requests

Actions View X Add Edit Detach

Generation Request Method	Generation Status	Creation Date	Created By	Message Severity	Product Code	Requested Quantity	Generated Quantity
User Interface	Error(s) Exist	5/20/2013	opam		0037-0226-10	10	
User Interface	Error(s) Exist	5/20/2013	jdupr		105810501-3	5	
User Interface	Error(s) Exist	5/16/2013	jdupr		11096011096011	1	
User Interface	Error(s) Exist	5/16/2013	jdupr		11096011096011	1	
User Interface	Error(s) Exist	5/14/2013	jlaker		303-CP-CS		
User Interface	Error(s) Exist	5/10/2013	jlaker		1001-0711-01		0
User Interface	Error(s) Exist	5/10/2013	jlaker		1105-1212-04		0
User Interface	Error(s) Exist	4/19/2013	jdupr		1198-0209-10	1	
User Interface	Error(s) Exist	4/19/2013	bralsba		1198-0209-10	1	
User Interface	Error(s) Exist	4/19/2013	bralsba		1198-0209-10	1	
User Interface	Error(s) Exist	4/19/2013	bralsba		1198-0209-10	5	

Rows Selected: 1

Serial Generation Messages

Message: The company prefix contained in the EPC number, 930000, is not the same as the company prefix for the location 778899. No serials have been generated. The serials requested are either out of range or they are all duplicates.

Message Severity:

All of the serial generation requests that match the search criteria appear in the Search Results: Serial Generation Requests region in a table format.

If you are using location security, all of the serial generation requests with a serial generation request location that you have at a minimum *read access* to in the Location Security Setup page will display.

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.

ORACLE® Pedigree and Serialization Manager

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.

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.

For more information on location security, see Location Security Overview, page 1-9.

Managing Serials 7-17

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 7-26.

Use this procedure to create serial generation requests:

Prerequisites

- ☐ Location security information must be set up if you are using location security.

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

ORACLE Pedigree and Serialization Manager About Sign Out opsm

Dashboard Serials Packaging Transactions System Setup EPCTIS Setup Audit Trail

Commission Serials Maintain Lots Lot Synchronization Work Order Serialization **Maintain Serial Generation Requests** Web Service Exceptions

Create Serial Generation Request Reset Save and Create Another Save and Close Cancel

General

☒ Quantity ☐ Serial Number Range

Serial Quantity

☒ Ignore Serial Overlap Amount ☐ Saleable Unit ☒ Automatically Submit ☐

* Location Created

Serial Type

Serial Usage ☒

Source System

Product

Item Cross Reference Number

Item Cross Reference Source

Item Cross Reference UOM

Item Cross Reference Description

Product Code

Product Name

Product Code Type

Product Code Variant

Packaging Unit

Lot

Lot Number

Lot Location

Expiration Date

Lot Source

Document

Created Document Organization

Created Document

Created Document Type ☒

Created Document Line Number

Alternate Document Organization

Alternate Document

Alternate Document Type ☒

Alternate Document Line Number

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 7-26.

Field Name	Description
Location Created	Select the location for the serial numbers that are to be created. This is a required field. If you are using location security, you will only be able to select locations that you have <i>update access</i> to in the Location Security Setup page. For more information on location security, see Location Security Overview, page 1-9.
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.

- (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 are using location security, you will only be able to select product codes associated to product detail locations or location groups that you have *update access* to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-

9.

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.

If you are using location security, the lot numbers you can select are based on the product code you selected and you will only be able to select lot numbers associated to lot locations that you have *update access* to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

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.
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 7-26.

- 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 7-26.

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 7-17.

If you are using location security, you will only be able to submit serial generation requests if you have the following:

- *Update access* to the serial generation requests location in the Location Security Setup page.
- *Update access* to the product detail location or location group associated to the product code on the serial generation request in the Location Security Setup page.
- *Update access* to the lot location associated to the lot number on the serial generation request in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

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:

Prerequisites

- ☐ Location security information must be set up if you are using location security.

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.

If you are using location security, you will only be able to submit serial generation requests if you have the following:

- *Update access* to the serial generation requests location in the Location Security Setup page.
- *Update access* to the product detail location or location group associated to the product code on the serial generation request in the Location Security Setup page.
- *Update access* to the lot location associated to the lot number on the serial generation request in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

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.

If you are using location security, the Submit action and the Submit Serial

Generation Request icon are available if you have *only read access* or if you have *read and update access* to the serial generation request location in the Location Security Setup page. If you try to submit the serial generation request with *only read access* you will receive a message that you do not have the correct privileges. You must have *update access* to the serial generation request location to be able to submit the 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. 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.

If you are using location security, you will only be able to delete serial generation requests associated to the serial generation request locations you have *delete access* to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

Use this procedure to delete serial generation requests:

Prerequisites

- ☐ Location security information must be set up if you are using location security.

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.

If you are using location security, you will only be able to delete serial generation requests associated to the serial generation request locations you have *delete access* to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

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.

If you are using location security, the Delete action and the Delete icon are available if you have *only read access* or if you have *read and update access* to the serial generation request location in the Location Security Setup page. If you try to delete the serial generation request with *only read access* or *read and update access* you will receive a message that you do not have the correct privileges. You must have *delete access* to the serial generation request location to be able to delete the serial generation request.

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 *Oracle*

Serialization and Tracking Process Integration Pack for Oracle Pedigree and Serialization Manager and Oracle E-Business Suite 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

ORACLE Pedigree and Serialization Manager About Sign Out epssm

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

Tasks
Maintain Serials
Commission Serials
Maintain Lots
Lot Synchronization
Work Order Serialization
Maintain Serial Generation Requests
Web Service Exceptions

Work Order Serialization Submit New Instance

Search: Job Instances Advanced Saved Search Display All Job Instances

Job Instance Id Created By
Job Status Creation Date

Search Reset Save...

Search Results: Job Instances

Actions

Job Instance Id	Job Status	Creation Date	Created By
No data to display.			

Job Instance Messages

Message

No data to display.

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 <i>Extract Work Orders and Process Work Order Serialization</i> . 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

Work Order Serialization

Select Work Order Serialization options, then press OK to process work orders for serialization. Press Cancel to exit without processing.

Synchronization Action: Extract Work Orders and Process Work Order Serialization

Extract Scenario Name: EBS Process Incremental

Source System: EBIZ_01

Purge Interface Table: ☐

OK Cancel

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 <i>Work Order Import</i> .
Generation Status	Select a generation status of <i>Generation Requested</i> .
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

ORACLE Pedigree and Serialization Manager

About Sign Out epism

Dashboard Serials Packaging Transactions System Setup EPCLIS Setup Audit Trail

« Commission Serials Maintain Lots Lot Synchronization Work Order Serialization Maintain Serial Generation Requests Web Service Exceptions

Maintain Serial Generation Requests

Search: Serial Generation Requests

Generation Request Method: Work Order Import Location:

Generation Status: Generation Requested Product Code:

Created Document: 436 Created By:

Lot Number: Creation Date:

Search Reset Save...

Search Results: Serial Generation Requests

Actions View

Generation Request Method	Generation Status	Creation Date	Created By	Message Severity	Product Code	Requested Quantity	Generated Quantity
Work Order Import	Generation Requested	5/17/2013	span		1210-1000-01	10	

Rows Selected: 1

Serial Generation Messages

Message: No data to display. Message Severity:

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 7-26.

Maintain Serial Generation Requests page

ORACLE[®] Pedigree and Serialization Manager About Sign Out opsm

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

Commission Serials Maintain Lots Lot Synchronization Work Order Serialization **Maintain Serial Generation Requests** Web Service Exceptions

Search: Serial Generation Requests Saved Search Display All Serial Generation Requests

Generation Request Method: Work Order Import Location:

Generation Status: Generation Requested Product Code:

Created Document: 436 Created By:

Lot Number: Creation Date:

Search Reset Save...

Search Results: Serial Generation Requests

Actions View

Generation Request Method	Generation Status	Creation Date	Created By	Message Severity	Product Code	Requested Quantity	Generated Quantity
Work Order Import	Generation Submitted	5/17/2013	span		1210-1000-01	10	

Rows Selected: 1

Serial Generation Messages

Message: Message Severity:

No data to display.

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 7-52.

Maintain Serials page

ORACLE Pedigree and Serialization Manager

AboutSign Outopsm

DashboardSerialsPackagingTransactionsSystem SetupEPCIS SetupAudit Trail

Maintain Serials

Commission SerialsMaintain LotsLot SynchronizationWork Order SerializationMaintain Serial Generation Requests

Search: Serials

BasicSaved SearchDisplay Serials

** At least one is required

** Item Number

Equals

P1210-1

** Product Code

Equals

1210-1000-01

** Product Name

Starts with

Deconsal

Product Code Type

Equals

NDC442

Product Code Variant

Starts with

NOVARIANT

** Lot Number

Equals

** Location

Equals

** Serial Number

Starts with

Serial Type

Equals

Serial State

Equals

Serial Status

Equals

Reason Code

Equals

Counterfeit Status

Equals

Created By

Starts with

Creation Date

Equals

Transaction Source Name

Starts with

Created Document Organization

Starts with

Created Document

Starts with

436

Created Document Type

Equals

Created Document Line Number

Starts with

SearchResetSave...Add Fields

Search Results: Serials

ActionViewCommission SerialsDecommission SerialsDetach

Serial Number	Action	Serial Type	Product Code	Product Name	Lot Number	Location	Serial Status	Count
1.890605555.1120.100		SGTIN-95	1210-1000-01	Deconsal		PR1	Reserved	
1.890605555.1120.63		SGTIN-95	1210-1000-01	Deconsal		PR1	Reserved	
1.890605555.1120.92		SGTIN-95	1210-1000-01	Deconsal		PR1	Reserved	
1.890605555.1120.93		SGTIN-95	1210-1000-01	Deconsal		PR1	Reserved	
1.890605555.1120.94		SGTIN-95	1210-1000-01	Deconsal		PR1	Reserved	
1.890605555.1120.95		SGTIN-95	1210-1000-01	Deconsal		PR1	Reserved	
1.890605555.1120.96		SGTIN-95	1210-1000-01	Deconsal		PR1	Reserved	
1.890605555.1120.97		SGTIN-95	1210-1000-01	Deconsal		PR1	Reserved	
1.890605555.1120.98		SGTIN-95	1210-1000-01	Deconsal		PR1	Reserved	

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 7-67.

To Extract Work Orders from an External System:

- 1. Navigate to the Work Order Serialization page, page A-2.

Work Order Serialization page

ORACLE Pedigree and Serialization Manager About Sign Out opsm

Dashboard Serials Packaging Transactions System Setup EPCIS Setup Audit Trail

Tasks

- Maintain Serials
- Commission Serials
- Maintain Lots
- Lot Synchronization
- Work Order Serialization**
- Maintain Serial Generation Requests
- Web Service Exceptions

Work Order Serialization

Submit New Instance

Search: Job Instances Advanced Saved Search Display All Job Instances

Job Instance Id Created By

Job Status Creation Date

Search Reset Save...

Search Results: Job Instances

Actions View Detach

Job Instance Id	Job Status	Creation Date	Created By
No data to display.			

Job Instance Messages

Message

No data to display.

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 <i>Extract Work Orders</i> . 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

Work Order Serialization

Select Work Order Serialization options, then press OK to process work orders for serialization. Press Cancel to exit without processing.

Synchronization Action: Extract Work Orders

Extract Scenario Name: EBS Process Incremental

Source System: EBIZ_01

Purge Interface Table: ☐

OK Cancel

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:

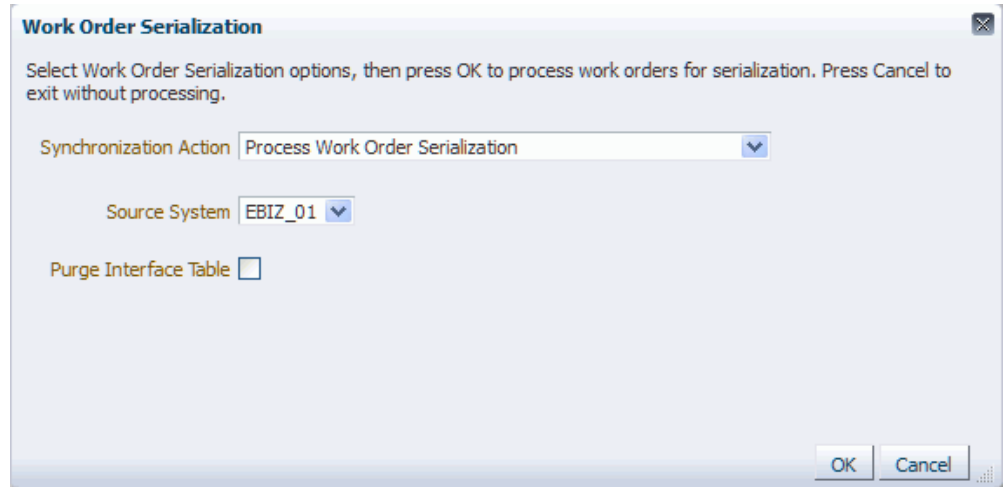
1. Navigate to the Work Order Serialization page, page A-2.
2. Click the Submit New Instance button in the upper right hand corner of the Work Order Serialization page.

The Work Order Serialization dialog box appears.

3. Enter the following options for the Work Order Serialization process:

Field Name	Description
Synchronization Action	Select <i>Process Work Order Serialization</i> . 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

The image shows a 'Work Order Serialization' dialog box. It has a title bar with a close button. The main area contains a text box with instructions: 'Select Work Order Serialization options, then press OK to process work orders for serialization. Press Cancel to exit without processing.' Below this are three controls: a 'Synchronization Action' dropdown menu set to 'Process Work Order Serialization', a 'Source System' dropdown menu set to 'EBIZ_01', and a 'Purge Interface Table' checkbox which is currently unchecked. At the bottom right are 'OK' and 'Cancel' buttons.

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 <i>Work Order Import</i> .
Generation Status	Select a generation status of <i>Generation Requested</i> .
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

ORACLE Pedigree and Serialization Manager About Sign Out epssm

Dashboard Serials Packaging Transactions System Setup EPCLIS Setup Audit Trail

« Commission Serials Maintain Lots Lot Synchronization Work Order Serialization **Maintain Serial Generation Requests** Web Service Exceptions

Search: Serial Generation Requests Saved Search Display All Serial Generation Requests

Generation Request Method: Work Order Import Location:

Generation Status: Generation Requested Product Code:

Created Document: 436 Created By:

Lot Number: Creation Date:

Search Results: Serial Generation Requests

Actions View

Generation Request Method	Generation Status	Creation Date	Created By	Message Severity	Product Code	Requested Quantity	Generated Quantity
Work Order Import	Generation Requested	5/17/2013	span		1210-1000-01	10	

Rows Selected: 1

Serial Generation Messages

Message: Message Severity:

No data to display.

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 7-26.

Maintain Serial Generation Requests page

ORACLE[®] Pedigree and Serialization Manager About Sign Out opsm

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

Commission Serials Maintain Lots Lot Synchronization Work Order Serialization **Maintain Serial Generation Requests** Web Service Exceptions

Search: Serial Generation Requests Saved Search Display All Serial Generation Requests

Generation Request Method: Work Order Import Location:
Generation Status: Generation Requested Product Code:
Created Document: 436 Created By:
Lot Number: Creation Date:

Search Reset Save...

Search Results: Serial Generation Requests

Actions View

Generation Request Method	Generation Status	Creation Date	Created By	Message Severity	Product Code	Requested Quantity	Generated Quantity
Work Order Import	Generation Submitted	5/17/2013	span		1210-1000-01	10	

Rows Selected: 1

Serial Generation Messages

Message: Message Severity:

No data to display.

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 7-52.

Maintain Serials page

Search: Serials

Item Number: Equals P1210-1
 Product Code: Equals 1210-1000-01
 Product Name: Starts with Deconsal
 Product Code Type: Equals NDC442
 Product Code Variant: Starts with NOVARIANT
 Lot Number: Equals
 Location: Equals
 Serial Number: Starts with
 Serial Type: Equals
 Serial Status: Equals
 Reason Code: Equals
 Counterfeit Status: Equals
 Created By: Starts with
 Creation Date: Equals
 Transaction Source Name: Starts with
 Created Document Organization: Starts with
 Created Document: Starts with 436
 Created Document Type: Equals
 Created Document Line Number: Starts with

Search Results: Serials

Serial Number	Action	Serial Type	Product Code	Product Name	Lot Number	Location	Serial Status	Count
1.890605555.1120.100		SGTIN-95	1210-1000-01	Deconsal		PR1	Reserved	
1.890605555.1120.63		SGTIN-95	1210-1000-01	Deconsal		PR1	Reserved	
1.890605555.1120.92		SGTIN-95	1210-1000-01	Deconsal		PR1	Reserved	
1.890605555.1120.93		SGTIN-95	1210-1000-01	Deconsal		PR1	Reserved	
1.890605555.1120.94		SGTIN-95	1210-1000-01	Deconsal		PR1	Reserved	
1.890605555.1120.95		SGTIN-95	1210-1000-01	Deconsal		PR1	Reserved	
1.890605555.1120.96		SGTIN-95	1210-1000-01	Deconsal		PR1	Reserved	
1.890605555.1120.97		SGTIN-95	1210-1000-01	Deconsal		PR1	Reserved	
1.890605555.1120.98		SGTIN-95	1210-1000-01	Deconsal		PR1	Reserved	

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 7-67.

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.

If you are using location security, you will only be able to search for serials associated to

locations you have at a minimum *read access* to in the Location Security Setup page. For more information on location security, see Location Security Overview, page 1-9. Use these procedures to search for serials:

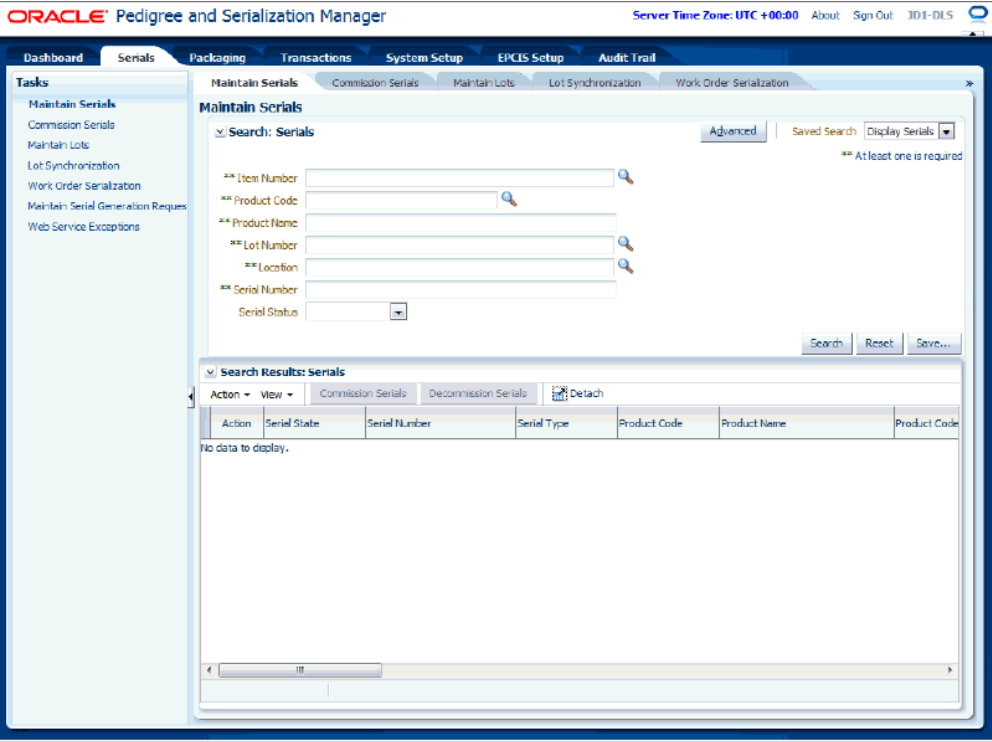
Prerequisites

- ☐ Location security information must be set up if you are using location security.

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. If you are using location security, you will only be able to select locations that you have at a minimum <i>read access</i> to in the Location Security Setup page. For more information on location security, see Location Security Overview, page 1-9.
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)

ORACLE Pedigree and Serialization Manager Server Time Zone: UTC +00:00 About Sign Out JD1-DLS

Dashboard **Serials** Packaging Transactions System Setup EPICIS Setup Audit Trail

Maintain Serials Commission Serials Maintain Lots Lot Synchronization Work Order Serialization Maintain Serial Generation Requests

Maintain Serials

☒ Search: Serials Advanced Saved Search Display Serials

** Item Number

** Product Code 0037-2000-10

** Product Name Headache Pain Relief

** Lot Number G450-800-100

** Location San Jose

** Serial Number

Serial Status

Search Reset Save...

Search Results: Serials

Action View Commission Serials Decommission Serials ☒ Detach

Action	Serial State	Serial Number	Serial Type	Product Code	Product Name	Product Code Type	Product Code Variant
		0.300008.1888888.10010	SGTIN-96	0037-2000-10	Headache Pain Relief	NDC442	NOVARIANT
		0.300008.1888888.10011	SGTIN-96	0037-2000-10	Headache Pain Relief	NDC442	NOVARIANT
		0.300008.1888888.10012	SGTIN-96	0037-2000-10	Headache Pain Relief	NDC442	NOVARIANT
		0.300008.1888888.10013	SGTIN-96	0037-2000-10	Headache Pain Relief	NDC442	NOVARIANT
		0.300008.1888888.10014	SGTIN-96	0037-2000-10	Headache Pain Relief	NDC442	NOVARIANT
		0.300008.1888888.10015	SGTIN-96	0037-2000-10	Headache Pain Relief	NDC442	NOVARIANT
		0.300008.1888888.10016	SGTIN-96	0037-2000-10	Headache Pain Relief	NDC442	NOVARIANT
		0.300008.1888888.10017	SGTIN-96	0037-2000-10	Headache Pain Relief	NDC442	NOVARIANT
		0.300008.1888888.10018	SGTIN-96	0037-2000-10	Headache Pain Relief	NDC442	NOVARIANT
		0.300008.1888888.10019	SGTIN-96	0037-2000-10	Headache Pain Relief	NDC442	NOVARIANT
		0.300008.1888888.10020	SGTIN-96	0037-2000-10	Headache Pain Relief	NDC442	NOVARIANT
		0.300008.1888888.10021	SGTIN-96	0037-2000-10	Headache Pain Relief	NDC442	NOVARIANT

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

If you are using location security, all of the serials associated with locations that you have at a minimum *read access* to in the Location Security Setup page will display. With *read access* you can view the serial number information using the Serial Number link in the table or the View option in the Action menu. The Edit icon in the Action column and the Edit option in the Action menu will be available if you have *update access* to the location associated to the serial in the Location Security Setup page. Otherwise, the icons will not be available. In addition the Commission Serials and Decommission Serials buttons and the Commission Serials and Decommission Serials options in the Action menu will always be available. You will only be able to commission serials and decommission serials associated with locations that you have *update access* to in the Location Security Setup page. Otherwise, when you attempt to commission or decommission a serial you will receive a message that you do not have the correct privileges.

For each serial number the following information displays:

Field Name	Description
Action	Displays the Edit icon.
Serial State	Displays the state of the serial number. Values are: Shipped, Received, Returned, and blank.
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.
Product Name	Displays the product name for the product.
Lot Number	Displays the lot number associated with the product.
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.
Created Document Organization	Displays the organization for the document that created the serial number.

Field Name	Description
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.
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)

The screenshot displays the 'Maintain Serials' page in the Oracle Pedigree and Serialization Manager. The page is titled 'Maintain Serials' and includes a navigation bar with tabs for Dashboard, Serials, Packaging, Transactions, System Setup, EPCIS Setup, and Audit Trail. The 'Serials' tab is active, and the 'Maintain Serials' sub-tab is selected. The page is in 'Advanced Search' mode, indicated by the 'Basic' and 'Advanced' buttons at the top right of the search section. The search criteria section is titled 'Search: Serials' and contains various fields for filtering, each with a dropdown menu for comparison operators. The fields include Item Number, Product Code, Product Name, Product Code Type, Product Code Variant, Lot Number, Location, Serial Number, Serial Type, and Serial State. The search results section is titled 'Search Results: Serials' and shows a table with columns for Action, Serial State, Serial Number, Serial Type, Product Code, Product Name, Product Code Type, Product Code Variant, and Lot. The table is currently empty, displaying 'No data to display'.

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. If you are using location security, you will only be able to select locations that you have at a minimum <i>read access</i> to in the Location Security Setup page. For more information on location security, see Location Security Overview, page 1-9.
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, Received, 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.

Field Name	Description
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.
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.

Field Name	Description
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
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.

Field Name	Description
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)

ORACLE Pedigree and Serialization Manager Server Time Zone: UTC +00:00 About Sign Out J01-DLS

Dashboard **Serials** Packaging Transactions System Setup EPICIS Setup Audit Trail

Maintain Serials Commission Serials Maintain Lots Lot Synchronization Work Order Serialization Maintain Serial Generation Requests

Maintain Serials

☒ Search: Serials Basic Saved Search Display Serials

**** Item Number** Equals Serial Status Equals

**** Product Code** Equals Reason Code Equals

**** Product Name** Starts with Headache Counterfeit Status Equals

Product Code Type Equals Created By Starts with

Product Code Variant Starts with Creation Date Before 12/2/14

**** Lot Number** Starts with G450 Transaction Source Name Starts with

**** Location** Equals San Jose Created Document Organization Starts with

**** Serial Number** Starts with Created Document Starts with

Serial Type Equals Created Document Type Equals

Serial State Equals Created Document Line Number Starts with

** At least one is required

Search Reset Save... Add Fields

Search Results: Serials

Action View Commission Serials Decommission Serials Detach

Action	Serial State	Serial Number	Serial Type	Product Code	Product Name	Product Code Type	Product Code Variant
		0.300008.1888888.10010	SGTIN-96	0037-2000-10	Headache Pain Relief	INDC442	NOVARIANT
		0.300008.1888888.10011	SGTIN-96	0037-2000-10	Headache Pain Relief	INDC442	NOVARIANT
		0.300008.1888888.10012	SGTIN-96	0037-2000-10	Headache Pain Relief	INDC442	NOVARIANT
		0.300008.1888888.10013	SGTIN-96	0037-2000-10	Headache Pain Relief	INDC442	NOVARIANT
		0.300008.1888888.10014	SGTIN-96	0037-2000-10	Headache Pain Relief	INDC442	NOVARIANT
		0.300008.1888888.10015	SGTIN-96	0037-2000-10	Headache Pain Relief	INDC442	NOVARIANT
		0.300008.1888888.10016	SGTIN-96	0037-2000-10	Headache Pain Relief	INDC442	NOVARIANT
		0.300008.1888888.10017	SGTIN-96	0037-2000-10	Headache Pain Relief	INDC442	NOVARIANT

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

If you are using location security, all of the serials associated with locations that you have at a minimum *read access* to in the Location Security Setup page will display. With *read access* you can view the serial number information using the Serial Number link in the table or the View option in the Action menu. The Edit icon in the Action column and the Edit option in the Action menu will be available if you have *update access* to the location associated to the serial in the Location Security Setup page. Otherwise, the icons will not be available. In addition the Commission Serials and Decommission Serials buttons and the Commission Serials and Decommission Serials options in the Action menu will always be available. You will only be able to commission serials and decommission serials associated with locations that you have *update access* to in the Location Security Setup page. Otherwise, when you attempt to commission or decommission a serial you will receive a message that you do not have the correct privileges.

For information on the fields that appear for each serial number, see Procedure: To Search for Serials (Basic Search), page 7-53.

- 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

If you are using location security, you will only be able to view serial detailed information associated to the serial locations you have at a minimum *read access* to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

Use this procedure to view serial detail information:

Prerequisites

- ☐ Location security information must be set up if you are using location security.

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.

If you are using location security, you will only be able to search for and view serial detail information associated to the serial locations you have at a minimum *read access* to in the Location Security Setup page.

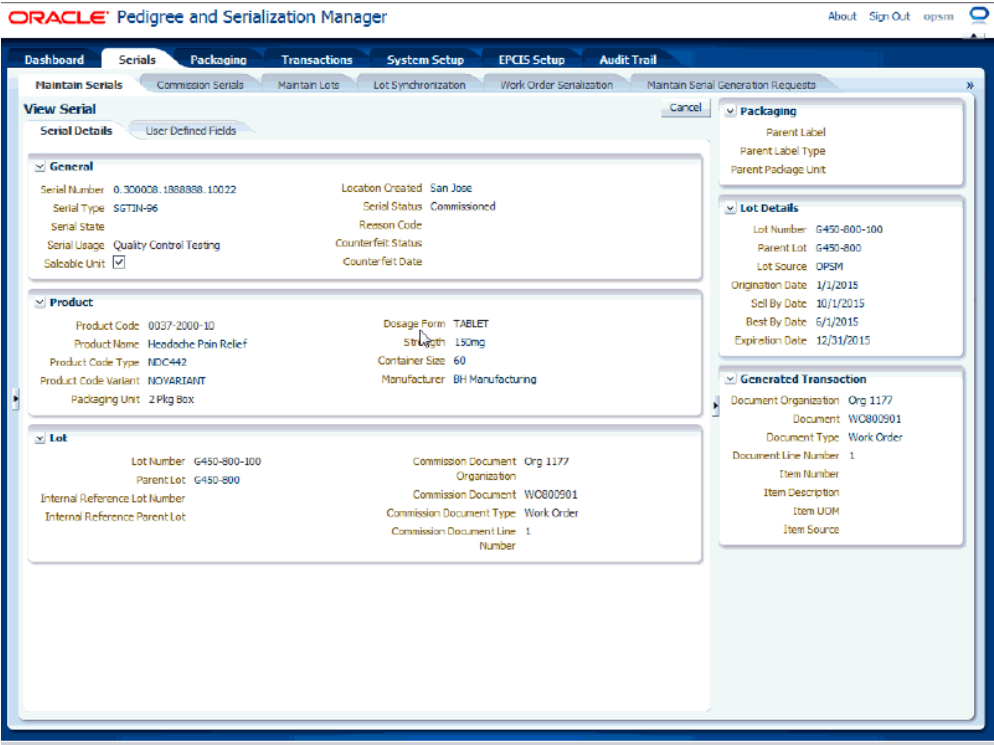
For more information on location security, see Location Security Overview, page 1-9.

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 Action menu or click the Serial Number link in the table.

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.

Field Name	Description
Serial State	Displays the state of the serial number. Values are: Shipped, Received, Returned, or blank.
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.

Field Name	Description
Counterfeit Date	Displays the date the serial number was detected as being Counterfeit, Suspect Counterfeit, or Verified Not Counterfeit.
Product region	
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.

Field Name	Description
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.
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 serials, see Commissioning Serials, page 7-85 and Decommissioning Serials, page 7-110.

If you are using location security, you will only be able to edit serial information associated to the serial locations you have *update access* to in the Location Security Setup page. In addition, when commissioning or decommissioning a serial you need *update access* to the location or location group associated to the product detail and the location

associated to the lot if entering or updating that type of information when commissioning or decommissioning a serial. If an existing serial that you want to commission already has a product code or lot number associated to it, before you can remove or update that information you must also have *update access* to the existing product detail location or location group or lot number location in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

Use these procedures to edit, commission, or decommission an individual serial number:

Prerequisites

- ☐ Location security information must be set up if you are using location security.

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.

If you are using location security, you will only be able to edit serial numbers associated to locations that you have *update access* to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

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 7-67.

5. Edit the serial number fields.

Edit Serial page (Serial State of Shipped)

ORACLE Pedigree and Serialization Manager

Logged In As: opsm1 Sign Out

The screenshot shows the 'Edit Serial' page in the Oracle Pedigree and Serialization Manager. The page is divided into several sections: 'Serial Details', 'Product', 'Lot', 'Packaging', 'Lot Details', and 'Generated Transaction'. The 'Serial Details' section is expanded, showing fields for Serial Number, Serial Type, Serial State, Serial Usage, Selectable Unit, Location Created, Serial Status, Reason Code, Counterfeit Status, and Counterfeit Date. The 'Product' section shows Product Code, Product Name, Product Code Type, Product Code Variant, Packaging Unit, Dosage Form, Strength, Container Size, and Manufacturer. The 'Lot' section shows Lot Number, Parent Lot, Internal Reference Lot, and Internal Reference Parent Lot. The 'Packaging' section shows Parent Label, Parent Label Type, and Parent Package Unit. The 'Lot Details' section shows Lot Number, Parent Lot, Lot Source, Origination Date, Sell by Date, Best By Date, and Expiration Date. The 'Generated Transaction' section shows Document, Organization, Document Type, Document Line Number, Item Number, Item Description, Item UOM, and Item Source.

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 (if you select a Counterfeit Status that is not blank)
- User Defined fields

Edit Serial page (Serial State of Received)

ORACLE Pedigree and Serialization Manager Server Time Zone: UTC +00:00 About Sign Out opsm

Dashboard **Serials** **Packaging** **Transactions** **System Setup** **EPICIS Setup** **Audit Trail**

Maintain Serials **Commission Serials** **Maintain Lots** **Lot Synchronization** **Work Order Serialization** **Maintain Serial Generation Requests**

Edit Serial Save and Close Cancel

Serial Details User Defined Fields

General

Serial Number: 3.0002288.911096.1615 Location Created: Salina
 Serial Type: SGTIN-96 * Serial Status: Commissioned
 Serial State: Received Reason Code
 Serial Usage: Sample Product Counterfeit Status
 Soluble Unit: ☐ Counterfeit Date

Product

Product Code: 11096-0110-96 Dosage Form: TABLET
 Product Name: IMPORT- SGTIN-96 Strength: 50mg
 Product Code Type: NDC542 Container Size: 100
 Product Code Variant: NOVARIANT Manufacturer: JD Man
 Packaging Unit: Blister Pack

Lot

Lot Number: 1109EP Commission: JD
 Parent Lot: 1109P Document Organization
 Internal Reference: Commission Document: RedPedsan
 Lot Number: Commission Document: RECEIPTNUMBER
 Internal Reference: Commission Document Type: Segment4
 Parent Lot: Commission Document Line Number

Packaging

Parent Label
 Parent Label Type
 Parent Package Unit

Lot Details

Lot Number: 1109EP
 Parent Lot: 1109P
 Lot Source: EBITZ_01
 Origination Date: 11/30/2010
 Sell By Date: 11/30/2028
 Best By Date: 11/30/2020
 Expiration Date: 11/30/2030

Generated Transaction

Document Organization: JD
 Document: RedPedsan
 Document Type: RECEIPTNUMBER
 Document Line Number: Segment4
 Item Number: 110960
 Item Description: BP
 Item UOM: BP
 Item Source: EBITZ_01

For serial numbers related to an SGTIN or product-specific serial type group that have a Serial State of *Received*, 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 that is not blank)
- Lot Number

If you are using location security, you will only be able to select lots associated to lot locations that you have *update access* to in the Location Security Setup page. In addition, you will only be able to change or remove the lot on the serial if you have *update access* to the existing lot location on the serial in the Location Security Setup page.

For more information on location security, see Location Security Overview,

page 1-9.

- Internal Reference Lot Number
- Internal Reference Parent Lot
- 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.

For serial numbers related to an non-product specific serial type group (USN) that have a Serial State of *Received*, 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 that is not blank)
- Product Code

If you are using location security, you will only be able to select product codes associated to product detail locations or location groups that you have *update access* to in the Location Security Setup page. In addition, you will only be able to change or remove the product code on the serial if you have *update access* to the existing product detail location or location group on the serial in the Location Security Setup page.

Note: Updating the product information is only available on non-product specific serials.

For more information on location security, see Location Security Overview, page 1-9.

- Lot Number

If you are using location security, you will only be able to select lots associated to lot locations that you have *update access* to in the Location Security Setup page. In addition, you will only be able to change or remove the lot on the serial if you have *update access* to the existing lot location on the serial in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

- Internal Reference Lot Number
- Internal Reference Parent Lot
- 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 (Serial State of Returned)

ORACLE Pedigree and Serialization Manager

Logged In As: opsm1 Sign Out

The screenshot shows the 'Edit Serial' page in the Oracle Pedigree and Serialization Manager. The page is divided into several sections: 'Serial Details', 'Product', 'Lot', 'Packaging', 'Lot Details', and 'Generated Transaction'. The 'Serial Details' section is expanded, showing fields for 'Serial Number' (500700), 'Serial Type' (USN-1), 'Serial State' (Returned), 'Serial Usage' (a dropdown menu), 'Selectable Unit' (checked), 'Location Created' (Runson), 'Serial Status' (Commissioned), 'Reason Code', 'Counterfeit Status', and 'Counterfeit Date'. The 'Product' section shows 'Product Code' (7777-1234-20), 'Product Name' (Test Product - Import), 'Product Code Type' (NDC442), 'Product Code Variant' (1), and 'Packaging Unit' (Case). The 'Lot' section shows 'Lot Number' (124-Dev), 'Parent Lot', 'Internal Reference Lot', 'Internal Reference Parent Lot', 'Commission Document Organization' (Corp), 'Commission Document' (020510-2), 'Commission Document Type' (SHIP), and 'Commission Document Line Number' (001). The 'Packaging' section shows 'Parent Label' (500007), 'Parent Label Type' (License Plate Number), and 'Parent Package Unit' (Pallet). The 'Lot Details' section shows 'Lot Number' (124-Dev), 'Parent Lot', 'Lot Source' (EBIZ_01), 'Origination Date', 'Sell by Date', 'Best By Date', and 'Expiration Date'. The 'Generated Transaction' section shows 'Document Organization' (Corp), 'Document' (020510-2), 'Document Type' (SHIP), 'Document Line Number' (001), 'Item Number', 'Item Description', 'Item UOM', and 'Item Source'.

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 that is not 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))

ORACLE Pedigree and Serialization Manager

Logged In As: opsm1 Sign Out

The screenshot displays the 'Edit Serial' page in the Oracle Pedigree and Serialization Manager. The page is divided into several sections: 'Serial Details', 'Product', 'Lot', 'Packaging', 'Lot Details', and 'Generated Transaction'. The 'Serial Details' section includes fields for Serial Number, Serial Type (SGTIN-96), Serial State, Serial Usage, Saleable Unit, Location Created, Serial Status (Commissioned), Reason Code, Counterfeit Status, and Counterfeit Date. The 'Product' section includes fields for Product Code, Product Name, Dosage Form, Strength, Container Size, and Manufacturer. The 'Lot' section includes fields for Lot Number, Parent Lot, Lot Source, Origination Date, Sell by Date, and Expiration Date. The 'Packaging' section includes fields for Parent Label, Parent Label Type, and Parent Package Unit. The 'Lot Details' section includes fields for Lot Number, Parent Lot, Lot Source, Origination Date, Sell by Date, and Expiration Date. The 'Generated Transaction' section includes fields for Document, Organization, Document Type, Document Line Number, Item Number, Item Description, Item UOM, and Item Source.

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

If you are using location security, you will only be able to select lots associated to lot locations that you have *update access* to in the Location Security Setup page. In addition, you will only be able to change or remove the lot on the serial if you have *update access* to the existing lot location on the serial in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

- Internal Reference Lot Number

- Internal Reference Parent Lot
- 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))

ORACLE Pedigree and Serialization Manager

Logged In As: opsm1 Sign Out

Dashboard Serials Packaging Transactions System Setup EPCIS Setup Audit Trail

Maintain Serials Commission Serials Maintain Lots Lot Synchronization Work Order Serialization Maintain Serial Generation Requests

Edit Serial Save and Close Cancel

Serial Details User Defined Fields

General

Serial Number: 7642533856 Location Created: Detroit
 Serial Type: USN-1 Serial Status: Commissioned
 Serial State: Reason Code:
 Serial Usage: Sample Product Counterfeit Status:
 Saleable Unit: ☒ Counterfeit Date:

Product

Product Code: 0037-0280-10 Dosage Form: CREAM
 Product Name: WartOff .75mg cream Strength: .75MG
 Product Code Type: NDC442 Container Size: 1
 Product Code Variant: 0 Manufacturer: PharmaOne
 Packaging Unit: Tube

Lot

Lot Number: R00193 Commission: CN
 Parent Lot: Organization:
 Internal Reference: Commission: 1111
 Lot Number: Commission: Work Order Number
 Internal: Document Type:

Packaging

Parent Label
 Parent Label Type
 Parent Package Unit

Lot Details

Lot Number: R00193
 Parent Lot:
 Lot Source: #BIZ_01
 Origination Date: 10/23/2009
 Sell by Date:
 Best By Date:
 Expiration Date: 10/23/2015

Generated Transaction

Document Organization: CN
 Document: 1111
 Document Type: Work Order Number
 Document Line Number: 1
 Item Number:
 Item Description:
 Item UOM:
 Item Source:

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

If you are using location security, you will only be able to select product codes associated to product detail locations or location groups that you have *update access* to in the Location Security Setup page. In addition, you will only be able to change or remove the product code on the serial if you have *update access* to the existing product detail location or location group on the serial in the Location Security Setup page.

Note: Updating the product information is only available on non-product specific serials.

For more information on location security, see Location Security Overview, page 1-9.

- Lot Number

If you are using location security, you will only be able to select lots associated to lot locations that you have *update access* to in the Location Security Setup page. In addition, you will only be able to change or remove the lot on the serial if you have *update access* to the existing lot location on the serial in the Location Security Setup page.

- Internal Reference Lot Number
- Internal Reference Parent Lot
- 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.

If you are using location security, you will only be able to commission serials associated to the serial locations you have *update access* to in the Location Security Setup page. In addition, when commissioning a serial you need *update access* to the location or location group associated to the product code and the location associated to the lot if entering or updating that type of information when commissioning a serial.

For more information on location security, see Location Security Overview, page 1-9.

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 7-67.

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.

If you are using location security, you will only be able to select product codes associated to locations or location groups and lot numbers associated to lot locations that you have *update access* to in the Location Security Setup page.

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.

If you are using location security, you will only be able to decommission serials associated to the serial locations you have *update access* to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

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 7-67.

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.

If you are using location security, you will only be able to commission serials associated to the serial locations you have *update access* to in the Location Security Setup page. In

addition, when commissioning a serial you need *update access* to the location or location group associated to the product detail and the location associated to the lot if entering or updating that type of information when commissioning or decommissioning a serial. If an existing serial that you want to commission already has a product code or lot number associated to it, before you can remove or update that information you must also have *update access* to the existing product code detail location or location group or lot number location in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

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 Oracle E-Business Suite (EBS), see *Oracle Serialization and Tracking Process Integration Pack for Oracle Pedigree and Serialization Manager and Oracle E-Business Suite 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:

Prerequisites

- ☐ Location security information must be set up if you are using location security.

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.

If you are using location security, you will only be able to commission serials associated to the serial locations you have *update access* to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

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

ORACLE Pedigree and Serialization Manager

About Sign Out opsm

Dashboard Serials Packaging Transactions System Setup EPCTIS Setup Audit Trail

Maintain Serials Commission Serials Maintain Lots Lot Synchronization Work Order Serialization Maintain Serial Generation Requests

Search: Serials Advanced Saved Search Display Serials

** At least one is required

** Item Number

** Product Code 0037-0223-11

** Product Name NoPain 200mg blister pack tablet

** Lot Number

** Location Denver

** Serial Number

Serial Status Reserved

Search Reset Save...

Search Results: Serials

Action View Commission Serials Decommission Serials Detail

Serial Number	Action	Serial Type	Product Code	Product Name	Lot Number	Location	Serial Status	Counterfeit Status	Counterfeit Date
4.0002299.081111.49		SGTIN-96	0037-0223-11	NoPain 200mg blister p		Denver	Reserved		
4.0002299.081111.50		SGTIN-96	0037-0223-11	NoPain 200mg blister p		Denver	Reserved		
4.0002299.081111.51		SGTIN-96	0037-0223-11	NoPain 200mg blister p		Denver	Reserved		
4.0002299.081111.52		SGTIN-96	0037-0223-11	NoPain 200mg blister p		Denver	Reserved		
4.0002299.081111.53		SGTIN-96	0037-0223-11	NoPain 200mg blister p		Denver	Reserved		
4.0002299.081111.54		SGTIN-96	0037-0223-11	NoPain 200mg blister p		Denver	Reserved		
4.0002299.081111.55		SGTIN-96	0037-0223-11	NoPain 200mg blister p		Denver	Reserved		
4.0002299.081111.56		SGTIN-96	0037-0223-11	NoPain 200mg blister p		Denver	Reserved		
4.0002299.081111.57		SGTIN-96	0037-0223-11	NoPain 200mg blister p		Denver	Reserved		
4.0002299.081111.58		SGTIN-96	0037-0223-11	NoPain 200mg blister p		Denver	Reserved		
4.0002299.081111.59		SGTIN-96	0037-0223-11	NoPain 200mg blister p		Denver	Reserved		

Rows Selected 3 Columns Hidden 2

4. Select Commission Serials in the Action menu or click the Commission Serials button located at the top of the Search Results: Serials region.

If you are using location security, the Commission Serials action and the Commission Serials button are available if you have *only read access* or if you have *read and update access* to the serial location in the Location Security Setup page. If you try to commission serials with *only read access* you will receive a message that you do not have the correct privileges. You will only be able to commission serials if you have all of the following:

- *Update access* to the serial location in the Location Security Setup page.
- *Updates access* to the location or location group associated to the product detail for the product code in the Location Security Setup page that you are using to commission the serial.
- *Update access* to the lot location associated to the lot number in the Location Security Setup page that you are using to commission the serial.
- *Update access* to the existing product detail location or location group and lot location on the serial in the Location Security Setup page.

Commission Serial(s) page (Product Specific Serial Type (SGTIN))

Commission Serial(s)

The selected serial(s) will be commissioned. Enter product information (required), lot information (required), and commission document information (optional), and then press OK to continue.

Product Code

0037-6211-10

Product Code Type

NDC442

Product Code Variant

0

Product Name

AllerX 200mg injection

Package Unit

Syringe

* Lot Number



Parent Lot

Commission Document Organization

Commission Document

Commission Document Type



Commission Document Line Number

OK

Cancel



Commission Serial(s) page (Non-Product Specific Serial Type (USN))

Commission Serial(s)

The selected serial(s) will be commissioned. Enter product information (required), lot information (required), and commission document information (optional), and then press OK to continue.

* Product Code

0037-0208-10

Product Code Type

NDC442

Product Code Variant

0

Product Name

WartOff .75mg cream

Package Unit

Tube

* Lot Number

Parent Lot

Commission Document Organization

Commission Document

Commission Document Type

Commission Document Line Number

OK

Cancel

Commission Serial(s) page (Serial State of Returned)

Commission Serial(s)

The selected serial(s) will be commissioned. Enter product information (required), lot information (required), and commission document information (optional), and then press OK to continue.

Product Code 0037-0280-10
Product Code Type NDC442
Product Code Variant 0
Product Name WartOff .75mg cream
Package Unit Tube
Lot Number R00195
Parent Lot

Commission Document Organization
Commission Document
Commission Document Type
Commission Document Line Number

OK Cancel

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.

If you are using location security, you will only be able to select product codes associated to product detail locations or location groups that you have *update access* to in the Location Security Setup page.

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.

If you are using location security, you will only be able to select lot numbers associated to lot locations that you have *update access* to in the Location Security Setup page.

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 7-74.

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.

Parameter Name	Description
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 External System)

ORACLE[®] Pedigree and Serialization Manager

Logged In 4

The Commission Serials page appears.

- 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.

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 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.
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.

Field Name	Description
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)

ORACLE Pedigree and Serialization Manager Logged In

Dashboard | **Serials** | Packaging | Transactions | System Setup | EPCIS Setup | Audit Trail

Maintain Serials | **Commission Serials** | Maintain Lots | Lot Synchronization | Work Order Serialization | Maintain Serial Generation Requests

Commission Serials Identify New Lot Close

Identify Lot

Lot Number: K05-0924-01	Item Number: 80120
Lot Location: PR1	Item UOM: BTL
Product Code: 6202-5616-10	Document Organization: PR1
Product Name: Restylane Tablets	Document Number: 211
Packaging Unit: BOTTLE	Commission Document Type: BATCH
	Document Line Number:

[Continue](#)

Commission Serial Analysis

Completed Quantity: 1000 ⚠	Commissioned Quantity: 3
Transaction Quantity: 1000 ⚠	

Commission Serials page (2 of 2)

ORACLE Pedigree and Serialization Manager

Logged In 4

The screenshot shows the 'Commission Serials' page in the Oracle Pedigree and Serialization Manager. The page has a top navigation bar with tabs: Dashboard, Serials, Packaging, Transactions, System Setup, EPCIS Setup, and Audit Trail. Below this is a sub-navigation bar with tabs: Maintain Serials, Commission Serials (selected), Maintain Lots, Lot Synchronization, Work Order Serialization, and Maintain Serial Generation Requests. The main content area is titled 'Commission Serials' and contains a 'Search: Serials' section. This section has a 'Basic' search method selected and a 'Search' button. The search criteria include: Item Number (80120), Product Code (6202-5616-10), Packaging Unit (Bottle), Lot Number, and Unique Serial Number. There are also fields for Serial Status (Reserved), Created Document Organization (PR L), Created Document Number (211), and Created Document Type (BATCH). Below the search criteria is a 'Search Result: Serials' section with a table. The table has columns: Serial Number, Serial Type, Product Code, Packaging Unit, Product Name, Lot Number, Created Location, and Commission Organization. The table is currently empty, showing 'No data to display.'

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.

- (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.

If you are using location security, and add the Location field as additional search criteria, you will only be able to select locations that you have at a

minimum *read access* to in the Location Security Setup page.

4. (Optional) Enter search criteria for the additional fields.
5. Click the Search button.

Commission Serials page (1 of 2)

ORACLE Pedigree and Serialization Manager Logged In As

Dashboard | **Serials** | Packaging | Transactions | System Setup | EPCIS Setup | Audit Trail

Maintain Serials | **Commission Serials** | Maintain Lots | Lot Synchronization | Work Order Serialization | Maintain Serial Generation Requests

Commission Serials Identify New Lot Close

☒ **Identify Lot**

Lot Number: KGB-0924-01
Lot Location: PR1
Product Code: 6202-5616-10
Product Name: Restylane Tablets
Packaging Unit: BOTTLE

Item Number: 80120
Item UOM: BTL
Document Organization: PR1
Document Number: 211
Commission Document Type: BATCH
Document Line Number:

Continue

☒ **Commission Serial Analysis**

Completed Quantity: 1000
Transaction Quantity: 1000
Commissioned Quantity: 3

Commission Serials page (2 of 2)

ORACLE Pedigree and Serialization Manager Logged In As

Dashboard | **Serials** | Packaging | Transactions | System Setup | EPCIS Setup | Audit Trail

Maintain Serials | **Commission Serials** | Maintain Lots | Lot Synchronization | Work Order Serialization | Maintain Serial Generation Requests

Commission Serials Identify New Lot Close

☒ **Search: Serials** Advanced Saved Search Display Serials

Item Number: 80120
Product Code: 6202-5616-10
Packaging Unit: Bottle
Lot Number:
Unique Serial Number:

Serial Status: Reserved
Created Document Organization:
Created Document Number:
Created Document Type:

Search Reset Save...

☒ **Search Result: Serials**

Action View Commission Decommission Details

Serial Number	Serial Type	Product Code	Packaging Unit	Product Name	Lot Number	Created Location	Commis Organiz
2.890605555.8876.434	SGTIN-95	6202-5616-10	Bottle	Restylane Tablets Edit		PR1	
2.890605555.8876.435	SGTIN-95	6202-5616-10	Bottle	Restylane Tablets Edit		PR1	
2.890605555.8876.436	SGTIN-95	6202-5616-10	Bottle	Restylane Tablets Edit		PR1	
2.890605555.8876.437	SGTIN-95	6202-5616-10	Bottle	Restylane Tablets Edit		PR1	
2.890605555.8876.438	SGTIN-95	6202-5616-10	Bottle	Restylane Tablets Edit		PR1	

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 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)

ORACLE Pedigree and Serialization Manager

Dashboard | **Serials** | Packaging | Transactions | System Setup | EPCIS Setup | Audit Trail

Maintain Serials | **Commission Serials** | Maintain Lots | Lot Synchronization | Work Order Serialization | Maintain Serial Generation Requests

Identify New Lot | Close

Identify Lot

Lot Number: KGB-0924-01
 Lot Location: PR.1
 Product Code: 6202-5616-10
 Product Name: Restylane Tablets
 Packaging Unit: BOTTLE

Item Number: 80120
 Item UOM: STL
 Document Organization: PR.1
 Document Number: 211
 Commission Document Type: BATCH
 Document Line Number:

Continue

Commission Serial Analysis

Completed Quantity: 1000
 Transaction Quantity: 1000
 Commissioned Quantity: 3

Commission Serials page (2 of 2)

ORACLE Pedigree and Serialization Manager

Dashboard | **Serials** | Packaging | Transactions | System Setup | EPCIS Setup | Audit Trail

Maintain Serials | **Commission Serials** | Maintain Lots | Lot Synchronization | Work Order Serialization | Maintain Serial Generation Requests

Identify New Lot | Close

Search: Serials

Item Number: 80120
 Product Code: 6202-5616-10
 Packaging Unit: Bottle
 Lot Number:
 Unique Serial Number:
 Serial Status: Reserved
 Created Document Organization:
 Created Document Number:
 Created Document Type:
 Search | Reset | Save...

Search Result: Serials

Serial Number	Serial Type	Product Code	Packaging Unit	Product Name	Lot Number	Created Location	Comm Organiz
2.89060555.8876.434	SGTIN-96	6202-5616-10	Bottle	Restylane Tablets Edit		PR.1	
2.89060555.8876.435	SGTIN-96	6202-5616-10	Bottle	Restylane Tablets Edit		PR.1	
2.89060555.8876.436	SGTIN-96	6202-5616-10	Bottle	Restylane Tablets Edit		PR.1	
2.89060555.8876.437	SGTIN-96	6202-5616-10	Bottle	Restylane Tablets Edit		PR.1	
2.89060555.8876.438	SGTIN-96	6202-5616-10	Bottle	Restylane Tablets Edit		PR.1	

7. Select Commission in the Action menu or click the Commission button located at the top of the Search Results: Serials region.

If you are using location security, the Commission action and the Commission button are available if you have *read access only* or if you have *read and update access* to the serial location in the Location Security Setup page. If you try to commission serials with *only read access* you will receive a message that you do not have the correct privileges. You will only be able to commission serials if you have all of the following:

- *Update access* to the serial location in the Location Security Setup page.
- *Updates access* to the location or location group associated to the product detail

for the product code in the Location Security Setup page that you are using to commission the serial.

- *Update access* to the lot location associated to the lot number in the Location Security Setup page that you are using to commission the serial.
- *Update access* to the existing product detail location or location group and lot location on the serial in the Location Security Setup page.

Commission Serial(s) page

Commission Serial(s)

Enter the commission document information and press OK to confirm the commissioning of the selected serial(s) to the identified lot.

Serials Selected 3

Lot Number KGB-0924-01

Lot Location PR 1

Product Code 6202-5616-10

Product Name Restylane Tablets

Packaging Unit BOTTLE

Commission Document Organization PR 1

Commission Document 211

Commission Document Type BATCH

Commission Document Line Number

OK Cancel

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.
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)

ORACLE Pedigree and Serialization Manager Logged In As

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

Maintain Serials | **Commission Serials** | Maintain Lots | Lot Synchronization | Work Order Serialization | Maintain Serial Generation Requests

Commission Serials Identify New Lot | Close

Identify Lot

Lot Number	K09-092401	Item Number	80120
Lot Location	PR1	Item UOM	BTL
Product Code	6202-5616-10	Document Organization	PR1
Product Name	Restylane Tablets	Document Number	211
Packaging Unit	BOTTLE	Commission Document Type	BATCH
		Document Line Number	

Continue

Commission Serial Analysis

Completed Quantity	1000	Commissioned Quantity	6
Transaction Quantity	1000		

Commission Serials page (2 of 2)

ORACLE Pedigree and Serialization Manager

Logged In 4

Commission Serials

Search: Serials

Item Number: 80120

Product Code: 6202-5616-10

Packaging Unit: Bottle

Lot Number:

Unique Serial Number:

Serial Status: Reserved

Created Document Organization:

Created Document Number:

Created Document Type:

Search Results: Serials

Serial Number	Serial Type	Product Code	Packaging Unit	Product Name	Lot Number	Created Location	Commis Organiz
2.890605555.8876.437	SSTIN-96	6202-5616-10	Bottle	Restylane Tablets Edit		PR.1	
2.890605555.8876.438	SSTIN-96	6202-5616-10	Bottle	Restylane Tablets Edit		PR.1	
2.890605555.8876.439	SSTIN-96	6202-5616-10	Bottle	Restylane Tablets Edit		PR.1	
2.890605555.8876.440	SSTIN-96	6202-5616-10	Bottle	Restylane Tablets Edit		PR.1	
2.890605555.8876.441	SSTIN-96	6202-5616-10	Bottle	Restylane Tablets Edit		PR.1	

The serial numbers that processed successfully 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.

If you are using location security, you will only be able to decommission serials associated to the serial locations you have *update access* to in the Location Security Setup page.

or more information on location security, see Location Security Overview, page 1-9

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:

Prerequisites

- ☐ Location security information must be set up if you are using location security.

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.

If you are using location security, you will only be able to decommission serials associated to serial locations you have *update access* to in the Location Security Setup page.

or more information on location security, see Location Security Overview, page 1-9

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.

If you are using location security, the Decommission Serials action and the Decommission Serials button are available if you have *only read access* or if you have *read and update access* to the serial location in the Location Security Setup page. If you try to decommission serials with *only read access* you will receive a message that you do not have the correct privileges. You will only be able to decommission serials if you have *update access* to the serial location in the Location Security Setup 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.

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 7-74.

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.

Parameter Name	Description
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)

ORACLE Pedigree and Serialization Manager Logged In As

Dashboard

Serials

Packaging

Transactions

System Setup

EPCIS Setup

Audit Trail

Tasks

- Maintain Serials
- Commission Serials**
- Maintain Lots
- Lot Synchronization
- Work Order Serialization
- Maintain Serial Generation Requests
- Web Service Exceptions

Maintain Serials

Commission Serials

Maintain Lots

Lot Synchronization

Work Order Serialization

Identify New Lot... Close

Identify Lot

Lot Number: KGB-0924-01

Lot Location: PR1

Product Code: 6202-5616-10

Product Name: Restylane Tablets

Packaging Unit: BOTTLE

Item Number: 80120

Item UOM: BTL

Document Organization: PR1

Document Number: 211

Commission Document Type: BATCH

Document Line Number

Continue

Commission Serial Analysis

Completed Quantity: 1000

Commissioned Quantity

Transaction Quantity: 1000

Search: Serials

Advanced

Saved Search

Display Serials

Item Number

Product Code

Serial Status: Reserved

Created Document Organization

At least one is required

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.
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.

Field Name	Description
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.
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)

ORACLE Pedigree and Serialization Manager Logged In /

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

Maintain Serials **Commission Serials** Maintain Lots Lot Synchronization Work Order Serialization Maintain Serial Generation Requests

Identify New Lot Close

Identify Lot

Lot Number: KGB-0924-01	Item Number: 80120
Lot Location: PRL1	Item UOM: BTL
Product Code: 6202-5616-10	Document Organization: PRL1
Product Name: Restylane Tablets	Document Number: 211
Packaging Unit: BOTTLE	Commission Document Type: BATCH
	Document Line Number:

Continue

Commission Serial Analysis

Completed Quantity: 1000	Commissioned Quantity: 6
Transaction Quantity: 1000	

Commission Serials page (2 of 2)

ORACLE Pedigree and Serialization Manager Logged In /

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

Maintain Serials **Commission Serials** Maintain Lots Lot Synchronization Work Order Serialization Maintain Serial Generation Requests

Identify New Lot Close

Search: Serials

Advanced Saved Search Display Serials ** At least one is required

Item Number: 80120	Serial Status: Reserved
** Product Code: 6202-5616-10	Created Document Organization: PRL1
Packaging Unit: Bottle	** Created Document Number: 211
** Lot Number:	Created Document Type: BATCH
Unique Serial Number:	

Search Reset Save...

Search Results: Serials

Action View Commission Decommission Detach

Serial Number	Serial Type	Product Code	Packaging Unit	Product Name	Lot Number	Created Location	Commission Organization
No data to display.							

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.

- (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.

Field Name	Description
Created Document Number	Enter the document number that was used to create the serial number.
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.

- (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.

If you are using location security, and add the Location field as additional search criteria, you will only be able to select locations that you have at a minimum *read access* to in the Location Security Setup page.

4. (Optional) Enter search criteria for the additional fields.
5. Click the Search button.

Commission Serials page (1 of 2)

ORACLE[®] Pedigree and Serialization Manager Logged In As

Dashboard | **Serials** | Packaging | Transactions | System Setup | EPCIS Setup | Audit Trail

Maintain Serials | **Commission Serials** | Maintain Lots | Lot Synchronization | Work Order Serialization | Maintain Serial Generation Requests

Identify New Lot | Close

Identify Lot

Lot Number	KG9-0924-01	Item Number	80120
Lot Location	PR1	Item UOM	MTL
Product Code	6202-5616-10	Document Organization	PR1
Product Name	Restylane Tablets	Document Number	211
Packaging Unit	BOTTLE	Commission Document Type	BATCH
		Document Line Number	

Continue

Commission Serial Analysis

Completed Quantity	1000	Commissioned Quantity	6
Transaction Quantity	1000		

Commission Serials page (2 of 2)

ORACLE[®] Pedigree and Serialization Manager

Logged In 4

Commission Serials

Search: Serials

Item Number: 80120

Product Code: 6202-5616-10

Packaging Unit: Bottle

Lot Number: KGB-0924-01

Unique Serial Number:

Serial Status: Commissioned

Created Document Organization:

Created Document Number:

Created Document Type:

Search Results: Serials

Action	View	Commission	Decommission	Details			
Serial Number	Serial Type	Product Code	Packaging Unit	Product Name	Lot Number	Created Location	Commission Organization
2.890605555.8876.432	SGTIN-96	6202-5616-10	Bottle	Restylane Tablets	KGB-0924-01	PR1	PR1
2.890605555.8876.433	SGTIN-96	6202-5616-10	Bottle	Restylane Tablets	KGB-0924-01	PR1	PR1
2.890605555.8876.434	SGTIN-96	6202-5616-10	Bottle	Restylane Tablets	KGB-0924-01	PR1	PR1
2.890605555.8876.435	SGTIN-96	6202-5616-10	Bottle	Restylane Tablets	KGB-0924-01	PR1	PR1
2.890605555.8876.436	SGTIN-96	6202-5616-10	Bottle	Restylane Tablets	KGB-0924-01	PR1	PR1
2.890605555.8876.167	SGTIN-96	6202-5616-10	Bottle	Restylane Tablets	KGB-0924-01	PR1	PR1

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.

Field Name	Description
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.
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.

- 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)

ORACLE Pedigree and Serialization Manager

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

Maintain Serials | **Commission Serials** | Maintain Lots | Lot Synchronization | Work Order Serialization | Maintain Serial Generation Requests

Identify New Lot | Close

Identify Lot

Lot Number: KGB-0924-01
 Lot Location: PR1
 Product Code: 6202-5616-10
 Product Name: Restylane Tablets
 Packaging Unit: BOTTLE

Item Number: 80120
 Item UOM: BTL
 Document Organization: PR1
 Document Number: 211
 Commission Document Type: BATCH
 Document Line Number:

Continue

Commission Serial Analysis

Completed Quantity: 1000 ⚠️
 Transaction Quantity: 1000 ⚠️
 Commissioned Quantity: 6

Commission Serials page (2 of 2)

ORACLE Pedigree and Serialization Manager

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

Maintain Serials | **Commission Serials** | Maintain Lots | Lot Synchronization | Work Order Serialization | Maintain Serial Generation Requests

Identify New Lot | Close

Search: Serials

Item Number: 80120
 ** Product Code: 6202-5616-10
 Packaging Unit: Bottle
 ** Lot Number: KGB-0924-01
 Unique Serial Number:

Serial Status: Commissioned
 Created Document Organization:
 ** Created Document Number:
 Created Document Type:

Search | Reset | Save...

Search Result: Serials

Action | View | Commission | Decommission | Attach | Detach

Serial Number	Serial Type	Product Code	Packaging Unit	Product Name	Lot Number	Created Location	Commission Organization
2.89060555.8876.432	SGTIN-96	6202-5616-10	Bottle	Restylane Tablets	KGB-0924-01	PR1	PR1
2.89060555.8876.433	SGTIN-96	6202-5616-10	Bottle	Restylane Tablets	KGB-0924-01	PR1	PR1
2.89060555.8876.434	SGTIN-96	6202-5616-10	Bottle	Restylane Tablets	KGB-0924-01	PR1	PR1
2.89060555.8876.435	SGTIN-96	6202-5616-10	Bottle	Restylane Tablets	KGB-0924-01	PR1	PR1
2.89060555.8876.436	SGTIN-96	6202-5616-10	Bottle	Restylane Tablets	KGB-0924-01	PR1	PR1

- Select Decommission in the Action menu or click the Decommission button located at the top of the Search Results: Serials region.

If you are using location security, the Decommission action and the Decommission button are available if you have *only read access* or if you have *read and update access* to the serial location in the Location Security Setup page. If you try to decommission serials with *only read access* you will receive a message that you do

not have the correct privileges. You will only be able to decommission serials if you have *Update access* to the serial location in the Location Security Setup page.

Decommission Serial(s) page

Decommission Serial(s)

Are you sure you want to decommission the selected serial(s)? If so, select a Reason Code and press Yes to continue. Otherwise, press No.

* Reason Code

Destroyed

Yes

No

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)

ORACLE Pedigree and Serialization Manager

DashboardSerialsPackagingTransactionsSystem SetupEPCIS SetupAudit Trail

Maintain SerialsCommission SerialsMaintain LotsLot SynchronizationWork Order SerializationMaintain Serial Generation Requests

Identify New LotClose

Identity Lot

Lot NumberKGS-0924-01

Lot LocationPR1

Product Code6202-5636-10

Product NameRestylane Tablets

Packaging UnitBOTTLE

Item Number80120

Item UOMBTL

Document OrganizationPR1

Document Number211

Commission Document TypeBATCH

Document Line Number

Continue

Commission Serial Analysis

Completed Quantity1000

Commissioned Quantity3

Transaction Quantity1000

Commission Serials page (2 of 2)

ORACLE[®] Pedigree and Serialization Manager

Logged In 4

Commission Serials

Search: Serials

Item Number: 80120

Product Code: 6202-5616-10

Packaging Unit: Bottle

Lot Number: KGB-0924-01

Unique Serial Number:

Serial Status: Commissioned

Created Document Organization:

Created Document Number:

Created Document Type:

Search Results: Serials

Serial Number	Serial Type	Product Code	Packaging Unit	Product Name	Lot Number	Created Location	Commission Organization
2.890605555.8876.435	SGTIN-95	6202-5616-10	Bottle	Restylane Tablets	KGB-0924-01	PR1	PR1
2.890605555.8876.436	SGTIN-95	6202-5616-10	Bottle	Restylane Tablets	KGB-0924-01	PR1	PR1
2.890605555.8876.167	SGTIN-95	6202-5616-10	Bottle	Restylane Tablets	KGB-0924-01	PR1	PR1

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

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.

OPSM also gives you the option to secure packages based on the locations or location groups attached to the packages. If you choose to use location security, the Maintain Packages, Create Package, Edit Package, and View Package pages are secured based on the locations or location groups attached to the packages that you are authorized for in the Location Security Setup page. When searching for and viewing packages, you will only be able to search for packages and view package information associated to the

package locations or location groups you have at a minimum *read access* to in the Location Security Setup page. When creating packages or editing packages, you will only be able to create packages or edit packages associated to the locations or location groups that you have *update access* to in the Location Security Setup page. When deleting packages, you will only be able to delete packages associated to the locations or location groups that you have *delete access* to in the Location Security Setup page.

If you are using location security and create a package without a location or location group, the only user who will be able to search for and maintain that package in the future is a super user (a user that has been defined with all of the OPSM roles and has access to the Maintain Users page in OPSM). This super user can then search for the package and select the location or location group to be associated to the package. From then on the users who have authorization for that location or location group in the Location Security Setup page will be able to maintain that package depending on there access level.

For more information on location security, see Location Security Overview, page 1-9.

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.

If you are using location security, you will only be able to search for packages associated to the package locations or location groups you have at a minimum *read access* to in the Location Security Setup page. Packages that were defined without locations can only be accessed by a super user.

For more information on location security, see Location Security Overview, page 1-9.

Use this procedure to search for packages:

Prerequisites

- ☐ Location security information must be set up if you are using location security.

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
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.
Package Identifier	Enter the package identifier.

Field Name	Description
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 4-5.
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 4-5.

3. (Optional) In the Search: Packages region, further specify the packages search criteria by entering 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 Type	(Optional) Select the product code type associated with the product.

Field Name	Description
Product Code Variant	(Optional) Enter the product code variant associated with the product.
Location Group	(Optional) Select the location group associated to the package. You can only select a Location Group or a Location when searching for a package. Both Location Group and Location cannot be selected at the same time. If you are using location security, you will only be able select location groups that you have at a minimum <i>read access</i> to in the Location Security Setup page. For more information on location security, see Location Security Overview, page 1-9.
Location	(Optional) Select the location associated to the package You can only select a Location Group or a Location when searching for a package. Both Location Group and Location cannot be selected at the same time. If you are using location security, you will only be able select locations that you have at a minimum <i>read access</i> to in the Location Security Setup page. For more information on location security, see Location Security Overview, page 1-9.

4. Click the Search button.

Maintain Packages page

ORACLE Pedigree and Serialization Manager Server Time Zone: UTC +00:00 About Sign Out JD11-DLS

Dashboard Serials **Packaging** Transactions System Setup EPICIS Setup Audit Trail

Maintain Packaging Hierarchy **Maintain Packages**

Search: Packages Saved Search Display Packages

Item Number **** Package Identifier Type** ** At least one is required

**** Product Code** 4498-0209-10 **** Packaging Unit**

Product Code Type NDC442 **Location Group**

Product Code Variant 0 **Location** Glendo

**** Package Identifier**

Search Results: Packages

Actions View

Primary Package Identifier	Primary Package Identifier Type	Alternate Package Identifier	Alternate Package Identifier Type	Packaging Unit	Product Code	
0.0004998.440020.40233	SGTIN-96			2 Package Box	4498-0209-10	Edit
1.0004998.440020.20044	SGTIN-96	4998-01	Universal Product Code	Blister Pack	4498-0209-10	Edit
1.0004998.440020.20044	SGTIN-96			Blister Pack	4498-0209-10	Edit
1.0004998.440020.20045	SGTIN-96	4208-10000	GTIN	Blister Pack	4498-0209-10	Edit
1.0004998.440020.20045	SGTIN-96			Blister Pack	4498-0209-10	Edit
1.0004998.440020.20046	SGTIN-96			Blister Pack	4498-0209-10	Edit
1.0004998.440020.20047	SGTIN-96			Blister Pack	4498-0209-10	Edit
1.0004998.440020.20048	SGTIN-96			Blister Pack	4498-0209-10	Edit
1.0004998.440020.20049	SGTIN-96			Blister Pack	4498-0209-10	Edit
1.0004998.440020.20050	SGTIN-96			Blister Pack	4498-0209-10	Edit
1.0004998.440020.20051	SGTIN-96			Blister Pack	4498-0209-10	Edit
1.0004998.440020.20052	SGTIN-96			Blister Pack	4498-0209-10	Edit
1.0004998.440020.20053	SGTIN-96			Blister Pack	4498-0209-10	Edit
1.0004998.440020.20054	SGTIN-96			Blister Pack	4498-0209-10	Edit
1.0004998.440020.20055	SGTIN-96			Blister Pack	4498-0209-10	Edit

Columns Hidden: 2

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. If a package has been received, a status of *Received* appears in the Shipped Status column of the package.

If you are using location security, all of the packages with the package location or location group that you have at a minimum *read access* to in the Location Security Setup page will display. The Edit Package icon and Delete Package icon in the actions column will be available if you have *update and delete access* to the package location or location group associated to the package in the Location Security Setup page. Otherwise, the icons will not be available. In addition, the Edit and Delete options in the Actions menu are also available if you have *update and delete access* to the package location or location group in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

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.

If you are using location security, you will only be able to view packages associated to the package locations or location groups you have at a minimum *read access* to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

Use this procedure to view package detail information:

Prerequisites

- ☐ Location security information must be set up if you are using location security.

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.

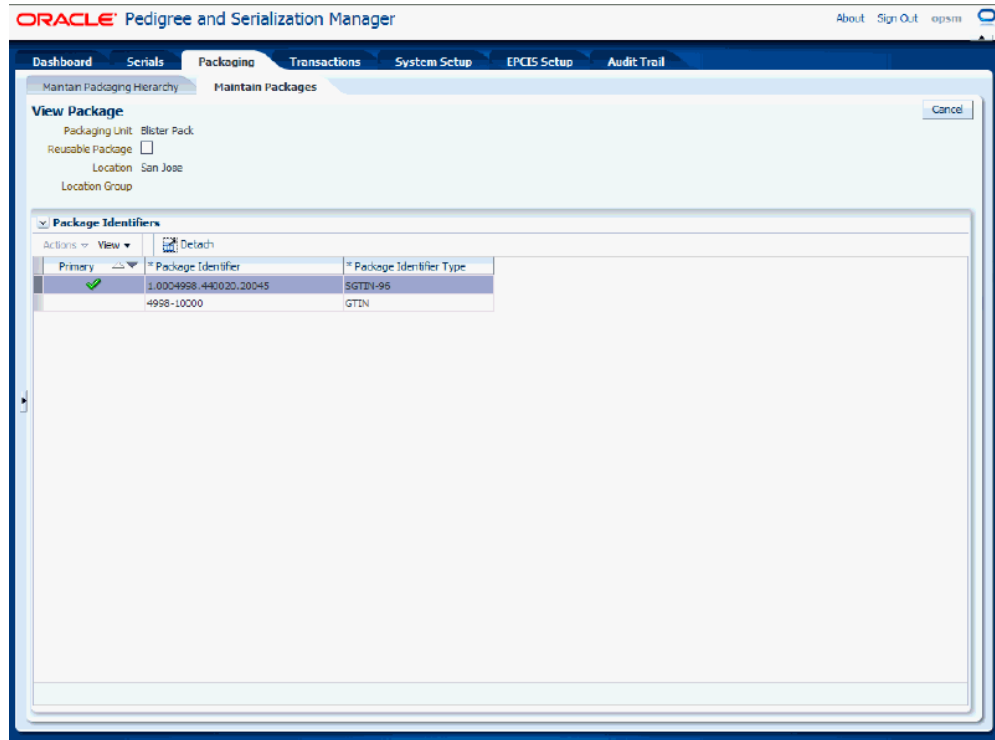
If you are using location security, you will only be able to search for and view packages associated to the package locations or location groups you have at a minimum *read access* to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

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.

If you are using location security, you can create a package if you have functional access

to the Create Package page but you can only associate it to a location or location group that you have *update access* to in the Location Security Setup page. You can also leave location and location group blank, but then only a super user can access and update the package.

For more information on location security, see Location Security Overview, page 1-9.

Use this procedure to create packages:

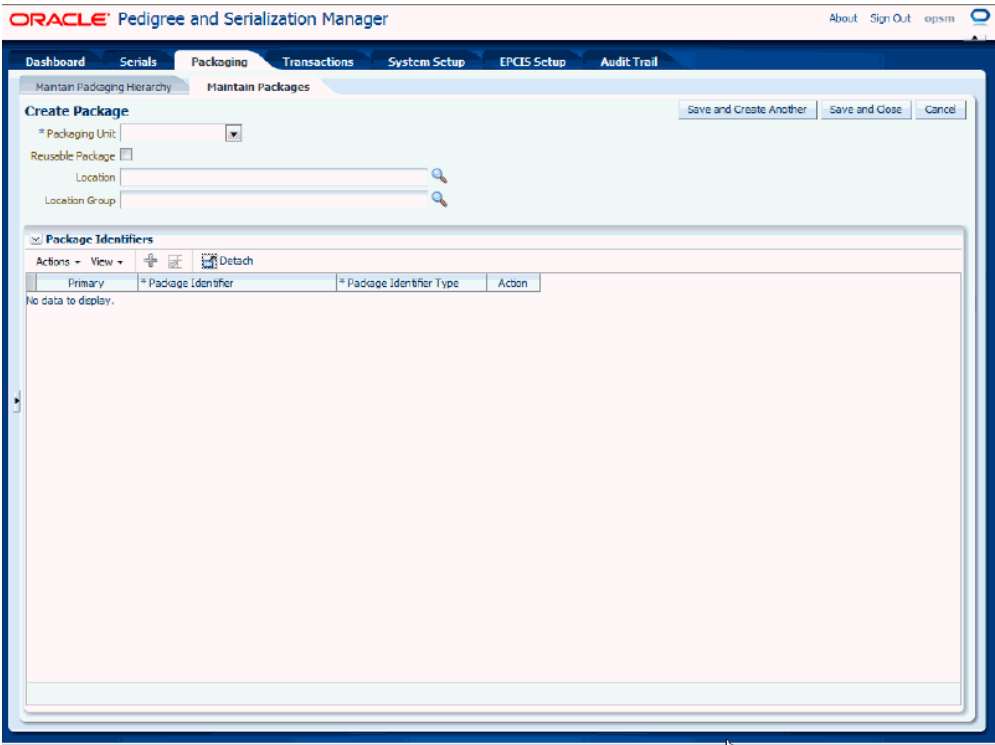
Prerequisites

- ☐ Location security information must be set up if you are using location security.

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.
Location	(Optional) Select the location for the package. After you select a location, the Location Group field becomes unavailable for entry. You can only select a location or location group for a package but not both at the same time. If you are using location security, you will only be able to select locations that you have <i>update access</i> to in the Location Security Setup page. If you are using location security, and define a package without a location or location group, only a super user will be able to access that package in the future until they assign a location or location group to the package. For more information on location security, see Location Security Overview, page 1-9.

Field Name	Description
Location Group	(Optional) Select the location group for the package. After you select a location group, the Location field becomes unavailable for entry. You can only select a location or location group for a package but not both at the same time. If you are using location security, you will only be able to select location groups that you have <i>update access</i> to in the Location Security Setup page. If you are using location security, and define a package without a location or location group, only a super user will be able to access that package in the future until they assign a location or location group to the package. For more information on location security, see Location Security Overview, page 1-9.

4. Select Add Package Identifier from the Actions menu or click the Add Product Identifier icon located at the top of the Package Identifiers region.

Create Package page

Oracle Pedigree and Serialization Manager

Dashboard Serials Packaging Transactions System Setup EPCIS Setup Audit Trail

Maintain Packaging Hierarchy Maintain Packages

Create Package Save and Create Another Save and Close Cancel

* Packaging Unit: Container

Reusable Package: ☐

Location: San Jose

Location Group:

Package Identifiers

Actions: View + Add - Detach

Primary	* Package Identifier	* Package Identifier Type	Action
			X

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

Primary	Package Identifier	Package Identifier Type	Action
☒	4458-2000A	GTIN	
☐	4458-1000A	Universal Product Code	

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.

If you are using location security, you will only be able to edit packages associated to the package locations or location groups you have *update access* to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

Use this procedure to edit packages:

Prerequisites

- ☐ Location security information must be set up if you are using location security.

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.

If you are using location security, you will only be able to edit packages associated to locations or location groups that you have *update access* to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

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.

If you are using location security, the Edit Package icon and Edit option in the Actions menu are only available if you have *update access* to the location or location group associated to the package in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

Edit Package page

The screenshot shows the 'Edit Package' page in the Oracle Pedigree and Serialization Manager (OPSM). The page has a navigation bar with tabs: Dashboard, Serials, Packaging, Transactions, System Setup, EPCIS Setup, and Audit Trail. The 'Packaging' tab is active. Below the navigation bar, there are two sub-tabs: 'Maintain Packaging Hierarchy' and 'Maintain Packages'. The 'Edit Package' page is displayed under 'Maintain Packages'. It contains the following fields:

- Packaging Unit: Container
- Reusable Package: ☒
- Location: San Jose
- Location Group:

Below these fields is a 'Package Identifiers' section with a table. The table has columns: Package Identifier, Package Identifier Type, and Action. The table contains two rows:

Package Identifier	Package Identifier Type	Action
4498-2000A	GTIN	
4498-1000A	Universal Product Code	

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 and Location or Location Groups fields if necessary.
6. (Optional) Add additional alternate package identifiers or delete alternate package identifiers if necessary.

If you are using location security, you will only be able to delete alternate identifiers from packages that are associated to the package locations or location groups you have *delete access* to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

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.

If you are using location security, you will only be able to delete packages associated to the package locations or location groups you have *delete access* to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

Use this procedure to delete a complete package:

Prerequisites

- ☐ Location security information must be set up if you are using location security.

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.

If you are using location security, you will only be able to delete packages associated to locations or location groups that you have *delete access* to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

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.

If you are using location security, the Delete icon and Delete option in the Actions menu are only available if you have *delete access* to the location or location groups associated to the package in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

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 8-20.

OPSM only enables maintenance on packages that are not at a *Shipped* status.

If you are using location security, you will only be able to delete alternate identifiers from packages using the Maintain Packages page that are associated to the package locations or location groups you have *delete access* to in the Location Security Setup page.

For more information on location security, see *Location Security Overview*, page 1-9.

Use this procedure to delete an alternate identifier from a package:

Prerequisites

- ☐ Location security information must be setup if you are using location security.

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.

If you are using location security, you will only be able to delete alternate identifiers from packages that are associated to locations or location groups that you have *delete access* to in the Location Security Setup page.

For more information on location security, see *Location Security Overview*, page 1-9.

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 8-19.

OPSM only enables maintenance on packages that are not at a *Shipped* status.

If you are using location security, you will only be able to delete alternate identifiers from packages using the Edit Package page that are associated to the package locations or location groups you have *update and delete access* to in the Location Security Setup page.

For more information on location security, see *Location Security Overview*, page 1-9.

Use this procedure to delete an alternate identifier from a package:

Prerequisites

- ☐ Location security information must be set up if you are using location security.

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.

If you are using location security, you will only be able to delete alternate identifiers from packages using the Edit Package page that are associated to locations or location groups that you have *update and delete access* to in the Location Security Setup page.

For more information on location security, see *Location Security Overview*, page 1-9.

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.

If you are using location security, the Edit Package icon and Edit option in the Actions menu are only available if you have *update access* to the package location or location group in the Location Security Setup page

For more information on location security, see Location Security Overview, page 1-9.

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.

If you are using location security, the Delete icon and Delete Package Identifier option in the Actions menu are only available if you have *delete access* to the package location or location group in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

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.

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.

If you are using location security, you will be able to search for any packaging hierarchies but when you try to take any action on the packages you must have access to that action in the Location Security Setup page. Otherwise, an error message will be issued that you do not have the correct privilege.

For more information on location security, see Location Security Overview, page 1-9.

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:

Prerequisites

- ☐ Location security information must be set up if you are using location security.

To Search for Packaging Hierarchies:

1. Navigate to the Maintain Packaging Hierarchy page, page A-2.

Maintain Packaging Hierarchy page

The screenshot displays the 'Maintain Packaging Hierarchy' page within the Oracle Pedigree and Serialization Manager. The page features a top navigation bar with tabs for Dashboard, Serials, Packaging, Transactions, System Setup, EPCIS Setup, and Audit Trail. The main content area is divided into two primary search sections: 'Search: Packaging Hierarchy' and 'Search: Packages'. Each section includes a 'Saved Search' dropdown, a 'Display' dropdown (set to 'Packaging' and 'Available Packages' respectively), and a search criteria form with fields for Item Number, Product Code, Product Code Type, Product Code Variant, Primary Package Identifier, Package Identifier Type, and Packaging Unit. Below the search forms are 'Search', 'Reset', and 'Save...' buttons. The 'Search: Packaging Hierarchy' section also includes a 'Show Parent' link and a 'Search Results: Packaging Hierarchy Tree' panel with 'Actions' (View, Create Child Package, Edit Status and Usage, Unpack) and a table area. The 'Search: Packages' section includes a 'Search Results: Packages' panel with 'Actions' (View, Pack, Detach) and a table with columns for Primary Package Identifier, Primary Package Identifier Type, and Alternate Package. Both result panels currently show 'No data to display.' The bottom right corner of the interface indicates 'Columns Hidden: 2'.

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	(Optional) 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.
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 <i>primary</i> package identifier directly into the Primary Package Identifier field. To Enter a Primary Package Identifier (Using Primary or Alternate Package Identifier) - Click the Search: Primary Package Identifier icon next to the Primary Package Identifier field. The Search and Select: Primary Package Identifier dialog box appears. - Search for a primary package identifier using the Primary Package Identifier field or an alternate package identifier using the Package Identifier field. - 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

ORACLE Pedigree and Serialization Manager

About Sign Out opsm

The screenshot shows the 'Maintain Packaging Hierarchy' page. It has two main search sections: 'Search: Packaging Hierarchy' and 'Search: Packages'. Both sections have fields for Item Number, Product Code, Product Code Type, Product Code Variant, Primary Package Identifier, Package Identifier Type, and Packaging Unit. The 'Search: Packaging Hierarchy' section has a 'Show Parent' button. The 'Search Results: Packaging Hierarchy Tree' section shows a tree structure with one item: 2.0004998.440020.60000 - 2 Pkg Case - 4998-0209-10 - SGTIN Cureall VAR 0. The 'Search: Packages' section has a 'Pack' button and a 'Detach' button. The 'Search Results: Packages' section shows 'No data to display.'

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.

If you are using location security, you will only be able to search for packages associated to the package locations or location groups you have *update access* to in the Location Security Setup page. Packages that were defined without locations can only be accessed by a super user.

For more information on location security, see Location Security Overview, page 1-9.

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:

Prerequisites

- ☐ Location security information must be set up if you are using location security.

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.

Field Name	Description
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

ORACLE Pedigree and Serialization Manager

About Sign Out opsm

The screenshot displays the 'Maintain Packaging Hierarchy' page. It features two search sections: 'Search: Packaging Hierarchy' and 'Search: Packages'. Both sections include fields for Item Number, Product Code, Product Code Type, Product Code Variant, Primary Package Identifier, Package Identifier Type, and Packaging Unit. Below these sections are buttons for 'Search', 'Reset', and 'Save...'. The 'Search Results: Packages' section shows a table with the following data:

Primary Package Identifier	Primary Package Identifier Type	Alternate Package Identifier
3.0002288.711115.10	SGTIN-96	
1.0002998.155520.222222222	SGTIN-198	
0.0004998.440020.40000	SGTIN-96	
0.0004998.440020.40085	SGTIN-96	
0.0004998.440020.40086	SGTIN-96	
0.0004998.440020.40087	SGTIN-96	
0.0004998.440020.40088	SGTIN-96	

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 you are using location security, all of the packages that have not been packed with the package location or location group that you have *update access* to in the Location Security Setup page will display.

For more information on location security, see Location Security Overview, page 1-9.

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 9-13.

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 screenshot displays the 'Maintain Packaging Hierarchy' page in the Oracle Pedigree and Serialization Manager. The page is divided into several sections:

- Search Filters:** Includes fields for Item Number, Product Code, Product Code Type, Product Code Variant, Primary Package Identifier, Package Identifier Type, and Packaging Unit. There are also buttons for 'Search', 'Reset', and 'Save...'. A note indicates 'At least one is required' for certain fields.
- Search Results: Packaging Hierarchy Tree:** Shows a tree of nodes. The selected node is expanded, displaying its children. The tree structure includes nodes for '2.0004998.440020.60000 - 2 Pkg Case - 4498-0209-10 - SGTIN Cureall VAR 0' and its sub-nodes.
- Search Results: Packages:** A table with columns for Primary Package Identifier, Primary Package Identifier Type, and Alternate Package. The table currently shows 'No data to display'.

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 screenshot shows the 'Maintain Packaging Hierarchy' page in the Oracle Pedigree and Serialization Manager. The page is divided into two main search regions. The left region, 'Search: Packaging Hierarchy', contains search criteria fields (Item Number, Product Code, Product Code Type, Product Code Variant, Primary Package Identifier, Package Identifier Type, Packaging Unit) and a 'Show Parent' link. The right region, 'Search: Packages', also has similar search criteria fields. Below the search regions are two result tables. The 'Search Results: Packaging Hierarchy Tree' table shows a single entry in a tree format: '1.0004998.440020.20018 - Blisterpack - 4498-0209-10 - 5GTIN Curlew VAR 0'. The 'Search Results: Packages' table is empty, displaying 'No data to display.' The page includes a top navigation bar with tabs for Dashboard, Serials, Packaging, Transactions, System Setup, EPCIS Setup, and Audit Trail. The Oracle logo and 'Pedigree and Serialization Manager' text are at the top left, and 'About Sign Out opsm' are at the top right.

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)

ORACLE Pedigree and Serialization Manager

About Sign Out opsm

The parent node displays next to the Show Parent 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.

If you are using location security, to create a packaging hierarchy you must have *update access* to the following in the Location Security Setup page:

- Serial location or package location or location group for the top most parent within the packaging hierarchy tree that you are packing into.
- Location or location group for the packages that are being packed (added) to the packaging hierarchy tree.

For more information on location security, see Location Security Overview, page 1-9.

Use this procedure to create packaging hierarchies:

Prerequisites

- ☐ Location security information must be set up if you are using location security.

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.

If you are using location security, you must have *update access* to the serial location or package location or package location group for the package identifier that you want to create the packaging hierarchy for in the Location Security Setup page.

3. Click the Search button.

Maintain Packaging Hierarchy page

ORACLE Pedigree and Serialization Manager

About Sign Out opsm

The screenshot displays the 'Maintain Packaging Hierarchy' page. It features two main search sections: 'Search: Packaging Hierarchy' and 'Search: Packages'. Both sections include fields for Item Number, Product Code, Product Code Type, Product Code Variant, Primary Package Identifier, Package Identifier Type, and Packaging Unit. The 'Search: Packaging Hierarchy' section has a 'Show Parent' button. Below the search sections are two result areas. The 'Search Results: Packaging Hierarchy Tree' area shows a tree structure with a single node: '0.0004998.440020.40088 - 2 Pkg Box - 4498-0209-10 - SGTIN Cureall VAR 0'. The 'Search Results: Packages' area is currently empty, displaying 'No data to display.'

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.

If you are using location security, you will only be able to search for packages associated to locations or location groups that you have *update access* to in the Location Security Setup page.

Maintain Packaging Hierarchy page

ORACLE Pedigree and Serialization Manager

About Sign Out opsm

The screenshot displays the 'Maintain Packaging Hierarchy' page. It features two search sections: 'Search: Packaging Hierarchy' and 'Search: Packages'. The 'Search: Packages' section is active, showing search criteria: Item Number (4498-0209-10), Product Code Type (NDC 942), Product Code Variant (0), Primary Package Identifier (0.0004998.440020.40068), Package Identifier Type (SGTIN-96), and Packaging Unit (Blisterpack). Below the search criteria is a table titled 'Search Results: Packages' with columns: Primary Package Identifier, Primary Package Identifier Type, Alternate Package Identifier, and Alternate Package Identifier. The table contains several rows of package identifiers. On the left side, there is a 'Search Results: Packaging Hierarchy Tree' showing a tree structure with a selected node: '0.0004998.440020.40068 - 2 Pkg Box - 4498-0209-10 - SGTIN Corell VAR 0'.

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.

Note: If you are using location security, you must have *update access* to the serial location or package location or location group in the Location Security Update page for the top most node in the packaging hierarchy tree that you are packing into.

Maintain Packaging Hierarchy page

ORACLE Pedigree and Serialization Manager

Dashboard Serials Packaging Transactions System Setup EPCIS Setup Audit Trail

Maintain Packaging Hierarchy

Search: Packaging Hierarchy

Item Number:

** Product Code:

Product Code Type:

Product Code Variant:

** Primary Package Identifier:

** Package Identifier Type:

** Packaging Unit:

Search Reset Save...

Search Results: Packaging Hierarchy Tree

Actions View Create Child Package Edit Status and Usage Unpack

0.0004998.440020.40088 - 2 Pkg Box - 4498-0209-10 - SGTIN Cureall VAR 0

Search: Packages

Item Number:

** Product Code:

Product Code Type:

Product Code Variant:

** Package Identifier:

** Package Identifier Type:

** Packaging Unit:

Search Reset Save...

Search Results: Packages

Actions View Pack Detach

Primary Package Identifier	Primary Package Identifier Type	Alternate Package Identifier	Alternate
1.0004998.440020.20021	SGTIN-96		
1.0004998.440020.20022	SGTIN-96		
1.0004998.440020.20023	SGTIN-96		
1.0004998.440020.20024	SGTIN-96		
1.0004998.440020.20025	SGTIN-96		
1.0004998.440020.20026	SGTIN-96		
1.0004998.440020.20027	SGTIN-96		
1.0004998.440020.20028	SGTIN-96		

Rows Selected: 1 Columns Hidden: 2

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

ORACLE Pedigree and Serialization Manager

About Sign Out opsm

The screenshot displays the 'Maintain Packaging Hierarchy' page in the Oracle Pedigree and Serialization Manager. The page is divided into several sections:

- Search: Packaging Hierarchy**: Includes fields for Item Number, Product Code, Product Code Type, Product Code Variant, Primary Package Identifier, Package Identifier Type, and Packaging Unit. A search button is present.
- Search: Packages**: Includes fields for Item Number, Product Code, Product Code Type, Product Code Variant, Package Identifier, Package Identifier Type, and Packaging Unit. A search button is present.
- Search Results: Packages**: A table showing search results for packages. The table has columns: Primary Package Identifier, Primary Package Identifier Type, Alternate Package Identifier, and Alternate Package Identifier. The results show a list of packages with their identifiers and types.
- Search Results: Packaging Hierarchy Tree**: A tree view showing the hierarchy of packages. The tree is currently expanded to show the parent node '0.0004998.440020.40088 - 2 Pkg Box - 4498-0209-10 - SGTIN Coreall VAR 0'.

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

ORACLE Pedigree and Serialization Manager

About Sign Out epsm

The screenshot displays the 'Maintain Packaging Hierarchy' page. It features two main search regions: 'Search: Packaging Hierarchy' on the left and 'Search: Packages' on the right. Both regions include fields for Item Number, Product Code, Product Code Type, Product Code Variant, Primary Package Identifier, Package Identifier Type, and Packaging Unit. The 'Search: Packages' region also includes a 'Display Available Packages' dropdown. Below the search regions, there are two result areas. The left area, 'Search Results: Packaging Hierarchy Tree', shows a tree structure with nodes like '0.0004998.440020.40088 - 2 Pkg Box - 4498-0209-10 - SGTIN Cureall VAR 0'. The right area, 'Search Results: Packages', displays a table of search results.

Primary Package Identifier	Primary Package Identifier Type	Alternate Package Identifier	Alternate
1.0004998.440020.20021	SGTIN-96		
1.0004998.440020.20022	SGTIN-96		
1.0004998.440020.20023	SGTIN-96		
1.0004998.440020.20024	SGTIN-96		
1.0004998.440020.20025	SGTIN-96		
1.0004998.440020.20028	SGTIN-96		
1.0004998.440020.20029	SGTIN-96		
1.0004998.440020.20030	SGTIN-96		

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.

If you are using location security, you will only be able to search for packages associated to locations or location groups that you have *update access* to in the Location Security Setup page.

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 9-32.

2. Select the node in the packaging hierarchy tree (left side of page) where you want to add the child packages.

Note: If you are using location security, you must have *update access* to the serial location or package location or location group in the Location Security Update page for the top most node in the packaging hierarchy tree that you are packing into.

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.

Note: If you are using location security, you must have *update access* to the serial location or package location or location group in the Location Security Update page for the top most node in the packaging hierarchy tree that you are packing into.

Maintain Packaging Hierarchy page

Oracle Pedigree and Serialization Manager

Dashboard Serials Packaging Transactions System Setup EPCIS Setup Audit Trail

Maintain Packaging Hierarchy Maintain Packages

Maintain Packaging Hierarchy

Search: Packaging Hierarchy Saved Search Display Packaging At least one is required

Item Number
Product Code
Product Code Type
Product Code Variant
Primary Package Identifier
Package Identifier Type
Packaging Unit

Search Reset Save...

Show Parent

Search Results: Packaging Hierarchy Tree

Actions View Create Child Package Edit Status and Usage Unpack

0.0004998.440020.40088 - 2 Pkg Box - 4498-0209-10 - SGTIN Cureall VAR 0

1.0004998.440020.20026 - Bletterpack - 4498-0209-10 - SGTIN Cureall VAR 0

1.0004998.440020.20027 - Bletterpack - 4498-0209-10 - SGTIN Cureall VAR 0

Search Results: Packages

Actions View Pack Detach

Primary Package Identifier	Primary Package Identifier Type	Alternate Package Identifier	Alternate Package Identifier
1.0004998.440020.20021	SGTIN-96		
1.0004998.440020.20022	SGTIN-96		
1.0004998.440020.20023	SGTIN-96		
1.0004998.440020.20024	SGTIN-96		
1.0004998.440020.20025	SGTIN-96		
1.0004998.440020.20026	SGTIN-96		
1.0004998.440020.20027	SGTIN-96		
1.0004998.440020.20028	SGTIN-96		
1.0004998.440020.20029	SGTIN-96		
1.0004998.440020.20030	SGTIN-96		

Rows Selected 2 Columns Hidden 2

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.

Note: If you are using location security, you must have *update access* to the serial location or package location or location group in the Location Security Update page for the top most node in the packaging hierarchy tree that you are packing into.

Otherwise, the system will display an error message that you do not have access to add children to the package(s) selected.

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 9-32.

3. Enter the package information.

Create Package page

ORACLE Pedigree and Serialization Manager

Server Time Zone: UTC +00:00 About Sign Out

Dashboard Serials Packaging Transactions System Setup EPCIS Setup Audit Trail

Maintain Packaging Hierarchy Maintain Packages

Create Package Save and Continue Cancel

* Packaging Unit: Blister Pack

Reusable Package: ☐

Location: Kansas City

Location Group:

Package Identifiers

Primary	Package Identifier	Package Identifier Type	Action
	9.0004998.440020	GTIN	

For information on creating a package, see [Creating Packages](#), page 8-8.

4. Click the Save and Continue button.

Maintain Packaging Hierarchy page

The screenshot displays the 'Maintain Packaging Hierarchy' page in the Oracle Pedigree and Serialization Manager (OPSM). The page is divided into two main sections: 'Search: Packaging Hierarchy' and 'Search: Packages'. Both sections have search filters including Item Number, Product Code, Product Code Type, Product Code Variant, Primary Package Identifier, Package Identifier Type, and Packaging Unit. The 'Search: Packaging Hierarchy' section shows a tree structure of packaging hierarchies. The selected node is '9,0004998,440020 - Blisterpack'. The 'Search: Packages' section shows a table of search results, which is currently empty.

The newly created package identifier displays under the selected node of the packaging hierarchy tree.

- 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.

If you are using location security, to unpack packages from the packaging hierarchy you must have *update access* to the serial location or package location or location group for the top most parent within the packaging hierarchy tree that you are unpacking from in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

Use this procedure to remove (unpack) packages from a packaging hierarchy:

Prerequisites

- ☐ A packaging hierarchy has already been created.

- ☐ Location security information must be set up if you are using location security.

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.

If you are using location security, you must have *update access* to the serial location or the package location or location group for the top most package identifier that you want to remove (unpack) packages from in the packaging hierarchy tree.

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

The screenshot displays the 'Maintain Packaging Hierarchy' page in the Oracle Pedigree and Serialization Manager. The page is divided into several sections:

- Search: Packaging Hierarchy**: This section contains search criteria for the packaging hierarchy. It includes fields for Item Number, Product Code, Product Code Type, Product Code Variant, Primary Package Identifier (0.0004998.440020.40088), Package Identifier Type, and Packaging Unit. There are 'Search', 'Reset', and 'Save...' buttons.
- Search: Packages**: This section contains search criteria for individual packages. It includes fields for Item Number, Product Code, Product Code Type, Product Code Variant, Package Identifier, Package Identifier Type, and Packaging Unit. There are 'Search', 'Reset', and 'Save...' buttons.
- Search Results: Packaging Hierarchy Tree**: This section displays a tree view of the packaging hierarchy. The tree shows a root node '0.0004998.440020.40088' with three child nodes: '1.0004998.440020.20026 - Blisterpack - 4496-0209-10 - SGTIN Cereal VAR 0', '1.0004998.440020.20027 - Blisterpack - 4496-0209-10 - SGTIN Cereal VAR 0', and '9.0004998.440020 - Blisterpack'. There are 'Show Parent', 'Create Child Package', 'Edit Status and Usage', and 'Unpack' buttons.
- Search Results: Packages**: This section displays a table of search results for packages. The table has columns for Primary Package Identifier, Primary Package Identifier Type, Alternate Package Identifier, and Alternate Package Identifier. The table is currently empty, showing 'No data to display.'

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

ORACLE® Pedigree and Serialization Manager

About Sign Out opsm

The screenshot displays the 'Maintain Packaging Hierarchy' page in the Oracle Pedigree and Serialization Manager. The page is divided into several sections for searching and managing packaging hierarchies. At the top, there are navigation tabs: Dashboard, Serials, Packaging (selected), Transactions, System Setup, EPCIS Setup, and Audit Trail. Below the tabs, there are two main search areas: 'Search: Packaging Hierarchy' and 'Search: Packages'. Each search area includes input fields for Item Number, Product Code, Product Code Type, Product Code Variant, Primary Package Identifier, Package Identifier Type, and Packaging Unit. The 'Search: Packaging Hierarchy' section also features a 'Show Parent' button and a 'Search Results: Packaging Hierarchy Tree' section. The 'Search Results: Packaging Hierarchy Tree' section shows a tree view of the packaging hierarchy. The 'Search: Packages' section includes a 'Search Results: Packages' table with columns for Primary Package Identifier, Primary Package Identifier Type, Alternate Package Identifier, and Alternate Package Identifier. The 'Search Results: Packaging Hierarchy Tree' section shows a tree view of the packaging hierarchy. The 'Search Results: Packages' section shows a table of search results.

6. Select Unpack from the Actions menu or click the Unpack button located at the top of the Search Results: Packaging Hierarchy Tree region.

Note: If you are using location security, you must have *update access* to the serial location or the package location or location group in the Location Security Update page for the top most node in the packaging hierarchy tree that you want to remove (unpack) packages from. Otherwise, the system will display an error message that you do not have access to unpack the package(s) selected.

A message appears asking if you are sure you want to unpack the selected items.

7. Click the OK button.

Maintain Packaging Hierarchy page

ORACLE Pedigree and Serialization Manager

About Sign Out opsm

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.

If you are using location security, to maintain a packaging hierarchy you must have *update access* to the following in the Location Security Setup page:

- Serial location or package location or location group for the top most parent within the packaging hierarchy tree that you are maintaining.
- Location or location group for the packages that are being packed (added) to the packaging hierarchy tree.

To unpack packages from a packaging hierarchy you only need *update access* in the Location Security Update page for the serial location or package location or location group for the top most parent within the packaging hierarchy tree.

For more information on location security, see Location Security Overview, page 1-9.

Use this procedure to maintain packaging hierarchies:

Prerequisites

- ☐ Location security information must be set up if you are using location security.

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.

If you are using location security, you must have *update access* to the serial location or the package location or location group for the package identifier that you want to maintain in the packaging hierarchy.

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 9-13.

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 9-23.

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.

If you are using location security, to edit the status and usage of a serialized item you must have *update access* to the serial location for the serialized item in the packaging hierarchy in the Location Security Setup page.

Use this procedure to edit status and usage for serialized items:

Prerequisites

- ☐ Location security information must be set up if you are using location security.

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.

If you are using location security, you must have *update access* to the serial location for the serialized item package identifier that you want to edit the status and usage for in the Location Security Setup page.
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

ORACLE Pedigree and Serialization Manager About Sign Out opsm

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

Maintain Packaging Hierarchy Maintain Packages

Search: Packaging Hierarchy Saved Search Display Packaging **Search: Packages** Saved Search Display Available Packages

Search: Packaging Hierarchy ** At least one is required

Item Number
 ** Product Code
 Product Code Type
 Product Code Variant
 ** Primary Package Identifier
 ** Package Identifier Type
 ** Packaging Unit

Search: Packages ** At least one is required

Item Number
 ** Product Code
 Product Code Type
 Product Code Variant
 ** Package Identifier
 ** Package Identifier Type
 ** Packaging Unit

Show Parent

Search Results: Packaging Hierarchy Tree

Actions View Create Child Package Edit Status and Usage Unpack

2.0004998.440020.60000 - 2 Pkg Box - 4498-0209-10 - SGTIN Cureall VAR 0

- 0.0004998.440020.40085 - 2 Pkg Box - 4498-0209-10 - SGTIN Cureall VAR 0
 - 1.0004998.440020.20015 - Blisterpack - 4498-0209-10 - SGTIN Cureall VAR 0
 - 1.0004998.440020.20058 - Blisterpack - 4498-0209-10 - SGTIN Cureall VAR 0
- 0.0004998.440020.40086 - 2 Pkg Box - 4498-0209-10 - SGTIN Cureall VAR 0
 - 1.0004998.440020.20019 - Blisterpack - 4498-0209-10 - SGTIN Cureall VAR 0
 - 1.0004998.440020.20020 - Blisterpack - 4498-0209-10 - SGTIN Cureall VAR 0
- 0.0004998.440020.40087 - 2 Pkg Box - 4498-0209-10 - SGTIN Cureall VAR 0
 - 1.0004998.440020.20019 - Blisterpack - 4498-0209-10 - SGTIN Cureall VAR 0
 - 1.0004998.440020.20020 - Blisterpack - 4498-0209-10 - SGTIN Cureall VAR 0

Search Results: Packages

Actions View Pack Detach

Primary Package Identifier	Primary Package Identifier Type	Alternate Package Identifier	Altern
No data to display.			

Columns Hidden 2

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

ORACLE Pedigree and Serialization Manager

About Sign Out ops.m

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.

Note: If you are using location security, you must have *update access* to the serial location in the Location Security Update page for the serialized item in the packaging hierarchy tree that you are editing the status and usage for. Otherwise, the system will display an error message that you do not have access to edit the packages selected.

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.

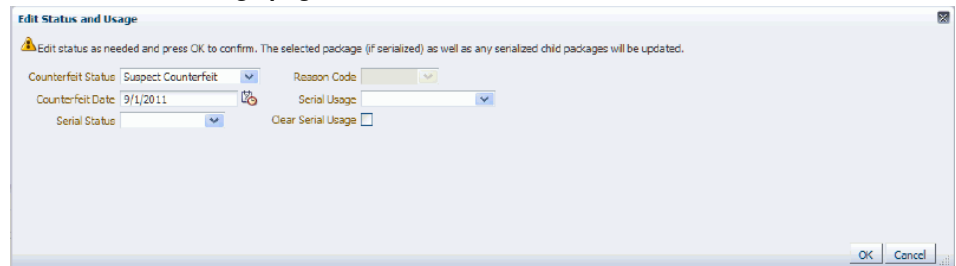
To Edit Counterfeit Status

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

ORACLE Pedigree and Serialization Manager

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 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.

If you are using location security, to create a package within the packaging hierarchy tree, you need *update access* to the serial location or package location or location group

within the packaging hierarchy tree where you want to create the new package in the Location Security Setup page. Plus, when creating the new package you will only be able to associate it to a location or location group that you have *update access* to in the Location Security Setup page. To create a package using the Packages region, you need to have functional access to the Maintain Packaging Hierarchy page but you will only be able to associate the package to a location or location group that you have *update access* to in the Location Security Setup page. In both methods above when creating a package, you can leave the location and location group fields blank when creating the package, but then only a super user can access and update the package.

For more information on location security, see Location Security Overview, page 1-9.

For more information on the Create Package page that you can access from the Maintain Packages page, see Creating Packages, page 8-8.

Use these procedures to create packages using the Maintain Packaging Hierarchy page:

Prerequisites

- ☐ Location security information must be set up if you are using location security.

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.

If you are using location security, you must have *update access* to the serial location or package location or package location group for the top most package identifier that you want to create the new package under in the Location Security Setup page.

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.

Note: If you are using location security, you must have *update access*

to the serial location or package location or location group in the Location Security Update page for the top most node in the packaging hierarchy tree that you are packing into. Otherwise, the system will display an error message that you do not have access to add children to the package(s) selected.

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 8-8.

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 8-8.

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 9-13.

Part 5

Managing Transactions

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
- Receipt
- Reserve Serials
- Return
- Serial Generation
- Shipment
- Serials Transmission

Commission Serials Transactions

Records the commission of serials into the OPSM application through the SerialsServiceAMService endpoint (editSerialStatusAndUsageByPrimaryDocument, editSerialStatusAndUsageByLabel, and editSerialStatusAndUsageByList web service operations) from an external transactional system.

The SerialsServiceAMService endpoint (web service operations) 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 and PL/SQL Services Overview, page 14-1.

For more information on defining the system parameters, see Maintaining System Parameters, page 4-24.

Decommission Serials Transactions

Records the decommission of serials into the OPSM application through the SerialsServiceAMService endpoint (editSerialStatusAndUsageByPrimaryDocument, editSerialStatusAndUsageByLabel, and editSerialStatusAndUsageByList web service operations) from an external transactional system.

The SerialsServiceAMService endpoint (web service operations) 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 and PL/SQL Services Overview, page 14-1.

For more information on defining the system parameters, see Maintaining System Parameters, page 4-24.

Edit Serials Transactions

Records the modification of attributes on serials coming into the OPSM application through the SerialsServiceAMService endpoint (editSerialStatusAndUsageByPrimaryDocument, editSerialStatusAndUsageByLabel, and editSerialStatusAndUsageByList web service operations) 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 SerialsServiceAMService endpoint (web service operations) 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 and PL/SQL Services Overview, page 14-1.

For more information on defining the system parameters, see Maintaining System Parameters, page 4-24.

Import Serials Transactions

Records the import of serials into the OPSM application through the TransactionsServiceAMService endpoint (createTransaction web service operation) from an external transactional system.

The TransactionsServiceAMService endpoint (createTransaction web service operation)

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 *Web Services and PL/SQL Services Overview*, page 14-1.

For more information on defining the system parameters, see *Maintaining System Parameters*, page 4-24.

Receipt Transactions

Records the receipt transaction into the OPSM application through the `TransactionsServiceAMService` endpoint (`processTransaction` PL/SQL operation) from an external transactional system.

For more information on the OPSM PL/SQL Services, see *Web Services and PL/SQL Services Overview*, page 14-1.

Reserve Serials Transactions

Records the reservation of serials into the OPSM application through the `SerialsServiceAMService` endpoint (`editSerialStatusAndUsageByPrimaryDocument`, `editSerialStatusAndUsageByLabel`, and `editSerialStatusAndUsageByList` web service operations) from an external transactional system.

The `SerialsServiceAMService` endpoint (web service operations) 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 and PL/SQL Services Overview*, page 14-1.

For more information on defining the system parameters, see *Maintaining System Parameters*, page 4-24.

Return Transactions

Records the return transaction into the OPSM application through the TransactionsServiceAMService endpoint (createTransaction web service operation) from an external transactional system.

The TransactionsServiceAMService endpoint (createTransaction web service operation) 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 and PL/SQL Services Overview, page 14-1.

For more information on defining the system parameters, see Maintaining System Parameters, page 4-24.

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 7-30.

- Through the TransactionsServiceAMService endpoint (createTransaction web service operation) from an external transactional system.

For more information on the OPSM Web Services, see the Web Services and PL/SQL 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 4-24.

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 TransactionsServiceAMService endpoint 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 4-262 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 10-73.

For more information on defining the system parameters, see *Maintaining System Parameters*, page 4-24.

Shipment Transactions

Records the shipment transaction into the OPSM application through the TransactionsServiceAMService endpoint (createTransaction web service operation) from an external transactional system.

The TransactionsServiceAMService endpoint (createTransaction web service operation) 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 and PL/SQL Services Overview*, page 14-1.

For more information on defining the system parameters, see *Maintaining System Parameters*, page 4-24.

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 *Oracle Serialization and Tracking Process Integration Pack for Oracle Pedigree and Serialization Manager and Oracle E-Business Suite 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 *Oracle Serialization and Tracking Process Integration Pack for Oracle Pedigree and Serialization Manager and Oracle E-Business Suite Guide*.

Maintain Transactions Page Functionality

Using the Maintain Transactions page in OPSM you can:

- Search for the different types (Serial Generation, Import Serials, Shipment, Receipt, 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 10-34.

- View transaction exception information for a transaction that did not process successfully.

For information, see *Viewing Transaction Exception Information*, page 10-41.

- View initiating transaction detail information for a serial transmission transaction.

For information, see *Viewing Initiating Transaction Detail Information*, page 10-43.

- Process Shipment, Return, Commission, Decommission, Reserve, Edit Serials, and Import Serials transactions that have previously failed processing.

For information, see *Processing Transactions*, page 10-45.

- Disregard transactions that have an Exception Status of *Errors*.

For more information, see *Disregarding Transactions*, page 10-47.

- 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 10-49, *Viewing Containers and/or Product Serials for a Transaction*, page 10-66, *Deleting Containers and/or Product Serials from a Transaction*, page 10-69, and *Updating Containers and/or Product Serials for a Transaction*, page 10-71.

- Transmit serials or retransmit serials for a transaction.

For information, see *Transmitting Serials*, page 10-73.

- 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 11-32
 - Printing a Pedigree Using the Maintain Transactions Page, page 11-24
- Create, view, and print a Pedigree document for a non-internal receipt transaction.
For more information, see:
 - Understanding Pedigree, page 11-1
 - Creating a Pedigree, page 11-6
 - Viewing a Pedigree Using the Maintain Transactions Page, page 11-32
 - Printing a Pedigree Using the Maintain Transactions Page, page 11-24

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
- Receipt
- 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.

If you are using location security, you will only be able to search for transactions associated to the transaction locations you have at a minimum *read access* to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

Use these procedures to search for transactions:

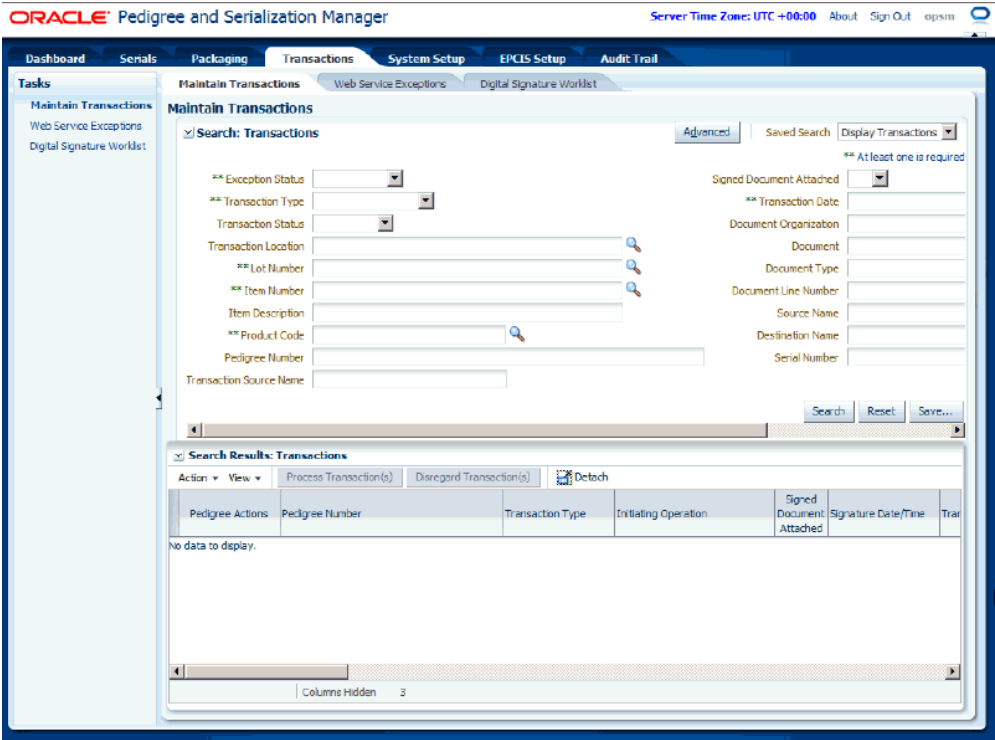
Prerequisites

- ☐ Location security information must be set up if you are using location security.

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 • Receipt • 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 <i>Submitted</i>. Once the transaction starts to process the transaction status changes to <i>In Progress</i>, and finally after the process completes to <i>Processed</i>. The transaction status can be manually changed to <i>Disregarded</i> by using the Disregarding Transaction process. For more information on disregarding transactions, see Disregarding Transactions, page 10-47. For more information on processing transactions, see Processing Transactions, page 10-45.

Field Name	Description
Transaction Location	Select the location associated with the transactions. If you are using location security, you will only be able select transaction locations that you have at a minimum <i>read access</i> to in the Location Security Setup page. For more information on location security, see Location Security Overview, page 1-9.
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.

Field Name	Description
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.
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)

ORACLE Pedigree and Serialization Manager Server Time Zone: UTC +00:00 About Sign Out opsm

Dashboard Serials Packaging Transactions System Setup EPCIS Setup Audit Trail

Maintain Transactions Web Service Exceptions Digital Signature Workflow

Search: Transactions Advanced Saved Search Display Transactions

**Exception Status: No Exceptions
 **Transaction Type: Shipment
 Transaction Status:
 Transaction Location:
 **Lot Number:
 **Item Number:
 Item Description:
 **Product Code:
 Pedigree Number:
 Transaction Source Name:
 Signed Document Attached:
 **Transaction Date: 1/13/2017
 Document Organization:
 Document:
 Document Type:
 Document Line Number:
 Source Name:
 Destination Name:
 Serial Number:
 ** At least one is required

Search Reset Save...

Search Results: Transactions

Action View Process Transaction(s) Disregard Transaction(s) Details

Pedigree Actions	Pedigree Number	Transaction Type	Initiating Operation	Signed Document Attached	Signature Date/Time	Transaction Date	Transaction Status
	6723ec50-e8d6-4ff3-8f01-8cd08ee4254e	Shipment				1/13/2017	Processed
	bd164fb3-b022-4bd6-901e-01cd9f267ee2	Shipment				1/13/2017	Processed
	3b1b3149-b62e-4431-9df8-55229ee3d7d7	Shipment				1/13/2017	Processed
	2a224b4d-b54d-4090-9b1b-46ff91deab7	Shipment		✓	1/13/17 9:30:34 AM (U 1/13/2017	1/13/2017	Processed
	23e48dff-c04a-42cf-b327-7c901cd83b0a	Shipment		✓	1/13/17 12:44:13 PM (1/13/2017	1/13/2017	Processed

Columns Hidden: 3

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

If you are using location security, all of the transactions with a transaction location that you have at a minimum *read access* to in the Location Security Setup page will display.

All of the actions and links are available for the transactions if you only have *read access* to the transaction location in the Location Security Setup page but you will only be able to view transaction detail, view transaction exceptions, view initiating transaction detail, print pedigree XML, and use the Transaction Type link. Otherwise, if you try to perform any of the others actions that are available with only *read access* the system will display an error message stating that you do not have update access to the location for the transaction. You need *update access* to the transaction location for the transaction to perform all of the other actions such as, transmit serials, maintain transaction serials, process transaction, disregard transactions, create a pedigree XML, and sign a pedigree.

For more information on location security, see Location Security Overview, page 1-9.

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. If you are using location security, you will only be able to create a pedigree XML and sign a pedigree XML using these icons if you have <i>update access</i> to the transaction location associated to the transaction in the Location Security Setup page. If you only have <i>read access</i> to the transaction location you will only be able print a pedigree XML using this icon.
Pedigree Number	Displays the Pedigree number associated with the transaction.

Field Name	Description
Transaction Type	Displays the type of transaction. This field contains a link for all transactions. If are using location security, you will be able to view transaction detail information using this link if you have at a minimum <i>read access</i> to the transaction location associated to the transaction in the Location Security Setup page.
Initiating Operation	Displays the initiating operation if a transaction was processed by the SerialsServiceAMService endpoint. Operations are: • Serial Update by Label • Serial Update by List • Serial Update by Primary Document
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 <i>Errors</i> or <i>Warnings</i>. It will also have a link to previous exceptions if the status is <i>No Exceptions</i> 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 <i>No Exceptions</i> or <i>Warnings</i> exception status. Displays the Maintain Transaction Serials icon. This icon is available for Shipment and Return type transactions that have an <i>Errors</i> exception status. If you are using location security, you will only be able to transmit serials and maintain transaction serials using these icons if you <i>update access</i> to the transaction location for the transaction in the Location Security Setup page.

Field Name	Description
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.
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. If are using location security, you will be able to view initiating transaction detail information using this link if you have at a minimum <i>read access</i> to the transaction location associated to the transaction in the Location Security Setup page.
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.

Field Name	Description
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.
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 the center indicates an informational message for the transaction. If are using location security, you will be able to view transaction exceptions using these icons if you have at a minimum <i>read access</i> to the transaction location associated to the transaction in the Location Security Setup page.

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)

The screenshot shows the 'Maintain Transactions' page in the Oracle Pedigree and Serialization Manager. The page is titled 'Maintain Transactions' and includes a navigation bar with tabs for Dashboard, Serials, Packaging, Transactions, System Setup, EPCLIS Setup, and Audit Trail. The 'Transactions' tab is selected. Below the navigation bar, there are tabs for 'Web Service Exceptions' and 'Digital Signature Workflow'. The main content area is divided into two sections: 'Search: Transactions' and 'Search Results: Transactions'.

The 'Search: Transactions' section contains a search criteria form with the following fields:

- ** Exception Status: Equals
- ** Transaction Type: Equals
- Transaction Status: Equals
- Transaction Location: Equals
- ** Lot Number: Equals
- ** Item Number: Equals
- Item Description: Starts with
- ** Product Code: Equals
- Product Code Type: Equals
- Product Code Variant: Starts with
- Pedigree Number: Starts with
- Transaction Source Name: Starts with
- Signed Document Attached: Equals
- ** Transaction Date: Equals
- Document Organization: Starts with
- Document: Starts with
- Document Type: Equals
- Document Line Number: Equals
- Source Name: Starts with
- Destination Name: Starts with
- Serial Number: Starts with

The 'Search Results: Transactions' section displays a table with the following columns: Pedigree Actions, Pedigree Number, Transaction Type, Initiating Operation, Signed Document Attached, Signature Date/Time, Transaction Date, and Transaction ID. The table is currently empty, and a message 'No data to display.' is shown below the table. The page also includes a 'Search' button, a 'Reset' button, a 'Save...' button, and an 'Add Fields' button.

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 • Receipt • 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. If you are using location security, you will only be able select transaction locations that you have at a minimum <i>read access</i> to in the Location Security Setup page. For more information on location security, see Location Security Overview, page 1-9.
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)

ORACLE Pedigree and Serialization Manager Server Time Zone: UTC +00:00 About Sign Out opsm

Dashboard Serials Packaging Transactions System Setup EPCIS Setup Audit Trail

Maintain Transactions Web Service Exceptions Digital Signature Worklist

Search: Transactions

Basic Saved Search Display Transactions

** At least one is required

** Exception Status Equals No Exceptions

** Transaction Type Equals Signed Document Attached

Transaction Status Equals

Transaction Location Equals

** Lot Number Equals

** Item Number Equals

Item Description Starts with

** Product Code Equals

Product Code Type Equals NDC442

Product Code Variant Starts with

Pedigree Number Starts with

Transaction Source Name Starts with

Signed Document Attached Equals

** Transaction Date Between 1/1/2017

Document Organization Starts with

Document Starts with

Document Type Equals

Document Line Number Equals

Source Name Starts with

Destination Name Starts with

Serial Number Starts with

Search Reset Save... Add Fields

Search Results: Transactions

Action View Process Transaction(s) Disregard Transaction(s) Details

Pedigree Actions	Pedigree Number	Transaction Type	Initiating Operation	Signed Document Attached	Signature Date/Time	Transaction Date	Transaction Status
	0bf7635-ff10-4df5-af6a-502d3840857	Shipment				3/28/2017	Processed
	d08cb6f-f9e4-4308-bb03-c2f605d25c50	Shipment		✓	1/31/17 7:24:59 AM (J)	1/4/2017	Processed
	5b583b24-ce30-4c13-88c2-283a4f8c0da6	Shipment				3/6/2017	Processed
	9bce36c8-9490-45e2-bb52-9c321c8ff875	Shipment				3/6/2017	Processed
	2a224b4d-b54d-4090-bb1b-4b6ff91deab7	Shipment		✓	1/13/17 9:30:34 AM (J)	1/13/2017	Processed
	73e684ff-c1da-43ef-b372-7c011e483b1a	Shipment		✓	1/13/17 17:44:13 DM (J)	1/13/2017	Denied

Columns Hidden: 3

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

If you are using location security, all of the transactions with a transaction location that you have at a minimum *read access* to in the Location Security Setup page will display.

All of the actions and links are available for the transactions if you only have *read access* to the transaction location in the Location Security Setup page but you will only be able to view transaction detail, view transaction exceptions, view initiating transaction detail, print pedigree XML, and use the Transaction Type link. Otherwise, if you try to perform any of the others actions that are available with only *read access* the system will display an error message stating that you do not have update access to the location for the transaction. You need *update access* to the transaction location for the transaction to perform all of the other actions such as, transmit serials, maintain transaction serials, process transaction, disregard transactions, create a pedigree XML, and sign a pedigree.

For more information on location security, see Location Security Overview, page 1-9.

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 *Oracle Serialization and Tracking Process Integration Pack for Oracle Pedigree and Serialization Manager and Oracle E-Business Suite 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.

Parameter Name	Description
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.

If you are using location security, you will only be able to view transaction detail information associated to the transaction locations you have at a minimum *read access* to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

Use this procedure to view transaction detail information:

Prerequisites

- ☐ Transactions have been previously created.
- ☐ Location security information must be set up if you are using location security.

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.

If you are using location security, you will only be able to search for and view transactions associated to the transaction locations you have at a minimum *read access* to in the Location Security Setup 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 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)

ORACLE Pedigree and Serialization Manager

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

Maintain Transactions | Web Service Exceptions | Digital Signature Workflow

View Transaction [Close]

Transaction Details | Associated Documents | Product Details | Associated Serials | Packaging Hierarchy | User Defined Fields

Transaction Details

Transaction Type: Shipment	Transaction Location: M1
Transaction Date: 8/29/2011	Primary Document: 3055215
Exception Status: No Exceptions	Primary Document Type: DELIVERY
Item Number: 1212019803	Primary Document Line Number: 3899251
Item Description: 56TIN-198 Package in EES	Transaction Source Name: EED_01
Product Code: 1212-0198-03	Internal Transaction: ☐
Lot Number: 82901	
Transaction Quantity: 100	
Transaction Unit of Measure: Ea	

Source

Business Name: Vision Operations	Shipping Name: Seattle Manufacturing
Business Address Street: 475 Park Avenue	Shipping Address Street: 3455 108th Avenue
City: New York	City: Seattle
State: NY	State: WA
Postal Code: 10022	Postal Code: 98101
Country: US	Country: US
Contact Name: B, Mr. Anesh	Contact Name: B, Mr. Anesh
Contact E-mail: anesh.b@oracle.com	Contact E-mail: anesh.b@oracle.com
Contact Phone: 123321	Contact Phone: 123321

View Transaction page - Transaction Details tab (2 of 2)

Destination

Business Name: A. C. Networks	Shipping Name: A. C. Networks
Business Address Street: 3405 East Bay Blvd.	Shipping Address Street: 3405 East Bay Blvd.
2nd address line:	2nd address line:
3rd address line:	3rd address line:
4th address line:	4th address line:
City: Provo	City: Provo
State: UT	State: UT
Postal Code: 84606	Postal Code: 84606
Country: US	Country: US
Contact Name: Davide Molni	Contact Name: Davide Molni
Contact E-mail:	Contact E-mail:
Contact Phone:	Contact Phone:

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, Receipt, 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 for the business and shipping information (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

ORACLE Pedigree and Serialization Manager

About Sign Out opsm

The screenshot shows the 'View Transaction' window with the 'Associated Documents' tab selected. The window has a top navigation bar with tabs: Dashboard, Serials, Packaging, Transactions (selected), System Setup, EPCIS Setup, and Audit Trail. Below this is a sub-navigation bar with: Maintain Transactions, Web Service Exceptions, Digital Signature Workflow, and a Close button. The main content area is titled 'Documents Associated to Transaction' and contains a table with the following data:

Document	Document Type	Document Line Number	Document Organization	Primary Document
3055215	DELIVERY	3899251	M1	✓
65463	MIXED	1	Vision Operations	
2174	BILLBOARDING		M1	

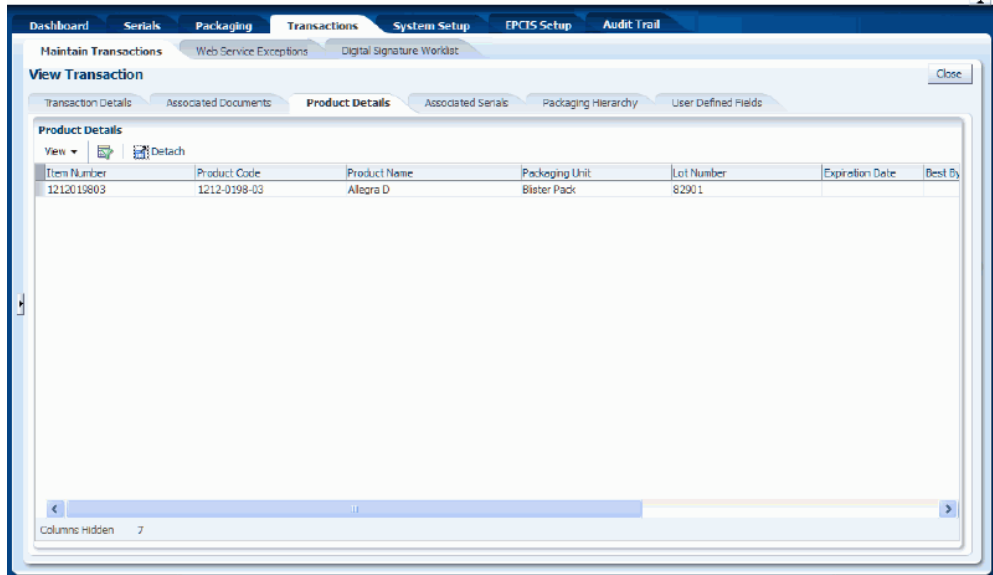
The Associated Documents tab appears displaying the associated documents for the transaction in a table format.

7. Select the Product Details tab to view the product and lot details associated with the transaction.

View Transaction page - Product Details tab

ORACLE[®] Pedigree and Serialization Manager

About Sign Out opsm



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

ORACLE Pedigree and Serialization Manager

About Sign Out opsm

The screenshot shows the 'View Transaction' page in the Oracle Pedigree and Serialization Manager. The 'Associated Serials' tab is selected, displaying a table of serials associated with a transaction. The table has columns for Serial Number, Item Number, Product Code, Product Name, Packaging Unit, Lot Number, Serial Type, and Manufacturer. The data is presented in a tree and table format, with a 'View' dropdown menu and a 'Detach' button. The table shows 10 rows of data, all for 'Alegre D' products, with packaging units of 'Blister Pack' and lot numbers of '82901'. The serial type is 'SGTIN-198'.

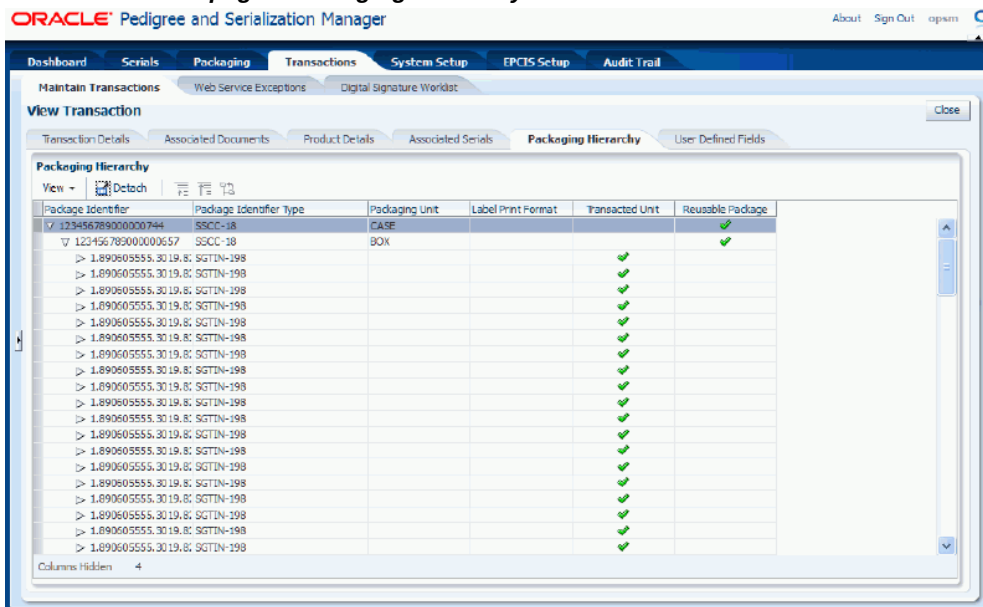
Serial Number	Item Number	Product Code	Product Name	Packaging Unit	Lot Number	Serial Type	Manufacturer
> 1.890605555.3019.8299691	1212019803	1212-0198-03	Alegre D	Blister Pack	82901	SGTIN-198	
> 1.890605555.3019.8299692	1212019803	1212-0198-03	Alegre D	Blister Pack	82901	SGTIN-198	
> 1.890605555.3019.8299693	1212019803	1212-0198-03	Alegre D	Blister Pack	82901	SGTIN-198	
> 1.890605555.3019.8299694	1212019803	1212-0198-03	Alegre D	Blister Pack	82901	SGTIN-198	
> 1.890605555.3019.8299695	1212019803	1212-0198-03	Alegre D	Blister Pack	82901	SGTIN-198	
> 1.890605555.3019.8299696	1212019803	1212-0198-03	Alegre D	Blister Pack	82901	SGTIN-198	
> 1.890605555.3019.8299697	1212019803	1212-0198-03	Alegre D	Blister Pack	82901	SGTIN-198	
> 1.890605555.3019.8299698	1212019803	1212-0198-03	Alegre D	Blister Pack	82901	SGTIN-198	
> 1.890605555.3019.8299699	1212019803	1212-0198-03	Alegre D	Blister Pack	82901	SGTIN-198	
> 1.890605555.3019.8299700	1212019803	1212-0198-03	Alegre D	Blister Pack	82901	SGTIN-198	

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.

ORACLE® Pedigree and Serialization Manager



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.

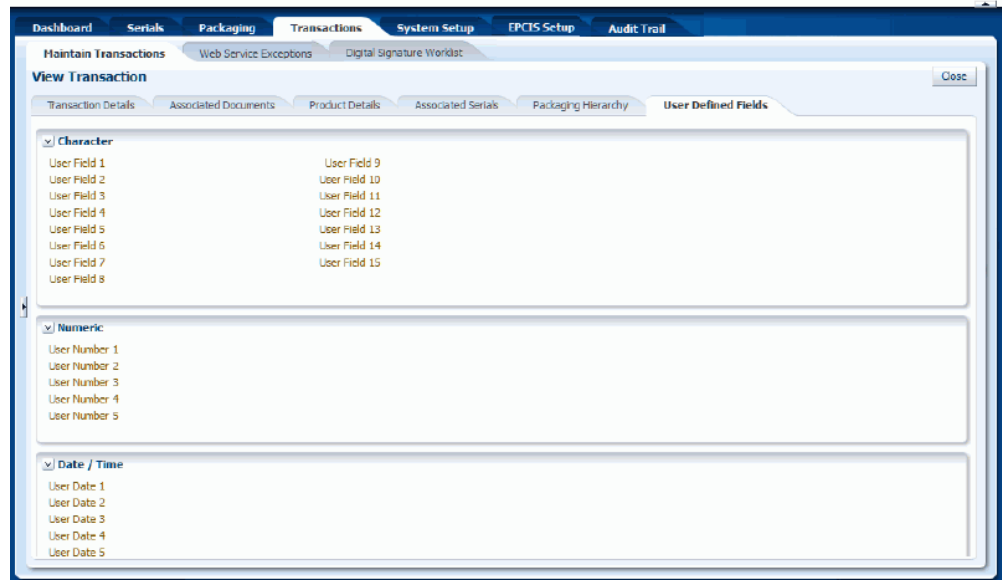
Expand the Package Identifier field to view the lower level packaging units in the tree.

10. Select the User Defined Fields tab to view the user-defined fields associated with the transaction.

View Transaction page - User Defined Fields tab

ORACLE[®] Pedigree and Serialization Manager

About Sign Out opsm



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.

Note: You cannot view transaction exceptions from the PL/SQL services using this page. If the PL/SQL service fails, the errors are written to the Error Interface table and you can view the errors in that table.

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.

If you are using location security, you will only be able to view transaction exception information associated to the transaction locations you have at a minimum *read access* to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

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.
- ☐ Location security information must be set up if you are using location security.

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.

If you are using location security, you will only be able to search for and view transactions associated to the transaction locations you have at a minimum *read access* to in the Location Security Setup 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 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

ORACLE Pedigree and Serialization Manager

About Sign Out opsm

The screenshot shows the 'View Transaction Exceptions' page. At the top, there are tabs for 'Maintain Transactions', 'Web Service Exceptions', and 'Digital Signature Worklist'. The 'View Transaction Exceptions' tab is active. Below the tabs, there is a 'Transaction Summary' section with the following details:

- Transaction Type: Shipment
- Transaction Date: 8/22/2011
- Exception Status: Error(s) Exist
- Item Number: 0121071111
- Item Description:
- Product Code:
- Product Code Type:
- Product Code Variant:
- Transaction Quantity: 5
- Transaction Unit of Measure: Ea
- Transaction Location: M1
- Lot Number: 599006
- Parent Lot:
- Primary Document: 3053232
- Primary Document Type: DELIVERY
- Primary Document Line Number: 3897461

Below the summary, there is an 'Error Details' section. It contains a table with the following data:

Message Severity	Error Status	Message	Last Updated Date
Detected	Detected	Location M1 is set to require a product for serial creation.	8/22/2011
Detected	Detected	The combination of item number 0121071111 and item source EBIZ_01 does not exist in OPSM. Change the item information of add the item information in OPSM.	8/22/2011

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.

If you are using location security, you will only be able to view initiating transaction information associated to the transaction locations you have at a minimum *read access* to in the Location Security Setup page.

Use this procedure to view initiating transaction detail information:

Prerequisites

- ☐ Location security information must be set up if you are using location security.

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.

If you are using location security, you will only be able to search for and view transactions associated to the transaction locations you have at a minimum *read access* to in the Location Security Setup 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 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 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.

If you are using location security, you will only be able to process transactions associated to the transaction locations you have *update access* to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

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.
- ☐ Location security information must be set up if you are using location security.

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.

If you are using location security, you will only be able to process transactions associated to transaction locations that you have *update access* to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

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.

Note: If you are using location security, you will only be able to process transactions associated to the transaction locations you have *update access* to in the Location Security Setup page. Otherwise, the system will display an error message stating that you do not have update access to the location for the transaction.

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*.

Note: If any serials have been shipped on the disregarded transaction, they are not available for reprocessing, nor do they display on a pedigree XML for reporting.

If you are using location security, you will only be able to disregard transactions associated to the transaction locations you have *update access* to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

Use this procedure to disregard transactions:

Prerequisites

- ☐ Location security information must be set up if you are using location security.

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.

If you are using location security, you will only be able to disregard transactions associated to transaction locations that you have *update access* to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

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.

Note: If you are using location security, you are only able to disregard transactions associated to the transaction locations you have *update access* to in the Location Security Setup page. Otherwise, the system displays an error message stating that you do not have update access to the location for the transaction.

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.

Note: If any serials have been shipped on the disregarded transaction, they are not available for reprocessing, nor do they display on a pedigree XML for reporting.

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.

If you are using location security, you will only be able to add containers and/or products serials to transactions that are associated to transaction locations you have *update access* to in the Location Security Setup page. You will also need to have *update access* to the location or location group being assigned if you are creating a new package.

For more information on location security, see Location Security Overview, page 1-9.

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*.

- ☐ Location security information must be set up if you are using location security.

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.

If you are using location security, you will only be able to add containers and/or product serials to transactions associated to transaction locations that you have *update access* to in the Location Security Setup page. You will also need to have *update access* to the location or location group being assigned if you are creating a new package.

For more information on location security, see Location Security Overview, page 1-9.

Maintain Transactions page

ORACLE Pedigree and Serialization Manager Server Time Zone: UTC +00:00 About Sign Out opsm

Dashboard Serials Packaging Transactions System Setup EPCIS Setup Audit Trail

Maintain Transactions Web Service Exceptions Digital Signature Worklist

☒ Search: Transactions Advanced Saved Search Display Transactions

☒ Exception Status: Errors
☒ Transaction Type: Shipment
 Transaction Status:
 Transaction Location:
☒ Lot Number:
☒ Item Number:
 Item Description:
☒ Product Code:
 Pedigree Number:
 Transaction Source Name: BBIZ_01

Signed Document Attached:
☒ Transaction Date:
 Document Organization: M1
 Document: 3063219
 Document Type: DELIVERY
 Document Line Number:
 Source Name:
 Destination Name:
 Serial Number:

** At least one is required

Search Reset Save...

☒ Search Results: Transactions

Action View Process Transaction(s) Disregard Transaction(s) Detail

Pedigree Actions	Pedigree Number	Transaction Type	Initiating Operation	Signed Document Attached	Signature Date/Time	Transaction Date	Transaction Status	Exception Status
		Shipment				1/7/2016	Processed	Errors

Rows Selected: 1 Columns Hidden: 3

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.

Note: If you are using location security, you will only be able to add containers and/or product serials to transactions associated to transaction locations that you have *update access* to in the Location Security Setup page. You will also need to have *update access* to the location or location group being assigned if you are creating a new package.

Maintain Transaction Serials page

ORACLE Pedigree and Serialization Manager

About Sign Out opsm

The screenshot displays the 'Maintain Transaction Serials' page. At the top, there are tabs for Dashboard, Serials, Packaging, Transactions, System Setup, EPCIS Setup, and Audit Trail. The 'Transactions' tab is active. Below the tabs, there are links for 'Maintain Transactions', 'Web Service Exceptions', and 'Digital Signature Worklist'. The main form area is titled 'Maintain Transaction Serials' and contains several fields: Item Number (80120), Item Source (EBIZ_01), Product Code, Product Code Type, Product Code Variant, Create Serials for Shipments (checkbox), Transaction (1), Quantity, Transaction Unit of Measure (DTL), Associated Serial (0), Quantity, and Packaging Unit. A yellow warning icon is present next to the Associated Serial Quantity field. Below this, there is a section for 'Container/Product Serial Hierarchy' with a table that has columns for Action, Package Identifier, Package Identifier Type, Packaging Unit, Label Print Format, Transacted Unit, and Reusable Package. The table is currently empty, showing 'No data to display.'

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.
Location	Select a location for the packaging unit (package or product serial). You can only select a location or location group but not both. If you select a location the Location Group field becomes unavailable for entry. If you are using location security, and adding a new package, you must have <i>update access</i> to the location or location group being added for the new package in the Location Security Setup page. Packages can be created without a location or location group. For product serials, the location appears by default from the transaction. No update access is checked for product serials.

Field Name	Description
Location Group	Select a location for the packaging unit (package or product serial). You can only select a location or location group but not both. If you select a location group the Location field becomes unavailable for entry. If you are using location security, and adding a new package, you must have <i>update access</i> to the location or location group being added for the new package in the Location Security Setup page. Packages can be created without a location or location group.
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.
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.

Field Name	Description
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.
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.

Field Name	Description
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

Associated Serials

Item Number: 80120
Product Code:
Product Code Variant:
Item Source: EBIZ_01
Product Code Type:
Create Serials for Shipments: ☐
Transaction: 1
Quantity:
Transaction Unit of Measure: BTL
Associated Serial: 0
Quantity:
Packaging Unit:

Container/Product Serial Hierarchy

Action	Package Identifier	Package Identifier Type	Packaging Unit	Label Print Format	Transacted Unit	Reusable Package
	Container 100	GTIN	Container	2D Barcode	☐	☒
	0.890605555.190 L 20	SGTIN-96	Bottle		☒	☐

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

Existing Containers/Product Serials

Search Containers/Product Serials

* Required

** At least one is required

** Package Identifier

Package Identifier Type

** Packaging Unit

Product Code

Lot Number

Primary Identifiers Only

Include Containers/Product Serials

Primary Labels

Both

Search

Reset

Search Results: Containers/Product Serials

Package Identifier	Package Identifier Type	Packaging Unit	Product Serial	Product Code	Produ
No data to display.					

Include Packed Transacted Units ☒

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.

Field Name	Description
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, <i>Labels for Containers</i> appears by default. If the Create Serials for Shipment check box is clear, <i>Both</i> appears by default. For Return transactions, <i>Labels for Product Serials</i> appears by default.

Select and Add dialog box

Existing Containers/Product Serials

▼ Search Containers/Product Serials

**** Package Identifier** 0.890605555.1901 * Required
** At least one is required

*** Package Identifier Type** SGTIN-96 ▼

**** Packaging Unit** Bottle ▼

Product Code

Lot Number

Primary Identifiers Only Primary Labels ▼

Include Containers/Product Serials Both ▼

Search Reset

▼ Search Results: Containers/Product Serials

Package Identifier	Package Identifier Type	Packaging Unit	Product Serial	Product Code	Pr
0.890605555.1901.10	SGTIN-96	Bottle	✓	6202-5808-01	R
0.890605555.1901.11	SGTIN-96	Bottle	✓	6202-5808-01	R
0.890605555.1901.12	SGTIN-96	Bottle	✓	6202-5808-01	R
0.890605555.1901.13	SGTIN-96	Bottle	✓	6202-5808-01	R
0.890605555.1901.14	SGTIN-96	Bottle	✓	6202-5808-01	R
0.890605555.1901.15	SGTIN-96	Bottle	✓	6202-5808-01	R
0.890605555.1901.16	SGTIN-96	Bottle	✓	6202-5808-01	R
0.890605555.1901.17	SGTIN-96	Bottle	✓	6202-5808-01	R
0.890605555.1901.18	SGTIN-96	Bottle	✓	6202-5808-01	R
0.890605555.1901.19	SGTIN-96	Bottle	✓	6202-5808-01	R
0.890605555.1901.20	SGTIN-96	Bottle	✓	6202-5808-01	R
0.890605555.1901.21	SGTIN-96	Bottle	✓	6202-5808-01	R
0.890605555.1901.22	SGTIN-96	Bottle	✓	6202-5808-01	R

Include Packed Transacted Units ☒

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

Maintain Transaction Serials

Save and Close Save and Continue Cancel

Associated Serials

Item Number: 80120 Item Source: EBIZ_01
 Product Code: Product Code Type:
 Product Code Variant: Create Serials for Shipments: ☐
 Transaction: 1 Associated Serial: 0
 Quantity: Quantity:
 Transaction Unit of Measure: BTL Packaging Unit:

Container/Product Serial Hierarchy

Action	Package Identifier	Package Identifier Type	Packaging Unit	Label Print Format	Transacted Unit	Reusable Package
	0.890605555.190 L.20	SGTIN-96	Bottle			☒

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 8-2 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 10-45.

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.

If you are using location security, you will only be able to view containers and/or products serials for transactions that are associated to transaction locations you have *update access* to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

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 10-49.

- ☐ Location security information must be set up if you are using location security.

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.

If you are using location security, you will only be able to view containers and/or product serials for transactions associated to transaction locations that you have

update access to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

Maintain Transactions page

The screenshot displays the 'Maintain Transactions' page in the Oracle Pedigree and Serialization Manager. The page has a top navigation bar with tabs: Dashboard, Serials, Packaging, Transactions (selected), System Setup, EPCIS Setup, and Audit Trail. Below the navigation bar, there are sub-tabs: Maintain Transactions, Web Service Exceptions, and Digital Signature Workflow. The main content area is divided into two sections: 'Search: Transactions' and 'Search Results: Transactions'.

Search: Transactions

Search criteria include:

- ** Exception Status: Errors
- ** Transaction Type: Shipment
- Transaction Status: (dropdown)
- Transaction Location: (text field)
- ** Lot Number: (text field)
- ** Item Number: (text field)
- Item Description: (text field)
- ** Product Code: (text field)
- Pedigree Number: (text field)
- Transaction Source Name: BBIZ_01
- Signed Document Attached: (checkbox)
- ** Transaction Date: (text field)
- Document Organization: M1
- Document: 3063219
- Document Type: DELIVERY
- Document Line Number: (text field)
- Source Name: (text field)
- Destination Name: (text field)
- Serial Number: (text field)

Search Results: Transactions

Search results are displayed in a table with the following columns:

Action	View	Process Transaction(s)	Disregard Transaction(s)	Detach	Pedigree Actions	Pedigree Number	Transaction Type	Initiating Operation	Signed Document Attached	Signature Date/Time	Transaction Date	Transaction Status	Exception Status
							Shipment				1/7/2016	Processed	Errors

At the bottom of the table, it shows 'Rows Selected: 1' and 'Columns Hidden: 3'.

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.

Note: If you are using location security, you will only be able to view containers and/or products serials for transactions that are associated to transaction locations you have *update access* to in the Location Security Setup page. Otherwise, the system will display an error message stating that you do not have update access to the location for the transaction.

Maintain Transaction Serials page

ORACLE Pedigree and Serialization Manager

About Sign Out opsm

The screenshot shows the 'Maintain Transaction Serials' page. At the top, there are tabs for Dashboard, Serials, Packaging, Transactions, System Setup, EPCIS Setup, and Audit Trail. The 'Transactions' tab is selected. Below the tabs, there are links for 'Maintain Transactions', 'Web Service Exceptions', and 'Digital Signature Workflow'. The main form has two sections: 'Associated Serials' and 'Container/Product Serial Hierarchy'.

Associated Serials

Item Number: 80120
 Product Code: [blank]
 Product Code Variant: [blank]
 Transaction Quantity: 1
 Transaction Unit of Measure: BTL

Item Source: EBIZ_01
 Product Code Type: [blank]
 Create Serials for Shipments: ☐
 Associated Serial Quantity: 1
 Packaging Unit: [blank]

Container/Product Serial Hierarchy

Action	Package Identifier	Package Identifier Type	Packaging Unit	Label Print Format	Transacted Unit	Reusable Package
	> Container.100	GTIN	Container	2D Barcode		☒

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.

- 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

ORACLE Pedigree and Serialization Manager

About Sign Out opsm

The screenshot displays the 'Maintain Transaction Serials' page. At the top, there are tabs for 'Dashboard', 'Serials', 'Packaging', 'Transactions', 'System Setup', 'EPCIS Setup', and 'Audit Trail'. The 'Transactions' tab is active. Below the tabs, there are sub-tabs: 'Maintain Transactions', 'Web Service Exceptions', and 'Digital Signature Workflow'. The 'Maintain Transactions' sub-tab is selected. The page has a title bar with 'Save and Close', 'Save and Continue', and 'Cancel' buttons. The main content area is divided into two sections. The first section, 'Associated Serials', contains fields for 'Item Number' (80120), 'Product Code', 'Product Code Variant', 'Transaction Quantity' (1), 'Transaction Unit of Measure' (BTL), 'Item Source' (EBIZ_01), 'Product Code Type', 'Create Serials for Shipments' (checkbox), 'Associated Serial Quantity' (1), and 'Packaging Unit'. The second section, 'Container/Product Serial Hierarchy', contains a table with columns: 'Action', 'Package Identifier', 'Package Identifier Type', 'Packaging Unit', 'Label Print Format', 'Transacted Unit', and 'Reusable Package'. The table has two rows: one for 'Container 100' with 'GTIN' type and 'Container' unit, and another for '> 0.890605555.1901.20' with 'SGTIN-95' type and 'Bottle' unit. The 'Transacted Unit' column has a checkbox checked for the second row. The 'Reusable Package' column has a checkbox checked for the first row.

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.

If you are using location security, you will only be able to delete containers and/or products serials from transactions that are associated to transaction locations you have *update access* to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

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 10-49.

- ☐ Location security information must be set up if you are using location security.

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.

If you are using location security, you will only be able to delete containers and/or product serials from transactions associated to transaction locations that you have *update access* to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

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.

Note: If you are using location security, you will only be able to delete containers and/or products serials from transactions that are associated to transaction locations you have *update access* to in the Location Security Setup page. Otherwise, the system will display an error message stating that you do not have update access to the location for the transaction.

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.

If you are using location security, you will only be able to update containers and/or products serials for transactions that are associated to transaction locations you have *update access* to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

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 10-49.

- ☐ Location security information must be set up if you are using location security.

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.

If you are using location security, you will only be able to update containers and/or product serials for transactions associated to transaction locations that you have *update access* to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

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.

Note: If you are using location security, you will only be able to update containers and/or products serials for transactions that are associated to transaction locations you have *update access* to in the Location Security Setup page. Otherwise, the system will display an error message that you do not have update access to the location for the transaction.

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.

If you are using location security, you will only be able to update container and/or product serial information if you have update access to the location on the product serial or update access to the location or location group on the package in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

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 10-49.

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 10-69.

Transmitting Serials

Use the Maintain Transactions page in Oracle Pedigree and Serialization Manager (OPSM) to transmit serials.

If you are using location security, you will only be able to transmit serials associated to the transaction locations you have *update access* to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

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 4-262.
- Transactions (Shipment, Return, Serial Generation, or Import Serials) have been created that require the transmitting of serials.
- Location security information must be set up if you are using location security.

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.

If you are using location security, you will only be able to transmit serials for transactions associated to transaction locations that you have *update access* to in the Location Security Setup page.

For more information on location security, see *Location Security Overview*, page 1-9.

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.

Note: If you are using location security, you will only be able to transmit serials associated to the transaction locations you have *update access* to in the Location Security Setup page. Otherwise, the system will display an error message stating that you do not have update access to the location for the transaction.

Serial Destinations page

Destination Group	Destination Description	Destination
EPCIS DESTINATION3	BFG Warehouse 3	Dest 3 by Type
JP Manufacturing	JP Manufacturing East	JP Manufacturing East
NON_EPCIS	JMS Queue	Queue

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 4-262.

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.

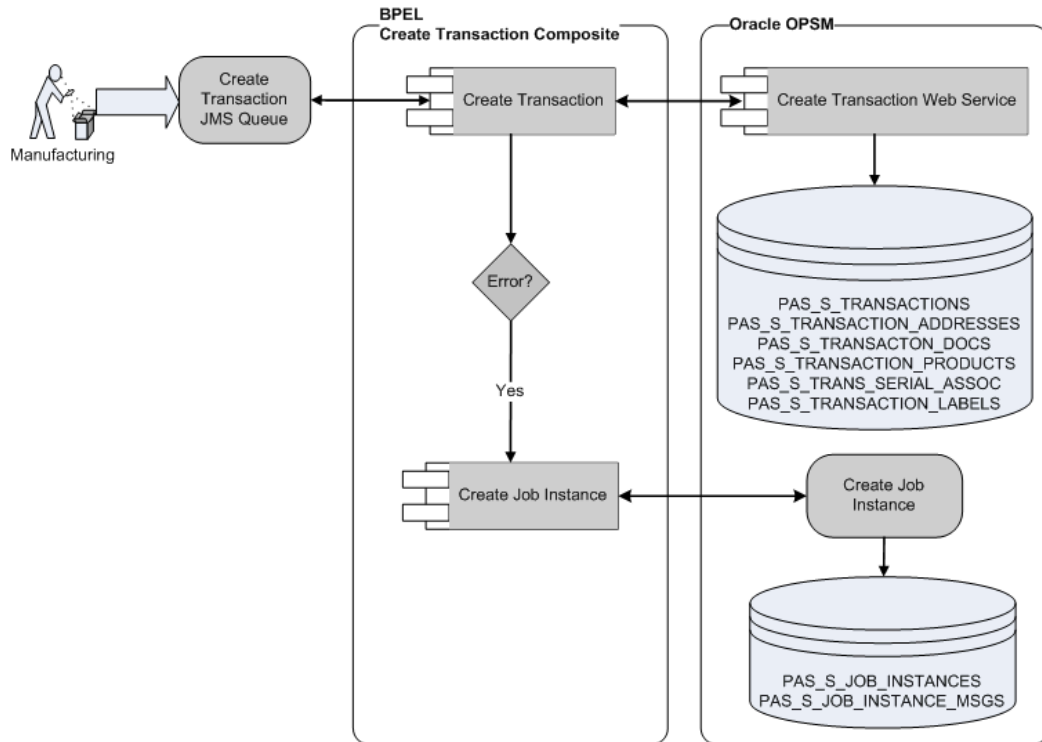
Creating Transactions Using JMS Queue

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 OPSPM Web Services directly without using the JMS Queue you are not able to view exception messages using the OPSPM Web Service Exceptions page.

For more information on integrating Oracle E-Business Suite with OPSPM, see *Oracle Serialization and Tracking Process Integration Pack for Oracle Pedigree and Serialization Manager and Oracle E-Business Suite 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 6-41.

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 and print a pedigree document for a shipment or receipt transaction. You can also digitally sign a pedigree document created from a shipment transaction. 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 or received by a downstream trading partner through a shipment or receipt transaction.

Example of a Pedigree Report

Pedigree Report

Pedigree Serial Number um:uuid:724d815c-058c-4180-b6ad-4d97ab74d32b

Product Information

Name: Maint. Product changes - Custom ST
Product Code: DSCSA PRODUCT CUSTOM
Strength: 25mg
Dosage Form: TABLET
Container Size: 50
NDC Number: 11111-22222-33333-44

Manufacturer: JD MFG

Ownership

Seller: Black MFG
Street Address 1
Street Address 2
Hyderabad, CO 500072 India

License State: TN TN-976589
License Agency: TN Food DRUG Administration

Contact: jdupy President
Phone: 595-595-5959
E-mail: jacqueline.dupy@oracle.com

Buyer: DSCSA Receiving
2 Street Address 1
Street Address 2
Hyderabad QA, CO 500072 India

Transaction

Transaction: Sale
Transaction Date: 2017-07-17 10:29:00.0
Shipment Date: 2017-06-12 00:00:00.0
Transaction ID: Pedtest7/17 RECEIPTNUMBER

Lot and Quantity

Lot Number DSCSA Lot
Expiration Date 2017-05-30

Serial Numbers

Serial Count: 3

2017AB%/17
2017AB%/18
2017AB%/19

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, NDC Number, 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)
 - Buyer Information:
 - Buyer Name and Address
 - Transaction Information: Transaction Type (Sale), Transaction Date, Shipment Date, Transaction ID (Invoice, Shipping number, Receipt 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 or receipt 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 is automatically created in OPSM, if OPSM receives a shipment or receipt transaction from a transactional system and it processes successfully, is not a shipment or receipt to an internal customer, has the product flagged as Pedigree Required, and has all the required pedigree fields populated. If the shipment or receipt transaction fails then the pedigree document is not created. If the shipment or receipt transaction is successfully reprocessed, then OPSM tries again to automatically create the pedigree document.

The pedigree document can be manually created in OPSM using the Maintain Transaction page if a shipment or receipt 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 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 or receipt 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 for a shipment transaction, access the Maintain

Transactions page or the Digital Signature Worklist page. From the Maintain Transactions page you 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 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. You cannot digitally sign a pedigree document created from a receipt transaction.

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 11-21.

To print a pedigree document for a shipment or receipt transaction, access the Maintain Transactions page and click the Print Pedigree XML icon or select the Print Pedigree XML option from the Action menu for a shipment or receipt transaction where the pedigree document has already been created. You can also print a pedigree document for a shipment transaction from the Digital Signature Worklist page. 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 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 11-24
- *Printing a Pedigree Using the Digital Signature Worklist*, page 11-27
- *Viewing a Pedigree Using the Maintain Transactions page*, page 11-32
- *Viewing a Pedigree Using the Digital Signature Worklist*, page 11-33

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 and printed in OPSM for a shipment or receipt transaction and the pedigree document digitally signed 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 the pedigree for the locations for which you are working.

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 4-47.

2. Define Location Contacts for the locations for which you are working.

For information, see Maintaining Locations, page 4-47.

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 4-24.

- 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 4-47.

- 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 4-47.

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 4-87.

5. Create shipment or receipt 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) automatically creates a pedigree XML document when it receives a non-internal shipment or receipt 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 or receipt transaction does not contain all of the required pedigree fields the pedigree XML document is not created. In this case, you 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 or receipt transaction. A pedigree XML document can only be created for shipment or receipt transactions with an exception status of *No Exceptions*.

If you are using location security, you will only be able to manually create a pedigree XML document for transactions associated to transaction locations you have *update access* to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

For more information on pedigree, see Understanding Pedigrees, 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 or receipt transaction exists with an exception status of *No Exceptions*.

- ☐ Location security information must be set up if you are using location security.

To Manually Create a Pedigree:

1. Navigate to the Maintain Transactions page, page A-2.
2. Enter search criteria for the transactions for which you want to create a pedigree and click the Search button.

You'll want to search for transactions with a Transaction Type of *Shipment* or *Receipt* and an Exception Status of *No Exceptions*.

If you are using location security, you will only be able to manually create pedigrees for transactions associated to transaction locations that you have *update access* to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

Maintain Transactions page

ORACLE Pedigree and Serialization Manager

Dashboard Serials Packaging Transactions System Setup EPCIS Setup Audit Trail

Maintain Transactions Web Service Exceptions Digital Signature Workflow

Maintain Transactions

Search: Transactions Advanced Saved Search Display Transactions

Exception Status: No Exceptions Transaction Type: Shipment Transaction Status: Transaction Location: PUEBLO Lot Number: Item Number: Item Description: Product Code: Pedigree Number: Transaction Source Name: Signed Document Attached: Transaction Date: 6/6/2012 Document Organization: Document: Document Type: Document Line Number: Source Name: Destination Name: Serial Number:

Search Reset Save...

Search Results: Transactions

Action	View	Process Transaction(s)	Discard Transaction(s)	Detach	Pedigree Actions	Pedigree Number	Transaction Type	Signed Document Attached	Signed By	Signature Date/Time	Transaction Date	Transaction Status	Reprocessable	Except
						594ea295-354e-4f Shipment	Shipment				6/6/2012	Processed		No Exc
						Shipment	Shipment				6/6/2012	Processed		No Exc
						Shipment	Shipment				6/6/2012	Processed		No Exc
						888fe2a4-bf3a-40 Shipment	Shipment	✓	brenda railback	6/11/12 7:44:04 AM (U)	6/6/2012	Processed		No Exc

Columns Hidden: 3

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

If you are using location security, all of the transactions with a transaction location that you have at a minimum *read access* to in the Location Security Setup page will display.

For more information on location security, see Location Security Overview, page 1-9.

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 appears in the Message Severity column of the results table for the shipment or receipt transaction. You 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 or receipt 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.

Note: You cannot digitally sign a pedigree document for a receipt transaction.

You can also digitally sign one or more pedigree documents for shipment transactions using the Digital Signature Worklist page.

If you are using location security, you will only be able to digitally sign a pedigree XML document for transactions associated to transaction locations you have *update access* to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

For information, see Digitally Signing a Pedigree Using the Digital Signature Worklist page, page 11-21.

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.
- ☐ Location security information must be set up if you are using location security.

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 for which you want to digitally sign a pedigree 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 appear that match the search criteria.

For more information on all of the search criteria fields, see Searching for Transactions, page 10-10.

If you are using location security, you will only be able to digitally sign pedigrees for transactions associated to transaction locations that you have *update access* to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

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

If you are using location security, all of the transactions with a transaction location that you have at a minimum *read access* to in the Location Security Setup page will display.

For more information on location security, see Location Security Overview, page 1-

9.

3. Select the transaction in the table for which you want to digitally sign the pedigree. The transaction has an associated Pedigree Number that appears in the Pedigree Number column of the Search Results: Transactions table.

Maintain Transactions page

Oracle Pedigree and Serialization Manager

Dashboard Serials Packaging Transactions System Setup EPCIS Setup Audit Trail

Maintain Transactions Web Service Exceptions Digital Signature Worklist

Search: Transactions Advanced Saved Search Display Transactions

Exception Status No Exceptions Transaction Type Shipment Transaction Status Transaction Location Lot Number Item Number Product Code Pedigree Number Transaction Source Name Signed Document Attached No Transaction Date Document Organization Document Type SO Document Line Number Source Name Destination Name Serial Number

Search Results: Transactions

Pedigree Actions	Pedigree Number	Transaction Type	Signed Document Attached	Signed By	Signature Date/Time	Transaction Date	Transaction Status	Reprocessable	Exception Status
	58765399-cdbi	shipment				8/20/2012	Processed		No Exception

Rows Selected: 1 Columns Hidden: 3

4. Select Sign in the Action menu or click the Unsigned icon for the transaction in the Pedigree Actions column of the results table.

Note: If you are using location security, you will only be able to digitally sign a pedigree document for transactions associated to transaction locations you have *update access* to in the Location Security Setup page. Otherwise, the system will display an error message that you do not have update access to the location for the transaction.

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 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 does not require you to enter the credentials. The credentials entered for the first pedigree are 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 screenshot shows the Oracle Pedigree and Serialization Manager (OPSM) interface. The top navigation bar includes links for Dashboard, Serials, Packaging, Transactions, System Setup, EPCIS Setup, and Audit Trail. The main section is titled 'Maintain Transactions' and contains a search form and a results table.

Search: Transactions

Filters:

- Exception Status: No Exceptions
- Transaction Type: Shipment
- Transaction Status: [Dropdown]
- Transaction Location: [Text Field]
- Lot Number: [Text Field]
- Item Number: [Text Field]
- Item Description: [Text Field]
- Product Code: [Text Field]
- Pedigree Number: [Text Field]
- Transaction Source Name: [Text Field]

Advanced search options: Signed Document Attached (Yes/No), Transaction Date (Date), Document Organization (Text), Document (Text), Document Type (Dropdown), Document Line Number (Text), Source Name (Text), Destination Name (Text), Serial Number (Text).

Search Results: Transactions

Pedigree Actions	Pedigree Number	Transaction Type	Signed Document Attached	Signed By	Signature Date/Time	Transaction Date	Transaction Status	Reprocessable	Exception Sta
[Icons]	58765390-cabr	Shipment	[Green Checkmark]	Karen Heath	8/29/12 9:30:09 AM (U)	8/20/2012	Processed		No Exceptions

Rows Selected: 1 | Columns Hidden: 3

The pedigree document is now digitally signed. You 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 appears in the Signed Document Attached column of the results table for the shipment transaction.
- Location contact name associated with the digital signature credential appears in the Signed By column of the results table for the shipment transaction.
- Date and time the pedigree was signed appears 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 11-24
- Printing a Pedigree Using the Digital Signature Worklist page, page 11-27
- Viewing a Pedigree Using the Digital Signature Worklist Page, page 11-33
- Viewing a Pedigree Using the Maintain Transactions Page, page 11-32

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.

If you are using location security, you will only be able to search for signed or unsigned pedigree documents for shipment transactions associated to transaction locations you have at a minimum *read access* to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

Use these procedures to search for signed or unsigned pedigree documents using the Digital Signature Worklist page:

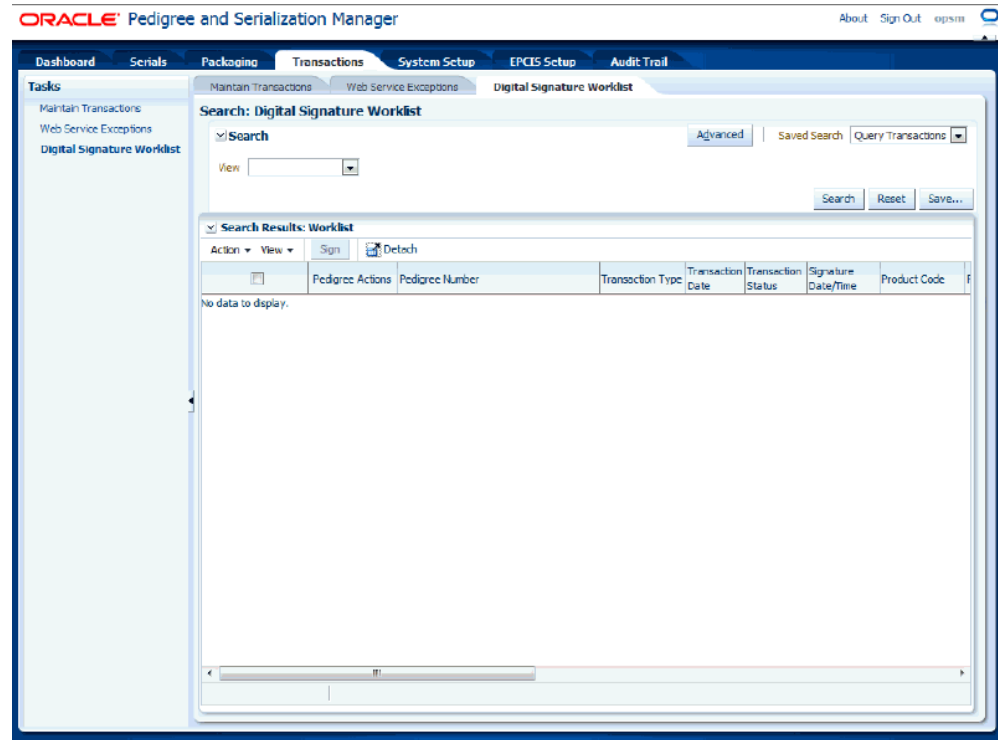
Prerequisites

- ☐ Pedigree documents have already been created for shipment transactions that require a digital signature.
- ☐ Location security information must be set up if you are using location security.

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: • Blank • 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 Username is associated as a location contact to the location for the transactions and you have credentials for digital signature) where the associated pedigree documents are signed or are pending a signature display.

If you are using location security, only the shipment transactions that you are authorized to sign where the pedigree documents are signed or are pending a signature that are associated to transaction locations that you have at a minimum *read access* to in the Location Security Setup page will display.

For more information on location security, see Location Security Overview, page 1-9.

3. Click the Search button.

Digital Signature Worklist page

ORACLE Pedigree and Serialization Manager

Dashboard Serials Packaging Transactions System Setup EPCIS Setup Audit Trail

Maintain Transactions Web Service Exceptions Digital Signature Worklist

Search: Digital Signature Worklist

Advanced Saved Search Query Transactions

View Pending Signature

Search Reset Save...

Search Results: Worklist

Action	Pedigree Actions	Pedigree Number	Transaction Type	Transaction Date	Transaction Status	Signature Date/Time	Product Code	Product Code Type	Product Code Variant
		6c8214d1-92ca-40f0-ab09-c33017900601	Shipment	3/27/2013	PROCESSED		0007-0011-00	NDC442	0
		315c2418-5604-451f-abdd-441b30970acc	Shipment	3/27/2013	PROCESSED		0007-0011-00	NDC442	0
		1896d09f-661d-4ec3-96f9-24a7810283d5	Shipment	3/27/2013	PROCESSED		0007-0011-00	NDC442	0
		359a2872-3a69-4e96-bc30-bf6b76c9f29	Shipment	3/27/2013	PROCESSED		0007-0011-00	NDC442	0
		2a2c6756-59f8-4bab-9d74-7726a9eb38d1	Shipment	3/27/2013	PROCESSED		0007-0011-00	NDC442	0
		2b3fe27-4d8f-4e8c-a91e-6cb9c6cd48c5	Shipment	3/27/2013	PROCESSED		0007-0011-00	NDC442	0
		cb0119f3-3fc3-483b-940d-56d3de872ad1	Shipment	3/27/2013	PROCESSED		0007-0011-00	NDC442	0
		69a3c74f-ae4b-4da6-9175-1523a7dfcf15	Shipment	3/27/2013	PROCESSED		4120-1210-10	NDC442	NOVARIAN
		8d153c03-48ff-4f74-8b05-78552b37447e	Shipment	5/5/2013	PROCESSED		0071-0010-01	NDC442	1
		9dca9959-1c45-49f5-8b5e-45d3a1912b75	Shipment	5/15/2013	PROCESSED		0071-0010-01	NDC442	1
		0070077e-3dee-420c-9151-69159e5899cf	Shipment	5/15/2013	PROCESSED		0071-0010-01	NDC442	1
		061a9b1a-ea21-4898-ab2b-dc762198629d	Shipment	5/21/2013	PROCESSED		0007-0011-00	NDC442	0
		f8d0c8c9-601d-4d2a-b391-ca31edfe3950	Shipment	8/12/2013	PROCESSED		1212-0198-03	NDC442	NOVARIAN
		ca66d4f3-3bfc-4152-91fd-23a140d6f4e2	Shipment	8/12/2013	PROCESSED		1212-0198-03	NDC442	NOVARIAN
		cfe651cc-741e-41e9-a829-86b877300487	Shipment	8/12/2013	PROCESSED		1212-0198-03	NDC442	NOVARIAN
		2aef5a1cc-7351-447e-8ac3-9f749awd5726	Shipment	8/12/2013	PROCESSED		1212-0198-03	NDC442	NOVARIAN
		001f859-843c-44ae-a3ef-8a5a2e6cb20a	Shipment	8/12/2013	PROCESSED		1212-0198-03	NDC442	NOVARIAN
		69c93aab-c395-401e-9293-820425aef7d31	Shipment	8/12/2013	PROCESSED		0121-0711-11	NDC442	1
		ee7a8fa9-cdb2-4617-ba5f-8991b95cc39	Shipment	8/12/2013	PROCESSED		0121-0711-11	NDC442	1
		5c3a3d8e-6ac0-4a80-88f3-27dc33f76462	Shipment	8/12/2013	PROCESSED		0121-0711-11	NDC442	1

Rows Selected 1

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.
Pedigree Number	Displays the pedigree number associated with the transaction.
Transaction Type	Displays the type of transaction. Only <i>Shipment</i> will display since this is the only transaction for which pedigrees are currently available.
Transaction Date	Displays the transaction date.
Transaction Status	Displays the transaction status. Only transactions that have processed successfully will be displayed.
Signature Date/Time	Displays the date and time the pedigree was digitally signed.
Product Code	Displays the product code for the transaction.
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.
Product Description	Displays the product description for the transaction.
Item Number	Displays the item number for the transaction.

Field Name	Description
Item Description	Displays the description of the item associated with the transaction.
Primary Document	Displays the primary document for the transaction.
Ship To	Displays the ship to location for the transaction.
Signed By	Displays the user that digitally signed the pedigree document.

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.

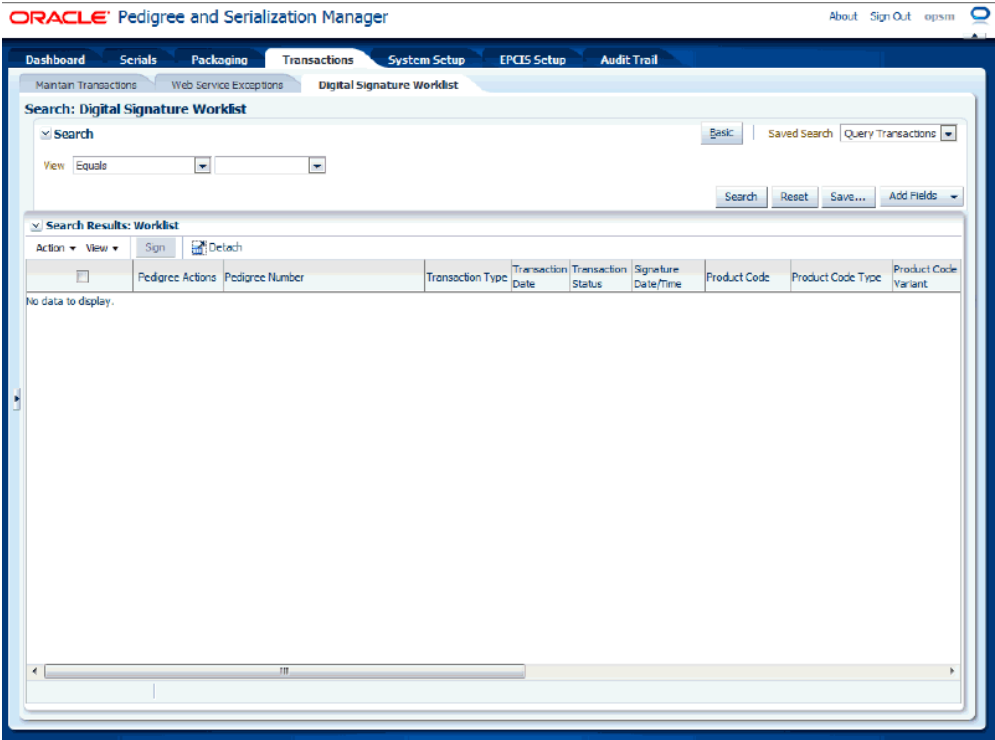
If you are using location security, you will only be able to search for signed or unsigned pedigree documents for shipment transactions associated to transaction locations you have at a minimum *read access* to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

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: • Blank • 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.

If you using location security, and attempt to perform a search using an additional search criteria such as lot, the system will still only display the shipping transactions related to the transaction locations related to that lot that you have at a minimum *read access* to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

A warning message appears stating that you have made changes to a system saved search. Would you like to save theses changes to a new personal saved search?

5. Perform one of these options:

- Click the No button to have the selected field appear as a search criteria field without modifying the saved searched.

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

- Click the Yes button to create a new saved search which will include the new search field as search criteria.

6. (Optional) Enter search criteria for the additional fields. Plus, enter the Match option of All or Any.

7. Click the Search button.

Digital Signature Worklist page

Search: Digital Signature Worklist

Basic | Saved Search | Query Transactions

Match: ☒ All ☐ Any

Primary Document: Equals | 3058224

View: Equals | Pending Signature

Search | Reset | Save... | Add Fields

Search Results: Worklist

Action	View	Sign	Detach	Pedigree Actions	Pedigree Number	Transaction Type	Transaction Date	Transaction Status	Signature Date/Time	Product Code	Product Code Type	Product Code Variant
					f8d03c9-601d-4d2a-b391-ca31edfe3950	Shipment	8/12/2013	PROCESSED		1212-0198-03	NDC442	NOVARIANT
					ca66d143-3bfc-4452-91fd-23a140d6f4e2	Shipment	8/12/2013	PROCESSED		1212-0198-03	NDC442	NOVARIANT
					cfe65cc-741e-41e9-a829-8eb877300487	Shipment	8/12/2013	PROCESSED		1212-0198-03	NDC442	NOVARIANT
					2a68a1ac-7301-447e-8a2b-9f79aad5726	Shipment	8/12/2013	PROCESSED		1212-0198-03	NDC442	NOVARIANT
					001fc59-843c-41ac-b3cf-9e5a2a6cd20e	Shipment	8/12/2013	PROCESSED		1212-0198-03	NDC442	NOVARIANT
					69c4aeb-c355-401e-9293-820425e7d31	Shipment	8/12/2013	PROCESSED		0121-0711-11	NDC442	1
					6e7a8fa9-cdb2-4617-ba5f-89941b59cc39	Shipment	8/12/2013	PROCESSED		0121-0711-11	NDC442	1
					5c3a3d8e-6ac0-4a80-88f3-27dc33776462	Shipment	8/12/2013	PROCESSED		0121-0711-11	NDC442	1
					2aac0f6-89a0-48ff-aab2-4c3908833259	Shipment	8/12/2013	PROCESSED		0121-0711-11	NDC442	1
					0d4b2a52-f7f7-4655-9b84-b9b4b8ca9436	Shipment	8/12/2013	PROCESSED		0121-0711-11	NDC442	1
					1bec203b-70ee-4275-abe5-d86fb86ebd	Shipment	8/12/2013	PROCESSED		0121-0711-11	NDC442	1

Rows Selected: 1

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 11-13.

- 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.

If you are using location security, you will only be able to sign pedigree documents for shipment transactions associated to transaction locations you have *update access* to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

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.
- ☐ Location security information must be set up if you are using location security.

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).

If you are using location security, you will only be able to sign pedigree documents for shipment transactions associated to transaction locations you have *update access* to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

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

ORACLE Pedigree and Serialization Manager

About Sign Out opsm

The screenshot displays the 'Digital Signature Worklist' page. At the top, there are navigation tabs: Dashboard, Serials, Packaging, Transactions, System Setup, EPCS Setup, and Audit Trail. Below these, there are sub-tabs: Maintain Transactions, Web Service Exceptions, and Digital Signature Worklist. A search bar is present with a 'Search' button and a 'View Pending Signature' dropdown. The main area shows a table of search results with columns: Pedigree Number, Transaction Type, Transaction Date, Transaction Status, Signature Date/Time, Product Code, Product Code Type, and Product Code Variant. The table contains 15 rows of data. At the bottom, there is a 'Rows Selected' indicator showing 1 row selected.

Pedigree Number	Transaction Type	Transaction Date	Transaction Status	Signature Date/Time	Product Code	Product Code Type	Product Code Variant
1899d9f6b61d-4ec3-96f9-24af810283ds	Shipment	3/27/2013	PROCESSED		0007-0011-00	NDC442	0
359a2872-3a69-4e96-bc30-bf66b7dc9f20	Shipment	3/27/2013	PROCESSED		0007-0011-00	NDC442	0
2a0b6756-59f8-bcb-9d74-7726e9eb38d1	Shipment	3/27/2013	PROCESSED		0007-0011-00	NDC442	0
2b3f6f27-4b8f-4e8c-e94e-6cb9c6cd48d5	Shipment	3/27/2013	PROCESSED		0007-0011-00	NDC442	0
cb001f93-3fc3-483b-948d-56d3de872ad1	Shipment	3/27/2013	PROCESSED		0007-0011-00	NDC442	0
89a3c74f-ae4b-4da5-9f75-1523a7dffc15	Shipment	3/27/2013	PROCESSED		4120-1210-10	NDC442	NOVARIAN
8d153c03-b8ff-4f74-8b05-78852b37447e	Shipment	5/5/2013	PROCESSED		0071-0010-01	NDC442	1
9de29359-1645-4dfe-8b5e-45d3bd912bf5	Shipment	5/15/2013	PROCESSED		0071-0010-01	NDC442	1
007a077e-3dee-420e-9151-69139e5899cf	Shipment	5/15/2013	PROCESSED		0071-0010-01	NDC442	1
061e9a1a-ea21-4e98-bb2b-dc762198d29d	Shipment	5/20/2013	PROCESSED		0007-0011-00	NDC442	0
8bd03c9-601d-4d2a-b391-ca31edfe3950	Shipment	8/12/2013	PROCESSED		1212-0198-03	NDC442	NOVARIAN
ca56d143-b1fc-4452-91fd-23a140d6f4e2	Shipment	8/12/2013	PROCESSED		1212-0198-03	NDC442	NOVARIAN
cfe6a1cc-741e-41e9-a829-8eb877300487	Shipment	8/12/2013	PROCESSED		1212-0198-03	NDC442	NOVARIAN
2a68a1ac-7391-447e-8ac9-9f79aad5726	Shipment	8/12/2013	PROCESSED		1212-0198-03	NDC442	NOVARIAN
001fc59-843c-44ae-93ef-9a5a2a6cd20a	Shipment	8/12/2013	PROCESSED		1212-0198-03	NDC442	NOVARIAN
69c43aeb-c355-401e-9293-820425ec7d51	Shipment	8/12/2013	PROCESSED		0121-0711-11	NDC442	1
6e7e8f69-cdb2-4617-ba5f-89941b59cc39	Shipment	8/12/2013	PROCESSED		0121-0711-11	NDC442	1
5c3a3d8e-6ac0-4a80-88f5-27dc33776462	Shipment	8/12/2013	PROCESSED		0121-0711-11	NDC442	1
2aa0c0f6-89a0-48ff-aa62-6c3906833259	Shipment	8/12/2013	PROCESSED		0121-0711-11	NDC442	1
0d4b2a52-f7f7-4655-5b84-09b48ca9416	Shipment	8/12/2013	PROCESSED		0121-0711-11	NDC442	1

4. Select Sign in the Actions menu or click the Sign button at the top of the results table.

If you are using location security, the Sign icon and the Sign option in the Action menu are available if you have *read or update access* to the transaction location in the Location Security Setup page. You will only be able to sign a pedigree if you have *update access*. Otherwise, you will receive a message stating that you do not have update access and to have your system administrator assign the appropriate location security access needed.

For more information on location security, see Location Security Overview, page 1-9.

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 11-27
- Printing a Pedigree Using the Maintain Transactions Page, page 11-24
- Viewing a Pedigree Using the Digital Signature Worklist Page, page 11-33
- Viewing a Pedigree Using the Maintain Transactions Page, page 11-32

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 or receipt transaction. 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.

If you are using location security, you will only be able to print pedigree XML documents for transactions associated to transaction locations you have at a minimum *read access* to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

You can also print a pedigree document for a shipment transaction 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 11-27.

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 or receipt transaction.
- ☐ Location security information must be set up if you are using location security.

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 for which you want to print a pedigree and click the Search button.

You'll want to search for transactions with a Transaction Type of *Shipment* or *Receipt* and an Exception Status of *No Exceptions* and the actual Pedigree Number if known. Otherwise, all pedigree numbers appear that match the search criteria.

If you are using location security, you will only be able to print pedigree documents for transactions associated to the transaction locations you have at a minimum *read access* to in the Location Security Setup page.

Maintain Transactions page

ORACLE Pedigree and Serialization Manager

About Sign Out opsm

Dashboard Serials Packaging Transactions System Setup EPCIS Setup Audit Trail

Maintain Transactions Web Service Exceptions Digital Signature Worklist

Maintain Transactions

Search: Transactions Advanced Saved Search Display Transactions

** Exception Status No Exceptions

** Transaction Type Shipment

Transaction Status

Transaction Location

** Lot Number

** Item Number

Item Description

** Product Code

Pedigree Number 76faac4-68cc-474a-b742-94c34cc7df19

Transaction Source Name

Signed Document Attached

** Transaction Date

Document Organization

Document

Document Type

Document Line Number

Source Name

Destination Name

Serial Number

Search! Reset Save...

Search Results: Transactions

Action View Process Transaction(s) Disregard Transaction(s) Detach

Pedigree Actions	Pedigree Number	Transaction Type	Signed Document Attached	Signed By	Signature Date/Time	Transaction Date	Transaction Status	Reprocessible	Excep
	76faac4-68cc-474a	Shipment		Karen Heath	7/5/12 5:05:06 PM (UTC-6/20/2012)	7/5/12 5:05:06 PM (UTC-6/20/2012)	Processed		No

Rows Selected 1 Columns Hidden 3

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 for which you want to print a pedigree. The transaction has an associated Pedigree Number that appears 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.

Note: If you are using location security, you will only be able to print pedigree XML documents for transactions associated to transaction locations you have at a minimum *read access* to in the Location Security Setup page. Otherwise, the system will display an error message that you do not have the correct access for this transaction.

The system calls 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

Oracle BI Publisher Enterprise

Welcome, administrator Preferences Sign Out Help

Reports Schedules Admin

Home > My Folders > OPSM > Pedigree View Schedule History Edit Configure

Template Generic Pedigree PDF View Export Send Schedule Analyzer Analyzer for Excel Link to this report

Digitally Signed By: Karen Heath
Date Signed: JUL-05-2012 05:06:06 PM

Pedigree Report

Pedigree Serial Number:	urn:uuid:78faac4-88ce-474a-b742-94c34cc7df19
Product Information:	
Name:	No More Allergies - Tablet
Product Code:	8969696989 NDC442
Strength:	25mg
Dosage Form:	TABLET
Container Size:	200
Manufacturer:	Brine MFG

Ownership

Seller:	PHARMACONE 5967 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: 888-959-7777 E-mail: Sam.Jones@oracle.com		

The pedigree document appears for the shipment or receipt 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 11-24.

If you are using location security, you will only be able to print pedigree documents for shipment transactions associated to transaction locations you have at a minimum *read access* to in the Location Security Setup page.

For more information on location security, see *Location Security Overview*, page 1-9.

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.
- ☐ Location security information must be set up if you are using location security.

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 for which you want to print a pedigree and click the Search button.

If you are using location security, you will only be able to print pedigree documents for shipment transactions associated to transaction locations you have at a minimum *read access* to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

Digital Signature Worklist page

ORACLE Pedigree and Serialization Manager

Dashboard Serials Packaging Transactions System Setup EPCIS Setup Audit Trail

Maintain Transactions Web Service Exceptions Digital Signature Worklist

Search: Digital Signature Worklist

Search Basic Saved Search Query Transactions

Match All Any View Equals Signed Documents Shipto Starts with W

Search Reset Save... Add Fields

Search Results: Worklist

Action View Sign Detach

Pedigree Actions	Pedigree Number	Transaction Type	Transaction Date	Transaction Status	Signature Date/Time	Product Code	Product Code Type	Product Code Variant
	85718316-b20a-4d6f-84f7-c8375f959ef2	Shipment	6/19/2012	PROCESSED	4/25/2013	989898989898	GTIN	NOVARIANT
	1e92b7b4-a1ff-4b3b-ae0b-ea157ffcae80	Shipment	6/19/2012	PROCESSED	4/25/2013	989898989898	GTIN	NOVARIANT
	118552b7-52fa-427b-8927-c4e121bc2b95	Shipment	6/19/2012	PROCESSED	4/25/2013	989898989898	GTIN	NOVARIANT
	7130e21d-422a-4007-4081-502548b5430b	Shipment	6/19/2012	PROCESSED	8/14/2013	989898989898	GTIN	NOVARIANT
	0e1b58ae-4cb5-4687-8acf-4de5a03b871a	Shipment	6/19/2012	PROCESSED	8/14/2013	989898989898	GTIN	NOVARIANT
	5e3d5116-0e2c-457a-9456-702a36e0b0d4	Shipment	6/19/2012	PROCESSED	8/14/2013	989898989898	GTIN	NOVARIANT
	9eb5d7e4-d83b-4e83-a7e8-6053d77f729	Shipment	6/19/2012	PROCESSED	8/14/2013	989898989898	GTIN	NOVARIANT
	54b82dbb-45e1-4ef8-8a92-2855cffe9828	Shipment	6/19/2012	PROCESSED	8/14/2013	989898989898	GTIN	NOVARIANT

Rows Selected 1

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 for which you want to print a pedigree.

The transaction has an associated Pedigree Number that appears 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.

If you are using location security, the Print Pedigree XML icon and the Print Pedigree XML option in the Action menu are available if you have at a minimum *read access* to the transaction location in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

The system calls 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

Pedigree Report
 Pedigree Serial Number urn:uid:b29d58a-e751-465c-b30d-d8490fa03589

Product Information
 Name/Main: Product changes - Custom ST
 Product Code DSCSA PRODUCT CUSTOM
 Strength: 25mg
 Dosage Form: TABLET
 Container Size: 50
 NDC Number: 11111-22222-33333-44
 Manufacturer: G

Ownership

Seller: Development Street Address 1 Street Address 2 Hyderabad, CO 500072 India License State: TN TN-076680 License Agency: TN Food DRUG Administration Contact: jdupy President Phone: 595-595-5959 E-mail: jacqueline.dupy@oracle.com	Buyer: QA 2 Street Address 1 Street Address 2 Hyderabad QA, CO 500072 India

Transaction

Transaction:	Sale
Transaction Date:	2017-07-07 10:29:00.0
Transaction Code:	2017-07-07 10:29:00.0

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.

If you are using location security, you will only be able to view transaction detail information for shipment transactions associated to transaction locations you have at a minimum *read access* to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

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.
- ☐ Location security information must be set up if you are using location security.

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.

If you are using location security, you will only be able to search for signed or unsigned pedigree documents for shipment transactions associated to transaction locations you have at a minimum *read access* to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

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.

If you are using location security, the Transaction Type link and the View Transaction Detail option in the Action menu are available if you have at a minimum *read access* to the transaction location associated to the shipping transaction in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

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 10-34.
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 or receipt transaction. You can view a pedigree document for a shipment transaction before or after it is digitally signed. OPSM integrates with the Oracle Business Intelligence Publisher application where you can view the pedigree document.

If you are using location security, you will only be able to view pedigree documents for transactions associated to transaction locations you have at a minimum *read access* to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

You can also view a pedigree document for a shipment transaction from the Digital Signature Worklist page.

For more information on viewing a pedigree document from the Digital Signature Worklist page, see Viewing a Pedigree Using the Digital Signature Worklist Page, page 11-33.

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 or receipt transaction.
- ☐ Location security information must be set up if you are using location security.

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 for which you want to view a pedigree and click the Search button.

You'll want to search for transactions with a Transaction Type of *Shipment* or *Receipt* and an Exception Status of *No Exceptions* and the actual Pedigree Number if known. Otherwise, all pedigree numbers appear that match the search criteria.

If you are using location security, you will only be able to view pedigree documents for transactions associated to the transaction locations you have at a minimum *read access* to in the Location Security Setup 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 for which you want to view a pedigree. The transaction has an associated Pedigree Number that appears 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.

Note: If you are using location security, you will only be able to print pedigree documents for transactions associated to the transaction locations you have at a minimum *read access* to in the Location Security Setup page. Otherwise, the system will display an error message that you do not have the correct access for this transaction.

The system calls the Oracle Business Intelligence (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 or receipt 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 11-32.

If you are using location security, you will only be able to view pedigree documents for shipment transactions associated to transaction locations you have at a minimum *read access* to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

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.
- ☐ Location security information must be set up if you are using location security.

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 for which you want to view a pedigree and click the Search button.

If you are using location security, you will only be able to view pedigree documents for shipment transactions associated to transaction locations you have at a minimum *read access* to in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

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 for which you want to view a pedigree. The transaction has an associated Pedigree Number that appears 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.

If you are using location security, the Print Pedigree XML icon and the Print Pedigree XML option in the Action menu are available if you have at a minimum *read access* to the transaction location in the Location Security Setup page.

For more information on location security, see Location Security Overview, page 1-9.

The system calls 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

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, returned, reserved, commissioned, decommissioned, and edited 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.

Note: This component does not reflect the exception counts created during the running of the PL/SQL services.

- 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, received, reserved, commissioned, decommissioned, and edited by location within Oracle Pedigree and Serialization Manager (OPSM) for a given date range. The total number of serials that display for reserved, commissioned, decommissioned, and edited reflect only the serials that were reserved, commissioned, decommissioned, and edited through the SerialsServiceAMService (Edit Serial Status and Usage) web service.

For more information on the SerialsServiceAMService web service, see *SerialsServiceAMService (Inbound)*, page 14-77.

If you are using location security, only the serial information that pertains to the transaction locations that you have at a minimum *read access* to in the Location Security Setup page will display in this component.

For more information on location security, see *Location Security Overview*, page 1-9.

From the Location Details component you can access the Location Details page where you can view:

- More detailed information for each location.
- Shipments, returns, and receipts transaction metric for each location.
Pie graphs displaying the breakdown of shipments, returns, and receipts by ship to (for shipments) and ship from (for returns and receipts).
- 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 4-47.
- ☐ Location security has been set up if you are using location security.

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:

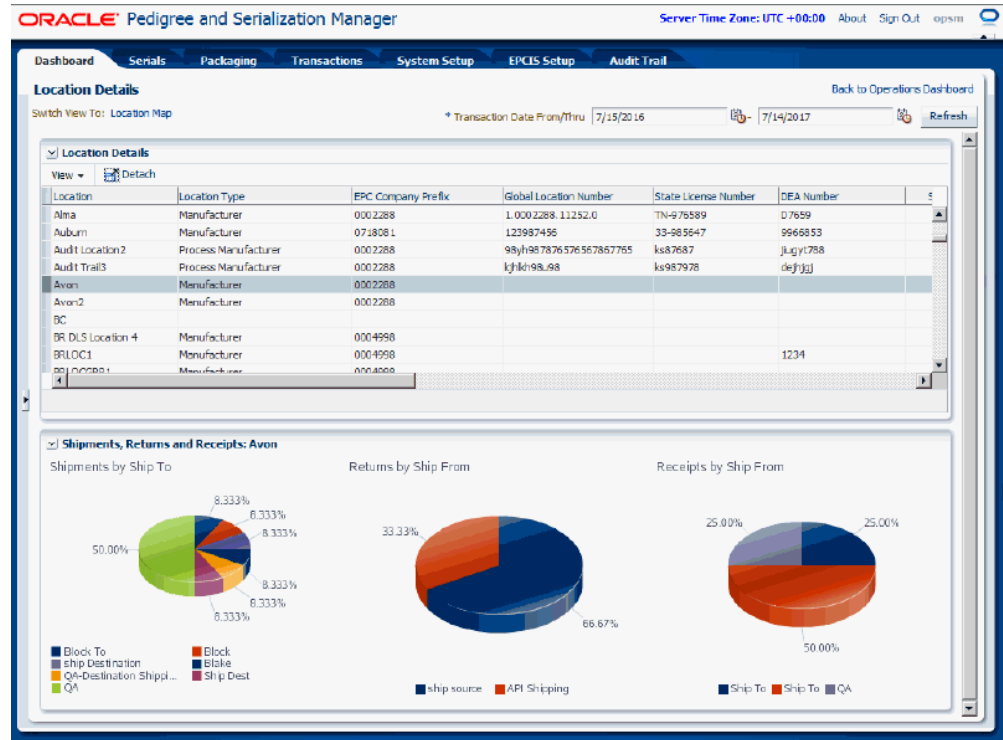
- Last 7 Days
- Last 30 Days
Appears by default.
- Last 60 Days
- Last 90 Days
- Last 365 Days

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, Returns, and Receipts 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 Received, 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, Returns, and Receipts region displays pie graphs that depict the shipment, return, and receipt transaction activity for the location that is selected in the Location Details region. If no shipment, return, or receipt 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, returns, and receipts.

4. (Optional) View the Shipments, Returns, and Receipts pie graphs for another location by selecting a different location in the Location Details region.

The Shipments, Returns, and Receipts 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.

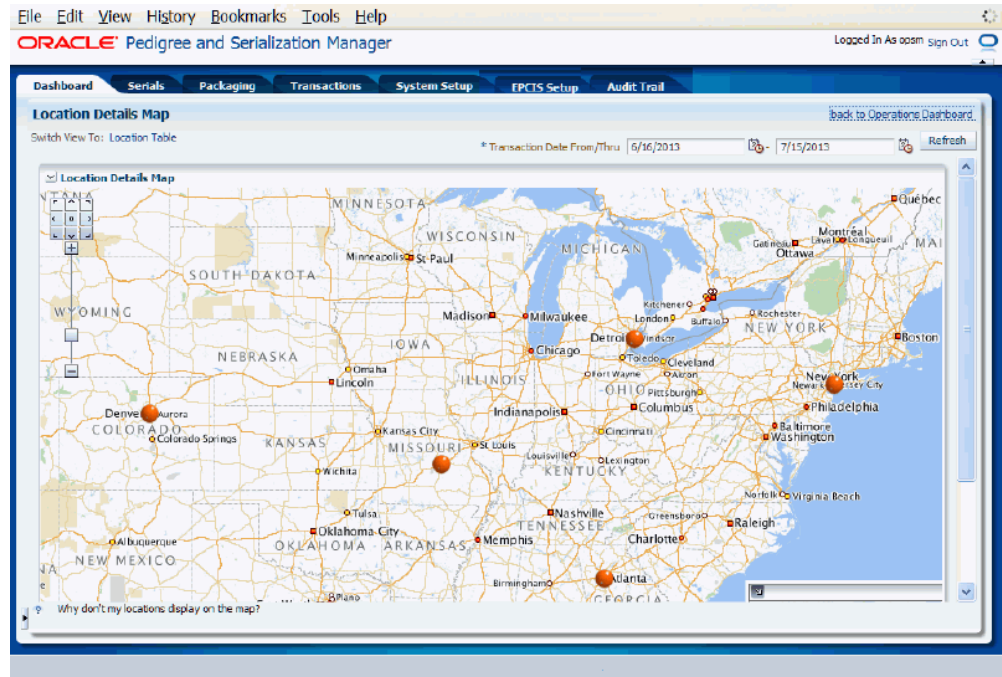
The Location Details page is refreshed and displays the information for the new date range.
6. To return to the main Operations Dashboard page, click the Back to Operations Dashboard link in the upper right corner of the Location Details page.

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 4-47.

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, received, 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.

These transactions exceptions metrics are only displayed for transactions created through the Java web services. No exceptions display for receipt transactions as the receipt transactions are created through a PL/SQL web service.

If you are using location security, only the transaction exception information that pertains to the transaction locations that you have at a minimum *read access* to in the Location Security Setup page will display in this component.

For more information on location security, see Location Security Overview, page 1-9.

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:

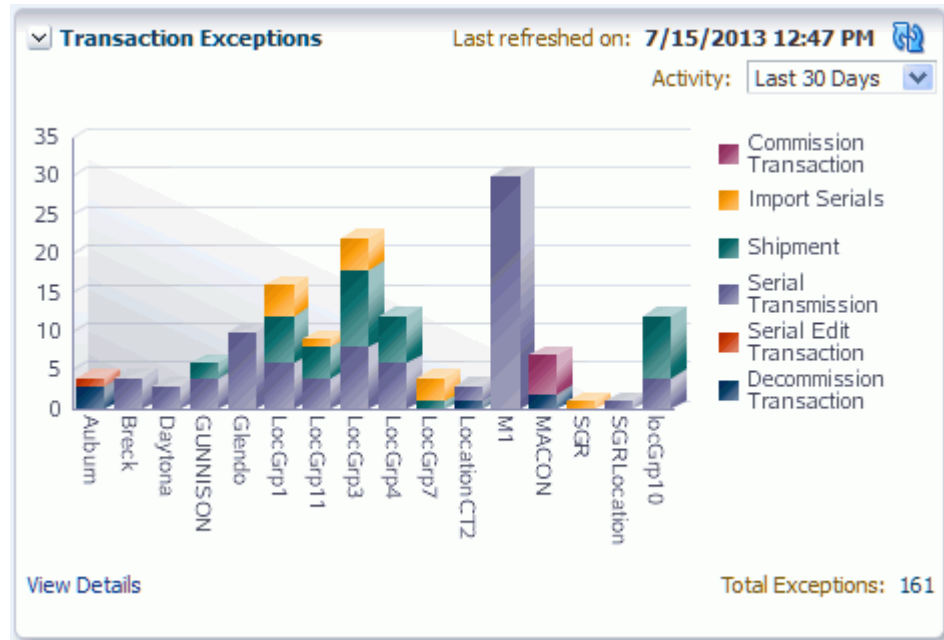
Prerequisites

- ☐ Location security has been set up if you are using location security.

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:

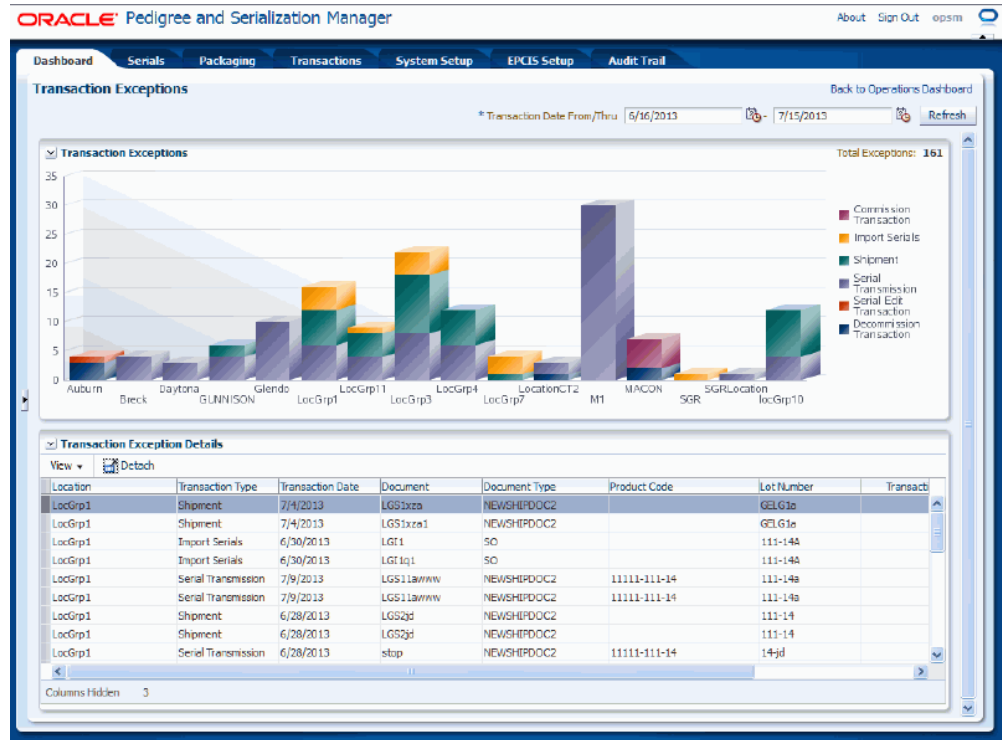
- Last 7 Days
- Last 30 Days
Appears by default.
- Last 60 Days
- Last 90 Days
- Last 365 Days

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.

- (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.

If you are using location security, only the counterfeit information that is related to the serial locations that you have at a minimum *read access* to in the Location Security Setup page will display in this component.

For more information on location security, see Location Security Overview, page 1-9.

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:

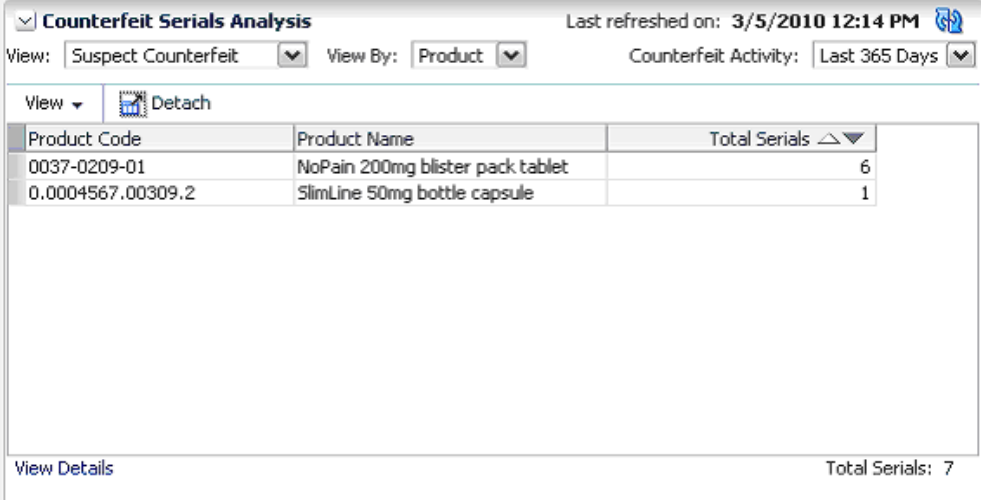
Prerequisites

- ☐ Location security has been set up if you are using location security.

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 screenshot shows the 'Counterfeit Serials Analysis' component. At the top, it says 'Last refreshed on: 3/5/2010 12:14 PM' with a refresh icon. Below this are three dropdown menus: 'View: Suspect Counterfeit', 'View By: Product', and 'Counterfeit Activity: Last 365 Days'. There is a 'View' dropdown and a 'Detach' button. The main table has three columns: 'Product Code', 'Product Name', and 'Total Serials'. It lists two products: '0037-0209-01 NoPain 200mg blister pack tablet' with 6 serials, and '0.0004567.00309.2 SlimLine 50mg bottle capsule' with 1 serial. At the bottom, there is a 'View Details' link and a 'Total Serials: 7' summary.

Product Code	Product Name	Total Serials
0037-0209-01	NoPain 200mg blister pack tablet	6
0.0004567.00309.2	SlimLine 50mg bottle capsule	1

View Details Total Serials: 7

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.

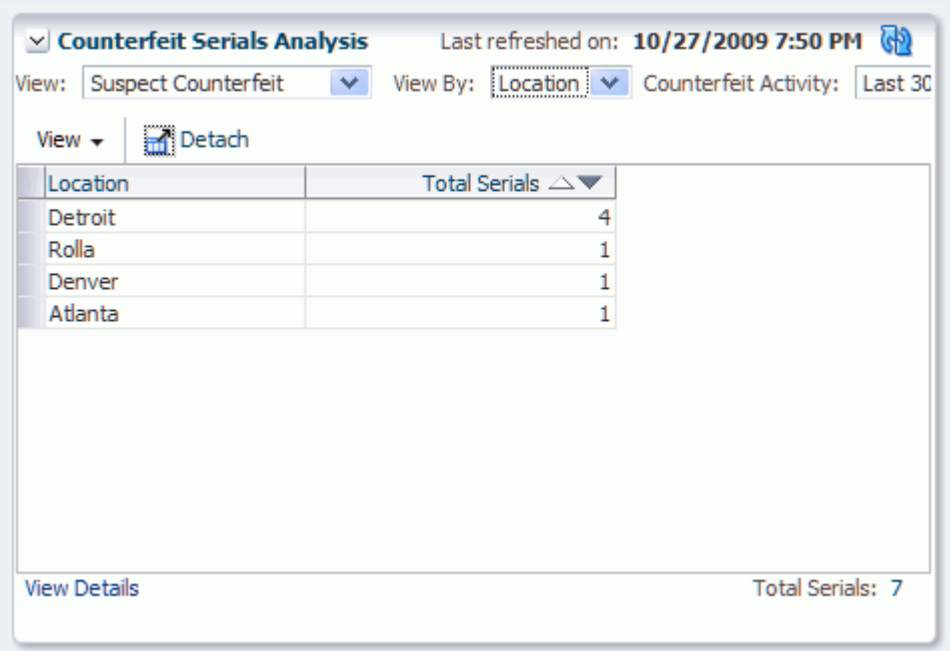
The Counterfeit Serials Analysis component is refreshed and displays the serial information pertaining to that counterfeit type. For example, you can change from viewing suspect counterfeit serials by product to viewing counterfeit serials by product.

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)



Location	Total Serials
Detroit	4
Rolla	1
Denver	1
Atlanta	1

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.

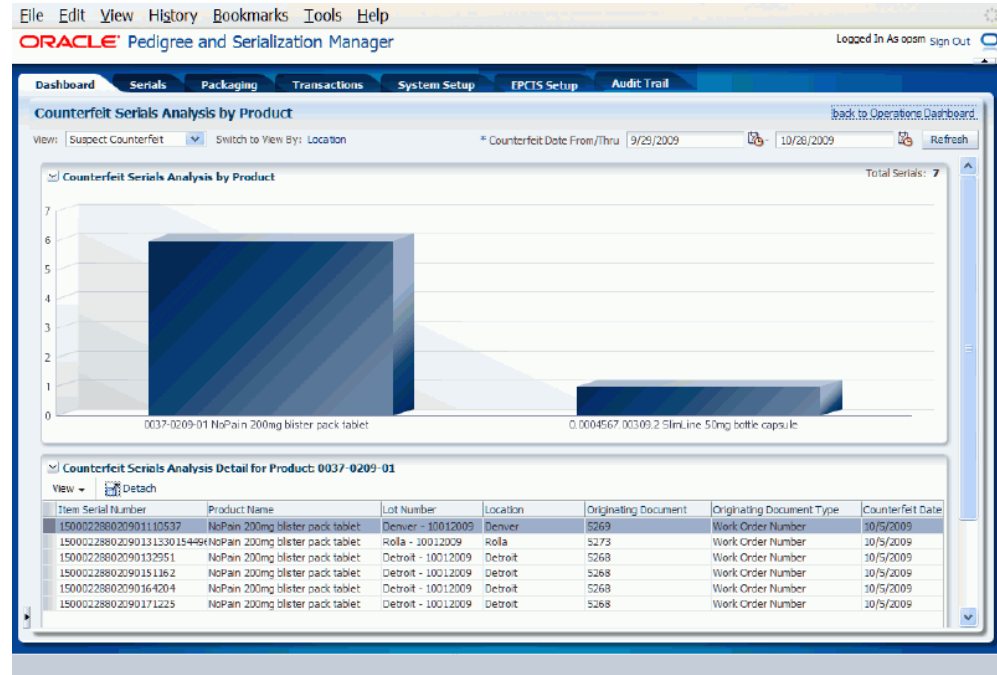
To View Counterfeit Serials Analysis Detail Information:

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.

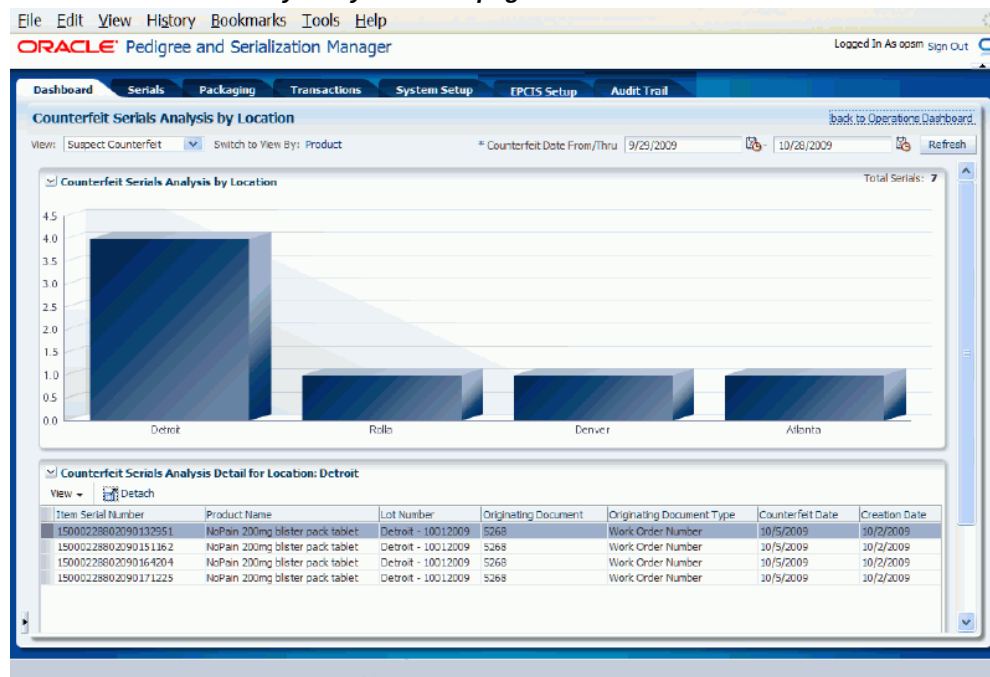
In the upper region of the page, the system displays a summary of the total number of suspect counterfeit, verified not counterfeit, or counterfeit serials by product or location in a bar graph format. Each bar graph represents a different product or location. In the upper right hand side of the region 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 CounterfeitThe 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).

If you are using location security, only the serial range information that is related to the serial range location or location group, and the location or location group associated to

product unit identifier (PUID) (if one exists) that you have at a minimum *read access* to in the Location Security Setup page will display in this component.

For more information on location security, see Location Security Overview, page 1-9.

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 4-47 or Maintaining Serial Ranges, page 4-245.

- ☐ Location security has been set up if you are using location security.

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

Location/Location Group	Range Exhaustion		Date
	Critical	At Risk	Next 7 Da
Denver	7	1	
GRP1	0	0	
GRP10	0	0	
GRP2	1	0	
GRP3	1	0	
GRP4	0	0	
GRP5	2	0	
GRP6	0	0	
GUNNISON	0	0	
Glenda	1	0	

View Details

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.

Dashboard
Serials
Packaging
Transactions
System Setup
EPCS Setup
Audit Trail

Serial Range Management

Back to Operations Dashboard

View: All Locations and Location Groups

Serial Range Management Details

View
Detach

Status	Location/Location Group	Product Unit Identifier	Range From	Range To	Remaining	Effective Start Date	Effective End Date
✖	Import Location	11096011096011.GTIN.NOVAR	929306	929310	0	5/2/2013	
✖	Import Location	11096011096011.GTIN.NOVAR	929321	929322	0	5/28/2013	
✖	Import Location	11096011096011.GTIN.NOVAR	929311	929320	0	5/28/2013	
✖	Import Location	11096011096011.GTIN.NOVAR	929290	929305	0	4/12/2013	
✖	LocationCT2	CP58C31.CUSTOM.NOVARJAN	125	129	1	1/24/2013	
✖	M1	9028890268.NDC532.NOVARIA	40100	40250	151	9/20/2011	
✖	M1	9589820110.NDC442.0.BOTTLE	130000	135000	4991	9/25/2011	
✖	M1	7798020910.NDC442.0.BLISTEF	40000	40100	101	9/28/2011	
✖	M1	1212110001.NDC442.1.BOTTLE	529101	529126	0	5/25/2013	
✖	M1	1212110001.NDC442.1.BOTTLE	805101	805225	100	9/28/2011	
✖	M1	12107119988214.GTIN.NOVAR	67214	67220	7	1/11/2012	
✖	M1	1896065559621.GTIN.NOVAR	67214	67220	7	1/18/2012	
✖	MACON	9998989989.NDC442.0.BLISTEF	1000	5500	4501	5/2/2013	5/2/2040
✖	MACON	9998989989.NDC442.0.BLISTEF	80000	98000	18999	4/18/2013	4/10/2039
✖	MACON	9998989989.NDC442.0.BLISTEF	60001	65001	5001	4/17/2013	4/17/2040
✖	PR1	6202561610.NDC442.NOVARIA	1	50	50	1/12/2012	
✖	SGR	0000.000002.NDC542.NOVARIA	33333333333333333333	33333333333333333333	-6	2/2/2011	
✖	SGR	0000.000002.NDC542.NOVARIA	33333333333333333333	33333333333333333333	-3	2/3/2011	
✖	SGR10	99989898989898.GTIN.NOVAR	11111111111111111111	11111111111111111111	0	1/25/2011	
✖	SGR11	7878787878.NDC442.3A	33333333333333333333	33333333333333333333	3334	12/4/2010	111
✖	SGR11	85858585858585.GTIN.1.BLIST	11111111111111111111	11111111111111111111	1112	12/9/1990	111
✖	SGR8	7878787878.NDC442.2A	21111111111111111111	21111111111111111111	-3	1/25/2011	
✖	SGR8	7878787878.NDC442.2A	21111111111111111111	21111111111111111111	-8	1/25/2011	
⚠	M1	1908201030.NDC442.NOVARIA	1111	10000	8890	6/30/2011	
✖	SGR10	7878787878.NDC442.50.2PHGK	11111111111111111111	11111111111111111111	8	8/25/2011	
✓	Album	2007671198.NDC542.1.BOX	5200	5300	100	1/1/2010	
✓	Album	2007671198.NDC542.1.BOTTLE	50000	50325	325	1/1/2010	12/51/2040
✓	Breck	1212121212.NDC442.NOVARIA	400	405	6	1/18/2012	
✓	Breck	7588111122.NDC442.THREEBL	100	200	101	7/14/2020	
✓	COCOA	CE99-QA20-B1.CUSTOM.0.BLIST	10000	11000	981	1/23/2013	

Columns Hidden
2

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

Oracle Pedigree and Serialization Manager (OPSM) enables you to add up to five custom URLs to the Operations 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

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.

Important: Careful examination and consideration should be given to the business objects and attributes within those business objects that you want to include in the audit trail as the amount of business objects and attributes within those business objects that you select for auditing may affect system performance.

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.

Node	Business Object	Description
	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.
	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.

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 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.
	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.

Node	Business Object	Description
	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.
	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.

Node	Business Object	Description
	Lookup Value Translations	Lookup value translations stores the translated text for the different Lookup values.
	OPSM Users	OPSM users that will be assigned to various tasks throughout the system.
	User Policies	EPCIS policies assigned to the users.
	User User Groups	Users that belong to the different location security user groups.
	User Groups	User groups defined in the system for location security.
	User User Groups	Users that belong to the different location security user groups.
	Role User User Group Privileges	Location security setup for users, user groups, and roles.
	Roles	Roles defined in the system for location security.
	Role User User Groups	Users and user groups that belong to different location security roles.
	OPSM Users	OPSM users that will be assigned to various tasks throughout the system.
	User Groups	User groups defined in the system for location security.
	OPSM Users	OPSM users that will be assigned to various tasks throughout the system.
	User Groups	User groups defined in the system for location security.
	Locations	Locations in OPSM are used to define and maintain locations associated with the management of serial numbers.

Node	Business Object	Description
SERIALS AND TRANSACTION S	Location Groups	Location groups in OPSM are used to associate locations which will share data, such as serial ranges.
	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.

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.
	Pack Associations	Pack associations maintain the relationship between the records in the packages and their identifying labels.
	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.

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.
	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.
	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.

Node	Business Object	Description
	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.
	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.

Node	Business Object	Description
	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.
	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		

Node	Business Object	Description
	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 required.		
			Only one record is allowed.		
	PAS_S_DASHBOARDS_REFRESH	Dashboard Component			
	PAS_S_SYSTEM_PARAMETERS	System Parameter Id			

Module Name	Business Object	User Key	Context Attribute 1	Context Attribute 2	Context Attribute 3
	PAS_S_LOCATION_GROUPS	Location Group	Location Group Description		
	PAS_S_LOCATION_LOCATION_GROUPS	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			
	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

Module Name	Business Object	User Key	Context Attribute 1	Context Attribute 2	Context Attribute 3
	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)
	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	
	PAS_S_USERS	Username	User Description	User Title	

Module Name	Business Object	User Key	Context Attribute 1	Context Attribute 2	Context Attribute 3
	PAS_S_ROL_USR_USRGRPS_PRIVS	Role User User Group Privilege ID	Role	User Group	Username
	PAS_S_USER_GROUPS	User Group	User Group Description		
	PAS_S_USER_USER_GROUPS	User User Group ID	User Group	Username	
	PAS_S_ROLES	Role Name	Role Description		
	PAS_S_ROLE_USER_USER_GROUPS	Role User User Group ID	Role	User Group	Username
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)	
	PAS_S_PACK_ASSOCIATIONS	Pack Association ID	Package Identifier (Parent Label)	Package Identifier (Child Label)	

Module Name	Business Object	User Key	Context Attribute 1	Context Attribute 2	Context Attribute 3
	PAS_S_TRANS_SERIAL ASSOCS	Trans Serial Assoc Id	Item Serial Number	Transaction Type	
	PAS_S_TRANSACTION	Transaction ID	Transaction Type	Transaction Date	
	PAS_S_PEDIGREE S	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
	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		

Module Name	Business Object	User Key	Context Attribute 1	Context Attribute 2	Context Attribute 3
	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_POLICES	EPC Policy	Policy Description		
	PAS_EPC_USER_POLICY_ASSOC	User Policy Assoc Id	Username	EPC Policy	
	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.

Important: Careful examination and consideration should be given to the business objects and attributes within those business objects that you want to include in the audit trail as the amount of business objects and attributes within those business objects that you select for auditing may affect system performance.

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.

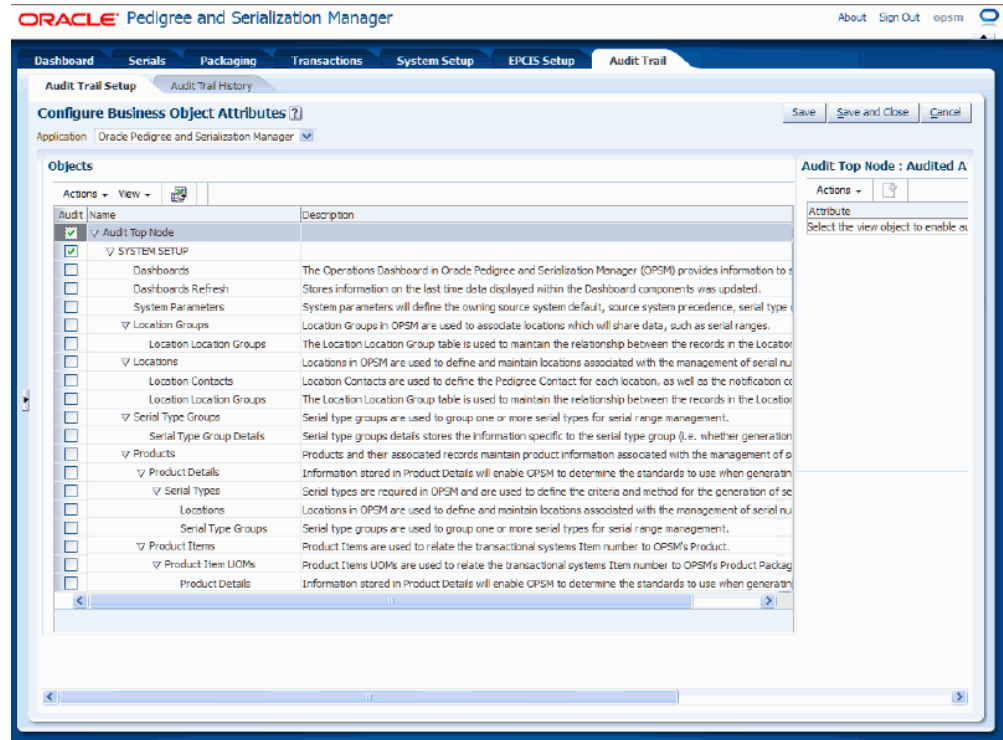
Audit Trail Setup page

The screenshot shows the Oracle Pedigree and Serialization Manager interface. The top navigation bar includes links for Dashboard, Serials, Packaging, Transactions, System Setup, EPCIS Setup, and Audit Trail. The Audit Trail Setup page is active, displaying a sidebar with 'Audit Trail Setup' and 'Audit Trail History'. The main content area is titled 'Configure Business Object Attributes' and features an 'Application' dropdown menu. Below this is an 'Objects' table with columns for 'Audit Name' and 'Description'. The table contains one entry with the text 'Select the Web Application to enable auditing for it.' in the 'Description' column. The page also includes 'Save', 'Save and Close', and 'Cancel' buttons.

Audit Name	Description
	Select the Web Application to enable auditing for it.

2. Select *Oracle Pedigree and Serialization Manager* in the Application field.

Audit Trail Setup page

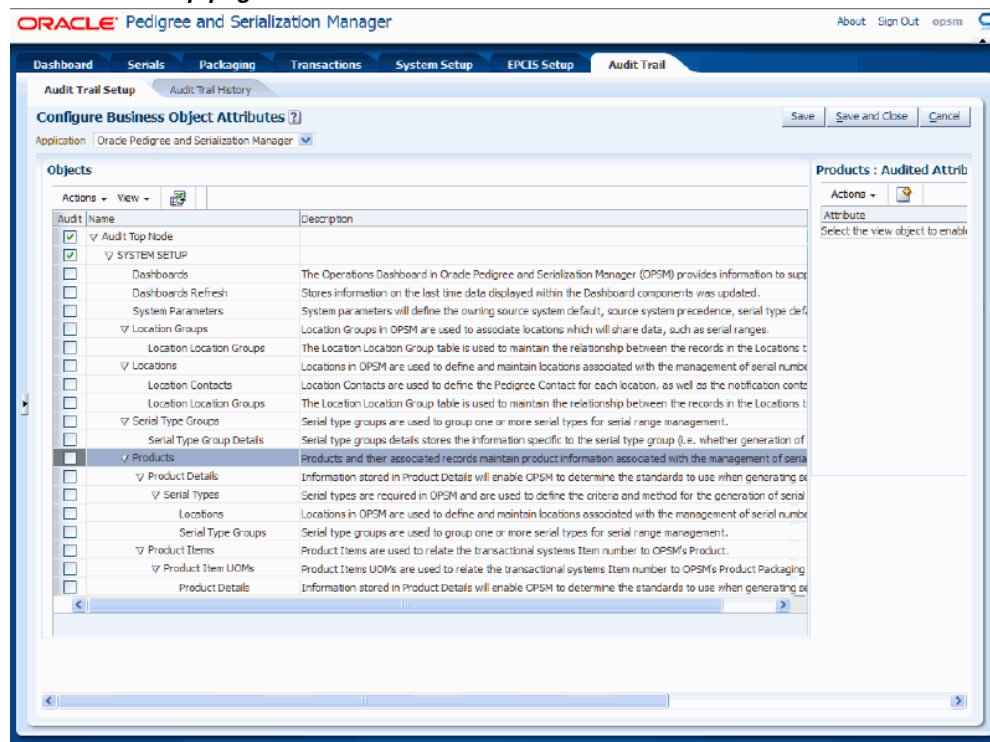


All of the business objects defined by OPSM display in the Objects region of the page in a tree format.

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.

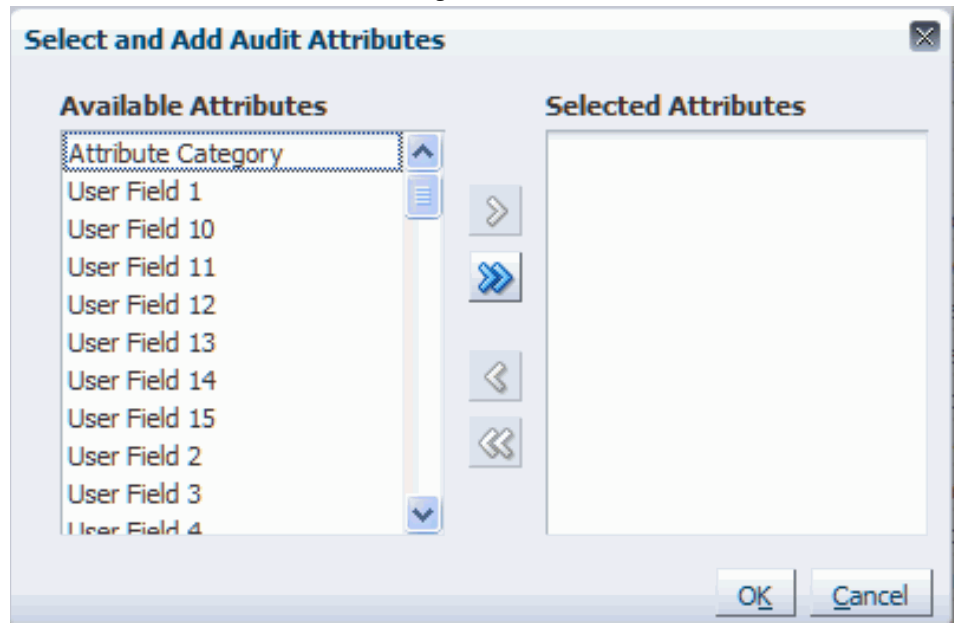
Audit Trail Setup page



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.

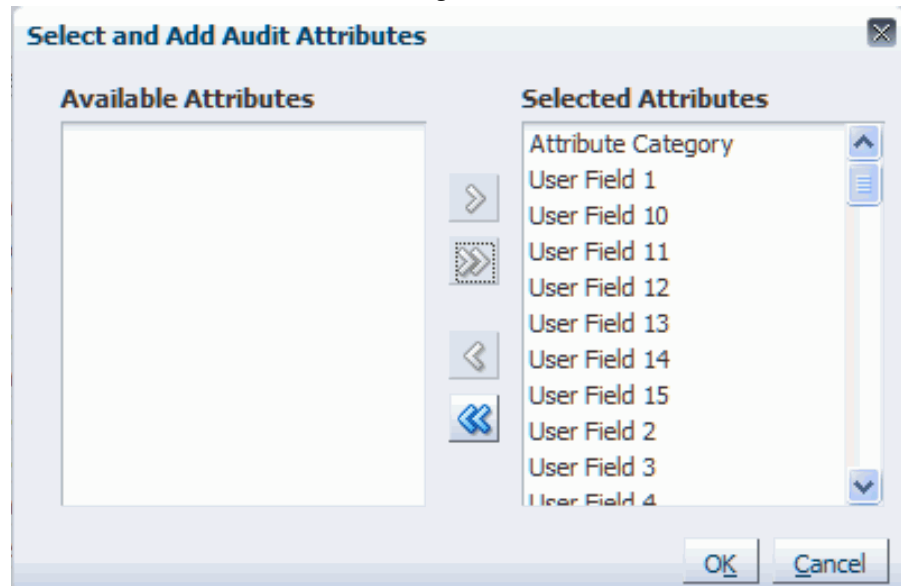
Select and Add Audit Attributes dialog box



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.

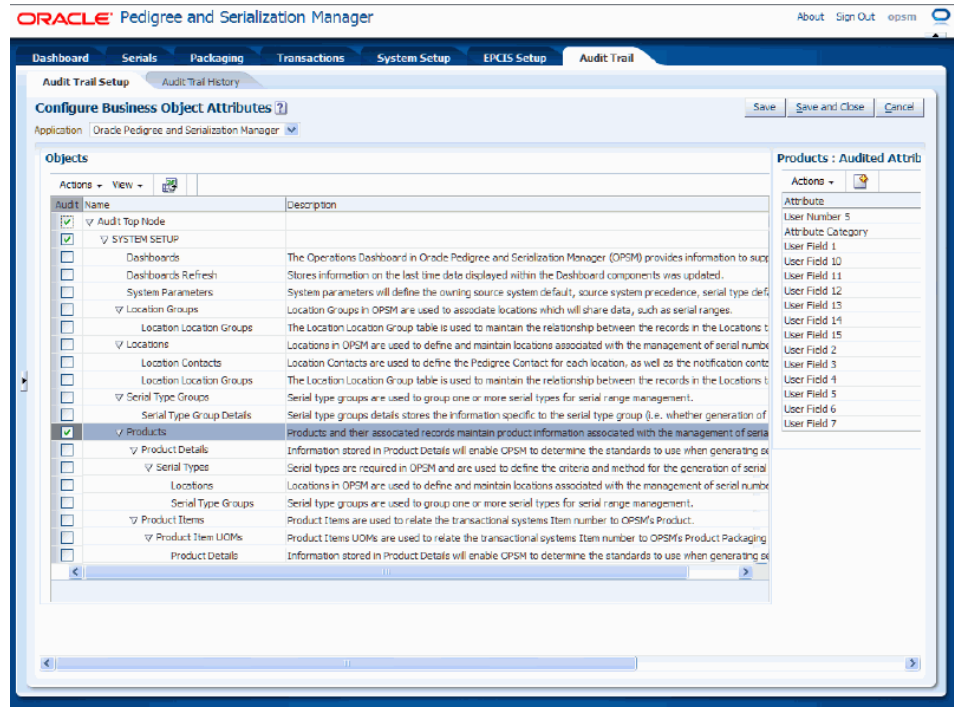
Select and Add Audit Attributes dialog box



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.

Important: Careful examination and consideration should be given to the business objects and attributes within those business objects that you want to include in the audit trail as the amount of business objects and attributes within those business objects that you select for auditing may affect system performance.

6. Click the Save button to save your work.

Viewing the Audit Trail Setup

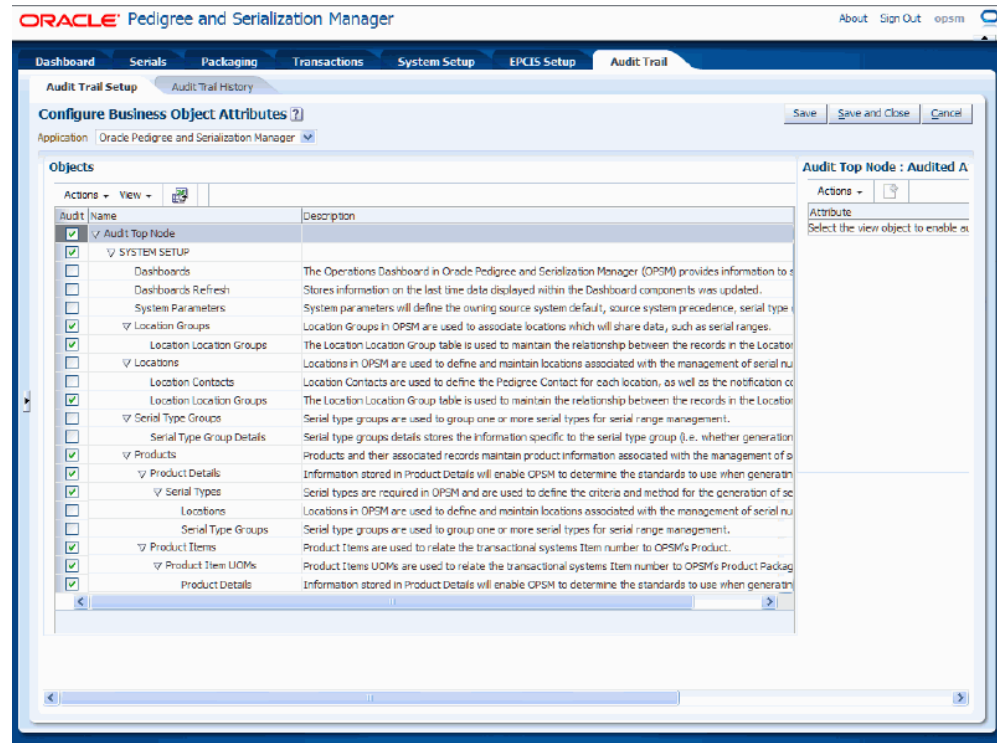
Use the Audit Trail Setup page in Oracle Pedigree and Serialization Manager (OPSM) to view the OPSM business objects and their associated attributes that you are currently auditing.

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.

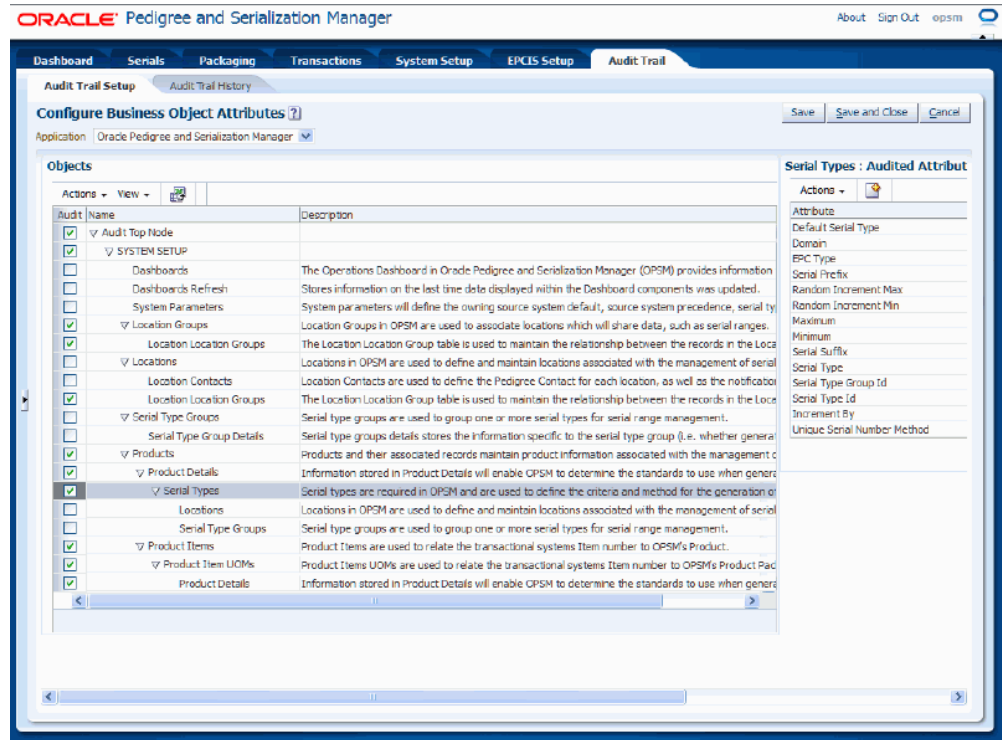
Audit Trail Setup page



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 13-17.

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 *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 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

The screenshot shows the Oracle Pedigree and Serialization Manager interface. The top navigation bar includes links for Dashboard, Serials, Packaging, Transactions, System Setup, EPCIS Setup, and Audit Trail. The left sidebar lists tasks: Audit Trail Setup and Audit Trail History. The main content area is titled 'Audit History' and contains a search section with the following fields:

- Date:** Equals [dropdown]
- User:** [dropdown]
- Product:** [dropdown]
- Event Type:** Equals [dropdown]
- Business Object Type:** [dropdown]
- Description:** [text input]

Buttons for Search, Reset, and Save are located below the search fields. The search results section shows a table with columns: Date, User, Business Object Type, Description, and Event Type. The table is currently empty, with the message 'No data to display.' and 'Columns Hidden: 10'.

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 <i>Oracle Pedigree and Serialization Manager</i> 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

ORACLE Pedigree and Serialization Manager About Sign Out epsm

Dashboard Serials Packaging Transactions System Setup EPCIS Setup Audit Trail

Audit Trail Setup Audit Trail History

Audit History ?

Search Saved Search My Recent Changes

* Date Equals 8/12/13 Event Type Equals Object Data Update

** User bralsba Business Object Type

** Product Oracle Pedigree and Serialization Manager Description

Search Reset Save...

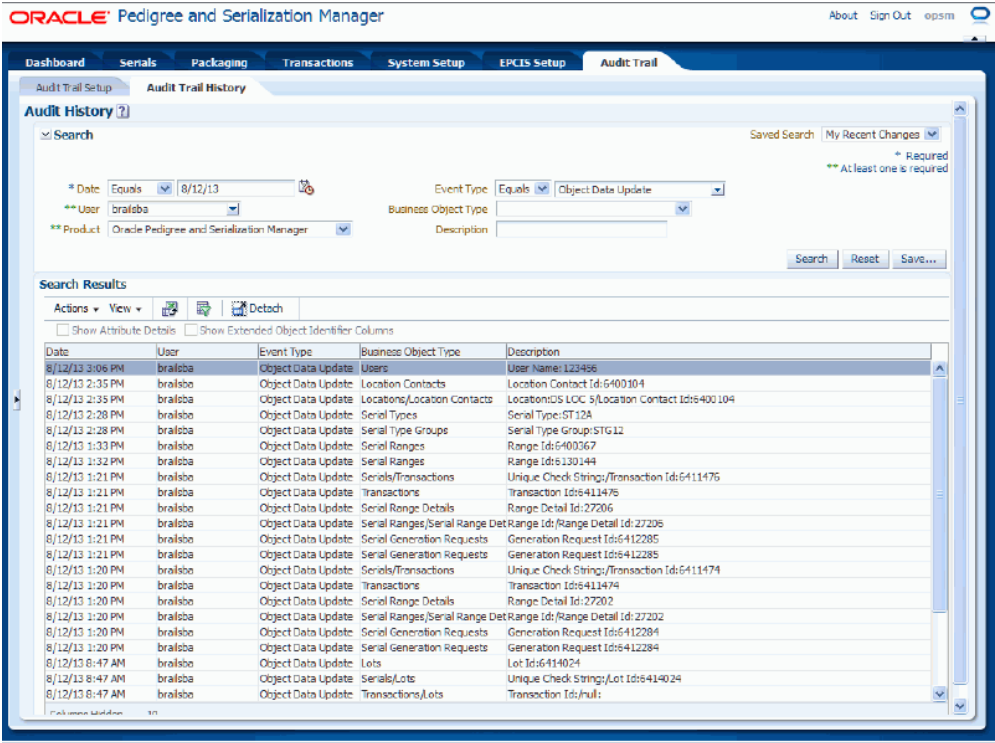
Search Results

Actions View Show Attribute Details Show Extended Object Identifier Columns

Date	User	Event Type	Business Object Type	Description
No data to display.				
Columns Hidden 10				

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 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

ORACLE Pedigree and Serialization Manager

About Sign Out epsm

Dashboard Serials Packaging Transactions System Setup EPCIS Setup Audit Trail

Audit Trail Setup Audit Trail History

Audit History ?

Search

Search Criteria:

- Date: After 4/11/13
- User: braloba
- Product: Oracle Pedigree and Serialization Manager
- Event Type: Equals All
- Business Object Type: Lots
- Description:

Search Results

Actions View Detach

☐ Show Attribute Details ☐ Show Extended Object Identifier Columns

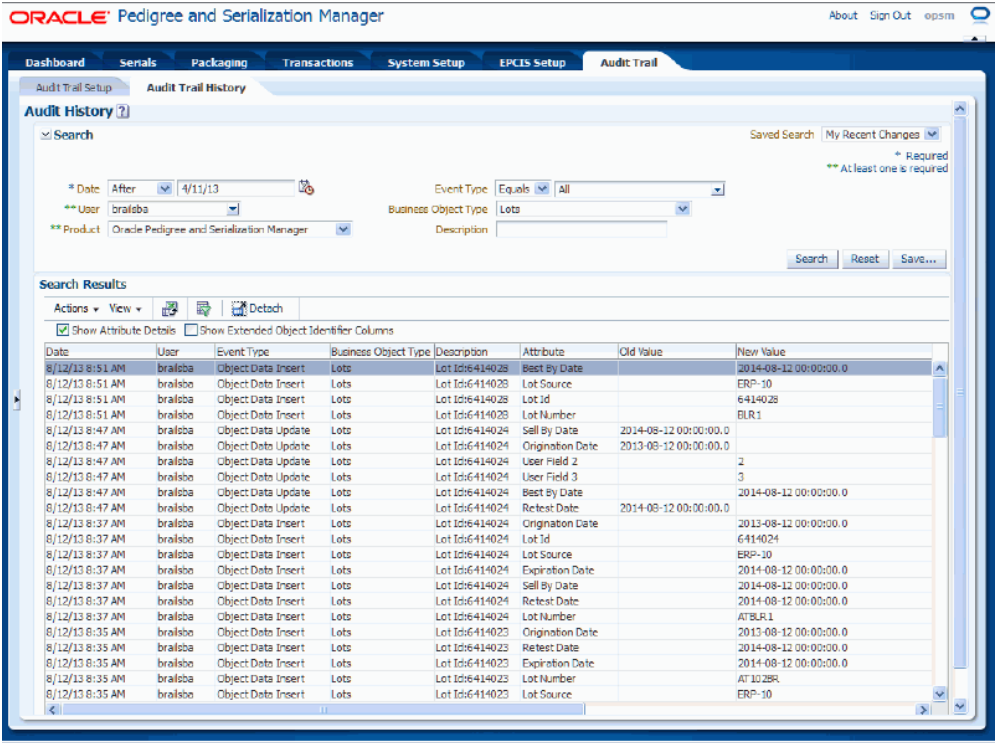
Date	User	Event Type	Business Object Type	Description
8/12/13 8:51 AM	braloba	Object Data Insert	Lots	Lot Id#6414028
8/12/13 8:47 AM	braloba	Object Data Update	Lots	Lot Id#6414024
8/12/13 8:37 AM	braloba	Object Data Insert	Lots	Lot Id#6414024
8/12/13 8:35 AM	braloba	Object Data Insert	Lots	Lot Id#6414023
8/12/13 8:14 AM	braloba	Object Data Update	Lots	Lot Id#6414022
8/12/13 8:11 AM	braloba	Object Data Update	Lots	Lot Id#6414022
8/12/13 8:03 AM	braloba	Object Data Insert	Lots	Lot Id#6414022
5/17/13 2:53 PM	braloba	Object Data Insert	Lots	Lot Id#6156119
5/17/13 2:42 PM	braloba	Object Data Insert	Lots	Lot Id#6156118
5/17/13 2:32 PM	braloba	Object Data Insert	Lots	Lot Id#6156117
5/17/13 2:32 PM	braloba	Object Data Insert	Lots	Lot Id#6156116
5/17/13 2:32 PM	braloba	Object Data Insert	Lots	Lot Id#6156115
5/17/13 2:32 PM	braloba	Object Data Insert	Lots	Lot Id#6156114
5/17/13 2:32 PM	braloba	Object Data Insert	Lots	Lot Id#6156113
5/17/13 2:32 PM	braloba	Object Data Insert	Lots	Lot Id#6156112
5/17/13 2:32 PM	braloba	Object Data Insert	Lots	Lot Id#6156111
5/17/13 2:32 PM	braloba	Object Data Insert	Lots	Lot Id#6156110
5/17/13 2:32 PM	braloba	Object Data Insert	Lots	Lot Id#6156109
5/17/13 2:32 PM	braloba	Object Data Insert	Lots	Lot Id#6156108
5/17/13 2:32 PM	braloba	Object Data Insert	Lots	Lot Id#6156107
5/17/13 2:32 PM	braloba	Object Data Insert	Lots	Lot Id#6156106
5/17/13 2:32 PM	braloba	Object Data Insert	Lots	Lot Id#6156105

The audit trail history results that match the search criteria display in the Search Results region in a table format.

- (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



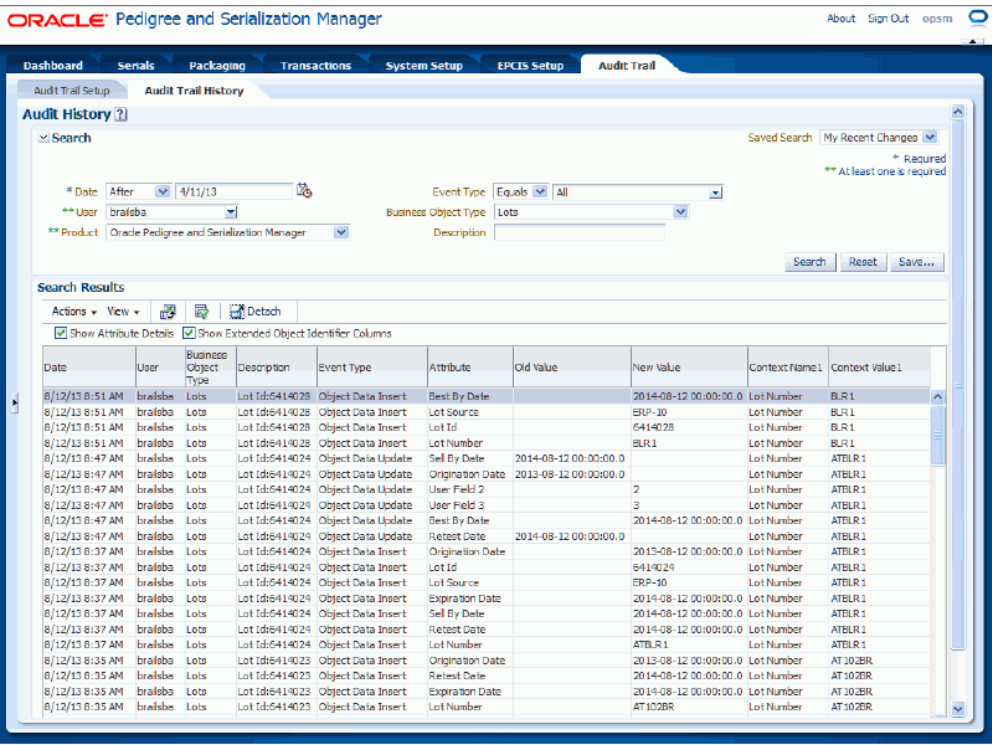
The system displays the additional attribute detail columns in the search results table. For each record the following information displays:

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 and PL/SQL Services

Understanding Web Services and PL/SQL Services

This chapter covers the following topics:

- Web Services and PL/SQL Services Overview
- Web Services and PL/SQL Services Detail
- Web Service Exceptions
- Web Service E-Mail Notifications

Web Services and PL/SQL 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. Using web services, PL/SQL 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>" [<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 Electronic Product Code Information Services (EPCIS) services provided by OPSM and provide a high-level overview of each service:

OPSM Services

Endpoint	Operation	Operation Type	Inbound/Outbound	WSDL
JobInstanceServiceAMService, page 14-4	createJobInstance createJobInstanceAsync	Web Service	Inbound	JobInstanceServiceAMService wsdl, page C-7
LotsServiceAMService, page 14-7	mergeLot mergeLotAsync	Web Service	Inbound	LotsServiceAMService wsdl, page C-10
PackagingServiceAMService, page 14-23	packPackage packPackageAsync	Web Service	Inbound	PackagingServiceAMService wsdl, page C-12
PackagingServiceAMService, page 14-23	unpackPackage unpackPackageAsync	Web Service	Inbound	PackagingServiceAMService wsdl, page C-12
PackagingServiceAMService, page 14-23	processPackageSQL processPackageSQLAsync processUnpackSQL processUnpackSQLAsync	PL/SQL Service	Inbound	N/A
ProductServiceAMService, page 14-39	mergeProducts mergeProductsAsync	Web Service	Inbound	ProductServiceAMService wsdl, page C-16
SerialGenRequestServiceAMService, page 14-52	createSerialGenerationRequest createSerialGenerationRequestAsync	Web Service	Inbound	SerialGenRequestServiceAMService wsdl, page C-18

Endpoint	Operation	Operation Type	Inbound/Outbound	WSDL
SerialGenRequestServiceAMService, page 14-52	createProcessSerialGenerationRequest	Web Service	Inbound	SerialGenRequestServiceAMService wsdl, page C-18
	createProcessSerialGenerationRequestAsync			
SerialsServiceAMService, page 14-77	editSerialStatusAndUsageByLabel	Web Service	Inbound	SerialsServiceAMService wsdl, page C-26
	editSerialStatusAndUsageByLabelAsync			
SerialsServiceAMService, page 14-77	editSerialStatusAndUsageByList	Web Service	Inbound	SerialsServiceAMService wsdl, page C-26
	editSerialStatusAndUsageByListAsync			
SerialsServiceAMService, page 14-77	editSerialStatusAndUsageByListSQL	PL/SQL Service	Inbound	N/A
	editSerialStatusAndUsageByListSQLAsync			
SerialsServiceAMService, page 14-77	editSerialStatusAndUsageByPrimaryDocument	Web Service	Inbound	SerialsServiceAMService wsdl, page C-26
	editSerialStatusAndUsageByPrimaryDocument			
TransactionsServiceAMService, page 14-122	createTransaction	Web Service	Inbound	TransactionsServiceAMService wsdl, page C-32
	createTransactionAsync			
TransactionsServiceAMService, page 14-122	processTransactionSQL	PL/SQL Service	Inbound	N/A
	processTransactionSQLAsync			

Endpoint	Operation	Operation Type	Inbound/Outbound	WSDL
TransactionsServiceAMService, page 14-122	processImportAndPackSQL	PL/SQL Service	Inbound	N/A
	processImportAndPackSQLAsync			

EPCIS Services

Endpoint	Operation	Operation Type	Inbound/Outbound	WSDL
CaptureService, page 14-202	capture	Web Service	Inbound	CaptureService wsdl, page C-2
QueryService, page 14-230	getQueryNames	Web Service	Inbound	EPCglobalEPCISService wsdl, page C-3
	getVendorVersion			
	getStandardVersion			
	poll			
	getSubscriptionIDs			
	subscribe			
	unsubscribe			

Web Services and PL/SQL Services Detail

This section lists the OPSM and EPCIS web services and PL/SQL services provided by Oracle Pedigree and Serialization Manager (OPSM) and provides the details for each web service and PL/SQL service.

JobInstanceServiceAMService (Inbound)

The JobInstanceServiceAMService endpoint is an inbound asynchronous business service that is part of the interoperability solution of the OPSM system. This endpoint

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 Type	Operation	Description
Web Service	createJobInstance	The createJobInstance operations are used to create a new job instance and job instance messages within OPSM from an external system.
	createJobInstanceAsync	

Web Services

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.
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 operation associated with the job. This must be a valid value in the PAS_WEB_SERVICE S 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.

Name	Type	Mandatory	Description
ErrorSubValue1	String	No	Error substitution value.
ErrorSubValue2	String	No	Error substitution value.
ErrorSubValue3	String	No	Error substitution value.
ErrorSubValue4	String	No	Error substitution value.
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-7 for this endpoint.

LotsServiceAMService (Inbound)

The LotsServiceAMService endpoint is an inbound service that provides the ability to add or update lots and lot attributes from an external system into the OPSM system.

Operation Type	Operation	Description
Web Service	mergeLot	The mergeLot operations merge lot information by adding a new lot or updating an existing lot in OPSM.
	mergeLotAsync	

Web Services

If you are using location security, you are only able to:

- Add a lot through the mergeLot operation if the user has *update access* in the Location Security Setup page for the lot location and for the location or location group associated to the product detail or the product detail related to the item that

is sent into the endpoint. Otherwise, the lot is not created and exception messages are issued.

- Update a lot through the mergeLot operation if the user has *update access* in the Location Security Setup page for the lot location. Otherwise, lot information is not updated and exception messages are issued.

For more information on location security, see Location Security Overview, page 1-9.

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 attempts to find the lot in OPSM using the following precedence:

- If LotId is passed in the system uses LotId.
- If LotId and Location are not passed in, then the system uses LotNumber, LotSource, ProductCode, ProductCodeType, ProductCodeVariant, and ProductUom.
- If LotId is not passed and Location is passed then the system uses 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 takes precedence in identifying the product.
- If an existing lot is found in OPSM, the lot is updated with the information that is passed in. If the lot is not found, a new lot is 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.

Location Security Exceptions

Adding Lots

- If LotNumber, LotSource, Location, ProductCode, ProductCodeType, ProductCodeVariant, ProductUom are passed in and the user does not have update access in location security setup for the location, or the location or location group associated to the product detail, an exception is issued and the lot is not added.
- If LotNumber, LotSource, Location, ProductCode, ProductCodeType, ProductCodeVariant, ProductUom are passed in and the user does have update access in location security setup for the location, but not the location or location group associated to the product detail, an exception is issued and the lot is not added.
- If LotNumber, LotSource, Location, ProductCode, ProductCodeType, ProductCodeVariant, ProductUom are passed in and the user does not have update access in location security setup for the location, but does have update access for the location or location group associated to the product detail, an exception is issued and the lot is not added.
- If LotNumber, LotSource, Location, ItemNumber, ItemSource, ItemUom are passed in and the user does not have update access in location security setup for the location, or the location or location group associated to the product detail related to the item, an exception is issued and the lot is not added.
- If LotNumber, LotSource, Location, ItemNumber, ItemSource, ItemUom are passed in and the user does have update access in location security setup for the location, but not the location or location group associated to the product detail related to the item, an exception is issued and the lot is not added.
- If LotNumber, LotSource, Location, ItemNumber, ItemSource, ItemUom are passed in and the user does not have update access in location security setup for the location, but does have update access for the location or location group associated to the product detail related to the item, an exception is issued and the lot is not added.
- If LotNumber, LotSource, ProductCode, ProductCodeType, ProductCodeVariant, ProductUom are passed in and the user does have update access in location security setup for the location or location group associated to the product detail, the lot will be added.

In this case, the lot number is added without a location. The only user that can access this lot is a super user.

Editing Lots

- If Lot Number, LotSource, Location, ProductCode, ProductCodeType, ProductCodeVariant, ProductUom are passed in and the user does not have update access in location security setup for the location, an exception is issued and the lot is not updated. Update access on the product detail location or location group is not required when updating a lot.
- If LotNumber, LotSource, Location, ItemNumber, ItemSource, ItemUom are passed in and the user does not have update access in location security setup for the location, an exception is issued and the lot is not updated. Update access on the product detail location or location group related to the item is not required when updating a lot.

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 is 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, ProductCodeVariant, 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. If you are using location security, to add or edit a lot, the user must have <i>update access</i> in the Location Security Setup page for the lot location passed in the web service. If you create a lot without a location only a super user can edit that lot. For more information on location security, see Location Security Overview, page 1-9.
ParentLot	String	No	The parent lot number associated to the lot.

Name	Type	Mandatory	Description
OriginationDate	Date	No	The date that the lot originated.
ExpirationDate	Date	No	The date that the lot expires.
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, ProductCodeVariant, 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 takes precedence in identifying the product. If you are using location security: • To add a lot, the user must have <i>update access</i> in the Location Security Setup page for the location or location group associated to the product detail related to the item number that is passed in the web service. • To edit a lot, update access to the location or location groups associated to the product detail related to the item number is not required. For more information on location security,

Name	Type	Mandatory	Description
			see Location Security Overview, page 1-9.
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. If you are using location security: • To add a lot, the user must have <i>update access</i> in the Location Security Setup page for the location or location group associated to the product detail that is passed in the web service. • To edit a lot, update access to the location or location group associated to the product detail is not required. For more information on location security, see Location Security Overview, page 1-9.
UserField1	String	No	User defined character field.

Name	Type	Mandatory	Description
UserField2	String	No	User defined character field.
UserField3	String	No	User defined character field.
UserField4	String	No	User defined character field.
UserField5	String	No	User defined character field.
UserField6	String	No	User defined character field.
UserField7	String	No	User defined character field.
UserField8	String	No	User defined character field.
UserField9	String	No	User defined character field.
UserField10	String	No	User defined character field.
UserField11	String	No	User defined character field.
UserField12	String	No	User defined character field.
UserField13	String	No	User defined character field.
UserField14	String	No	User defined character field.
UserField15	String	No	User defined character field.

Name	Type	Mandatory	Description
UserNumber1	Decimal	No	User defined numeric field.
UserNumber2	Decimal	No	User defined numeric field.
UserNumber3	Decimal	No	User defined numeric field.
UserNumber4	Decimal	No	User defined numeric field.
UserNumber5	Decimal	No	User defined numeric field.
UserDate1	dateTime (YYYY-MM-DDTHH:mm:ss.SSS)	No	User defined timestamp field.
UserDate2	dateTime (YYYY-MM-DDTHH:mm:ss.SSS)	No	User defined timestamp field.
UserDate3	dateTime (YYYY-MM-DDTHH:mm:ss.SSS)	No	User defined timestamp field.
UserDate4	dateTime (YYYY-MM-DDTHH:mm:ss.SSS)	No	User defined timestamp field.
UserDate5	dateTime (YYYY-MM-DDTHH:mm:ss.SSS)	No	User defined timestamp field.

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. If you are using location security: • To add a lot, the user must have <i>update access</i> in the Location Security Setup page for the location or location group associated to the product detail that is passed in the web service. • To edit a lot, update access to the location or location group associated to the product detail is not required. For more information on location security, see Location Security Overview, page 1-9.
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.

Name	Type	Mandatory	Description
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. If you are using location security: • To add a lot, the user must have <i>update access</i> in the Location Security Setup page for the location or location group associated to the product detail related to the item number that is passed in the web service. • To edit a lot, update access to the location or location group associated to the product detail related to the item number is not required. For more information on location security, see Location Security Overview, page 1-9.

Name	Type	Mandatory	Description
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-10 for this endpoint.

PackagingServiceAMService (Inbound)

The PackagingServiceAMService endpoint is an inbound service into the OPSM system, which records the packaging operations (pack and unpack) that are used to maintain the packaging hierarchy within OPSM.

If you are using location security, and you want to pack a package using this endpoint, you must have *update access* to the location for both the child and topmost parent in the Location Security Setup page. This endpoint reviews the location on the immediate child to be packed and the topmost parent being packed. If the child record has children (items packed within it) those locations are not reviewed for location security access. For example:

Pack Scenario

Package Level 1 – Location A

Package Level 2 – Location B

Package Level 3 – Location C

If a request is sent to pack Package Level 2 into Package Level 1, the system checks to make sure that you have update access to both Location A and Location B. Location C is not considered.

If you are using location security, and you want to unpack a package using this endpoint, you must have *update access* to the location for the parent level in the Location Security Setup page. This endpoint reviews the location on the parent that is being unpacked. For example:

Unpack Scenario

Package Level 1 – Location A

Package Level 2 – Location B

Package Level 3 – Location C

If a request is sent to unpack Package Level 2 from Package Level 1, the system checks to make sure that you have update access to Location A. Location B and Location C are not considered. The same is true if a request is sent to unpack Package Level 3 from Package Level 2, the system checks to make sure that you have update access to Location A. Location B and Location C are not considered.

Operation Type	Operation	Description
Web Service	packPackage	The pack request packs or repacks one or multiple single level or a multiple level packaging structure as defined in the request. Resulting in a complete packaging hierarchy within OPSM.
	packPackageAsync	
Web Service	unpackPackage	The unpack request unpacks one or more packages within a single unpack request.
	unpackPackageAsync	
PL/SQL Service	processPackageSQL, processPackageSQLAsync, processUnpackSQL, and processUnpackSQLAsync Operations	These PL/SQL services record the creation of a packaging hierarchy within OPSM. The processPackageSQL and processPackageSQLAsync operations pack or repack one or multiple single level or a multiple level packaging structure as defined in the request, resulting in a complete packaging hierarchy within OPSM. The processUnpackSQL and processUnpackSQLAsync operations unpack the child label from its existing parent, removing it from its current packaging hierarchy.

Web Services

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.

If you are using location security, and you want to pack a package, you must have *update access* to the location for both the child and topmost parent in the Location Security Setup page. These operations review the location on the immediate child to be packed and the topmost parent being packed. If the child record has children (items packed within it) those locations are not reviewed for location security access.

Key Logic

- The ChildLabel and ChildLabelType are used to identify the package that is packed.
- The ParentLabel and ParentLabelType are used to identify the package into which the child package is packed.
- If the ParentLabelType is not a serial type, the parent package is added if it does not already exist. However, the child package must already exist. The packaging hierarchy must be built from the top level parent to the bottom level package, not bottom to top.

Uniqueness Check

To validate uniqueness for seeded serial types (SGTIN-96, SGTIN-198, and USN-1), this endpoint uses serial type plus serial number.

To validate uniqueness for *custom* serial types, this endpoint uses product code plus 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 fails.

Required Input

- ParentLabel
- ParentLabelType
- ChildLabel
- ChildLabelType

Exceptions

- Required parameters not passed.
- Invalid lookup value:
 - Label Type
 - Packaging Unit
 - Label Print Format
- Invalid location security access. To pack, you must have *update access* to the location for both the child and topmost parent in the Location Security Setup page.

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.
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.

Name	Type	Mandatory	Description
ParentProductDetailID	String	No	Identifies the product detail Id associated with the package. If the product detail Id is entered, it takes precedence over the following entries: • Product Code only • Product Code, Product Code Type, Product Code Variant, and Product UOM
ParentLocation	String	No	Identifies the location associated with the parent package. You can enter either a parent location or a parent location group but not both at the same time. If you are using location security, you must have <i>update access</i> to the parent location in the Location Security Setup page. This location is only considered if the Parent Label is being created at the time of packaging.

Name	Type	Mandatory	Description
ParentLocationGroup	String	No	Identifies the location group associated with the parent package. You can enter either a parent location or a parent location group but not both at the same time. If you are using location security, you must have <i>update access</i> to the parent location group in the Location Security Setup page. This location group is only considered if the Parent Label is being created at the time of packaging.
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.

Name	Type	Mandatory	Description
LabelPrintFormat	String	No	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.
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.

Name	Type	Mandatory	Description
ChildProductUom	String	No	Identifies the product code unit of measure associated with the product code.
ChildProductDetailID	String	No	Identifies the product detail Id associated with the package. If the product detail Id is entered, it takes 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.

If you are using location security, and you want to unpack a package, you must have *update access* to the location for the parent level in the Location Security Setup page. These operations review the location on the parent that is being unpacked.

Key Logic

The primary Label and LabelType are used to identify the package that is unpacked. For example if a bottle is packed within a box and the label information for the bottle is sent, the bottle is unpacked from the box.

Required Input

- Label
- LabelType

Exceptions

- Required parameters not passed.
- Invalid Lookup value:

- Label Type
- Invalid location security access. To unpack, you must have *update access* to the location or location group for the parent level in the Location Security Setup page.

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 takes 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-12 for this endpoint.

PL/SQL Services

processPackageSQL, processPackageSQLAsync, processUnpackSQL, and processUnpackSQLAsync Operations

These PL/SQL services record the creation of a packaging hierarchy within OPSM. The processPackageSQL and processPackageSQLAsync operations 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. The processUnpackSQL and processUnpackSQLAsync operations unpack the child label from its existing parent, removing it from its current packaging hierarchy.

Security

Since the data is being loaded directly into the PAS_S_PACK_INTERFACE table, OPSM's functional security is not applicable. It is the responsibility of the implementer to ensure that proper access to the database is validated.

Key Logic

- The ChildLabel and ChildLabelType are used to identify the packages that is packed or unpacked.

- The ParentLabel and ParentLabelType are used to identify the package into which the child package is packed if the procedure is creating or changing the packaging hierarchy.
- During a pack or repack, if the ParentLabelType is not a serial type, the parent package is added if it does not already exist. However, the child package must already exist. This implies that the packaging hierarchy must 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, SGTIN-198, and USN-1), this endpoint uses serial type plus serial number. To validate uniqueness for custom serial types, this endpoint uses product code plus serial number. The following combinations of product information can be used:

- Product Code Only OR
- Product Code, Product Code Type, Product Code Variant, and Product UOM OR
- Product Detail Id

Note: If Product Detail Id is entered the rest of the data is ignored. If the Product Detail Id is provided and it is invalid or it does not match the product detail associated to the serial number provided, the processing fails. If Product information is provided and it is invalid or it does not match the product detail associated to the serial number provided, the processing fails.

Required Input

- ParentLabel (for pack and repack only)
- ParentLabelType (for pack and repack only)
- ChildLabel
- ChildLabelType
- Created By
- Last Updated By

Exceptions

- Required parameters not passed: An error of this type is issued if one or more of the fields listed in the Required Input section (above) is not included.
- Invalid lookup value: An error of this type is issued if the value being sent in one of

the following fields does not match an existing lookup code in the associated lookup type:

- Label Type [PAS_LABEL_TYPE]
- Packaging Unit [PAS_PACKAGE_UNIT]
- Label Print Format [PAS_LABEL_PRINT_FORMAT]

Restrictions

An alternate Label and LabelType cannot be used to identify the package.

Procedure

To Use these PL/SQL Services:

1. Load data into the PAS_S_PACK_INTERFACE table.

At a minimum, the Package Interface ID, Package Interface Batch ID, Parent Label, Parent Label Type, Child Label, Child Label Type, Created By and Last Updated By fields must be provided.

This table displays the column names and descriptions and the required fields for the PAS_S_PACK_INTERFACE table:

PAS_S_PACK_INTERFACE Table

Column Name	Column Description	Required?
PACKAGE_INTERFACE_ID	Uniquely identifies each row in the PAS_S_PACK_INTERFACE table.	Y
PACKAGE_INTERFACE_BATCH_ID	Associates a batch number to the records in the table.	Y
PARENT_LABEL	The primary identifier of a parent package.	Y
PARENT_LABEL_TYPE	The primary identifier type of a parent package.	Y

Column Name	Column Description	Required?
PARENT_PRODUCT_CODE	The unformatted product class identifier for the pharmaceutical product (e.g., the NDC number) for the parent package.	N
PARENT_PRODUCT_CODE_TYPE	The type of product code (e.g., NDC442, NDC532, NDC541, NDC542, GTIN) for the parent package.	N
PARENT_PRODUCT_CODE_VARIANT	A unique key value used in case Product Code and Product Code Type do not uniquely identify the product for the parent package.	N
PARENT_PRODUCT_UOM	The unit of measure of the product for the parent package.	N
PARENT_PRODUCT_DETAIL_ID	Internal use only - unique ID for each Product Detail for the parent package.	N
REUSABLE_FLAG	Flag to indicate if the package is a reusable package.	N
PACKAGING_UNIT	The unit of packaging for this package (e.g. Box, Case, Pallet. etc.).	N
LABEL_PRINT_FORMAT	Format the label will be printed in.	N
CHILD_LABEL	The primary identifier of a child package.	Y
CHILD_LABEL_TYPE	The primary identifier type of a child package.	Y

Column Name	Column Description	Required?
CHILD_PRODUCT_CODE	The unformatted product class identifier for the pharmaceutical product (e. g., the NDC number) for the child package.	N
CHILD_PRODUCT_CODE_TYPE	The type of product code (e. g., NDC442, NDC532, NDC541, NDC542, GTIN) for the child package.	N
CHILD_PRODUCT_CODE_VARIANT	A unique key value used in case Product Code and Product Code Type do not uniquely identify the product for the child package.	N
CHILD_PRODUCT_UOM	The unit of measure of the product for the child package.	N
CHILD_PRODUCT_DETAIL_ID	Internal use only - unique ID for each Product Detail for the child package.	N
ERROR_STATUS_FLAG	Flag to identify error records in the interface table	N
CREATED_BY	Who column: indicates the user who created the row.	Y
CREATION_DATE	Who column: indicates the date and time of the creation of the row.	N
LAST_UPDATED_BY	Who column: indicates the user who last updated the row.	Y
LAST_UPDATE_DATE	Who column: indicates the date and time of the last update of the row.	N

Column Name	Column Description	Required?
LAST_UPDATE_LOGIN	Who column: indicates the session login associated to the user who last updated the row.	N

2. The Package Interface ID and Package Interface Batch ID must be generated by the user. The Package Interface Batch ID must associate all records for one packaging hierarchy within the table. The Package Interface ID must uniquely identify each row within the table.
3. When executing the PL/SQL service, only the Package Interface Batch ID is required as input into the service. OPSM searches for this Package Interface Batch ID within the PAS_S_PACK_INTERFACE table. If no corresponding Package Interface Batch ID is found, an INVALID BATCH ID ERROR is issued and no further processing occurs.
4. After the endpoint has been executed for a batch, if processing is successful, the records for the batch are removed from the PAS_S_PACK_INTERFACE table, and the packaging hierarchy is saved in OPSM for use in subsequent processing. However, if errors are found during processing, the records for the batch remain in the PAS_S_PACK_INTERFACE table, and the ERROR_STATUS_FLAG within that table is updated to a value of "1" for all record with an error. Additionally, error messages are written to the PAS_S_PACK_INTERFACE_ERR table. After the errors have been resolved, the ERROR_STATUS_FLAG must be updated to a value of "0" for all rows, or the processing will fail with an error stating that there is an ERROR STATUS FLAG error. No further processing is done until the error status flag has the correct value.

This table displays the column names and descriptions for the PAS_S_PACK_INTERFACE_ERR_TABLE table:

PAS_S_PACK_INTERFACE_ERR_TABLE Table

Column Name	Column Description
PACKAGE_INTERFACE_ID	Indicates the package interface ID from the PAS_S_PACK_INTERFACE table, for which an error occurred.

Column Name	Column Description
PACKAGE_INTERFACE_BATCH_ID	Indicates the package interface batch ID from the PAS_S_PACK_INTERFACE table, for which an error occurred.
ERROR_CODE	Is the error code of the error message that was issued.
ERROR_MESSAGE	Is the complete error message that was issued.
CREATED_BY	Who column: indicates the user who created the row.
CREATION_DATE	Who column: indicates the date and time of the creation of the row.
LAST_UPDATED_BY	Who column: indicates the user who last updated the row.
LAST_UPDATE_DATE	Who column: indicates the date and time of the last update of the row.
LAST_UPDATE_LOGIN	Who column: indicates the session login associated to the user who last updated the row.

5. If processing is successful after correction of the errors, the batch records in the PAS_S_PACK_INTERFACE table as well as the error messages in the PAS_S_PACK_INTERFACE_ERR table are removed.

ProductServiceAMService (Inbound)

The ProductServiceAMService endpoint is an inbound asynchronous business service that is part of the interoperability solution of the OPSM system. This endpoint enables external systems to create or update product and related product detail, product item, and product item UOM records in OPSM. This endpoint service behaves similar to the Product Synchronization ODI process.

If you are using location security, you are only able to:

- Add product information through this endpoint if the user has *update access* in the Location Security Setup page for the location or location group being assigned to

the product details for the product. Otherwise, the product is not created and exception messages are issued.

- Update product information through this endpoint if the user has *update access* in the Location Security Setup page for the location or location group associated to the product details for the product. Otherwise, the product information is not updated and exception messages are issued.

For more information on location security, see Location Security Overview, page 1-9.

Operation Type	Operation	Description
Web Services	mergeProducts	The mergeProducts operations are 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.
	mergeProductsAsync	

Web Services

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 is created. If it is existing, it is updated. If a field is sent in as blank, the existing data in that field is not updated.

Required Input

At a minimum, the required product information and one required product detail must be provided.

- ProductCode
- ProductCodeType

- ProductUom
- 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

Location Security Exceptions

Attempting to add or update a product when the user does not have *update access* in the Location Security Setup page for the location or location group associated to the product details for the product.

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.

Name	Type	Mandatory	Description
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.
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.

Name	Type	Mandatory	Description
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.
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.

Name	Type	Mandatory	Description
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.
CreateSerialsForReceipts	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 receipt. Turn on when serials do not already exist and must be created. Turn off when serials exist for a receipt transaction.

Name	Type	Mandatory	Description
CreateSerialsForShip Flag	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 do not already exist and must be created. Turn off when serials 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 must 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.
RecordInternalReceipts	String	No Default = 0	Flag to activate the recording of receipts from internal customers for this product.
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).

Name	Type	Mandatory	Description
Product Details			
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.
NDCNumber	String	No	Indicates the National Drug Code (NDC) number assigned to the product.
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.

Name	Type	Mandatory	Description
SerialIncrease	String	No Default is 0.	Indicates how many additional serials must be generated above the quantity/percent requested (For example, 5, 10, or 12).
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	No	Indicates the type of serial that is generated. This must be a valid value in the PAS_SERIAL_TYPE lookup.
ProductDetailLocation	String	No Product details can only be associated to a location or a location group but not both at the same time.	Identifies the location for the product detail line associated to the product. If you are using location security, you are only able to add or update product information using this web service if you have <i>update access</i> to this product detail location in the Location Security Setup page For more information on location security, see Location Security Overview, page 1-9.

Name	Type	Mandatory	Description
ProductDetailLocationGroup	String	No	Identifies the location group for the product detail line associated to the product. If you are using location security, you are only able to add or update product information using this web service if you have <i>update access</i> to this product detail location group in the Location Security Setup page. For more information on location security, see Location Security Overview, page 1-9.
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.

Name	Type	Mandatory	Description
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-16for this endpoint.

SerialGenRequestServiceAMService (Inbound)

The SerialGenRequestServiceAMService endpoint is an inbound asynchronous business service that is part of the interoperability solution of the OPSM system. This endpoint enables external systems to make requests to OPSM for serial generation.

If you are using location security, you are only able to create and process serial generation requests using this endpoint if you have *update access* to the following in the Location Security Setup page:

- Serial location provided in the endpoint.
- Product detail location or location group if product information is provided in the endpoint.
- Lot location if lot information is provided in the endpoint.
- GTIN location if GTIN is provided in the endpoint (GTIN location is the same as product detail location).

For more information on location security, see Location Security Overview, page 1-9.

Operation Type	Operation	Description
Web Service	createSerialGenerationRequest	Used to create a new serial generation request within OPSM from an external system.
	createSerialGenerationRequestAsync	
Web Service	createProcessSerialGenerationRequest	Used to create and process a new serial generation request within OPSM from an external system.
	createProcessSerialGenerationRequestAsync	

Web Services

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.

If you are using location security, you must have *update access* in the Location Security Setup page for serial location, product detail location or location group, lot location, and GTIN location if some or all of this type of information is provided in the web service operation.

Key Logic

- If GenerationStatus is sent in as SUBMITTED, the serial generation request processes automatically. If GenerationStatus is REQUESTED or blank, the system captures the request for future processing. The user needs 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 are 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 is 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)
- If using location security, you must have *update access* in the Location Security Setup page for serial location, product detail location or location group, lot location, and GTIN location if some or all of this type of information is provided in the web service operation.

For information on manually submitting a serial generation request, see Submitting Serial Generation Requests, page 7-26.

Required Input

- SourceSystem
- SerialQuantity *or* StartingSerialNumber *or* StartingSerialNumber and EndingSerialNumber
- IgnoreOverageFlag
- LocationId *or* Location

If you are using location security, you must have *update access* to the serial location in the Location Security Setup page.

- 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

- Gtin

If you are using location security, you must have *update access* to the product detail location or location group in the Location Security Setup page.

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
- Invalid location security access. You must have *update access* in the Location Security Setup page for serial location, product detail location or location group, lot location, and GTIN location if some or all of this type of information is provided in the web service operation.

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 is automatically 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.
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.

Name	Type	Mandatory	Description
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.
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 whether the overage amount defined in the product detail definition must or must not be applied in the calculation of the quantity of serials to be generated. 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 must 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. If you are using location security, you must have <i>update access</i> to the serial location in the Location Security Setup page. For more information on location security, see Location Security Overview, page 1-9.
Location	String	Conditional: Either the LocationId or Location is required.	Identifies the location that initiated the serial generation request. If you are using location security, you must have <i>update access</i> to the serial location in the Location Security Setup page. For more information on location security, see Location Security Overview, page 1-9.
SerialUsage	String	No	Identifies the serial usage. This must be a valid user defined value in the PAS_SERIAL_USAGE lookup.

Name	Type	Mandatory	Description
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 is used to locate the product detail record. If you are using location security, you must have <i>update access</i> to the product detail location or location group in the Location Security Setup page. For more information on location security, see Location Security Overview, page 1-9.

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 takes precedence in identifying the product. If you are using location security, you must have <i>update access</i> to the product detail location or location group in the Location Security Setup page. For more information on location security, see Location Security Overview, page 1-9.

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 takes 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 takes 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 takes 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 takes 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 takes 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. If you are using location security, you must have <i>update access</i> to the lot location in the Location Security Setup page. For more information on location security, see Location Security Overview, page 1-9.

Name	Type	Mandatory	Description
LotSource	String	No	The Source System associated with the lot.
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.
Gtin	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 - Gtin	Identifies the Global Trade Identification Number (GTIN) assigned to a product in OPSM. If the GTIN is entered it can be used to identify the product. If Product information, Item information, and GTIN are all provided, the Product information takes precedence in identifying the product. If you are using location security, you must have <i>update access</i> to the GTIN location in the Location Security Setup page. GTIN location is the same as product detail location For more information on location security, see Location Security Overview, page 1-9.

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.

If you are using location security, you must have *update access* in the Location Security Setup page for serial location, product detail location or location group, lot location, and GTIN location if some or all of this type of information is provided in the web service operation.

Key Logic

- Irrespective of the GenerationStatus in the request xml, it is overwritten with a new status SYNC_REQ_SUBMITTED and the request is 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 are 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 is 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 is 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)

- If using location security, you must have *update access* in the Location Security Setup page for serial location, product detail location or location group, lot location, and GTIN location if some or all of this type of information is provided in the web service operation.

Required Input

- SourceSystem
- SerialQuantity *or* StartingSerialNumber *or* StartingSerialNumber and EndingSerialNumber
- LocationId *or* Location

If you are using location security, you must have *update access* to the serial location in the Location Security Setup page.

- 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

If you are using location security, you must have *update access* to the product detail location or location group in the Location Security Setup page.

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 is overwritten with a new status SYNC_REQ_SUBMITTED and the request is 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-18 for this endpoint.

SerialsServiceAMService (Inbound)

The SerialsServiceAMService endpoint is an inbound service into the OPSM system that is used to update the status and usage of one or more serials. Common uses for this endpoint 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 are updated with the passed serial attributes. If an attribute is not passed, then its value is not changed.

For each serial status and usage update performed, the SerialsServiceAMService endpoint creates a transaction. The transactions that can be created by this endpoint 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 is an Edit Serial transaction. For example, changing counterfeit status.

If you are using location security, depending on the serial status and usage update you are making to a serial you need the following:

- For commissioning, you need *update access* to the serial location, existing product detail location or location group, new product detail location or location group, and new lot location in the Location Security Setup page.
- For decommissioning, you need *update access* to the serial location in the Location Security Setup page.
- For updating the attributes of the serial (for example, serial status and usage), you need *update access* to the serial location in the Location Security Setup page.
- For reserving (removing the Lot ID), you need *update access* to the serial location and existing lot location in the Location Security Update page.

For more information on location security, see Location Security Overview, page 1-9.

All of the transactions that are created by the SerialsServiceAMService endpoint 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 Type	Operation	Description
Web Service	editSerialStatusAndUsageByLabel	These operations update serial status, serial usage, and counterfeit status information for a given Label and LabelType combination and 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 Decommission Serials or Edit Serials transaction is created depending on the type of edit performed.
	editSerialStatusAndUsageByLabelAsync	
Web Service	editSerialStatusAndUsageByPrimaryDocument	These operations 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 is created depending on the type of edit performed.
	editSerialStatusAndUsageByPrimaryDocumentAsync	
Web Service	editSerialStatusAndUsageByList	These operations 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 is created depending on the type of edit performed.
	editSerialStatusAndUsageByListAsync	

Operation Type	Operation	Description
PL/SQL Service	editSerialStatusAndUsageByLabelSQL editSerialStatusAndUsageByLabelSQLAsync	These are PL/SQL services in OPSM that update serial number attributes within OPSM. The editSerialStatusAndUsageByLabelSQL and editSerialStatusAndUsageByLabelSQLAsync operations update serial numbers as defined in the request. Serials are updated depending on the data included in the request.

Web Services

editSerialStatusAndUsageByLabel and editSerialStatusAndUsageByLabelAsync Operations

These operations update serial status, serial usage, and counterfeit status information for a Label and LabelType combination and utilize the 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 is created depending on the type of edit performed.

If you are using location security, you must have *update access* for the serial location in the Location Security Setup page before you can decommission the serial or edit the attributes on the serial using this web service operation.

Key Logic

- Updating Serials
 - Serials that are updated are identified by the primary Label and LabelType of the serial or a higher level packaging level. All serials within the packaging hierarchy are updated.
 - Serials are updated with the value of the attributes that are passed. If no value is passed for an attribute, that attribute is not 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
- Location security access is invalid. You must have *update access* for the serial location in the Location Security Setup page to decommission the serial or to edit the attributes on the serial.

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.

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_STATU S 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_COD E lookup.
SerialUsage	String	No	Identifies the serial usage. This must be a valid user defined value in the PAS_SERIAL_USAG E lookup.
CounterfeitStatus	String	No	Identifies the serial as COUNTERFEIT, NOTCOUNTERFEIT, or SUSPECT.
CounterfeitDate	Date	No	Notes the date of the counterfeit status.

editSerialStatusAndUsageByPrimaryDocument and editSerialStatusAndUsageByPrimaryDocumentAsync Operations

These operations 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 also create transactions in OPSM for every endpoint call. You can

view the transactions and their status using the Maintain Transactions page in OPSM. If the endpoint 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 are created depending on the type of edit performed.

If you are using location security, depending on the serial status and usage update you are making to a serial using this web service operation you need the following:

- To commission a serial, you need *update access* to the serial location, existing product detail location or location group, new product detail location or location group, and new lot location in the Location Security Setup page.
- To decommission a serial, you need *update access* to the serial location in the Location Security Setup page.
- For updating the attributes of the serial, you need *update access* to the serial location in the Location Security Setup page.
- For reserving the serial, you need *update access* to the serial location and existing lot location in the Location Security Update page.

Key Logic

- Updating Serials
 - Serials that are updated are identified by the Segments of the primary document.
 - Serials are updated with the value of the attributes that are passed. If no value is passed for an attribute, that attribute is not 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 is updated to COMMISSIONED.
- The identified lot must be for the given product. The lot must already be defined within OPSM.
- The endpoint does 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
- Location security access is invalid. You must have the following:
 - Update access for the serial location and lot location in the Location Security Setup page to reserve a serial.
 - Update access for the serial location, existing product detail location or location group, new product detail location or location group, and new lot location in the Location Security Setup page to commission a serial.
 - Update access for the serial location in the Location Security Setup page to decommission a serial.
 - Update access for the serial location in the Location Security Setup page to update the attributes of a serial.

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 is added to this lookup and a message is 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.
Segment6	String	No	Identifies the 6th segment of the primary document for selection of serials.

Name	Type	Mandatory	Description
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.
OnlyReservedSerials	String	No	Indicates that only serials that are at a RESERVED status must be selected for update. Valid values: 1 = Reserve Serial Only, 0 = All Statuses. Default: 0.

Name	Type	Mandatory	Description
SerialStatus	String	No	Identifies the status that is used for updating the selected serials. This must be a valid status in the PAS_SERIAL_STATU S 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_COD E lookup.
SerialUsage	String	No	Identifies the serial usage. This must be a valid user defined value in the PAS_SERIAL_USAG E 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 is used to locate the product detail record. If you are using location security, you must have <i>update access</i> for the product detail location or location group in the Location Security Setup page. For more information on location security, see Location Security Overview, page 1-9.

Name	Type	Mandatory	Description
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 takes precedence in identifying the product. If you are using location security, you must have <i>update access</i> for the product detail location or location group in the Location Security Setup page. For more information on location security, see Location Security Overview, page 1-9.

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 takes 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 takes 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 takes 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 is 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 takes 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 takes 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 takes precedence in identifying the lot. This must be a valid location defined in OPSM. If you are using location security, you must have <i>update access</i> for the lot location in the Location Security Setup page. For more information on location security, see Location Security Overview, page 1-9.
CommissionSegment 1	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 is added to this lookup and a message is 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.

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.

editSerialStatusAndUsageByList and editSerialStatusAndUsageByListAsync Operations

These operations 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 is created depending on the type of edit performed.

If you are using location security, depending on the serial status and usage update you are making to a serial using this web service operation you need the following:

- To commission a serial, you need *update access* to the serial location, existing product detail location or location group, new product detail location or location group, and new lot location in the Location Security Setup page.
- To decommission a serial, you need *update access* to the serial location in the Location Security Setup page.
- For updating the attributes of the serial, you need *update access* to the serial location in the Location Security Setup page.
- For reserving the serial, you need *update access* to the serial location and existing lot location in the Location Security Update page.

Key Logic

- Updating Serials
 - Serials that are 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 is created.
 - Product Code and Item Serial Number if the serial type is a custom type.
 - Serials are updated with the value of the attributes that are passed. If no value is passed for an attribute, that attribute is not 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 is updated to COMMISSIONED.
- The identified lot must be for the given product. The lot must already be defined within OPSM.
- 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
- Location security access is invalid. You must have the following:
 - Update access for the serial location and lot location in the Location Security Setup page to reserve a serial.
 - Update access for the serial location, existing product detail location or location group, new product detail location or location group, and new lot location in the Location Security Setup page to commission a serial.
 - Update access for the serial location in the Location Security Setup page to decommission a serial.
 - Update access for the serial location in the Location Security Setup page to update the attributes of a serial.

Restrictions

No Restrictions

editSerialStatusAndUsageByList

Name	Type	Mandatory	Description
TransactionSourceName	String	Yes	Identifies the source name for the transaction. This must be a valid user defined value in the PAS_SOURCE_SYSTEM lookup.

Name	Type	Mandatory	Description
SerialStatus	String	No	Identifies the status that is used for updating the selected serials. This must be a valid status in the PAS_SERIAL_STATU S 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_COD E lookup.
SerialUsage	String	No	Identifies the serial usage. This must be a valid user defined value in the PAS_SERIAL_USAG E 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 is used to locate the product detail record. If you are using location security, you must have <i>update access</i> for the product detail location or location group in the Location Security Setup page. For more information on location security, see Location Security Overview, page 1-9.

Name	Type	Mandatory	Description
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 takes precedence in identifying the product. If you are using location security, you must have <i>update access</i> for the product detail location or location group in the Location Security Setup page. For more information on location security, see Location Security Overview, page 1-9.

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 takes 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 takes 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 takes 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 is 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 takes 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 takes 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 takes precedence in identifying the lot. This must be a valid location defined in OPSM. If you are using location security, you must have <i>update access</i> for the lot location in the Location Security Setup page. For more information on location security, see Location Security Overview, page 1-9.
LotLocationID	String	No	The lot location Id associated to the lot location.
CommissionSegment 1	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 is added to this lookup and a message is 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.

Name	Type	Mandatory	Description
ItemNumber	String	No	Identifies the item number in the transactional system that is cross referenced to a product within OPSM. You can only update the item information using this web service operation. You cannot use the item information for serial selection.
ItemSource	String	No	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. You can only update the item information using this web service operation. You cannot use the item information for serial selection.

Name	Type	Mandatory	Description
ItemUOM	String	No	Identifies the item UOM in the transactional system that is cross referenced to the product packaging unit in OPSM. You can only update the item information using this web service operation. You cannot use the item information for serial selection.
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.

Name	Type	Mandatory	Description
AttributeChar10	String	No	User defined character field.
AttributeChar11	String	No	User defined character field.
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 number field.
AttributeNumber2	Decimal	No	User defined number field.
AttributeNumber3	Decimal	No	User defined number field.
AttributeNumber4	Decimal	No	User defined number field.
AttributeNumber5	Decimal	No	User defined number field.
AttributeTimestamp1	dateTime (YYYY-MM-DDTHH:mm:ss.SSS)	No	User defined timestamp field.
AttributeTimestamp2	dateTime (YYYY-MM-DDTHH:mm:ss.SSS)	No	User defined timestamp field.

Name	Type	Mandatory	Description
AttributeTimestamp3	dateTime (YYYY-MM-DDTHH:mm:ss.SSS)	No	User defined timestamp field.
AttributeTimestamp4	dateTime (YYYY-MM-DDTHH:mm:ss.SSS)	No	User defined timestamp field.
AttributeTimestamp5	dateTime (YYYY-MM-DDTHH:mm:ss.SSS)	No	User defined timestamp field.

SerialsListVO

Name	Type	Mandatory	Description
ItemSerialNumber	String	Yes	Identifies the serials that are 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-26 for this endpoint.

PL/SQL Services

editSerialStatusAndUsageByListSQL and editSerialStatusAndUsageByListSQLAsync Operations

These are PL/SQL services in OPSM that update serial number attributes within OPSM. The editSerialStatusAndUsageByListSQL and editSerialStatusAndUsageByListSQLAsync operations update serial numbers as defined in the request. Serials are updated depending on the data included in the request.

Security

Since the data is being loaded directly into the PAS_S_EDIT_SERIAL_HDR_INT and PAS_S_EDIT_SERIAL_LIST_INT tables, OPSM's functional security is not applicable. It is the responsibility of the implementer to ensure that proper access to the database is validated.

Key Logic

- The Serial Interface Batch ID is used to identify the batch to be processed for Edit Serials by List.
- All records associated to the transaction must share the same Serial Interface Batch ID.

Procedure

To Use these PL/SQL Services:

1. Load data into the PAS_S_EDIT_SERIAL_HDR_INT and PAS_S_EDIT_SERIAL_LIST_INT tables.

Note: At least one record must be provided for each of the two tables listed above.

These tables display the column names and descriptions and the required fields for the PAS_S_EDIT_SERIAL_HDR_INT and PAS_S_EDIT_SERIAL_LIST_INT tables:

PAS_S_EDIT_SERIAL_HDR_INT Table

Column Name	Column Description	Required?
SERIAL_INTERFACE_BATCH_ID	Unique ID for each edit serial batch.	Y
TRANSACTION_SOURCE_NAME	Transaction WHO Field.	Y
SERIAL_STATUS	The status of the serial number (e.g. COMMISSIONED, DECOMMISSIONED).	N
REASON_CODE	Reason for decommissioning the serial number (e.g. Voided, Expired, Damaged, Returned, etc.).	N
SERIAL_USAGE	A code used to categorize serials (ex. samples, etc.).	N

Column Name	Column Description	Required?
COUNTERFEIT_STATUS	A status used to indicate if this serial number is either suspected to be counterfeit, or is actually a counterfeit.	N
COUNTERFEIT_DATE	The date that this serial was suspected or confirmed as being a counterfeit.	N
PRODUCT_DETAIL_ID	The unique ID used to identify the Product Detail record in the PAS_S_PRODUCT_DETAIL_S table.	N
PRODUCT_CODE	The unformatted product class identifier for the pharmaceutical product (e. g., the NDC number).	N
PRODUCT_CODE_TYPE	The type of product code (e. g., NDC442, NDC532, NDC541, NDC542, GTIN).	N
PRODUCT_CODE_VARIANT	A unique key value used in case Product Code and Product Code Type do not uniquely identify the product.	N
PRODUCT_UOM	The unit of measure of the product.	N
LOT_ID	The unique ID used to identify the Lot record in the PAS_S_LOTS table.	N
LOT_NUMBER	Identification number assigned to a particular quantity or lot of material from a single manufacturer.	N

Column Name	Column Description	Required?
LOT_SOURCE	The source system from which this lot is derived.	N
LOT_LOCATION	The location of the lot number.	N
LOT_LOCATION_ID	The unique ID used to identify the Location record related to the Lot in the PAS_S_LOCATIONS table.	N
ITEM_NUMBER	The item number from the transactional system.	N
ITEM_SOURCE	Transactional system that the ITEM_NUMBER is from.	N
ITEM_UOM	The unit of measure of the item number as it exists in the transactional system.	N
CREATED_BY	Who column: indicates the user who created the row.	Y
CREATION_DATE	Who column: indicates the date and time of the creation of the row.	Y
LAST_UPDATED_BY	Who column: indicates the user who last updated the row.	Y
LAST_UPDATE_DATE	Who column: indicates the date and time of the last update of the row.	Y
LAST_UPDATE_LOGIN	Who column: indicates the session login associated to the user who last updated the row.	N

Column Name	Column Description	Required?
COMMISSION_SEGMENT_1	Identifies the 1st segment of the document (Document Organization) used as reference when commissioning the serials.	N
COMMISSION_SEGMENT_2	Identifies the 2nd segment of the document (Document Number) used as reference when commissioning the serials.	N
COMMISSION_SEGMENT_3	Identifies the 3rd segment of the document (Document Type) used as reference when commissioning the serials.	N
COMMISSION_SEGMENT_4	Identifies the 4th segment of the document used as a reference when commissioning serials.	N
COMMISSION_SEGMENT_5	Identifies the 5th segment of the document used as a reference when commissioning serials.	N
COMMISSION_SEGMENT_6	Identifies the 6th segment of the document used as a reference when commissioning serials.	N
COMMISSION_SEGMENT_7	Identifies the 7th segment of the document used as a reference when commissioning serials.	N
COMMISSION_SEGMENT_8	Identifies the 8th segment of the document used as a reference when commissioning serials.	N

Column Name	Column Description	Required?
COMMISSION_SEGMENT_9	Identifies the 9th segment of the document used as a reference when commissioning serials.	N
COMMISSION_SEGMENT_10	Identifies the 10th segment of the document used as a reference when commissioning serials.	N
ATTRIBUTE_CHAR1	User defined character field 1.	N
ATTRIBUTE_CHAR2	User defined character field 2.	N
ATTRIBUTE_CHAR3	User defined character field 3.	N
ATTRIBUTE_CHAR4	User defined character field 4.	N
ATTRIBUTE_CHAR5	User defined character field 5.	N
ATTRIBUTE_CHAR6	User defined character field 6.	N
ATTRIBUTE_CHAR7	User defined character field 7.	N
ATTRIBUTE_CHAR8	User defined character field 8.	N
ATTRIBUTE_CHAR9	User defined character field 9.	N
ATTRIBUTE_CHAR10	User defined character field 10.	N
ATTRIBUTE_CHAR11	User defined character field 11.	N

Column Name	Column Description	Required?
ATTRIBUTE_CHAR12	User defined character field 12.	N
ATTRIBUTE_CHAR13	User defined character field 13.	N
ATTRIBUTE_CHAR14	User defined character field 14.	N
ATTRIBUTE_CHAR15	User defined character field 15.	N
ATTRIBUTE_NUMBER1	User defined numeric field 1.	N
ATTRIBUTE_NUMBER2	User defined numeric field 2.	N
ATTRIBUTE_NUMBER3	User defined numeric field 3.	N
ATTRIBUTE_NUMBER4	User defined numeric field 4.	N
ATTRIBUTE_NUMBER5	User defined numeric field 5.	N
ATTRIBUTE_TIMESTAMP1	User defined date / time field 1.	N
ATTRIBUTE_TIMESTAMP2	User defined date / time field 2.	N
ATTRIBUTE_TIMESTAMP3	User defined date / time field 3.	N
ATTRIBUTE_TIMESTAMP4	User defined date / time field 4.	N
ATTRIBUTE_TIMESTAMP5	User defined date / time field 5.	N

Column Name	Column Description	Required?
ERROR_STATUS_FLAG	Flag to identify error records in the interface table .	Y (Default=0)

PAS_S_EDIT_SERIAL_LIST_INT Table

Column Name	Column Description	Required?
EDIT_SERIAL_LIST_ID	Unique ID for each item serial number in the edit serial list.	Y
SERIAL_INTERFACE_BAT CH_ID	Unique ID for each edit serial batch.	Y
ITEM_SERIAL_NUMBER	A unique number assigned for identification which varies from its successor or predecessor by a fixed discrete integer value.	N
CREATED_BY	Who column: indicates the user who created the row.	Y
CREATION_DATE	Who column: indicates the date and time of the creation of the row.	Y
LAST_UPDATED_BY	Who column: indicates the user who last updated the row.	Y
LAST_UPDATE_DATE	Who column: indicates the date and time of the last update of the row.	Y
LAST_UPDATE_LOGIN	Who column: indicates the session login associated to the user who last updated the row.	N

Column Name	Column Description	Required?
ERROR_STATUS_FLAG	Flag to identify error records in the interface table.	Y (Default=0)

2. The Serial Interface Batch ID must be generated by the user. The Serial Interface Batch ID must associate all records within these two tables for one transaction.
3. In addition to the Serial Interface Batch ID, the user must also supply the EDIT_SERIAL_LIST_ID within the PAS_S_EDIT_SERIAL_LIST_INT table. This ID must uniquely identify each row within the PAS_S_EDIT_SERIAL_LIST_INT table.
4. When executing the PL/SQL service, the Serial Interface Batch ID is required as input into the service. OPSM searches for this Serial Interface Batch ID within the PAS_S_EDIT_SERIAL_HDR_INT and PAS_S_EDIT_SERIAL_LIST_INT tables. If no corresponding Serial Interface Batch ID is found, an INVALID BATCH ID ERROR is issued and no further processing occurs.
5. After the service has been executed for a batch, if processing is successful, the records for the batch are removed from the PAS_S_EDIT_SERIAL_HDR_INT and PAS_S_EDIT_SERIAL_LIST_INT tables, and the serials are updated in OPSM for use in subsequent processing. However, if errors are found during processing, the records for the batch remain in the PAS_S_EDIT_SERIAL_HDR_INT and PAS_S_EDIT_SERIAL_LIST_INT tables, and the ERROR_STATUS_FLAG within the tables is updated to a value of "1" for all records with an error. Additionally, error messages are written to the PAS_S_EDIT_SERIALIZES_ERRORS_INT table. After the errors have been resolved, the ERROR_STATUS_FLAG must be updated to a value of "0" for all rows, or the processing will fail with an error stating that there is an ERROR STATUS FLAG error. No further processing is done until the error status flag has the correct value.

This table displays the column names and descriptions for the PAS_S_EDIT_SERIAL_ERRORS_INT table:

PAS_S_EDIT_SERIAL_ERRORS_INT Table

Column Name	Column Description
EDIT_SERIAL_ERROR_ID	Internal use only - unique ID for each edit serial interface error.

Column Name	Column Description
SERIAL_INTERFACE_BATCH_ID	Internal use only - unique ID for each edit serial batch.
ERROR_CODE	The error code issued for the edit serial error.
ERROR_SEVERITY_LEVEL	A code indicating the severity level of the transaction error message (i.e. 1=ERRORS, 2=WARNING, 3=MESSAGE).
CREATED_BY	Who column: indicates the user who created the row.
CREATION_DATE	Who column: indicates the date and time of the creation of the row.
LAST_UPDATED_BY	Who column: indicates the user who last updated the row.
LAST_UPDATE_DATE	Who column: indicates the date and time of the last update of the row.
LAST_UPDATE_LOGIN	Who column: indicates the session login associated to the user who last updated the row.
ERROR_MESSAGE	Is the complete error message.

6. If processing is successful after correction of the errors, the batch records in the PAS_S_EDIT_SERIAL_HDR_INT and PAS_S_EDIT_SERIAL_LIST_INT tables as well as the error messages in the PAS_S_EDIT_SERIALS_ERRORS_INT table are removed.

TransactionsServiceAMService (Inbound)

The TransactionsServiceAMService endpoint is an inbound asynchronous business service that is part of the interoperability solution of the OPSM system. This endpoint enables external systems to record an import, shipment, receipt, or return transaction into the OPSM system. In addition, the system shall optionally enable:

- Creating serials in OPSM at time of shipment or receipt. (The OPSM system must be configured on the Product or Product Location Overrides to "Create Serials for

Shipments" or "Create Serials for Receipts").

For information on maintaining products, see Maintaining Products and Item Cross Reference, page 4-87.

- Commissioning the serials at time of shipment or receipt.
- Creating lots on a shipment, receipt, 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 4-24.

- Updating packaging hierarchy in OPSM at time of shipment, receipt, 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 4-262.

- Recording the shipment, receipt, or return to an internal customer (The OPSM system must be configured on the Product or Product Location Overrides to "Record Internal Shipments", "Record Internal Receipts" or "Record Internal Returns").

For information on maintaining products, see Maintaining Products and Item Cross Reference, page 4-87.

- Shipping serials multiple times to external customers is allowed if the serials are not in a packaging hierarchy and the Allow Multiple Shipments check box is selected on the Shipment sub tab of the Maintain System Parameters page.

For information on maintaining system parameters, see Maintaining System Parameters, page 4-24.

- Receiving serials multiple times from external customers is allowed if the serials are not in a packaging hierarchy and the Allow Multiple Receipts check box is selected on the Receipt sub tab of the Maintain System Parameters page.

For information on maintaining system parameters, see Maintaining System Parameters, page 4-24

If you are using location security, you need *update access* to the following data elements in the Location Security Setup page depending on the type of transaction you are capturing using the endpoint. If you do not have the correct update access, then the operation ends and sends an error message.

Shipment Transactions

- To capture a shipment transaction for existing serials, you need *update access* in the Location Security Setup page for:
 - Transaction location

During the shipment of existing serials, if both the lot and serials exist, you only need *update access* to the transaction location to ship those serials. If the lot is being created, you need *update access* to the lot location and product detail location or location group on the lot. After the lot is created, the endpoint uses the transaction location to validate that you can commission the serials. You can create a lot with no location but after the lot is created, this endpoint enables you to use this lot in the transaction based on update access to the transaction location.

- To capture a shipment transaction and pack existing serials for that shipment, you need *update access* in the Location Security Setup page for:
 - Transaction location
- To capture a shipment transaction and ship an existing packaging hierarchy for that shipment, you need *update access* in the Location Security Setup page for:
 - Transaction location
- To capture a shipment transaction and import serials that for that shipment, you need *update access* in the Location Security Setup page for:
 - Transaction location
 - Product detail location or location group
 - Lot location (new or existing lot)
- To capture a shipment transaction, create new packages, and pack serials for that shipment, you need *update access* in the Location Security Setup page for:
 - Transaction location
 - Package location or location group

After the package is created, the endpoint does not check for *update access* on the existing items being packed. Packaging is enabled based on the transaction location. This endpoint does not use the location or location group fields from the TransactionLabelVO for serials that are being created. The new serials use the create location from the transaction.

- To capture a shipment transaction, create new packages, pack, and import serials for that shipment, you need *update access* in the Location Security Setup page for:

- Transaction location
 - Product detail location or location group
 - Package location or location group
 - Lot location
- To capture a shipment transaction and create a lot for that shipment, you need *update access* in the Location Security Setup page for:
 - Transaction location
 - Product detail location or location group (required to create a lot)
 - Lot location (required to create a lot)

Receipt Transactions

- To capture a receipt transaction for existing serials, you need *update access* in the Location Security Setup page for:
 - Transaction location

During the receipt of existing serials, if both the lot and serials exist, you only need *update access* to the transaction location to receive those serials. If the lot is being created, you need *update access* to the lot location and product detail location or location group on the lot. After the lot is created, the endpoint uses the transaction location to validate that you can commission the serials. You can create a lot with no location but after the lot is created, this endpoint enables you to use this lot in the transaction based on update access to the transaction location.

- To capture a receipt transaction and pack existing serials for that receipt, you need *update access* in the Location Security Setup page for:
 - Transaction location
- To capture a receipt transaction and receive an existing packaging hierarchy for that receipt, you need *update access* in the Location Security Setup page for:
 - Transaction location
- To capture a receipt transaction and import serials that for that receipt, you need *update access* in the Location Security Setup page for:
 - Transaction location
 - Product detail location or location group

- Lot location (new or existing lot)
- To capture a receipt transaction, create new packages, and pack serials for that receipt, you need *update access* in the Location Security Setup page for:
 - Transaction location
 - Package location or location group

After the package is created, the endpoint does not check for *update access* on the existing items being packed. Packaging is enabled based on the transaction location. The new serials use the create location from the transaction.

- To capture a receipt transaction, create new packages, pack, and import serials for that receipt, you need *update access* in the Location Security Setup page for:
 - Transaction location
 - Product detail location or location group
 - Package location or location group
 - Lot location
- To capture a receipt transaction and create a lot for that receipt, you need *update access* in the Location Security Setup page for:
 - Transaction location
 - Product detail location or location group (required to create a lot)
 - Lot location (required to create a lot)

Return Transactions

- To capture a return transaction for existing serials, you need *update access* in the Location Security Setup page for:
 - Transaction location
- To capture a return transaction and create a lot, you need *update access* in the Location Security Setup page for:
 - Transaction location
 - Product detail location or location group for the lot (required to create a lot)
 - Lot location (required to create a lot)

Import Transactions

To capture an import transaction, you need *update access* in the Location Security Setup page for:

- Transaction location
- Product detail location or location group (if product information is provided)
- Lot location (if lot is provided)

Operation Type	Operation	Description
Web Service	createTransaction	The createTransaction operations 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.
	createTransactionAsync	
PL/SQL Service	processTransactionSQL	The processTransactionSQL and processTransactionSQLAsync operations process shipment, receipt, or return transactions as defined in the request. Serials are processed and serial state is changed to SHIPPED, RECEIVED, or RETURNED depending on the data included in the request.
	processTransactionSQLAsync	

Operation Type	Operation	Description
PL/SQL Service	processImportAndPackSQL processImportAndPackSQLAsync	These are PL/SQL services in OPSM, that import, create, and pack serial numbers within OPSM. The processImportAndPackSQL and processImportAndPackSQLAsync operations create serial numbers as defined in the request and then pack them into a packaging hierarchy. Serials are created in a reserved or commissioned status depending on the data included in the request.

Web Services

createTransaction and createTransactionAsync Operations

These operations are used to create a shipment, return, or import transaction in OPSM.

Note: You cannot create Receipt transactions using the createTransaction operations.

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 is created in OPSM if it does not already exist using the information on the transaction. An existing lot is not updated.
 - If lot creation is not allowed, the lot must already exist in OPSM.
- Shipment Transaction
 - A shipment transaction must 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) must be identified in the transactionLabelVO or serials must be identified in the transactionSerialAssocVO. If labels or serials are not defined, the transaction is created in OPSM with an exception status.
- transactionSerialAssocVO - optional, either labels (for inference) must be identified in the transactionLabelVO or serials must be identified in the transactionSerialAssocVO. If labels or serials are not defined, the transaction is 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 transaction is not processed.
 - If the transaction is flagged as internal, the serial state is not updated.
- Packaging Hierarchy
 - If a new package is identified on the transactions where the LabelType is not a Serial Type, it is automatically created in OPSM when the shipment transaction is processed.
 - The packaging hierarchy is automatically updated in OPSM based on the packing configuration sent on the shipment transaction.
 - The highest level package is 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 is used to identify serials that match the product and lot identified on the transaction. Any lower level serials associated to the matched serials are also identified on the transaction.

- If a shipped item serial is identified that does not have lower level serials, inference is used to identify lower level serials using the packaging hierarchy in OPSM.
- Return Transaction
 - A return transaction must 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) must be identified in the transactionLabelVO or serials must be identified in the transactionSerialAssocVO. If labels or serials are not defined, the transaction is created in OPSM with an exception status.
 - transactionSerialAssocVO - optional, either labels (for inference) must be identified in the transactionLabelVO or serials must be identified in the transactionSerialAssocVO. If labels or serials are not defined, the transaction is 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 transaction is not processed.
 - If the transaction is flagged as internal, the serial state is not updated.
- Packaging Hierarchy
 - If a new package is identified on the transactions where the LabelType is not a Serial Type, it automatically is created in OPSM when the return transaction is processed.
 - The packaging hierarchy is automatically updated in OPSM based on the packing configuration sent on the return transaction.

- The highest level package is 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 is used to identify serials that match the product and lot identified on the transaction. Any lower level serials associated to the match serials are also identified on the transaction.
 - If a returned item serial is identified that does not have lower level serials, inference is used to identify lower level serials using the packaging hierarchy in OPSM.
- Import Transaction
 - An Import transaction must 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 must match the transaction quantity.
 - transactionDocumentVO - optional, highly recommended for identification of the reference document.
 - Serial Creation
 - Serials identified on the import transaction are created in OPSM.
 - If a duplicate serial already exists in OPSM, the duplicate serial is created and both the original and the newly created serial are 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).
- Invalid location security access. Depending on the type of transaction, you need *update access* in the Location Security Setup page for certain elements provided in the transaction.

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.
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 is not 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

Name	Type	Mandatory	Description
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. If you are using location security, you need <i>update access</i> to the transaction location in the Location Security Setup page.
TransactionQuantity	Decimal	Yes	The quantity of the product that was transacted.
TransactionUnitofMeasure	String	Yes	The UOM associated with the quantity.
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.

Name	Type	Mandatory	Description
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.
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.

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. If you are using location security, you need <i>update access</i> to the product detail location or location group in the Location Security Setup page.
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.
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.

Name	Type	Mandatory	Description
LotSource	String	Yes	The source system associated to the lot. This must be a valid value in the PAS_SOURCE_SYSTM lookup.
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. The Lot Location must only be included in the request if a location has been assigned to the lot. If there is no location associated to the lot, then this field can be left blank. This applies to all Transactions (Import, Shipment, and Return). This must be a valid location in OPSM. If you are using location security, you need <i>update access</i> to the lot location in the Location Security Setup page.
ParentLot	String	No	Identifies the parent lot number associated with the lot.
ImportSerialsFlag	String	Yes	Not used.

Name	Type	Mandatory	Description
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.
EventCreatedSource Name	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.
EventUpdatedSource Name	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.

Name	Type	Mandatory	Description
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.
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.

Name	Type	Mandatory	Description
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. If you are using location security, and a lot is being created with this product, then you need <i>update access</i> to the lot location in the Location Security Setup page.
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. The Lot Location must only be included in the request if a location has been assigned to the lot. If there is no location associated to the lot, then this field can be left blank. This applies to all Transactions (Import, Shipment, and Return). This must be a valid location in OPSM. If you are using location security, and a lot is being created, then you need <i>update access</i> to the lot location in the Location Security Setup page.
ParentLot	String	No	Identifies the parent lot number associated with the lot.

Name	Type	Mandatory	Description
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.
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.

Name	Type	Mandatory	Description
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.
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.

Name	Type	Mandatory	Description
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.
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.

Name	Type	Mandatory	Description
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.
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.

Name	Type	Mandatory	Description
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	dateTime (YYYY-MM-DDTHH:mm:ss.SSS)	No	User defined timestamp field.
AttributeTimestamp2	dateTime (YYYY-MM-DDTHH:mm:ss.SSS)	No	User defined timestamp field.
AttributeTimestamp3	dateTime (YYYY-MM-DDTHH:mm:ss.SSS)	No	User defined timestamp field.
AttributeTimestamp4	dateTime (YYYY-MM-DDTHH:mm:ss.SSS)	No	User defined timestamp field.
AttributeTimestamp5	dateTime (YYYY-MM-DDTHH:mm:ss.SSS)	No	User defined timestamp field.

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.
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.

Name	Type	Mandatory	Description
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.
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.

Name	Type	Mandatory	Description
Location	String	No	Identifies the location associated with the package. You can only associate a location or a location group to a package. Both cannot be entered at the same time. This must be a valid location in OPSM. If you are using location security, and a package is being created during shipment, then you need <i>update access</i> to the package location in the Location Security Setup page. Otherwise, this field is ignored.

Name	Type	Mandatory	Description
Location Group	String	No	Identifies the location group associated with the package. You can only associate a location or a location group to a package. Both cannot be entered at the same time. This must be a valid location group in OPSM. If you are using location security, and a package is being created during shipment, then you need <i>update access</i> to the package location group in the Location Security Setup page. Otherwise, this field is ignored.

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.

Name	Type	Mandatory	Description
AddressType	String	Yes	Identifies the type of address. This must be a valid value in the PAS_ADDRESS_TYPE lookup.
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.

Name	Type	Mandatory	Description
GlobalLocationNumber	String	No	The Global Location Number associated with the transaction address.
Contact Name	String	No	The contact name for the transaction address.
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 automatically adds 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-32 for this endpoint.

PL/SQL Services

processTransactionSQL and processTransactionSQLAsync Operations

The processTransactionSQL and processTransactionSQLAsync operations process shipment, receipt, return transactions as defined in the request. Serials are processed and serial state is changed to SHIPPED, RECEIVED, RETURNED depending on the data included in the request.

OPSM does not support the following for the shipment and return transactions:

- Packing, repacking, or unpacking of serial numbers.
- Creating of new serial numbers.
- Creating of new lots.
- Creating product identification using item cross reference.
- Changing of lot or product information associated to the serial.
- Reprocessing shipments in exception status through the Maintain Transactions page.
- Viewing shipments in exception status through the Maintain Transactions page.

Key Logic

- The Transaction Interface Batch ID and the Transaction Type are used to identify the batch to be processed for the shipment, receipt, or return.

Note: The Transaction Type value must be SHIPMENT for shipment processing, RECEIPT for receipt processing, and

RETURN for return processing.

- All records associated to the shipment, receipt, or return transaction must share the same Transaction Interface Batch ID.
- The receipt transaction will consider each product being sent in to determine if serials must be created or not. The shipment transaction only considers the settings of the product in the Transaction Product.

Security

Since the data is being loaded directly into the PAS_S_SHP_SERIAL_ASSOC_INT, PAS_S_SHP_SERIAL_DOCS_INT, PAS_S_SHP_SERIAL_ADDR_INT, PAS_S_SHP_SERIAL_PRODS_INT, PAS_S_SHP_SERIAL_LBL_INT, and PAS_S_SHP_SERIAL_INT tables, OPSM's functional security is not applicable. It is the responsibility of the implementer to ensure that proper access to the database is validated.

Procedure

To Use these PL/SQL Services:

1. Load data into the these tables:

- PAS_S_SHP_SERIAL_INT
- PAS_S_SHP_SERIAL_PRODS_INT
- PAS_S_SHP_SERIAL_ADDR_INT
- PAS_S_SHP_SERIAL_DOCS_INT

2. Load data into the PAS_S_SHP_SERIAL_ASSOC_INT table for a loose serials shipment or for return of loose serials.

For receipt transactions, load data in into the PAS_S_SHP_SERIAL_ASSOC_INT table for each serial being imported into OPSM. It must also indicate the parent serialized item if a packaging hierarchy is being created during processing.

3. Load data into the PAS_S_SHP_SERIAL_LBL_INT table for a shipment or return with inference.

For receipt transactions, load data into the PAS_S_SHP_SERIAL_LBL_INT table for the top level serials being created during processing or with the non-serialized package used for receipt with inference.

These tables display the column names and descriptions and the required fields for the PAS_S_SHP_SERIAL_ASSOC_INT, PAS_S_SHP_SERIAL_DOCS_INT,

PAS_S_SHP_SERIAL_ADDR_INT, PAS_S_SHP_SERIAL_PRODS_INT, PAS_S_SHP_SERIAL_LBL_INT, and PAS_S_SHP_SERIAL_INT tables:

Note: For shipment and return transactions, Shipment Date is not retained if it is sent into this service.

PAS_S_SHP_SERIAL_ASSOC_INT Table

Column Name	Column Description	Required?
TRANS_SERIAL_ASSOC_ID	Internal use only - unique identifier for each serial association.	Y
TRANSACTION_INTERFACE_BATCH_ID	Internal use only - unique identifier for each transaction batch.	Y
ITEM_SERIAL_NUMBER	A unique number assigned for identification which varies from its successor or predecessor by a fixed discrete integer value.	Y
SHIPPED_ITEM_FLAG	A flag used to indicate if the item was shipped on the sales order line.	Y (Default=0)
SALEABLE_UNIT_FLAG	On if this serial number is for a saleable unit.	Y
SERIAL_TYPE	Unique identifier of the serial type.	N
SERIAL_IDENTIFICATION	Serial Identification to define hierarchy.	N
MANUFACTURED_DATE	The date the product was manufactured.	N
SERIAL_USAGE	A code used to categorize serials (ex. samples, etc.).	N

Column Name	Column Description	Required?
CREATED_BY	Who column: indicates the user who created the row.	Y
CREATION_DATE	Who column: indicates the date and time of the creation of the row.	Y
LAST_UPDATED_BY	Who column: indicates the user who last updated the row.	Y
LAST_UPDATE_DATE	Who column: indicates the date and time of the last update of the row.	Y
LAST_UPDATE_LOGIN	Who column: indicates the session login associated to the user who last updated the row.	N
ATTRIBUTE_CHAR1	Descriptive Flexfield: segment of user descriptive flexfield.	N
ATTRIBUTE_CHAR2	Descriptive Flexfield: segment of user descriptive flexfield.	N
ATTRIBUTE_CHAR3	Descriptive Flexfield: segment of user descriptive flexfield.	N
ATTRIBUTE_CHAR4	Descriptive Flexfield: segment of user descriptive flexfield.	N
ATTRIBUTE_CHAR5	Descriptive Flexfield: segment of user descriptive flexfield.	N

Column Name	Column Description	Required?
ATTRIBUTE_CHAR6	Descriptive Flexfield: segment of user descriptive flexfield.	N
ATTRIBUTE_CHAR7	Descriptive Flexfield: segment of user descriptive flexfield.	N
ATTRIBUTE_CHAR8	Descriptive Flexfield: segment of user descriptive flexfield.	N
ATTRIBUTE_CHAR9	Descriptive Flexfield: segment of user descriptive flexfield.	N
ATTRIBUTE_CHAR10	Descriptive Flexfield: segment of user descriptive flexfield.	N
ATTRIBUTE_NUMBER1	Descriptive Flexfield: segment of user descriptive flexfield.	N
ATTRIBUTE_NUMBER2	Descriptive Flexfield: segment of user descriptive flexfield.	N
ATTRIBUTE_NUMBER3	Descriptive Flexfield: segment of user descriptive flexfield.	N
ATTRIBUTE_NUMBER4	Descriptive Flexfield: segment of user descriptive flexfield.	N
ATTRIBUTE_NUMBER5	Descriptive Flexfield: segment of user descriptive flexfield.	N

Column Name	Column Description	Required?
ATTRIBUTE_TIMESTAMP1	Descriptive Flexfield: segment of user descriptive flexfield.	N
ATTRIBUTE_TIMESTAMP2	Descriptive Flexfield: segment of user descriptive flexfield.	N
ATTRIBUTE_TIMESTAMP3	Descriptive Flexfield: segment of user descriptive flexfield.	N
ATTRIBUTE_TIMESTAMP4	Descriptive Flexfield: segment of user descriptive flexfield.	N
ATTRIBUTE_TIMESTAMP5	Descriptive Flexfield: segment of user descriptive flexfield.	N
ERROR_STATUS_FLAG	Flag to identify error records in the interface table.	Y (Default=0)
TRANSACTION_PRODUC T_ID	Internal use only - unique identifier for each serial association.	Y
PARENT_SERIAL_IDENTIF ICATION	Parent Serial Identification used to define hierarchy.	N

PAS_S_SHP_SERIAL_DOCS_INT Table

Column Name	Column Description	Required?
TRANSACTION_DOC_ID	Internal use only - unique ID for each transaction document.	Y

Column Name	Column Description	Required?
TRANSACTION_INTERFA CE_BATCH_ID	Internal use only - unique ID for each transaction batch.	Y
SEGMENT1	The document organization of the reference document.	N
SEGMENT2	The document number of the reference document.	N
SEGMENT3	The document type of the reference document.	N
SEGMENT4	The document line number of the reference document.	N
SEGMENT5	Segment 5 of the reference document.	N
SEGMENT6	Segment 6 of the reference document.	N
SEGMENT7	Segment 7 of the reference document.	N
SEGMENT8	Segment 8 of the reference document.	N
SEGMENT9	Segment 9 of the reference document.	N
SEGMENT10	Segment 10 of the reference document.	N
PRIMARY_FLAG	A flag used to indicate that this document is the primary document.	Y

Column Name	Column Description	Required?
PEDIGREE_DOCUMENT_TYPE	Examples of possible values include INVOICE, SHIPPINGNUMBER, and PURCHASEORDER depending on the setup.	N
CREATED_BY	Who column: indicates the user who created the row.	Y
CREATION_DATE	Who column: indicates the date and time of the creation of the row.	Y
LAST_UPDATED_BY	Who column: indicates the user who last updated the row.	Y
LAST_UPDATE_DATE	Who column: indicates the date and time of the last update of the row.	Y
LAST_UPDATE_LOGIN	Who column: indicates the session login associated to the user who last updated the row.	N
ERROR_STATUS_FLAG	Flag to identify error records in the interface table.	Y (Default=0)

PAS_S_SHP_SERIAL_PRODS_INT Table

Column Name	Column Description	Required?
TRANSACTION_PRODUCT_ID	Internal use only - unique ID for each transaction product.	Y
TRANSACTION_INTERFACE_BATCH_ID	Internal use only - unique ID for each transaction batch.	Y

Column Name	Column Description	Required?
PRODUCT_CODE	The unformatted product class identifier for the pharmaceutical product (e. g., the NDC number).	N
PRODUCT_CODE_TYPE	The type of product code (e. g., NDC442, NDC532, NDC541, NDC542, GTIN).	N
PRODUCT_CODE_VARIANT	A unique key value used in case Produce Code and Product Code Type do not uniquely identify the product.	N
PRODUCT_UOM	The unit of measure of the product.	N
LOT_NUMBER	Identification number assigned to a particular quantity or lot of material from a single manufacturer.	N
PARENT_LOT	The identification number assigned to the parent of this lot.	N
LOT_LOCATION	The location of the lot number.	N
LOT_SOURCE	The source system from which this lot is derived.	N
ORIGINATION_DATE	The date the lot was created or originated.	N
EXPIRATION_DATE	The date the lot expires.	N
BEST_BY_DATE	The date on or before which the lot is best used.	N

Column Name	Column Description	Required?
SELL_BY_DATE	The date the product from this lot should be sold.	N
RETEST_DATE	The date the quality of this lot has been retested.	N
CREATED_BY	Who column: indicates the user who created the row.	Y
CREATION_DATE	Who column: indicates the date and time of the creation of the row.	Y
LAST_UPDATED_BY	Who column: indicates the user who last updated the row.	Y
LAST_UPDATE_DATE	Who column: indicates the date and time of the last update of the row.	Y
LAST_UPDATE_LOGIN	Who column: indicates the session login associated to the user who last updated the row.	N
ERROR_STATUS_FLAG	Flag to identify error records in the interface table.	Y (Default=0)
ITEM_NUMBER	The item number from the transactional system.	N
ITEM_SOURCE	Transactional System that the ITEM_NUMBER is from.	N
ITEM_IDENTIFIER	Unique Item Identifier on Integration Source.	N
ITEM_UOM	The unit of measure on the item number as it exists in the transactional system.	N

PAS_S_SHP_SERIAL_LBL_INT Table

Column Name	Column Description	Required?
TRANSACTION_LABEL_ID	Internal use only - unique ID for each transaction/identifier.	Y
TRANSACTION_INTERFACE_BATCH_ID	Internal use only - unique ID for each transaction batch.	Y
LABEL	The primary or alternate identifier of a package.	Y
LABEL_TYPE	The type of identifier on the package (e.g. Serial Number, LPN, etc.).	Y
SHIPPED_ITEM_FLAG	Flag used to indicate if this item was shipped on the sales order line.	Y
PACKAGE_UNIT	The unit of packaging for this package (e.g. Box, Case, Pallet. etc.).	N
CREATED_BY	Who column: indicates the user who created the row.	Y
CREATION_DATE	Who column: indicates the date and time of the creation of the row.	Y
LAST_UPDATED_BY	Who column: indicates the user who last updated the row.	Y
LAST_UPDATE_DATE	Who column: indicates the date and time of the last update of the row.	Y

Column Name	Column Description	Required?
LAST_UPDATE_LOGIN	Who column: indicates the session login associated to the user who last updated the row.	N
ERROR_STATUS_FLAG	Flag to identify error records in the interface table.	Y (Default=0)
REUSABLE_FLAG	Flag to indicate if the package is a reusable package.	Y
PARENT_LABEL	The parent primary or alternate identifier of a package.	N
PARENT_LABEL_TYPE	The type of identifier on the parent package (e.g. Serial Number, LPN, etc.).	N
LABEL_PRINT_FORMAT	Format the label will be printed in.	N

PAS_S_SHP_SERIAL_ADDR_INT Table

Column Name	Column Description	Required?
TRANSACTION_ADDRESS_ID	Internal use only - unique ID for each transaction/identifier.	Y
TRANSACTION_INTERFACE_BATCH_ID	Internal use only - unique ID for each transaction batch.	Y
ADDRESS_CODE	A code used to identify if the address is for a destination or source.	Y

Column Name	Column Description	Required?
ADDRESS_TYPE	A code used to identify the type of address (i.e. Business, Shipping, etc.).	Y
NAME	The name associated with the address.	Y
STREET1	Used to hold a portion of the street address.	N
STREET2	Used to hold a portion of the street address.	N
STREET3	Used to hold a portion of the street address.	N
STREET4	Used to hold a portion of the street address.	N
CITY	The city of the transaction address.	N
STATE_OR_REGION	The state or region of the transaction address.	N
POSTAL_CODE	The postal code of the transaction address.	N
COUNTRY	The country of the transaction address.	N
CONTACT_NAME	The name of the contact for this address.	N
CONTACT_EMAIL	The e-mail address for the contact of this address.	N
CONTACT_PHONE	The phone number for the contact of this address	N

Column Name	Column Description	Required?
GLOBAL_LOCATION_NUMBER	The Global Location Number (GLN) is a thirteen digit number used to identify parties and physical locations. This is in the EPC Tag URI format.	N
CREATED_BY	Who column: indicates the user who created the row.	Y
CREATION_DATE	Who column: indicates the date and time of the creation of the row.	Y
LAST_UPDATED_BY	Who column: indicates the user who last updated the row.	Y
LAST_UPDATE_DATE	Who column: indicates the date and time of the last update of the row.	Y
LAST_UPDATE_LOGIN	Who column: indicates the session login associated to the user who last updated the row.	N
ERROR_STATUS_FLAG	Flag to identify error records in the interface table.	Y (Default=0)

PAS_S_SHP_SERIAL_INT Table

Column Name	Column Description	Required?
TRANSACTION_INTERFACE_BATCH_ID	Internal use only - unique ID for each transaction batch.	Y

Column Name	Column Description	Required?
TRANSACTION_TYPE	The type of transaction (e.g. Shipment, Receipt, Return, etc.).	Y
TRANS_DATE	The date the transaction occurred.	Y
TRANSACTION_SOURCE_NAME	Transaction WHO Field.	Y
TRANS_LOCATION	The location that created the transaction.	N
PRODUCT_CODE	The unformatted product class identifier for the pharmaceutical product (e.g., the NDC number).	N
PRODUCT_CODE_TYPE	The type of product code (e.g., NDC442, NDC532, NDC541, NDC542, GTIN).	N
PRODUCT_CODE_VARIANT	A unique key value used in case Produce Code and Product Code Type do not uniquely identify the product.	N
PRODUCT_UOM	The unit of measure of the product.	N
LOT_NUMBER	Identification number assigned to a particular quantity or lot of material from a single manufacturer.	N
LOT_SOURCE	The source system from which this lot is derived.	N
LOT_LOCATION	The location of the lot number.	N

Column Name	Column Description	Required?
PARENT_LOT	The identification number assigned to the parent of this lot.	N
INTERNAL_TRANSACTION_FLAG	On when the destination of the transaction is another location within the OPSM system.	Y
TRANSACTION_QUANTITY	The quantity of serials related to this transaction.	N
TRANSACTION_UNIT_OF_MEASURE	The unit of measure of the transaction (ie. BOX, CASE, etc.).	N
CREATED_BY	Who column: indicates the user who created the row.	Y
CREATION_DATE	Who column: indicates the date and time of the creation of the row.	Y
LAST_UPDATED_BY	Who column: indicates the user who last updated the row.	Y
LAST_UPDATE_DATE	Who column: indicates the date and time of the last update of the row.	Y
LAST_UPDATE_LOGIN	Who column: indicates the session login associated to the user who last updated the row.	N
EVENT_CREATED_SOURCE_NAME	Event Who column: indicates the source system that created the row.	N

Column Name	Column Description	Required?
EVENT_CREATED_BY	Event Who column: indicates the user who created the row.	N
EVENT_CREATED_DATE	Event Who column: indicates the date and time of the creation of the row.	N
EVENT_UPDATED_SOURCE_NAME	Event Who column: indicates the source system that updated the row.	N
EVENT_UPDATED_BY	Event Who column: indicates the user who updated the row.	N
EVENT_UPDATED_DATE	Event Who column: indicates the date and time of the update of the row.	N
ATTRIBUTE_CATEGORY	Descriptive Flexfield: structure definition of the user descriptive flexfield.	N
ATTRIBUTE_CHAR1	Descriptive Flexfield: segment of the user descriptive flexfield.	N
ATTRIBUTE_CHAR2	Descriptive Flexfield: segment of the user descriptive flexfield.	N
ATTRIBUTE_CHAR3	Descriptive Flexfield: segment of the user descriptive flexfield.	N
ATTRIBUTE_CHAR4	Descriptive Flexfield: segment of the user descriptive flexfield.	N

Column Name	Column Description	Required?
ATTRIBUTE_CHAR5	Descriptive Flexfield: segment of the user descriptive flexfield.	N
ATTRIBUTE_CHAR6	Descriptive Flexfield: segment of the user descriptive flexfield.	N
ATTRIBUTE_CHAR7	Descriptive Flexfield: segment of the user descriptive flexfield.	N
ATTRIBUTE_CHAR8	Descriptive Flexfield: segment of the user descriptive flexfield.	N
ATTRIBUTE_CHAR9	Descriptive Flexfield: segment of the user descriptive flexfield.	N
ATTRIBUTE_CHAR10	Descriptive Flexfield: segment of the user descriptive flexfield.	N
ATTRIBUTE_CHAR11	Descriptive Flexfield: segment of the user descriptive flexfield.	N
ATTRIBUTE_CHAR12	Descriptive Flexfield: segment of the user descriptive flexfield.	N
ATTRIBUTE_CHAR13	Descriptive Flexfield: segment of the user descriptive flexfield.	N
ATTRIBUTE_CHAR14	Descriptive Flexfield: segment of the user descriptive flexfield.	N

Column Name	Column Description	Required?
ATTRIBUTE_CHAR15	Descriptive Flexfield: segment of the user descriptive flexfield.	N
ATTRIBUTE_NUMBER1	Descriptive Flexfield: segment of the user descriptive flexfield.	N
ATTRIBUTE_NUMBER2	Descriptive Flexfield: segment of the user descriptive flexfield.	N
ATTRIBUTE_NUMBER3	Descriptive Flexfield: segment of the user descriptive flexfield.	N
ATTRIBUTE_NUMBER4	Descriptive Flexfield: segment of the user descriptive flexfield.	N
ATTRIBUTE_NUMBER5	Descriptive Flexfield: segment of the user descriptive flexfield.	N
ATTRIBUTE_TIMESTAMP1	Descriptive Flexfield: segment of the user descriptive flexfield.	N
ATTRIBUTE_TIMESTAMP2	Descriptive Flexfield: segment of the user descriptive flexfield.	N
ATTRIBUTE_TIMESTAMP3	Descriptive Flexfield: segment of the user descriptive flexfield.	N
ATTRIBUTE_TIMESTAMP4	Descriptive Flexfield: segment of the user descriptive flexfield.	N

Column Name	Column Description	Required?
ATTRIBUTE_TIMESTAMP5	Descriptive Flexfield: segment of the user descriptive flexfield.	N
ERROR_STATUS_FLAG	Flag to identify error records in the interface table.	Y (Default=0)
ITEM_NUMBER	The item number from the transactional system.	N
ITEM_SOURCE	Transactional System that the ITEM_NUMBER is from.	N
ITEM_UOM	The unit of measure of the item number as it exists in the transactional system.	N

2. The Transaction Interface Batch ID must be generated by the user. The Transaction Interface Batch ID must associate all records within these six tables for one transaction.
3. In addition to the Transaction Interface Batch ID, the user must also supply the following IDs within the six tables listed above: TRANS_SERIAL_ASSOC_ID, TRANSACTION_LABEL_ID, TRANSACTION_DOC_ID, TRANSACTION_ADDRESS_ID, TRANSACTION_PRODUCT_ID, and TRANSACTION_INTERFACE_BATCH_ID. These IDs must uniquely identify each row within the table.
4. When executing the PL/SQL service, the Transaction Interface Batch ID and Transaction Type are required as input into the service. OPSM searches for this Transaction Interface Batch ID within the PAS_S_SHP_SERIAL_INT, PAS_S_SHP_SERIAL_ASSOC_INT, PAS_S_SHP_SERIAL_DOCS_INT, PAS_S_SHP_SERIAL_PRODS_INT, PAS_S_SHP_SERIAL_LBL_INT, and PAS_S_SHP_SERIAL_ADDR_INT tables. If no corresponding Transaction Interface Batch ID is found, an INVALID BATCH ID ERROR is issued and no further processing occurs.
5. After the service has been executed for a batch, if processing is successful, the records for the batch are removed from the PAS_S_SHP_SERIAL_INT, PAS_S_SHP_SERIAL_ASSOC_INT, PAS_S_SHP_SERIAL_DOCS_INT, PAS_S_SHP_SERIAL_PRODS_INT, PAS_S_SHP_SERIAL_LBL_INT, and PAS_S_SHP_SERIAL_ADDR_INT tables, and the serials are saved in OPSM for use

in subsequent processing. However, if errors are found during processing, the records for the batch remain in the PAS_S_SHP_SERIAL_INT, PAS_S_SHP_SERIAL_ASSOC_INT, PAS_S_SHP_SERIAL_DOCS_INT, PAS_S_SHP_SERIAL_PRODS_INT, PAS_S_SHP_SERIAL_LBL_INT, and PAS_S_SHP_SERIAL_ADDR_INT tables, and the ERROR_STATUS_FLAG within the tables is updated to a value of "1" for all records with an error. Additionally, error messages are written to the PAS_S_SHP_SERIAL_ERRORS_INT table. After the errors have been resolved, the ERROR_STATUS_FLAG must be updated to a value of "0" for all rows, or the processing will fail with an error stating that there is an ERROR STATUS FLAG error. No further processing is done until the error status flag has the correct value.

This table displays the column names and descriptions for the PAS_S_SHP_SERIAL_ERRORS_INT table:

PAS_S_SHP_SERIAL_ERRORS_INT Table

Column Name	Column Description
TRANSACTION_ERROR_ID	Internal use only - unique ID for each interface transaction error.
OBJECT_VERSION_NUMBER	Version number for error record.
TRANSACTION_INTERFACE_BATCH_ID	Internal use only - unique ID for each transaction batch.
TRANSACTION_ERROR	A code representing an error, warning, or informational message related to the transaction record.
ERROR_STATUS	The status of the error (i.e. Detected, Cleared, etc.).
ERROR_CODE	Is the error code.
ERROR_SEVERITY_LEVEL	A code indicating the severity level of the transaction error message. (i.e. 1=ERRORS, 2=WARNING, 3=MESSAGE).
ERROR_SUBVALUE1	Substitution value used as part of the displayed message.

Column Name	Column Description
ERROR_SUBVALUE2	Substitution value used as part of the displayed message.
ERROR_SUBVALUE3	Substitution value used as part of the displayed message.
ERROR_SUBVALUE4	Substitution value used as part of the displayed message.
ERROR_SUBVALUE5	Substitution value used as part of the displayed message.
DOMAIN	Used to enable a hosted PAS system.
CREATED_BY	Who column: indicates the user who created the row.
CREATION_DATE	Who column: indicates the date and time of the creation of the row.
LAST_UPDATED_BY	Who column: indicates the user who last updated the row.
LAST_UPDATE_DATE	Who column: indicates the date and time of the last update of the row.
LAST_UPDATE_LOGIN	Who column: indicates the session login associated to the user who last updated the row.
ERROR_SUBVALUE6	Substitution value used as part of the displayed message.
ERROR_SUBVALUE7	Substitution value used as part of the displayed message.
ERROR_SUBVALUE8	Substitution value used as part of the displayed message.
ERROR_SUBVALUE9	Substitution value used as part of the displayed message.

Column Name	Column Description
ERROR_SUBVALUE10	Substitution value used as part of the displayed message.
ERROR_MESSAGE	Is the complete error message.

6. If processing is successful after correction of the errors, the batch records in the PAS_S_SHP_SERIAL_INT, PAS_S_SHP_SERIAL_ASSOC_INT, PAS_S_SHP_SERIAL_DOCS_INT, PAS_S_SHP_SERIAL_PRODS_INT, PAS_S_SHP_SERIAL_LBL_INT, and PAS_S_SHP_SERIAL_ADDR_INT tables as well as the error messages in the PAS_S_SHP_SERIAL_ERRORS_INT table are removed.
7. If the "Allow Multiple Receipts" transaction flag is on, serials can be received multiple times even if they are already in a state of RECEIVED. However, the product associated to the serials that are being received multiple times cannot have the flag "Create Serials on Receipt" turned on and the serials cannot be aggregated, they must be loose serials.

processImportAndPackSQL and processImportAndPackSQLAsync Operations

These are PL/SQL services in OPSM that import, create, and pack serial numbers within OPSM. The processImportAndPackSQL and processImportAndPackSQLAsync operations create serial numbers as defined in the request and then pack them into a packaging hierarchy. Serials are created in a reserved or commissioned status depending on the data included in the request.

Security

Since the data is being loaded directly into the PAS_S_IMP_SERIAL_ASSOC_INT, PAS_S_IMP_SERIAL_DOCS_INT, PAS_S_IMP_SERIAL_PRODS_INT, PAS_S_IMP_SERIAL_INT, and PAS_S_PACK_INTERFACE tables, OPSM's functional security is not applicable. It is the responsibility of the implementer to ensure that proper access to the database is validated.

Key Logic

- The Batch ID is used to identify the batch to be processed for import and pack.
- All records associated to the Import and Pack transaction must share the same Batch ID.

Uniqueness Check

To validate uniqueness during packing for seeded serial types (SGTIN-96, STGIN-198, and USN-1), this endpoint uses serial type plus serial number. To validate uniqueness for custom serial types, this endpoint uses product code plus serial number. The following combinations of product information can be used:

- Product Code Only OR
- Product Code, Product Code Type, Product Code Variant, and Product UOM OR
- Product Detail Id

Note: If Product Detail Id is entered the rest of the data is ignored. If the Product Detail Id is provided and it is invalid or it does not match the product detail associated to the serial number provided, the processing fails. If Product information is provided and it is invalid or it does not match the product detail associated to the serial number provided, the processing fails.

Exceptions

- Required parameters not passed: An error of this type is issued if one or more of the required fields is not included.
- Invalid lookup value: An error of this type is issued if the value being sent in does not match an existing lookup code in the associated lookup type.

Restrictions

An alternate Label and LabelType cannot be used to identify the package to create a packaging hierarchy.

Procedure

To Use these PL/SQL Services:

1. Load data into these tables:
 - PAS_S_IMP_SERIAL_ASSOC_INT
 - PAS_S_IMP_SERIAL_DOCS_INT
 - PAS_S_IMP_SERIAL_PRODS_INT
 - PAS_S_IMP_SERIAL_INT
 - PAS_S_PACK_INTERFACE

These tables display the column names and descriptions and the required fields for the PAS_S_IMP_SERIAL_ASSOC_INT, PAS_S_IMP_SERIAL_DOCS_INT, PAS_S_IMP_SERIAL_PRODS_INT, PAS_S_IMP_SERIAL_INT, and PAS_S_PACK_INTERFACE tables:

Note: At least one record must be provided for each of the tables listed below. For example, if you are importing serials but do not

wish to associate a product to those serials during import processing, you must still insert a dummy record in the PAS_S_IMP_SERIAL_PRODS_INT table which includes all of the required fields for that table.

PAS_S_IMP_SERIAL_ASSOC_INT Table

Column Name	Column Description	Required?
TRANS_SERIAL_ASSOC_ID	Internal use only - unique identifier for each serial association.	Y
TRANSACTION_INTERFACE_BATCH_ID	Internal use only - unique identifier for each transaction batch.	Y
ITEM_SERIAL_NUMBER	A unique number assigned for identification which varies from its successor or predecessor by a fixed discrete integer value.	Y
SHIPPED_ITEM_FLAG	A flag used to indicate if the item was shipped on the sales order line.	Y
SALEABLE_UNIT_FLAG	On if this serial number is for a saleable unit.	Y
SERIAL_TYPE	Unique identifier of the serial type.	N
PARENT_SERIAL_IDENTIFICATION	Parent Serial Identification used to define hierarchy.	N
MANUFACTURED_DATE	The date the product was manufactured.	N
SERIAL_USAGE	A code used to categorize serials (ex. samples, etc.).	N

Column Name	Column Description	Required?
CREATED_BY	Who column: indicates the user who created the row.	Y
CREATION_DATE	Who column: indicates the date and time of the creation of the row.	Y
LAST_UPDATED_BY	Who column: indicates the user who last updated the row.	Y
LAST_UPDATE_DATE	Who column: indicates the date and time of the last update of the row.	Y
LAST_UPDATE_LOGIN	Who column: indicates the session login associated to the user who last updated the row.	N
ATTRIBUTE_CHAR1	Descriptive Flexfield: segment of user descriptive flexfield.	N
ATTRIBUTE_CHAR2	Descriptive Flexfield: segment of user descriptive flexfield.	N
ATTRIBUTE_CHAR3	Descriptive Flexfield: segment of user descriptive flexfield.	N
ATTRIBUTE_CHAR4	Descriptive Flexfield: segment of user descriptive flexfield.	N
ATTRIBUTE_CHAR5	Descriptive Flexfield: segment of user descriptive flexfield.	N

Column Name	Column Description	Required?
ATTRIBUTE_CHAR6	Descriptive Flexfield: segment of user descriptive flexfield.	N
ATTRIBUTE_CHAR7	Descriptive Flexfield: segment of user descriptive flexfield.	N
ATTRIBUTE_CHAR8	Descriptive Flexfield: segment of user descriptive flexfield.	N
ATTRIBUTE_CHAR9	Descriptive Flexfield: segment of user descriptive flexfield.	N
ATTRIBUTE_CHAR10	Descriptive Flexfield: segment of user descriptive flexfield.	N
ATTRIBUTE_NUMBER1	Descriptive Flexfield: segment of user descriptive flexfield.	N
ATTRIBUTE_NUMBER2	Descriptive Flexfield: segment of user descriptive flexfield.	N
ATTRIBUTE_NUMBER3	Descriptive Flexfield: segment of user descriptive flexfield.	N
ATTRIBUTE_NUMBER4	Descriptive Flexfield: segment of user descriptive flexfield.	N
ATTRIBUTE_NUMBER5	Descriptive Flexfield: segment of user descriptive flexfield.	N

Column Name	Column Description	Required?
ATTRIBUTE_TIMESTAMP1	Descriptive Flexfield: segment of user descriptive flexfield.	N
ATTRIBUTE_TIMESTAMP2	Descriptive Flexfield: segment of user descriptive flexfield.	N
ATTRIBUTE_TIMESTAMP3	Descriptive Flexfield: segment of user descriptive flexfield.	N
ATTRIBUTE_TIMESTAMP4	Descriptive Flexfield: segment of user descriptive flexfield.	N
ATTRIBUTE_TIMESTAMP5	Descriptive Flexfield: segment of user descriptive flexfield.	N
ERROR_STATUS_FLAG	Flag to identify error records in the interface table.	Y (Default=0)
TRANSACTION_PRODUC T_ID	Internal use only - unique identifier for each serial association.	Y

PAS_S_IMP_SERIAL_DOCS_INT Table

Column Name	Column Description	Required?
TRANSACTION_DOC_ID	Internal use only - unique ID for each transaction document.	Y
TRANSACTION_INTERFA CE_BATCH_ID	Internal use only - unique ID for each transaction batch.	Y

Column Name	Column Description	Required?
SEGMENT1	The document organization of the reference document.	N
SEGMENT2	The document number of the reference document.	N
SEGMENT3	The document type of the reference document.	N
SEGMENT4	The document line number of the reference document.	N
SEGMENT5	Segment 5 of the reference document.	N
SEGMENT6	Segment 6 of the reference document.	N
SEGMENT7	Segment 7 of the reference document.	N
SEGMENT8	Segment 8 of the reference document.	N
SEGMENT9	Segment 9 of the reference document.	N
SEGMENT10	Segment 10 of the reference document.	N
PRIMARY_FLAG	A flag used to indicate that this document is the primary document.	Y
PEDIGREE_DOCUMENT_TYPE	Examples of possible values include INVOICE, SHIPPINGNUMBER, and PURCHASEORDER depending on the setup.	N
CREATED_BY	Who column: indicates the user who created the row.	Y

Column Name	Column Description	Required?
CREATION_DATE	Who column: indicates the date and time of the creation of the row.	Y
LAST_UPDATED_BY	Who column: indicates the user who last updated the row.	Y
LAST_UPDATE_DATE	Who column: indicates the date and time of the last update of the row.	Y
LAST_UPDATE_LOGIN	Who column: indicates the session login associated to the user who last updated the row.	N
ERROR_STATUS_FLAG	Flag to identify error records in the interface table.	Y (Default=0)

PAS_S_IMP_SERIAL_PRODS_INT Table

Column Name	Column Description	Required?
TRANSACTION_PRODUCT_ID	Internal use only - unique ID for each transaction product.	Y
TRANSACTION_INTERFACE_BATCH_ID	Internal use only - unique ID for each transaction batch.	Y
PRODUCT_CODE	The unformatted product class identifier for the pharmaceutical product (e. g., the NDC number).	N
PRODUCT_CODE_TYPE	The type of product code (e. g., NDC442, NDC532, NDC541, NDC542, GTIN).	N

Column Name	Column Description	Required?
PRODUCT_CODE_VARIANT	A unique key value used in case Produce Code and Product Code Type do not uniquely identify the product.	N
PRODUCT_UOM	The unit of measure of the product.	N
ITEM_NUMBER	The item number from the transactional system.	N
ITEM_SOURCE	Transactional System that the ITEM_NUMBER is from.	N
ITEM_IDENTIFIER	Unique Item Identifier on Integration Source.	N
ITEM_UOM	The unit of measure of the item number as it exists in the transactional system.	N
LOT_NUMBER	Identification number assigned to a particular quantity or lot of material from a single manufacturer.	N
PARENT_LOT	The identification number assigned to the parent of this lot.	N
LOT_LOCATION	The location of the lot number.	N
LOT_SOURCE	The source system from which this lot is derived.	N
ORIGINATION_DATE	The date the lot was created or originated.	N
EXPIRATION_DATE	The date the lot expires.	N

Column Name	Column Description	Required?
BEST_BY_DATE	The date on or before which the lot is best used.	N
SELL_BY_DATE	The date the product from this lot should be sold.	N
RETEST_DATE	The date the quality of this lot has been retested.	N
CREATED_BY	Who column: indicates the user who created the row.	Y
CREATION_DATE	Who column: indicates the date and time of the creation of the row.	Y
LAST_UPDATED_BY	Who column: indicates the user who last updated the row.	Y
LAST_UPDATE_DATE	Who column: indicates the date and time of the last update of the row.	Y
LAST_UPDATE_LOGIN	Who column: indicates the session login associated to the user who last updated the row.	N
ERROR_STATUS_FLAG	Flag to identify error records in the interface table.	Y (Default=0)

PAS_S_IMP_SERIAL_INT Table

Column Name	Column Description	Required?
TRANSACTION_INTERFACE_BATCH_ID	Internal use only - unique ID for each transaction batch.	Y

Column Name	Column Description	Required?
TRANSACTION_TYPE	The type of transaction (e.g. Shipment, Return, etc.).	Y
TRANS_DATE	The date the transaction occurred.	Y
TRANSACTION_SOURCE_NAME	Transaction WHO Field.	Y
TRANS_LOCATION	The location that created the transaction.	N
ITEM_NUMBER	The item number from the transactional system.	N
ITEM_SOURCE	Transactional System that the ITEM_NUMBER is from.	N
ITEM_UOM	The unit of measure of the item number as it exists in the transactional system.	N
PRODUCT_CODE	The unformatted product class identifier for the pharmaceutical product (e.g., the NDC number).	N
PRODUCT_CODE_TYPE	The type of product code (e.g., NDC442, NDC532, NDC541, NDC542, GTIN).	N
PRODUCT_CODE_VARIANT	A unique key value used in case Produce Code and Product Code Type do not uniquely identify the product.	N
PRODUCT_UOM	The unit of measure of the product.	N

Column Name	Column Description	Required?
LOT_NUMBER	Identification number assigned to a particular quantity or lot of material from a single manufacturer.	N
LOT_SOURCE	The source system from which this lot is derived.	N
LOT_LOCATION	The location of the lot number.	N
PARENT_LOT	The identification number assigned to the parent of this lot.	N
IMPORT_SERIALS_FLAG	When on, import the serial, otherwise update the serial.	Y
INTERNAL_TRANSACTION_FLAG	On when the destination of the transaction is another location within the OPSM system.	Y
TRANSACTION_QUANTITY	The quantity of serials related to this transaction.	N
TRANSACTION_UNIT_OF_MEASURE	The unit of measure of the transaction (ie. BOX, CASE, etc.).	N
CREATED_BY	Who column: indicates the user who created the row.	Y
CREATION_DATE	Who column: indicates the date and time of the creation of the row.	Y
LAST_UPDATED_BY	Who column: indicates the user who last updated the row.	Y

Column Name	Column Description	Required?
LAST_UPDATE_DATE	Who column: indicates the date and time of the last update of the row.	Y
LAST_UPDATE_LOGIN	Who column: indicates the session login associated to the user who last updated the row.	N
EVENT_CREATED_SOURCE_NAME	Event Who column: indicates the source system that created the row.	N
EVENT_CREATED_BY	Event Who column: indicates the user who created the row.	N
EVENT_CREATED_DATE	Event Who column: indicates the date and time of the creation of the row.	N
EVENT_UPDATED_SOURCE_NAME	Event Who column: indicates the source system that updated the row.	N
EVENT_UPDATED_BY	Event Who column: indicates the user who updated the row.	N
EVENT_UPDATED_DATE	Event Who column: indicates the date and time of the update of the row.	N
ATTRIBUTE_CATEGORY	Descriptive Flexfield: structure definition of the user descriptive flexfield.	N
ATTRIBUTE_CHAR1	Descriptive Flexfield: segment of the user descriptive flexfield.	N

Column Name	Column Description	Required?
ATTRIBUTE_CHAR2	Descriptive Flexfield: segment of the user descriptive flexfield.	N
ATTRIBUTE_CHAR3	Descriptive Flexfield: segment of the user descriptive flexfield.	N
ATTRIBUTE_CHAR4	Descriptive Flexfield: segment of the user descriptive flexfield.	N
ATTRIBUTE_CHAR5	Descriptive Flexfield: segment of the user descriptive flexfield.	N
ATTRIBUTE_CHAR6	Descriptive Flexfield: segment of the user descriptive flexfield.	N
ATTRIBUTE_CHAR7	Descriptive Flexfield: segment of the user descriptive flexfield.	N
ATTRIBUTE_CHAR8	Descriptive Flexfield: segment of the user descriptive flexfield.	N
ATTRIBUTE_CHAR9	Descriptive Flexfield: segment of the user descriptive flexfield.	N
ATTRIBUTE_CHAR10	Descriptive Flexfield: segment of the user descriptive flexfield.	N
ATTRIBUTE_CHAR11	Descriptive Flexfield: segment of the user descriptive flexfield.	N

Column Name	Column Description	Required?
ATTRIBUTE_CHAR12	Descriptive Flexfield: segment of the user descriptive flexfield.	N
ATTRIBUTE_CHAR13	Descriptive Flexfield: segment of the user descriptive flexfield.	N
ATTRIBUTE_CHAR14	Descriptive Flexfield: segment of the user descriptive flexfield.	N
ATTRIBUTE_CHAR15	Descriptive Flexfield: segment of the user descriptive flexfield.	N
ATTRIBUTE_NUMBER1	Descriptive Flexfield: segment of the user descriptive flexfield.	N
ATTRIBUTE_NUMBER2	Descriptive Flexfield: segment of the user descriptive flexfield.	N
ATTRIBUTE_NUMBER3	Descriptive Flexfield: segment of the user descriptive flexfield.	N
ATTRIBUTE_NUMBER4	Descriptive Flexfield: segment of the user descriptive flexfield.	N
ATTRIBUTE_NUMBER5	Descriptive Flexfield: segment of the user descriptive flexfield.	N
ATTRIBUTE_TIMESTAMP1	Descriptive Flexfield: segment of the user descriptive flexfield.	N

Column Name	Column Description	Required?
ATTRIBUTE_TIMESTAMP2	Descriptive Flexfield: segment of the user descriptive flexfield.	N
ATTRIBUTE_TIMESTAMP3	Descriptive Flexfield: segment of the user descriptive flexfield.	N
ATTRIBUTE_TIMESTAMP4	Descriptive Flexfield: segment of the user descriptive flexfield.	N
ATTRIBUTE_TIMESTAMP5	Descriptive Flexfield: segment of the user descriptive flexfield.	N
ERROR_STATUS_FLAG	Flag to identify error records in the interface table.	Y (Default=0)

PAS_S_PACK_INTERFACE Table

Column Name	Column Description	Required?
PACKAGE_INTERFACE_ID	Uniquely identifies each row in the PAS_S_PACK_INTERFACE table.	Y
PACKAGE_INTERFACE_BATCH_ID	Associates a batch number to the records in the table.	Y
PARENT_LABEL	The primary identifier of a parent package.	Y
PARENT_LABEL_TYPE	The primary identifier type of a parent package.	Y

Column Name	Column Description	Required?
PARENT_PRODUCT_CODE	The unformatted product class identifier for the pharmaceutical product (e.g., the NDC number) for the parent package.	N
PARENT_PRODUCT_CODE_TYPE	The type of product code (e.g., NDC442, NDC532, NDC541, NDC542, GTIN) for the parent package.	N
PARENT_PRODUCT_CODE_VARIANT	A unique key value used in case Product Code and Product Code Type do not uniquely identify the product for the parent package.	N
PARENT_PRODUCT_UOM	The unit of measure of the product for the parent package.	N
PARENT_PRODUCT_DETAIL_ID	Internal use only - unique ID for each Product Detail for the parent package.	N
REUSABLE_FLAG	Flag to indicate if the package is a reusable package.	N
PACKAGING_UNIT	The unit of packaging for this package (e.g. Box, Case, Pallet. etc.).	N
LABEL_PRINT_FORMAT	Format the label will be printed in.	N
CHILD_LABEL	The primary identifier of a child package.	Y
CHILD_LABEL_TYPE	The primary identifier type of a child package.	Y

Column Name	Column Description	Required?
CHILD_PRODUCT_CODE	The unformatted product class identifier for the pharmaceutical product (e. g., the NDC number) for the child package.	N
CHILD_PRODUCT_CODE_TYPE	The type of product code (e. g., NDC442, NDC532, NDC541, NDC542, GTIN) for the child package.	N
CHILD_PRODUCT_CODE_VARIANT	A unique key value used in case Product Code and Product Code Type do not uniquely identify the product for the child package.	N
CHILD_PRODUCT_UOM	The unit of measure of the product for the child package.	N
CHILD_PRODUCT_DETAIL_ID	Internal use only - unique ID for each Product Detail for the child package.	N
ERROR_STATUS_FLAG	Flag to identify error records in the interface table	N
CREATED_BY	Who column: indicates the user who created the row.	Y
CREATION_DATE	Who column: indicates the date and time of the creation of the row.	N
LAST_UPDATED_BY	Who column: indicates the user who last updated the row.	Y
LAST_UPDATE_DATE	Who column: indicates the date and time of the last update of the row.	N

Column Name	Column Description	Required?
LAST_UPDATE_LOGIN	Who column: indicates the session login associated to the user who last updated the row.	N

2. The Transaction Interface Batch ID and Package Interface Batch ID must be generated by the user. The Transaction Interface Batch ID and Package Interface Batch ID must be equal so that they associate all records within these five tables into one transaction.
3. In addition to the Transaction Interface Batch ID and Package Interface Batch ID, the user must also supply the following IDs within the tables listed above: TRANS_SERIAL_ASSOC_ID, TRANSACTION_DOC_ID, TRANSACTION_PRODUCT_ID, TRANSACTION_INTERFACE_BATCH_ID, and PACKAGE_INTERFACE_ID. These IDs must uniquely identify each row within the tables.
4. After the service has been executed for a batch, if processing is successful, the records for the batch are removed from the PAS_S_IMP_SERIAL_ASSOC_INT, PAS_S_IMP_SERIAL_DOCS_INT, PAS_S_IMP_SERIAL_PRODS_INT, PAS_S_IMP_SERIAL_INT and PAS_S_PACK_INTERFACE tables, and the serials and packaging hierarchy are saved in OPSM for use in subsequent processing. However, if errors are found during processing, the records for the batch remain in the PAS_S_IMP_SERIAL_ASSOC_INT, PAS_S_IMP_SERIAL_DOCS_INT, PAS_S_IMP_SERIAL_PRODS_INT, PAS_S_IMP_SERIAL_INT and PAS_S_PACK_INTERFACE tables, and the ERROR_STATUS_FLAG within the tables is updated to a value of "1" for all records with an error. Additionally, error messages are written to the PAS_S_IMP_SERIAL_ERRORS_INT and PAS_S_PACK_INTERFACE_ERR tables. After the errors have been resolved, the ERROR_STATUS_FLAG must be updated to a value of "0" for all rows, or the processing will fail with an error stating that there is an ERROR STATUS FLAG error. No further processing is done until the error status flag has the correct value.

These tables display the column names and descriptions for the PAS_S_IMP_SERIAL_ERRORS_INT and PAS_S_PACK_INTERFACE_ERR tables:

PAS_S_IMP_SERIAL_ERRORS_INT Table

Column Name	Column Description
TRANSACTION_ERROR_ID	Internal use only - unique ID for each interface transaction error.
TRANSACTION_INTERFACE_BATCH_ID	Internal use only - unique ID for each transaction batch.
ERROR_CODE	Is the error code.
ERROR_SEVERITY_LEVEL	A code indicating the severity level of the transaction error message. (i.e. 1=ERRORS, 2=WARNING, 3=MESSAGE).
CREATED_BY	Who column: indicates the user who created the row.
CREATION_DATE	Who column: indicates the date and time of the creation of the row.
LAST_UPDATED_BY	Who column: indicates the user who last updated the row.
LAST_UPDATE_DATE	Who column: indicates the date and time of the last update of the row.
LAST_UPDATE_LOGIN	Who column: indicates the session login associated to the user who last updated the row.
ERROR_MESSAGE	Is the complete error message.

PAS_S_PACK_INTERFACE_ERR_TABLE Table

Column Name	Column Description
PACKAGE_INTERFACE_ID	Indicates the package interface ID from the PAS_S_PACK_INTERFACE table, for which an error occurred.

Column Name	Column Description
PACKAGE_INTERFACE_BATCH_ID	Indicates the package interface batch ID from the PAS_S_PACK_INTERFACE table, for which an error occurred.
ERROR_CODE	Is the error code of the error message that was issued.
ERROR_MESSAGE	Is the complete error message that was issued.
CREATED_BY	Who column: indicates the user who created the row.
CREATION_DATE	Who column: indicates the date and time of the creation of the row.
LAST_UPDATED_BY	Who column: indicates the user who last updated the row.
LAST_UPDATE_DATE	Who column: indicates the date and time of the last update of the row.
LAST_UPDATE_LOGIN	Who column: indicates the session login associated to the user who last updated the row.

5. If processing is successful after correction of the errors, the batch records in the PAS_S_IMP_SERIAL_ASSOC_INT, PAS_S_IMP_SERIAL_DOCS_INT, PAS_S_IMP_SERIAL_PRODS_INT, PAS_S_IMP_SERIAL_INT and PAS_S_PACK_INTERFACE tables as well as the error messages in the PAS_S_IMP_SERIAL_ERRORS_INT and PAS_S_PACK_INTERFACE_ERR tables are removed.

CaptureService (Inbound)

The CaptureService endpoint is an inbound business service that is part of the interoperability solution of the OPSM system. This endpoint enables EPCIS events to get captured and stored in the events repository. Captured events can be queried by the EPCIS Query endpoint. The CaptureService endpoint accepts the EPCISDocument form to store the EPCIS events in the repository.

Operation Type	Operation	Description
Web Service	capture	The capture operation is used to capture EPCIS events in the OPSM system.

Web Services

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 operation 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 five EPCIS events at least one event needs to be provided. EPCIS events are:

- ObjectEvent
- TransactionEvent
- AggregationEvent
- QuantityEvent (deprecated in EPCIS 1.1)
- Transformation Event

Note: The Quantity Event is deprecated to conform to EPCIS 1.1 standards.

- EventTime is required for all EPCIS events.
- EventTimeZoneOffset is required for all EPCIS events.
- For Object Event these fields are required:
 - epcList (it must 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 (deprecated in EPCIS 1.1) these fields are required:
 - epcClass
 - quantity
- For TransformationEvent these fields are required:
 - At least one input (inputEPCList/inputQuantityList) AND at least one output (outputEPCList/outputQuantityList) is required if transformation ID is omitted
 - If transformation ID is included, then at least one input (inputEPCList/inputQuantityList) OR at least one output (outputEPCList/outputQuantityList) is required

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 event type is Transformation Event and transformation ID and epc Lists are 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.
- If both schedule and trigger are empty for subscription.

capture

The description information in this table was taken from the *GS1 EPC Global - EPC Information Services (EPCIS) Version 1.1 Specification Guide*. For more information visit the

GS1 EPC Global website at: <http://www.gs1.org>.

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.
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 1.1 Specification Guide*. For more information visit the GS1 EPC Global website at: <http://www.gs1.org>.

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.
BusinessScope	BusinessScope	No	The business scope provides a basis to determine which rules are applicable to the transaction involving the enclosed business documents.

Name	Type	Mandatory	Description
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 1.1 Specification Guide*. For more information visit the GS1 EPC Global website at: <http://www.gs1.org>.

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 14-209.

Receiver

The description information in this table was taken from the *GS1 EPC Global - EPC Information Services (EPCIS) Version 1.1 Specification Guide*. For more information visit the GS1 EPC Global website at: <http://www.gs1.org>.

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 14-209.

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 1.1 Specification Guide*. For more information visit the GS1 EPC Global website at: <http://www.gs1.org>.

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 14-211.

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 14-212.

Scope

The description information in this table was taken from the *GS1 EPC Global - EPC Information Services (EPCIS) Version 1.1 Specification Guide*. For more information visit the GS1 EPC Global website at: <http://www.gs1.org>.

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 1.1 Specification Guide*. For more information visit the

GS1 EPC Global website at: <http://www.gs1.org>.

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 1.1 Specification Guide*. For more information visit the GS1 EPC Global website at: <http://www.gs1.org>.

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	AggregationEventTy pe	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.

Name	Type	Mandatory	Description
TransactionEvent	TransactionEvent Type	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.
TransformationEvent	TransformationEvent Type	No	The event type TransformationEvent represents an event in which input objects are fully or partially consumed and output objects are produced, such that any of the input objects may have contributed to all of the output objects.

ObjectEvent

The description information in this table was taken from the *GS1 EPC Global - EPC Information Services (EPCIS) Version 1.1 Specification Guide*. For more information visit the GS1 EPC Global website at: <http://www.gs1.org>.

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.
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.

Name	Type	Mandatory	Description
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.
bizTransactionList	BusinessTransactionListType	No	An unordered list of business transactions that define the context of this event.

Name	Type	Mandatory	Description
extension	ObjectEventExtension Type	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 1.1 Specification Guide*. For more information visit the GS1 EPC Global website at: <http://www.gs1.org>.

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	EPCISEventExtension Type	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 1.1 Specification Guide*. For more information visit the GS1 EPC Global website at: <http://www.gs1.org>.

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 1.1 Specification Guide*. For more information visit the GS1 EPC Global website at: <http://www.gs1.org>.

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	BusinessTransactionListType	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 epclList.

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	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	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.

Transformation Event

The description information in this table was taken from the *GS1 EPC Global - EPC Information Services (EPCIS) Version 1.1 Specification Guide*. For more information visit the GS1 EPC Global website at: <http://www.gs1.org>.

Name	Type	Mandatory	Description
eventTime	Time	Yes	The date and time at which the EPCIS Capturing Application asserts the event occurred.
recordTime	Time	No	The date and time at which this event was recorded by an EPCIS Repository.
eventTimeZoneOffset	String	Yes	The time zone offset in effect at the time and place the event occurred, expressed as an offset from UTC.

Name	Type	Mandatory	Description
inputepcList	List<EPC>	No	An unordered list of one or more EPCs identifying (at the instance level) objects that were inputs to the transformation.
inputQuantityList	List<QuantityElement >	No	An unordered list of one or more QuantityElements identifying (at the class level) objects that were inputs to the transformation.
outputepcList	List<EPC>	No	An unordered list of one or more EPCs identifying (at the instance level) objects that were outputs to the transformation.
outputQuantityList	List<QuantityElement >	No	An unordered list of one or more QuantityElements identifying (at the class level) objects that were outputs to the transformation.

Name	Type	Mandatory	Description
transformationID	TransformationID	No	A unique identifier that links this event to other TransformationEvents having an identical value of transformationID. When specified, all inputs to all events sharing the same value of the transformationID may contribute to all outputs of all events sharing that value of transformationID. If transformationID is omitted, then the inputs of this event may contribute to the outputs of this event, but the inputs and outputs of other events are not connected to this one.
bizStep	BusinessStepID	No	The business step of which this event was a part.
Disposition	DispositionID	No	The business state of the objects associated with the EPCs.
readPoint	readPointID	No	The read point at which the event took place ("where the objects were at the time of the EPCIS event").

Name	Type	Mandatory	Description
bizLocation	BusinessLocationID	No	The business location of the objects associated with the EPCs ("where the objects are following the EPCIS event").
bizTransactionList	Unordered list of zero or more BusinessTransaction instances	No	An unordered list of business transactions (eg: Purchase Order) that define the context of this event.
sourceList	List<Source>	No	An unordered list of Source elements that provide context about the originating endpoint of a business transfer of which this event is a part.
destinationList	List<Destination>	No	An unordered list of Destination elements that provide context about the terminating endpoint of a business transfer of which this event is a part.

Name	Type	Mandatory	Description
ilmd	ILMD	No	Instance/Lot Master Data that describes the objects created during this event. An example of ILMD is the expiration date of a perishable trade item. Unlike Master Data, this is not the same for all trade items having the same GTIN. Other examples of ILMD are date of manufacture and place of manufacture. It is expected to remain static over the life of an object. An ObjectEvent SHALL NOT contain ilmd if action is OBSERVE or DELETE.

bizLocation

The description information in this table was taken from the *GS1 EPC Global - EPC Information Services (EPCIS) Version 1.1 Specification Guide*. For more information visit the GS1 EPC Global website at: <http://www.gs1.org>.

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 1.1 Specification Guide*. For more information visit the GS1 EPC Global website at: <http://www.gs1.org>.

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 endpoint.

QueryService (Inbound)

The QueryService endpoint is an inbound business service that is part of the interoperability solution of the OPSM system. This endpoint 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 Type	Operation	Description
Web Service	getQueryNames	This operation returns all the queries that the QueryService endpoint supports.

Operation Type	Operation	Description
Web Service	getVendorVersion	This operation returns the version implemented by the vendor.
Web Service	getStandardVersion	This operation returns the EPCIS implemented version.
Web Service	poll	This operation returns the events based on the parameters provided and the access of the user.
Web Service	getSubscriptionIDs	This operation returns a list of all subscriptionIDs currently subscribed to the specified named query.

Operation Type	Operation	Description
Web Service	subscribe	This operation registers a subscriber for a previously defined query having the specified name. The params argument provides the values to be used for any named parameters defined by the query. The dest parameter specifies a destination where results from the query are to be delivered, through the Query Callback Interface. The dest parameter is a URI that both identifies a specific binding of the Query Callback Interface to use and specifies addressing information. The controls parameter controls how the subscription is to be processed; in particular, it specifies the conditions under which the query is to be invoked (e.g., specifying a periodic schedule). The subscriptionID is an arbitrary string that is copied into every response delivered to the specified destination, and otherwise not interpreted by the EPCIS service. The client may use the subscriptionID to identify from which subscription a given result was generated, especially when several subscriptions are made to the same destination. The dest argument MAY be null or empty, in which case results are delivered to a pre-arranged destination based on the authenticated identity of the caller. If the EPCIS implementation does not have a destination pre-

Operation Type	Operation	Description
		arranged for the caller, or does not permit this usage, it SHALL raise an InvalidURIException.
Web Service	unsubscribe	This operation removes a previously registered subscription having the specified subscriptionID.

Web Services

getQueryNames Operation

This operation is used to fetch all of the Query Names that the EPCIS QueryService endpoint supports.

Key Logic

There are only two queries (SimpleEventQuery and SimpleMasterDataQuery) that are supported by the EPCIS QueryService endpoint.

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 1.1 is implemented, so 1.1 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

This operation returns events in the EPCIS database, based on the request from the user.

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

<param>	<value> DataType	Can Specify Multiple Values	Enclosed in <string> </string>	Description
LT_recordTime	ISO 8601 Date	No	No	Identifies the Time when the event was captured.
GE_recordTime	Format YYYY-MM-DDTHH:MMZ. Hours, minutes, and offset is mandatory.	No	No	• 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.
EQ_bizTransaction_type	String	Yes	Yes	Identifies the type in the business step of the event.
MATCH_epc	String, Range	Yes	Yes	Identifies the epc codes in the event.
MATCH_parentId				• epc: Matches the epcList and childEpc
MATCH_anyEPC				• parentId: Matches the parent epc code
MATCH_epcClasses				• anyEpc: Matches the parent epc code, child epc, and epc list • epcClass: Matches the epc class code

<param>	<value> DataType	Can Specify Multiple Values	Enclosed in <string> </string>	Description
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.
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.

<param>	<value> DataType	Can Specify Multiple Values	Enclosed in <string> </string>	Description
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
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

<param>	<value> DataType	Can Specify Multiple Values	Enclosed in <string> </string>	Description
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.

<param>	<value> DataType	Can Specify Multiple Values	Enclosed in <string> </string>	Description
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.

getSubscriptionIDs Operation

This operation returns a list of all subscriptionIDs currently subscribed to the specified named query.

Key Logic

Returns a list of all subscriptionIDs currently subscribed to the specified named query.

Required Input

Name	Type	Mandatory	Description
queryName	String	Yes	SimpleEventQuery

Exceptions

None

Restrictions

None

Unsubscribe Operation

Removes a previously registered subscription having the specified subscriptionID.

Key Logic

Removes a previously registered subscription having the specified subscriptionID.

Required Input

Name	Type	Mandatory	Description
subscriptionID	String	Yes	Subscription ID for which the subscription has to be cancelled.

Exceptions

None

Restrictions

None

Subscribe Operation

This operation registers a subscriber for a previously defined query having the specified name.

Key Logic

This operation registers a subscriber for a previously defined query having the specified name. The params argument provides the values to be used for any named parameters defined by the query. The dest parameter specifies a destination where results from the query are to be delivered, through the Query Callback Interface. The dest parameter is a URI that both identifies a specific binding of the Query Callback Interface to use and specifies addressing information. The controls parameter controls how the subscription is to be processed; in particular, it specifies the conditions under which the query is to be invoked (e.g., specifying a periodic schedule). The subscriptionID is an arbitrary string that is copied into every response delivered to the specified destination, and otherwise not interpreted by the EPCIS service. The client may use the subscriptionID to identify from which subscription a given result was generated, especially when several subscriptions are made to the same destination.

The dest argument MAY be null or empty, in which case results are delivered to a pre-arranged destination based on the authenticated identity of the caller. If the EPCIS implementation does not have a destination pre-arranged for the caller, or does not permit this usage, it SHALL raise an InvalidURIException.

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 is more than the specified value.
- Size of the data returned is more than the specified value.

Restrictions

None

Input Request for Poll

Name	Type	Mandatory	Description
queryName	String	Yes	SimpleEventQuery.
name	String	No/Yes (see details that follow)	Similar to poll operation.
value	String/Integer/Float/Date/List	No/Yes (see details that follow)	Similar to poll operation.

WSDL

WSDL oracle.apps.pas.epc.service.query.EPCglobalEPCIService.wsdl

For detailed descriptions of all input and output parameters, please refer to the EPCglobalEPCIService wsdl, page C-3 for this endpoint.

Web Service Exceptions

Using the Web Service Exceptions page you can view the job instance messages created by these web service operations:

- mergeLot
- createTransaction
- editSerialStatusAndUsageByPrimaryDocument
- editSerialStatusAndUsageByLabel
- editSerialStatusAndUsageByList
- capture
- mergeProducts

A web service operation 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 endpoints not running errors using the Web Service Exceptions page. If the web service operations process 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 these operations:
 - captureEpcisDoc
 - createTransaction
 - editSerialStatusAndUsageByLabel
 - editSerialStatusAndUsageByList
 - editSerialStatusAndUsageByPrimaryDocument
 - HTTPPost
 - mergeLot
- Exceptions that occur when processing shipment and return transactions using the createTransaction operation.

- Counterfeit status updates that occur for a serial using the `editSerialStatusAndUsageByLabel`, `editSerialStatusAndUsageByList`, and `editSerialStatusAndUsageByPrimaryDocument` operations.

When processing transactions, serials, or lots using the `createTransaction`, `editSerialStatusAndUsageByLabel`, `editSerialStatusAndUsageByList`, and `editSerialStatusAndUsageByPrimaryDocument`, and `mergeLot` web service operations 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 operation 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 operation is a mismatch from the data in OPSM.

When shipment or return transactions fail while being processed by the `createTransaction` web service operation an exception is logged and these exceptions are reported in the OPSM Dashboard under the Transaction Exceptions component. These exceptions are also sent in the e-mail notifications only if e-mail notifications are enabled.

Finally, when the counterfeit status is updated on a serial using the `editSerialStatusAndUsageByLabel`, `editSerialStatusAndUsageByList`, and `editSerialStatusAndUsageByPrimaryDocument` web services operations, 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 only if e-mail notifications are enabled.

OPSM using Oracle Scheduler sends 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 is 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 receives 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 receives 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 queries 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 uses the information you define in the System Parameters page to determine if notifications are to be sent and the time interval when the scheduler runs. In addition, the Oracle Scheduler also uses the e-mail addresses you define on the System Parameters page and Location Contacts tab of the Location page to determine the individuals that receive the e-mail notifications.

For more information, see:

- Maintaining System Parameters, page 4-24.
- Maintaining Locations, page 4-47.
- *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 registers 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 service operations (createTransaction, editSerialStatusAndUsageByLabel, editSerialStatusAndUsageByList, and editSerialStatusAndUsageByPrimaryDocument, and mergeLot) 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 service operations (createTransaction, editSerialStatusAndUsageByLabel, editSerialStatusAndUsageByList, and editSerialStatusAndUsageByPrimaryDocument, and mergeLot) that had issues are executed again.

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 Security Role	• Maintain Location Security Roles > (M) Actions > Create • Maintain Location Security Roles > (I) Create Location Security Role
Create Location	• Maintain Locations > (M) Actions > Create • Maintain Locations > (I) Create

Page	Navigator Menu Path
Create Location Group	• Maintain Location Groups > (M) Actions > Create • Maintain Location Groups > (I) Create Location Group
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

Page	Navigator Menu Path
Create Serial Destination	• Maintain Serial Destinations > (M) Actions > Create • Maintain Serial Destinations > (I) Create
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 Group	• Maintain User Groups > (M) Actions > Create • Maintain User Groups > (I) Create User Group
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

Page	Navigator Menu Path
Edit Location Security Role	• Maintain Location Security Roles > (M) Actions > Edit • Maintain Location Security Roles > (I) Edit Location Security Role in search results table
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
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

Page	Navigator Menu Path
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
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

Page	Navigator Menu Path
Location Security Setup	• (T) System Setup > (T) Location Security Setup • (T) System Setup > Select Location Security Setup link in Tasks region • (T) Dashboard > Select Location Security Setup link in Tasks region
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 Location Security Roles	• (T) System Setup > (T) Maintain Location Security Roles • (T) System Setup > Select Maintain Location Security Roles link in Tasks region • (T) Dashboard > Select Maintain Location Security Roles 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 User Groups	• (T) System Setup > (T) Maintain User Groups • (T) System Setup > Select Maintain User Groups link in Tasks region • (T) Dashboard > Select Maintain User Groups link in Tasks region
Maintain Users	• (T) System Setup > (T) Maintain Users • (T) System Setup > Select Maintain Users link in Tasks region • (T) Dashboard > Select Maintain Users link in Tasks region

Page	Navigator Menu Path
Operations Dashboard	• (T) Dashboard • (T) Dashboard > Select Operations Dashboard link in Tasks region
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]

Page	Navigators Menu Path
View Location Security Role	Maintain Location Security Roles > Click the Location Security Role link in search results table
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
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 User Group	• Maintain User Groups > Click the User Group 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

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 4-5.

OPSM Lookup Types and Codes - User Defined Access Level

Lookup Type	Lookup Type Meaning	Lookup Type Description	Lookup Codes
PAS_CONTAINER_T YPE	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 is not 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 indicates 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

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 is 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_INCREMENTAL, 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_INCREMENTAL, 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 is used for the product information extract.	None by default. Oracle provides these lookup codes for the integration between Oracle E-Business Suite and OPM: - 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 is 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 is 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_INCREMENTAL, EBS Discrete Incremental, EBS Discrete Incremental Load • EBS_WO_SERIAL_PROCESS_FULL, EBS Process Full, EBS Process Full Load • EBS_WO_SERIAL_PROCESS_INCREMENTAL, 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_ADDRESS_CODE	Address Code	The type of address (i.e. source, destination, etc.)	• DESTINATION, Destination Address, Destination Address • SOURCE, Source Address, Source Address
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_TYPE	Address Type	The type of address (i.e. shipping, business, etc.)	- BUSINESS, Business Address, Business Address - SHIPPING, Shipping Address, Shipping 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 is 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_TY PES	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_TY PES	Pure Type	EPCIS Pure Type	• 0, GID, General Identifier [urn: epc:id:gid: GeneralManager Number. 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. IndividualAssetR

Lookup Type	Lookup Type Meaning	Lookup Type Description	Lookup Code, Meaning, and Description
			eference] • 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_STATU S	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_MERGE_CONTROL	Lot Merge Control	Identifies how lot merges are controlled Reserved for future.	- AUTOMATIC, Automatic, Automatic - MANUAL, Manual, Manual
PAS_LOT_SPLIT_CONTROL	Lot Split Control	Identifies how lot splits are controlled Reserved for future.	- AUTOMATIC, Automatic, Automatic - MANUAL, Manual, Manual

Lookup Type	Lookup Type Meaning	Lookup Type Description	Lookup Code, Meaning, and Description
PAS_LOT_SYNCH_ACTIONS	Actions for Lot Synchronization	Actions for Lot Synchronization (Extract, Merge, etc.)	- EXTRACT, Extract Lots, Extract, Lots - EXTRACTAND MERGE, Extract Lots and Merge Lots, Extract Lots and Merge Lots from Lot Interface table - MERGE, Merge Lots, Merge Lots from Lot Interface table
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

Lookup Type	Lookup Type Meaning	Lookup Type Description	Lookup Code, Meaning, and Description
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
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

Lookup Type	Lookup Type Meaning	Lookup Type Description	Lookup Code, Meaning, and Description
PAS_PRIMARY_NO NPRIMARY	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.	- CUSTOM, Custom, Custom - 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 - SERIALNUMBER RANGE, 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

Lookup Type	Lookup Type Meaning	Lookup Type Description	Lookup Code, Meaning, and Description
PAS_RULES_TRANS_TYPE	Destination Rules Transaction Type	Transaction Type that sends Serials to the Destination.	• COMMISSION, Commission Serials, Commission Serials • DECOMMISSION, Decommission Serials, Decommission Serials • GENERATE, Serial Generation, Serial Generation • IMPORT, Import Serials, Import Serials • RECEIPT, Receipt, Receipt • RESERVE, Reserve Serials, Reserve Serials • RETURN, Return, Return • SERIALEDIT, Edit Serials, Edit Serials • SHIPMENT, Shipment, Shipment

Lookup Type	Lookup Type Meaning	Lookup Type Description	Lookup Code, Meaning, and Description
PAS_SECURITY_ACCESS_ASSIGNMENT	Location Security Access Assignment	A lookup used to determine if security assignment is defined at the Location or Location Group level.	• LOCATION, Location, A location which has been predefined in the Maintain Locations user interface • LOCATION_GROUP, Location Group, A group of locations which has been predefined in the Maintain Location Groups user interface

Lookup Type	Lookup Type Meaning	Lookup Type Description	Lookup Code, Meaning, and Description
PAS_SECURITY_ACCESS_LEVEL	Location Security Access Level	A lookup used to determine if security access is defined at the Role, User Group, or Username level.	• ROLE, Location Security Role, A group of users which has been predefined in the Maintain Location Security Roles user interface • USER, OPSM User, A user who has been defined in the Maintain Users user interface • USER_GROUP, Location Security User Group, A group of users which has been predefined in the Maintain User Groups user interface
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.	• EXTERNALLY GENERATED, Externally Generated, Externally Generated • OPSMSERIALIZED, OPSM Serialized, OPSM Serialized
PAS_SERIAL_INCREMENT_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.	• RECEIVED, Received, Received • RETURNED, Returned, Returned • SHIPPED, Shipped, Shipped

Lookup Type	Lookup Type Meaning	Lookup Type Description	Lookup Code, Meaning, and Description
PAS_SERIAL_STATU S	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_SYSTM_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 • RECEIPT, Receipt, Receipt • RESERVE, Reserve Serials, Reserve Serials • RETURN, Return, Return • SERIALEDIT, Edit Serials, Edit Serials • SHIPMENT, Shipment, Shipment • TRANSMIT, Serial

Lookup Type	Lookup Type Meaning	Lookup Type Description	Lookup Code, Meaning, and Description
			Transmission, Serial Transmission
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_SERVICE S	Web Services for Exception Handling Review	Web Services for Exception Handling Review	• CAPTUREEPCIS DOC, captureEpcisDoc, captureEpcisDoc Web Service • CREATETRANS ACTION, 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_SERIALI ZATION_ACTIONS	Actions for Work Order Serialization	Actions for Work Order Serialization.	• EXTRACT, Extract Work Orders, Extract Work Orders • EXTRACTANDP ROCESS, 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

Web Service WSDLs

This appendix covers the following topics:

- Web Service WSDLs

Web Service WSDLs

This section lists all of the web service wsdl's and provides the structure of each wsdl.

For more information on the OPSM and EPCIS web services and PL/SQL services, see the *Web Services and PL/SQL 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_1.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/opsmsservices-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_1.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/transactionsService/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/transactionsService/applicationModule/common/"
  xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"
  xmlns:types="http://xmlns.oracle.
com/apps/pas/transactions/transactionsService/applicationModule/common/t
ypes/"
>
  <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/transactionsService/applicationModule/common/t
ypes/"
      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/transactionsService/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/transactionsService/applicationModule/common/c
reateJobInstanceAsync"/>
  </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/Fault"/>
  </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/transactionsService/applicationModule/common/c
reateJobInstanceAsyncResponse"/>
  </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/transactionsService/applicationModule/common/c
reateJobInstance"/>
    <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/transactionsService/applicationModule/common/c
reateJobInstanceAsync"/>
    <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/Fault"/>
      <wsdl:input>
        <soap:body use="literal"/>
      </wsdl:input>
    </wsdl:operation>
    <wsdl:operation name="createJobInstanceAsyncResponse">
      <soap:operation soapAction="http://xmlns.oracle.
com/apps/pas/transactions/transactionsService/applicationModule/common/c
reateJobInstanceAsyncResponse"/>
      <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/opsmsservices-
transactions/JobInstanceServiceAMService"/>
    </wsdl:port>
  </wsdl:service>
</wsdl:definitions>

```

LotsServiceAMService WSDL

```

<wsdl:definitions
  name="LotsServiceAMService"
  targetNamespace="
/oracle/apps/pas/serials/serialsService/applicationModule/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/common/"
  xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"
  xmlns:types="
/oracle/apps/pas/serials/serialsService/applicationModule/common/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/common/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 LotProductV0
        ProductCode
        ProductCodeType
        ProductCodeVariant
        ProductUom
      or
        ItemNumber and LotItemV0
        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.
    </wsdl:documentation>
  </wsdl:portType>
</wsdl:portType>

```


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/common/mergeLo
t"/>
    <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-PasSerialsService-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/applicationModule/common/"
    xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"
    xmlns:types="http://xmlns.oracle.
com/apps/pas/serials/serialsService/applicationModule/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/applicationModule/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 - Identifier 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
                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/applicationModule/common/unpackPacka
geAsync"/>
        </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/applicationModule/common/packPackage
Async"/>

```

```

</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/Fault"/>
    </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/applicationModule/common/unpackPacka
geAsyncResponse"/>
    </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/applicationModule/common/packPackage
AsyncResponse"/>
    </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/applicationModule/common/unpackPacka
ge"/>
      <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/applicationModule/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/applicationModule/common/unpackPacka
geAsync"/>
      <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/applicationModule/common/packPackage
Async"/>
        <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/Fault"/>
        <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/applicationModule/common/unpackPacka
geAsyncResponse"/>
        <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/applicationModule/common/packPackage
AsyncResponse"/>
        <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/opsmsservices-
serials/PackagingServiceAMService"/>
    </wsdl:port>
</wsdl:service>
</wsdl:definitions>

```

ProductServiceAMService WSDL

```
<wsdl:definitions
  name="ProductServiceAMService"
  targetNamespace="http://xmlns.oracle.
com/oracle/apps/pas/setup/setupService/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/applicationModule/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/applicationModule/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/Fault"/>
    </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/applicationModule/common/mergePro
ductsAsyncResponse"/>
    </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/applicationModule/common/mergePro
ductsAsync"/>
    </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/Fault"/>
      <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/applicationModule/common/mergePro
ductsAsyncResponse"/>
      <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/applicationModule/common/mergePro
ducts"/>
      <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/applicationModule/common/mergePro
ductsAsync"/>
    <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/ProductServiceAMService"/>
    </wsdl:port>
</wsdl:service>
</wsdl:definitions>

```

SerialGenRequestServiceAMService WSDL

SerialGenRequestServiceAMService WSDL


```

<wsdl:definitions
  name="SerialGenRequestServiceAMService"
  targetNamespace="http://xmlns.oracle.
com/apps/pas/transactions/transactionsService/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/transactionsService/applicationModule/common/"
  xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"
  xmlns:types="http://xmlns.oracle.
com/apps/pas/transactions/transactionsService/applicationModule/common/t
ypes/"
>
  <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/transactionsService/applicationModule/common/t
ypes/"
          schemaLocation="SerialGenRequestServiceAMService.xsd"/>
    </schema>
  </wsdl:types>
  <wsdl:message name="
SerialGenRequestServiceAMService_createSerialGenerationRequest">
    <wsdl:part name="parameters" element="types:
createSerialGenerationRequest"/>
  </wsdl:message>
  <wsdl:message name="
SerialGenRequestServiceAMService_createSerialGenerationRequestResponse">
    <wsdl:part name="parameters" element="types:
createSerialGenerationRequestResponse"/>
  </wsdl:message>
  <wsdl:message name="
SerialGenRequestServiceAMService_createSerialGenerationRequestAsync">
    <wsdl:part name="parameters" element="types:
createSerialGenerationRequestAsync"/>
  </wsdl:message>
  <wsdl:message name="
SerialGenRequestServiceAMService_createProcessSerialGenerationRequest">
    <wsdl:part name="parameters" element="types:
createProcessSerialGenerationRequest"/>
  </wsdl:message>
  <wsdl:message name="
SerialGenRequestServiceAMService_createProcessSerialGenerationRequestRes
ponse">
    <wsdl:part name="parameters" element="types:
createProcessSerialGenerationRequestResponse"/>
  </wsdl:message>
  <wsdl:message name="
SerialGenRequestServiceAMService_createProcessSerialGenerationRequestAsy

```

```

nc">
    <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_createSerialGenerationRequestAsyncRespo
nse">
        <wsdl:part name="parameters" element="types:
createSerialGenerationRequestAsyncResponse"/>
    </wsdl:message>
    <wsdl:message name="
SerialGenRequestServiceAMService_createProcessSerialGenerationRequestAsy
ncResponse">
        <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/transactionsService/view/common/"
SDOName="ns0:SerialGenerationRequestVOSDO"
CreateOpName="createSerialGenerationRequest"/>
        </wsdl:documentation>
        <wsdl:operation name="createSerialGenerationRequest">
            <wsdl:input message="tns:
SerialGenRequestServiceAMService_createSerialGenerationRequest"/>
            <wsdl:output message="tns:
SerialGenRequestServiceAMService_createSerialGenerationRequestResponse"
/>
            <wsdl:fault name="ServiceException" message="errors:
ServiceException"/>
        </wsdl:operation>
        <wsdl:operation name="createSerialGenerationRequestAsync">
            <wsdl:input message="tns:
SerialGenRequestServiceAMService_createSerialGenerationRequestAsync"
xmlns:ns1="http://www.w3.org/2006/05/addressing/wsdl"
ns1:Action="http://xmlns.oracle.
com/apps/pas/transactions/transactionsService/applicationModule/common/c
reateSerialGenerationRequestAsync"/>
            </wsdl:operation>
            <wsdl:operation name="createProcessSerialGenerationRequest">
                <wsdl:input message="tns:
SerialGenRequestServiceAMService_createProcessSerialGenerationRequest"/>
                <wsdl:output message="tns:
SerialGenRequestServiceAMService_createProcessSerialGenerationRequestRes
ponse"/>
                <wsdl:fault name="ServiceException" message="errors:
ServiceException"/>
            </wsdl:operation>
            <wsdl:operation name="createProcessSerialGenerationRequestAsync"
>
                <wsdl:input message="tns:
SerialGenRequestServiceAMService_createProcessSerialGenerationRequestAsy
nc"
xmlns:ns1="http://www.w3.org/2006/05/addressing/wsdl"
ns1:Action="http://xmlns.oracle.
com/apps/pas/transactions/transactionsService/applicationModule/common/c
reateProcessSerialGenerationRequestAsync"/>
                </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/Fault"/>
  </wsdl:operation>
  <wsdl:operation name="
createSerialGenerationRequestAsyncResponse">
    <wsdl:input message="tns:
SerialGenRequestServiceAMService_createSerialGenerationRequestAsyncRespo
nse"
      xmlns:ns1="http://www.w3.org/2006/05/addressing/wsdl"
      ns1:Action="http://xmlns.oracle.
com/apps/pas/transactions/transactionsService/applicationModule/common/c
reateSerialGenerationRequestAsyncResponse"/>
    </wsdl:operation>
    <wsdl:operation name="
createProcessSerialGenerationRequestAsyncResponse">
      <wsdl:input message="tns:
SerialGenRequestServiceAMService_createProcessSerialGenerationRequestAsy
ncResponse"
        xmlns:ns1="http://www.w3.org/2006/05/addressing/wsdl"
        ns1:Action="http://xmlns.oracle.
com/apps/pas/transactions/transactionsService/applicationModule/common/c
reateProcessSerialGenerationRequestAsyncResponse"/>
      </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/Fault"/>
        <wsdl:input>
          <soap:body use="literal"/>
        </wsdl:input>
      </wsdl:operation>
      <wsdl:operation name="
createSerialGenerationRequestAsyncResponse">
        <soap:operation soapAction="http://xmlns.oracle.
com/apps/pas/transactions/transactionsService/applicationModule/common/c
reateSerialGenerationRequestAsyncResponse"/>
        <wsdl:input>
          <soap:body use="literal"/>
        </wsdl:input>
      </wsdl:operation>
      <wsdl:operation name="
createProcessSerialGenerationRequestAsyncResponse">
        <soap:operation soapAction="http://xmlns.oracle.
com/apps/pas/transactions/transactionsService/applicationModule/common/c
reateProcessSerialGenerationRequestAsyncResponse"/>
        <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/transactionsService/applicationModule/common/c
reateSerialGenerationRequest"/>

```

```

<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/transactionsService/applicationModule/common/c
reateSerialGenerationRequestAsync"/>
    <wsdl:input>
        <soap:body use="literal"/>
    </wsdl:input>
</wsdl:operation>
<wsdl:operation name="createProcessSerialGenerationRequest">
    <soap:operation soapAction="http://xmlns.oracle.
com/apps/pas/transactions/transactionsService/applicationModule/common/c
reateProcessSerialGenerationRequest"/>
    <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/transactionsService/applicationModule/common/c
reateProcessSerialGenerationRequestAsync"/>
    <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/SerialGenRequestServiceAMService"/>
    </wsdl:port>
</wsdl:service>
</wsdl:definitions>

```

createProcessSerialGenerationRequest Response WSDL

```

<xsd:schema elementFormDefault="qualified" targetNamespace="http://xmlns.oracle.com/oracle/apps/pas/transactions/transactionsService/view/common/" sdoJava:package="oracle.apps.pas.transactions.transactionsService.view.common" xmlns:ns0="http://xmlns.oracle.com/adf/svc/types/" xmlns:sdoJava="commonj.sdo/java" xmlns:sdoXML="commonj.sdo/xml" xmlns="http://xmlns.oracle.com/oracle/apps/pas/transactions/transactionsService/view/common/" xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <xsd:import namespace="http://xmlns.oracle.com/adf/svc/types/" schemaLocation="http://slc07ifj.us.oracle.com:8001/opsmsservices-transactions/SerialGenRequestServiceAMService?XSD=/META-INF/wsd/BC4JService.xsd"/>
  <xsd:import namespace="commonj.sdo/java" schemaLocation="http://slc07ifj.us.oracle.com:8001/opsmsservices-transactions/SerialGenRequestServiceAMService?XSD=/xml/sdoJava.xsd"/>
  <xsd:import namespace="commonj.sdo/xml" schemaLocation="http://slc07ifj.us.oracle.com:8001/opsmsservices-transactions/SerialGenRequestServiceAMService?XSD=/xml/sdoXML.xsd"/>
  <xsd:include schemaLocation="http://slc07ifj.us.oracle.com:8001/opsmsservices-transactions/SerialGenRequestServiceAMService?XSD=/oracle/apps/pas/transactions/transactionsService/view/common/SerialNumberList.xsd"/>
  <xsd:complexType name="SerialGenerationRequestResponse">
    <xsd:annotation>
      <xsd:appinfo source="http://xmlns.oracle.com/adf/svc/metadata/">
        <key xmlns="http://xmlns.oracle.com/adf/svc/metadata/">
          <attribute>SerialGenRequestId</attribute>
          <attribute>LocationId1</attribute>
          <attribute>ProductDetailId1</attribute>
          <attribute>ProductId</attribute>
        </key>
      </xsd:appinfo>
    </xsd:annotation>
    <xsd:sequence>
      <xsd:element minOccurs="0" name="GenerationStatus" nillable="true" type="xsd:string"/>
      <xsd:element minOccurs="0" name="SourceSystem" type="xsd:string"/>
      <xsd:element minOccurs="0" name="SerialQuantity" nillable="true" type="xsd:decimal"/>
      <xsd:element minOccurs="0" name="StartingSerialNumber" nillable="true" type="xsd:decimal"/>
      <xsd:element minOccurs="0" name="EndingSerialNumber" nillable="true" type="xsd:decimal"/>
      <xsd:element minOccurs="0" name="IgnoreOverageFlag" type="xsd:string"/>
      <xsd:element minOccurs="0" name="SaleableUnitFlag" type="xsd:string"/>
      <xsd:element minOccurs="0" name="EpcNumber" nillable="true" type="xsd:string"/>
      <xsd:element minOccurs="0" name="GlobalLocationNumber" nillable="true" type="xsd:string"/>
      <xsd:element minOccurs="0" name="LocationId" type="xsd:long" sdoXML:dataType="sdoJava:LongObject"/>
      <xsd:element minOccurs="0" name="Location" type="xsd:string"/>
      <xsd:element minOccurs="0" name="SerialUsage" nillable="true" type="xsd:string"/>
      <xsd:element minOccurs="0" name="ProductDetailId" nillable="true" type="xsd:long"/>
      <xsd:element minOccurs="0" name="ProductCode" type="xsd:string"/>
      <xsd:element minOccurs="0" name="ProductCodeType" type="xsd:string"/>
      <xsd:element minOccurs="0" name="ProductCodeVariant" type="xsd:

```

```

string"/>
    <xsd:element minOccurs="0" name="ProductUom" type="xsd:string"
/>
    <xsd:element minOccurs="0" name="ItemNumber" nillable="true"
type="xsd:string"/>
    <xsd:element minOccurs="0" name="ItemSource" type="xsd:string"
/>
    <xsd:element minOccurs="0" name="SerializedUom" nillable="true"
type="xsd:string"/>
    <xsd:element minOccurs="0" name="LotId" nillable="true" type="
xsd:long"/>
    <xsd:element minOccurs="0" name="LotNumber" nillable="true"
type="xsd:string"/>
    <xsd:element minOccurs="0" name="LotLocation" nillable="true"
type="xsd:string"/>
    <xsd:element minOccurs="0" name="LotSource" nillable="true"
type="xsd:string"/>
    <xsd:element minOccurs="0" name="ParentLot" nillable="true"
type="xsd:string"/>
    <xsd:element minOccurs="0" name="OriginationDate" nillable="
true" type="ns0:date-Date"/>
    <xsd:element minOccurs="0" name="ExpirationDate" nillable="
true" type="ns0:date-Date"/>
    <xsd:element minOccurs="0" name="BestByDate" nillable="true"
type="ns0:date-Date"/>
    <xsd:element minOccurs="0" name="SellByDate" nillable="true"
type="ns0:date-Date"/>
    <xsd:element minOccurs="0" name="RetestDate" nillable="true"
type="ns0:date-Date"/>
    <xsd:element minOccurs="0" name="Segment1" nillable="true"
type="xsd:string"/>
    <xsd:element minOccurs="0" name="Segment2" nillable="true"
type="xsd:string"/>
    <xsd:element minOccurs="0" name="Segment3" nillable="true"
type="xsd:string"/>
    <xsd:element minOccurs="0" name="Segment4" nillable="true"
type="xsd:string"/>
    <xsd:element minOccurs="0" name="Segment5" nillable="true"
type="xsd:string"/>
    <xsd:element minOccurs="0" name="Segment6" nillable="true"
type="xsd:string"/>
    <xsd:element minOccurs="0" name="Segment7" nillable="true"
type="xsd:string"/>
    <xsd:element minOccurs="0" name="Segment8" nillable="true"
type="xsd:string"/>
    <xsd:element minOccurs="0" name="Segment9" nillable="true"
type="xsd:string"/>
    <xsd:element minOccurs="0" name="Segment10" nillable="true"
type="xsd:string"/>
    <xsd:element minOccurs="0" name="AlternateSegment1" nillable="
true" type="xsd:string"/>
    <xsd:element minOccurs="0" name="AlternateSegment2" nillable="
true" type="xsd:string"/>
    <xsd:element minOccurs="0" name="AlternateSegment3" nillable="
true" type="xsd:string"/>
    <xsd:element minOccurs="0" name="AlternateSegment4" nillable="
true" type="xsd:string"/>
    <xsd:element minOccurs="0" name="AlternateSegment5" nillable="
true" type="xsd:string"/>
    <xsd:element minOccurs="0" name="AlternateSegment6" nillable="
true" type="xsd:string"/>
    <xsd:element minOccurs="0" name="AlternateSegment7" nillable="
true" type="xsd:string"/>
    <xsd:element minOccurs="0" name="AlternateSegment8" nillable="
true" type="xsd:string"/>
    <xsd:element minOccurs="0" name="AlternateSegment9" nillable="

```

```

true" type="xsd:string"/>
      <xsd:element minOccurs="0" name="AlternateSegment10" nillable="
true" type="xsd:string"/>
      <xsd:element minOccurs="0" name="StatusMessage" nillable="true"
type="xsd:string"/>
      <xsd:element maxOccurs="unbounded" minOccurs="0" name="
SerialNumberListV0" type="SerialNumberList"/>
    </xsd:sequence>
  </xsd:complexType>
  <xsd:element name="serialGenerationRequestResponse" type="
SerialGenerationRequestResponse"/>
</xsd:schema>

```

SerialsServiceAMService WSDL

```

<wsdl:definitions
  name="SerialsServiceAMService"
  targetNamespace="http://xmlns.oracle.
com/oracle/apps/pas/transactions/transactionsService/applicationModule/c
ommon/"
  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/transactionsService/applicationModule/c
ommon/"
  xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"
  xmlns:types="http://xmlns.oracle.
com/oracle/apps/pas/transactions/transactionsService/applicationModule/c
ommon/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/transactionsService/applicationModule/c
ommon/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_editSerialStatusAndUsageByPrimaryDocumentRespons
e">
  <wsdl:part name="parameters" element="types:
editSerialStatusAndUsageByPrimaryDocumentResponse"/>
</wsdl:message>
<wsdl:message name="
SerialsServiceAMService_editSerialStatusAndUsageByPrimaryDocumentAsync">
  <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_editSerialStatusAndUsageByLabelAsyncResponse">
  <wsdl:part name="parameters" element="types:
editSerialStatusAndUsageByLabelAsyncResponse"/>
</wsdl:message>
<wsdl:message name="
SerialsServiceAMService_editSerialStatusAndUsageByListAsyncResponse">
  <wsdl:part name="parameters" element="types:
editSerialStatusAndUsageByListAsyncResponse"/>
</wsdl:message>
<wsdl:message name="
SerialsServiceAMService_editSerialStatusAndUsageByPrimaryDocumentAsyncRe
sponse">
  <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/transactionsService/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/transactionsService/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/transactionsService/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/transactionsService/view/common/"
SDOName="ns0:
EditSerialStatusAndUsageByListResponseVOSDO"/>

```

```

</wsdl:documentation>
  <wsdl:operation name="editSerialStatusAndUsageByLabel">
    <wsdl:input message="tns:
SerialsServiceAMService_editSerialStatusAndUsageByLabel"/>
    <wsdl:output message="tns:
SerialsServiceAMService_editSerialStatusAndUsageByLabelResponse"/>
    <wsdl:fault name="ServiceException" message="errors:
ServiceException"/>
  </wsdl:operation>
  <wsdl:operation name="editSerialStatusAndUsageByLabelAsync">
    <wsdl:input message="tns:
SerialsServiceAMService_editSerialStatusAndUsageByLabelAsync"
      xmlns:ns1="http://www.w3.org/2006/05/addressing/wsdl"
      ns1:Action="http://xmlns.oracle.
com/oracle/apps/pas/transactions/transactionsService/applicationModule/c
ommon/editSerialStatusAndUsageByLabelAsync"/>
    </wsdl:operation>
  <wsdl:operation name="editSerialStatusAndUsageByList">
    <wsdl:input message="tns:
SerialsServiceAMService_editSerialStatusAndUsageByList"/>
    <wsdl:output message="tns:
SerialsServiceAMService_editSerialStatusAndUsageByListResponse"/>
    <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/transactionsService/applicationModule/c
ommon/editSerialStatusAndUsageByListAsync"/>
    </wsdl:operation>
  <wsdl:operation name="editSerialStatusAndUsageByPrimaryDocument"
>
    <wsdl:input message="tns:
SerialsServiceAMService_editSerialStatusAndUsageByPrimaryDocument"/>
    <wsdl:output message="tns:
SerialsServiceAMService_editSerialStatusAndUsageByPrimaryDocumentRespons
e"/>
    <wsdl:fault name="ServiceException" message="errors:
ServiceException"/>
  </wsdl:operation>
  <wsdl:operation name="
editSerialStatusAndUsageByPrimaryDocumentAsync">
    <wsdl:input message="tns:
SerialsServiceAMService_editSerialStatusAndUsageByPrimaryDocumentAsync"
      xmlns:ns1="http://www.w3.org/2006/05/addressing/wsdl"
      ns1:Action="http://xmlns.oracle.
com/oracle/apps/pas/transactions/transactionsService/applicationModule/c
ommon/editSerialStatusAndUsageByPrimaryDocumentAsync"/>
    </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/Fault"/>
    </wsdl:operation>
    <wsdl:operation name="
editSerialStatusAndUsageByLabelAsyncResponse">
      <wsdl:input message="tns:
SerialsServiceAMService_editSerialStatusAndUsageByLabelAsyncResponse"
xmlns:ns1="http://www.w3.org/2006/05/addressing/wsdl"
      ns1:Action="http://xmlns.oracle.

```

```

com/oracle/apps/pas/transactions/transactionsService/applicationModule/c
ommon/editSerialStatusAndUsageByLabelAsyncResponse"/>
    </wsdl:operation>
    <wsdl:operation name="
editSerialStatusAndUsageByListAsyncResponse">
        <wsdl:input message="tns:
SerialsServiceAMService_editSerialStatusAndUsageByListAsyncResponse"
xmlns:ns1="http://www.w3.org/2006/05/addressing/wsdl"
ns1:Action="http://xmlns.oracle.
com/oracle/apps/pas/transactions/transactionsService/applicationModule/c
ommon/editSerialStatusAndUsageByListAsyncResponse"/>
    </wsdl:operation>
    <wsdl:operation name="
editSerialStatusAndUsageByPrimaryDocumentAsyncResponse">
        <wsdl:input message="tns:
SerialsServiceAMService_editSerialStatusAndUsageByPrimaryDocumentAsyncRe
sponse"
xmlns:ns1="http://www.w3.org/2006/05/addressing/wsdl"
ns1:Action="http://xmlns.oracle.
com/oracle/apps/pas/transactions/transactionsService/applicationModule/c
ommon/editSerialStatusAndUsageByPrimaryDocumentAsyncResponse"/>
    </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/Fault"/>
        <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/transactionsService/applicationModule/c
ommon/editSerialStatusAndUsageByLabelAsyncResponse"/>
        <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/transactionsService/applicationModule/c
ommon/editSerialStatusAndUsageByListAsyncResponse"/>
        <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/transactionsService/applicationModule/c
ommon/editSerialStatusAndUsageByPrimaryDocumentAsyncResponse"/>
        <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/transactionsService/applicationModule/c
ommon/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/transactionsService/applicationModule/c
ommon/editSerialStatusAndUsageByLabelAsync"/>
  <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/transactionsService/applicationModule/c
ommon/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/transactionsService/applicationModule/c
ommon/editSerialStatusAndUsageByListAsync"/>
  <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/transactionsService/applicationModule/c
ommon/editSerialStatusAndUsageByPrimaryDocument"/>
  <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/transactionsService/applicationModule/c
ommon/editSerialStatusAndUsageByPrimaryDocumentAsync"/>
  <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/SerialsServiceAMService"/>
    </wsdl:port>
  </wsdl:service>
</wsdl:definitions>
```

TransactionsServiceAMService WSDL

```

<wsdl:definitions name="TransactionsServiceAMService"
    targetNamespace="http://xmlns.oracle.
com/apps/pas/transactions/transactionsService/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/transactionsService/applicationModule/common/"
    xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"
    xmlns:types="http://xmlns.oracle.
com/apps/pas/transactions/transactionsService/applicationModule/common/t
ypes/">
    <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/transactionsService/applicationModule/common/t
ypes/"
                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/transactionsService/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/transactionsService/applicationModule/common/c
reateTransactionAsync"/>
</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/Fault"/>
  </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/transactionsService/applicationModule/common/c
reateTransactionAsyncResponse"/>
  </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/transactionsService/applicationModule/common/c
reateTransaction"/>
    <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/transactionsService/applicationModule/common/c

```

```

    reateTransactionAsync"/>
        <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/Fault"/>
        <wsdl:input>
            <soap:body use="literal"/>
        </wsdl:input>
    </wsdl:operation>
    <wsdl:operation name="createTransactionAsyncResponse">
        <soap:operation soapAction="http://xmlns.oracle.
com/apps/pas/transactions/transactionsService/applicationModule/common/c
reateTransactionAsyncResponse"/>
        <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/opsmsservices-
transactions/TransactionsServiceAMService"/>
    </wsdl:port>
</wsdl:service>
</wsdl:definitions>

```

Version and Build Information

This appendix covers the following topics:

- Viewing Version and Build Information

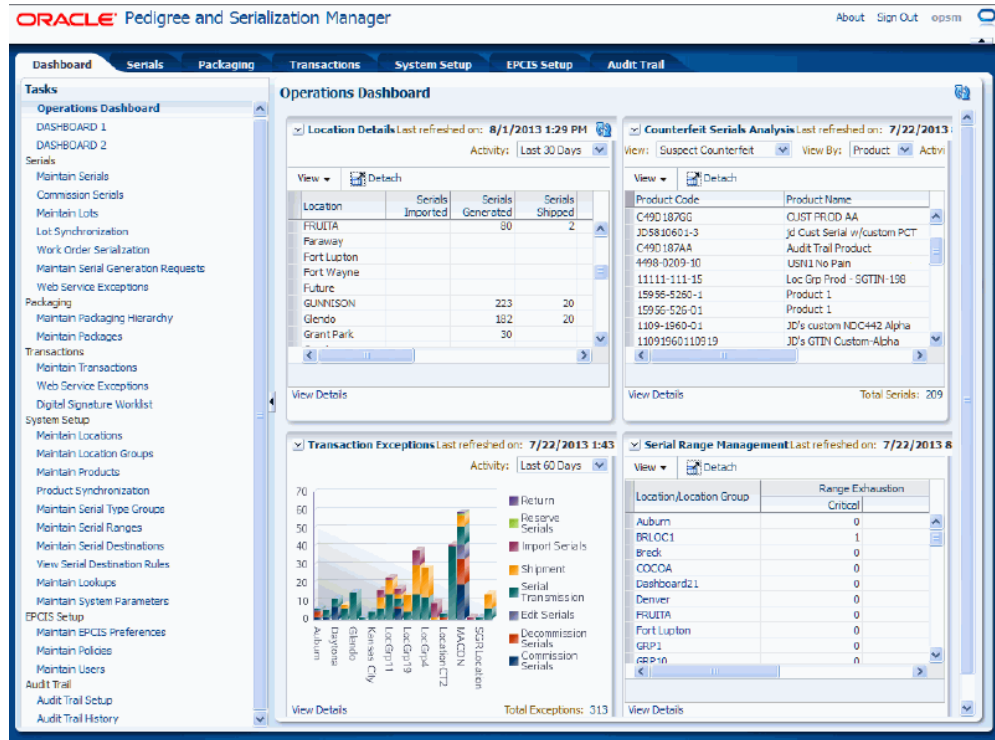
Viewing Version and Build Information

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:

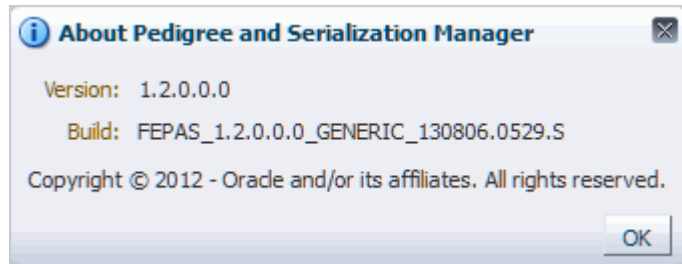
1. Log in to the OPSM application.

Operations Dashboard page



- 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.

- To close the About Pedigree and Serialization Manager dialog box, click the OK button.
The About Pedigree and Serialization Manager dialog box closes.

Using Custom Serial Generation

This appendix covers the following topics:

- Using the PAS_SERIAL_GEN.generate_serial Procedure
- Using the PAS_SERIAL_VAL.validate_serial Procedure

Using the PAS_SERIAL_GEN.generate_serial Procedure

You can use the PAS_SERIAL_GEN.generate_serial Procedure to implement the following:

- Generate custom serial number logic.

Note: Custom serials must belong to a serial type group that is flagged as product-specific.

- Use uniqueness check.

The uniqueness check is for custom serial numbers.

- Generate serials using the serial_next parameter.

The PAS_SERIAL_GEN.generate_serial procedure is located within the Oracle Pedigree and Serialization Manager (OPSM) database and can be found under the "Packages" folder within the database.

Implementation of the generate custom serial number logic is required. However, implementation for the use uniqueness check and generate serials using the serial_next parameter are optional.

The table below contains a description of all of the parameters used in the PAS_SERIAL_GEN.generate_serial procedure:

Note: Do not change the initial values for the variables that are

assigned in this procedure. These variables can be changed when customizing serial number generation logic.

For more information on customizing serial generation logic, see:

- Generating Custom Serial Number Logic, page E-4
- Using Uniqueness Check, page E-4
- Generating Serials Using the Serial_Next Parameter, page E-5

PAS_SERIAL_GEN.generate_serial Procedure Parameters

Parameter	Description
p_location_id	The location that is used for the Serial Generation Request.
p_product_detail_id	The product detail Id (from table pas_s_product_details), if specified in Serial Generation Request, else it will be zero.
p_serial_type	The serial type for which the procedure will be used to generate the serial number.
p_serial_min	The minimum value for range of values that can be used for the serial number.
p_serial_max	The maximum value for range of values that can be used for the serial number.
p_serial_number	The serial number created by the procedure.
p_serial_unique_check_string	The unique check string created by the procedure which would be used to check the uniqueness of the number.
p_unique_serial_number	The unique number created by the procedure which is concatenated with the prefix to generate the serial number.
p_start_serial	If the serial generation request has specified the "From" and "To", then this parameter will refer to "From" else it will be zero.

Parameter	Description
p_end_serial	If the serial generation request has specified the "From" and "To", then this parameter will refer to "To" else it will be zero.
p_unique_serial_method	The unique serial method specified for a serial type in setup. Values are: • RANDOM • NEXTNUMBER
p_unique_serial_increment	The unique serial increment specified for a serial type in setup if p_unique_serial_method is NEXTNUMBER, else it will be zero.
p_serial_next	This value contains the Oracle Pedigree and Serialization Manager (OPSM) suggested unique serial number, which can be updated by you if you implement the serial next logic
p_random_min	If the p_unique_serial_method is RANDOM, then this parameter holds the minimum value that the unique serial number can be incremented with.
p_random_max	If the p_unique_serial_method is RANDOM, then this parameter holds the maximum value that the unique serial number can be incremented with.
p_unique	This parameter indicates whether the serial number generated is unique or not. Values are: • 1 - Numbers are unique • 0 - Numbers are not unique 2 appears by default which indicates that the uniqueness has not been checked.
p_error_string	This holds any error message that you want to display for a particular serial number.

Generating Custom Serial Number Logic (Mandatory)

For each custom serial type that needs to be implemented, add an IF-END IF block.

Note: You will need to add a separate IF-END IF block for every custom serial type.

Note: Custom serials must belong to a serial type group that is flagged as product-specific.

For example, the condition in the if statement must be:

```
IF (p_serial_type = 'EXAMPLECUSTOMSERIALTYPE-1')
```

You can replace EXAMPLECUSTOMSERIALTYPE-1 with your custom serial type.

Add all of your custom serial generation logic between this IF-END IF block. Your logic must ensure that one of the following is achieved:

1. This logic must populate the values in the following parameters:
 1. p_unique_serial_number - This is the number that will be prefixed to create the complete serial number.
 2. p_serial_unique_check_string - This is the string that will be used to check the uniqueness of the serial number generated.
 3. p_serial_number - This is the actual serial number generated which is performed by concatenating the prefix and p_unique_serial_number.
2. This logic must populate the value in the following parameter:
 1. p_error_string - The error message that you want to be populated for a particular serial number.

Using Uniqueness Check (Optional)

Oracle Pedigree and Serialization Manager (OPSM) implements uniqueness check based on the value populated in p_serial_unique_check_string. This value must be unique across the system. If it is not, an error stating that the number is not unique will be issued. You have the option of implementing your own uniqueness check for the serial numbers that their customer serial number logic generates as part of Generating Custom Serial Number Logic, page E-4 above. In that case, the parameter p_serial_unique_check_string will again be used to check the uniqueness. If the customer implements their own uniqueness check logic, they must set the parameter p_unique. The values that can be assigned to p_unique are:

- If the number is unique: p_unique = 1 (The parameters in Step 1 in the Generating Custom Serial Number Logic, page E-4 above must also be set)
- If the number is not unique: p_unique = 0

Generating Serials Using the Serial_Next Parameter (Optional)

OPSM has implemented logic to use the serial next value from the serial range details table for serial generation. This field will contain the next OPSM suggested serial number in the parameter p_serial_next. You can also generate your own serial_next which you can use as the next number. In that case, you will have to implement your own logic for populating the field and you will have to assign that value to p_serial_next and ensure that the corresponding tables are updated correctly.

Using the PAS_SERIAL_VAL.validate_serial Procedure

You can use the PAS_SERIAL_VAL.validate_serial procedure to perform validation on serial numbers. Implementation of the serial number validation logic is required.

The PAS_SERIAL_VAL.validate_serial procedure is located within the Oracle Pedigree and Serialization Manager (OPSM) database and can be found under the "Packages" folder within the database.

Before using this procedure, review the information in this appendix for the PAS_SERIAL_GEN.generate_serial procedure.

For more information on the PAS_SERIAL_GEN.generate_serial procedure, see Using the PAS_SERIAL_GEN.generate_serial Procedure, page E-1.

The table below contains a description of all of the parameters used in the PAS_SERIAL_VAL.validate_serial procedure:

Note: Do not change the initial values for the variables that are assigned in this procedure. These variables can be changed when performing serial number validation.

For more information on serial number validation, see Validating Serial Numbers, page E-6.

PAS_SERIAL_VAL.validate_serial Procedure Parameters

Parameter	Description
p_serial_number	The item serial number to be imported.

Parameter	Description
p_location_id	The location that is used for this transaction.
p_product_detail_id	The product detail Id (from the table pas_s_product_details).
p_serial_type	The serial type of the serial to be processed.
p_validated	If the item serial number is being validated, the value is 1, otherwise, the value is 0.
p_valid_serial	If the passed item serial number is valid the value is 1, otherwise, the value is 0.
p_unique_check_string	This is the unique check string, that will be used to check the uniqueness of the item serial number.
p_unique_serial_number	The unique serial number that must be numeric and is derived from the item serial number.
p_error_message	If the item serial number is not valid, then the error message stating the reason for the item serial number being invalid.

Validating Serial Numbers

Serial validation:

1. p_serial_number is the item serial number that needs to be validated. Whenever an item serial number is validated, the p_validated parameter must be set to "1" (irrespective of whether the serial is valid or not).
2. Validate the item serial number.

In the sample implementation, the item serial number is validated by matching the formed prefix for a particular serial type and fetching the string of the same size (as of the prefix) from the item serial number and then checking whether the remaining characters in the item serial number are numeric or not (which would be a unique serial number and so that has to be numeric).

If the serial number is valid:

1. Set p_valid_serial as "1".
2. Form the unique check string in p_unique_check_string. This will be used to check the uniqueness of the item serial number.
3. Extract the unique serial number in p_unique_serial_number. This will be used to check whether the item serial number is valid as defined in the setup or not.

Note: If the serial is valid, p_unique_check_string and p_unique_serial_number must be populated.

If the serial number is not valid:

1. Set p_valid_serial as "0".
2. Populate the p_error_message with the error message.

Note: If the serial is not valid, p_error_message must be populated.

Oracle Pedigree and Serialization Manager Error and Warning Messages

Error and Warning Messages

This appendix lists the error and warning messages that the Oracle Pedigree and Serialization Manager (OPSM) application can issue during its processing.

This table lists the different error/warning message codes with their associated messages:

Error/Warning Code	Error/Warning Message
ABNORMAL_TERMINATION	The job has ended abnormally. Submit a new job to complete processing.
ACCESS_LEVEL_INVALID	The access level entered is invalid. Enter a valid access level.
ADDRESS_CODE_INVALID	The address code entered is invalid. Enter or select a value for this field using the associated lookup table.
ADDRESS_TYPE_INVALID	The address type entered is invalid. Enter or select a value for this field using the associated lookup table.
ADD_LABEL_TO_TRANS_CHILD_SERIAL_COUNTERFEITED	The selected container includes serial record(s) that are counterfeited. The selected container will not be added to this transaction.

Error/Warning Code	Error/Warning Message
ADD_LABEL_TO_TRANS_CHILD_SERIAL_NOT_COMMISSIONED	The selected container includes serial record(s) that have not been commissioned. The selected container will not be added to this transaction.
ADD_LABEL_TO_TRANS_CHILD_SERIAL_NOT_RETURNED	The selected container includes serial record(s) that are not returned. The selected container will not be added to this transaction.
ADD_LABEL_TO_TRANS_CHILD_SERIAL_NOT_SHIPPED	The selected container includes serial record(s) that have not been shipped. The selected container will not be added to this transaction.
ADD_LABEL_TO_TRANS_CHILD_SERIAL_SHIPPED	The selected container includes serial record(s) that have been already shipped. The selected container will not be added to this transaction.
ADD_LABEL_TO_TRANS_NOT_INCLUDING_TRANSACTED_ITEM	The selected container does not include a transacted unit of this transaction. The selected container will not be added to this transaction.
ADD_LABEL_TO_TRANS_SERIAL_INVALID_LOT	The selected product serial is committed to another lot. This product serial cannot be included in this transaction.
ADD_LABEL_TO_TRANS_SERIAL_INVALID_PROD	The selected product serial is not for the transacted item. This product serial cannot be included in this transaction.
ADD_LABEL_TO_TRANS_SERIAL_NOT_SHIPPED	The selected product serial has not been shipped. This product serial cannot be included in this transaction.
ADD_LABEL_TO_TRANS_SERIAL_SHIPPED	The selected product serial has been already shipped. This product serial cannot be included in this transaction.
ADD_LOC_GROUP_NOT_ALLOWED_LOC_DEACTIVATED	This location is deactivated and cannot be associated to a Location Group. If this location is still in use, the deactivation date should be extended.

Error/Warning Code	Error/Warning Message
AGGR_EVENT_ADD_CHILDEPC_ERROR	A parentID and at least one childEPC should be provided on an Aggregation Event with the action of Add. Please correct the event and resubmit.
AGGR_EVENT_OBS_CHILDEPC_ERROR	At least one childEPC should be provided on an Aggregation Event with the action of Observe. Please correct the event and resubmit.
ALLOW_LOT_CREATE_ACCEPT_INVALID	The allow lot creation at accept flag value is invalid. Enter a value of 0 or 1.
ALLOW_LOT_CREATE_AT_COMM_FLAG_INVALID	The allow lot creation at commission flag value is invalid. Enter a value of 0 or 1.
ALLOW_LOT_CREATE_RECEIPT_FLAG_INVALID	The allow lot creation at receipt flag value is invalid. Enter a value of 0 or 1.
ALLOW_LOT_CREATE_REPKG_FLAG_INVALID	The allow lot creation at repackaging flag value is invalid. Enter a value of 0 or 1.
ALLOW_LOT_CREATION_GENERATE_FLAG_INVALID	The allow lot creation at generation flag value is invalid. Enter a value of 0 or 1.
ALLOW_LOT_CREATION_IMPORT_FLAG_INVALID	The allow lot creation at import flag value is invalid. Enter a value of 0 or 1.
ALLOW_LOT_CREATION_RETURN_FLAG_INVALID	The allow lot creation at return flag value is invalid. Enter a value of 0 or 1.
ALLOW_LOT_CREATION_SHIP_FLAG_INVALID	The allow lot creation at shipment flag value is invalid. Enter a value of 0 or 1.
ALT_DOCUMENT_TYPE_INVALID	The alternate document type entered is invalid. Enter or select a value for this field using the associated lookup table.
ALTERNATE_DOCUMENT_TYPE_REQUIRED	The alternate document type is required when providing an alternate document value. Enter a valid alternate document type.

Error/Warning Code	Error/Warning Message
ASSOC_DUPLICATED	The associated serial record already exists for the transaction. The system could not create the record.
BATCH_ID_INVALID	The batch id entered is invalid. Enter a valid batch id
BATCH_ID_INVALID	The batch id {0} was not found in PAS_S_EDIT_SERIAL_HDR_INT. Please verify the batch id and resubmit.
BEST_BY_EXP_DATE_ERROR	The best by date must be prior to the expiration date.
BEST_BY_ORIG_DATE_ERROR	The best by date must be after the origination date.
BLANK_SOURCE_SYSTEM_INVALID	The source system should not be blank. Enter a valid source system value.
BLS_EXTRACTED_RECORD_CNT	{0} records inserted, {1} records updated by the extract.
CANNOT_CREATE_SERIAL_ASSOC	The system could not create a transaction serial association record for the given label.
CANNOT_PACK_INTO_ITSELF	You are not allowed to pack a package into itself.
CAPTURE_EPCIS_DOC_COMPOSITE_DETAILS	An exception has occurred. Please review composite instance {0} using the Oracle Enterprise Manager application for more details.
CAPTURE_EPCIS_DOC_EXCEPTION_DETAILS	An exception has occurred while processing the captureEpcisDoc web service. The exception is as follows: {0}

Error/Warning Code	Error/Warning Message
CAPTURE_EPCIS_DOC_FAULTED	A fault has occurred during the processing of the captureEpcisDoc web service for composite instance {0}. Please contact your system administrator to investigate the fault using the Oracle Enterprise Manager application.
CHANGE_PASSWORD_REQUIRED_EXCEPTION	Provide a password.
CHANGE_PASSWORD_VALIDATION_EXCEPTION	The passwords entered do not match. The password entered must match the re-entry password.
CHILD_LABEL_MULTIPLE_PACKAGES_EXCEPTION	The child label / label type combination provided exists on more than one package. Provide a label / label type combination that uniquely identifies a package.
COMMISSIONED_STATUS_INVALID	The status of this serial cannot be "Commissioned" since product code or lot number is not determined. Select a different status.
COMMISSIONING_NOT_SUPPORTED	The serial status provided = COMMISSION, however, the ability to commission serials is not supported by this web service. Please select a different serial status value.
COMMUNICATION_METHOD_INVALID	The communication method entered is invalid. Enter or select a value for this field using the associated lookup table.
COMPANY_PREFIX_MISMATCH	The company prefix contained in the GTIN, {0}, is not the same as the company prefix for the location {1}.
COMPANY_PREFIXES_DO_NOT_MATCH	The company prefix for location {0} does not match the company prefix within the GTIN for product {1} {2} {3} unit of measure {4}.

Error/Warning Code	Error/Warning Message
COMPOSITE_ALERT_CTRL_INVALID	The composite alert control entered is invalid. Enter or select a value for this field using the associated lookup table.
COMPOSITE_DETAILS_MESSAGE	Please review composite instance {0} using the Oracle Enterprise Manager application for more details.
CONTACTUSER_NOTIN_LOCATION	ContactUser Id is not in the Location Contacts.
CONTAINER_TYPE_INVALID	The container type entered is invalid. Enter or select a value for this field using the associated lookup table.
CONTROLLED_SUBSTANCE_FLAG_INVALID ID	The controlled substance flag value is invalid. Enter a value of 0 or 1.
COUNTERFEIT_FUTURE_DATE	The counterfeit must be on or before today's date.
COUNTERFEIT_STATUS_INVALID	The counterfeit status entered is invalid. Enter or select a value for this field using the associated lookup table.
CREATE_SER_FOR_ACCEPT_FLAG_INVALID ID	The create serial for accept flag value is invalid. Enter a value of 0 or 1.
CREATE_SER_FOR_RECEIPT_FLAG_INVALID ID	The create serial for receipt flag value is invalid. Enter a value of 0 or 1.
CREATE_SER_FOR_REPKG_FLAG_INVALID ID	The create serial for repackaging flag value is invalid. Enter a value of 0 or 1.
CREATE_SERIAL_RCPT_ON_NO_SERIAL_ASSOC	The create serials for receipts flag is on for product {0} and no Transaction Serial Association records are on the transaction. If this flag is on the process is expecting that the serials are being sent into the transaction.

Error/Warning Code	Error/Warning Message
CREATE_SERIAL_SHIP_ON_NO_SERIAL_ASSOC	The create serials for shipment flag is on for product {0} and no Transaction Serial Association records are on the transaction. If this flag is on the process is expecting that the serials are being sent into the transaction.
CREATE_SERIALS_AT_RECEIPT_FLAG_INVALID	The create serials at receipt flag value is invalid. Enter a value of 0 or 1.
CREATE_SERIALS_FOR_SHIP_FLAG_INVALID	The create serials for shipment flag value is invalid. Enter a value of 0 or 1.
CREATE_SERIALS_FOR_SHIP_NOT_SUPPORTED	The "Create Serials for Shipments" flag is on for this product. This service does not currently support creating serials for this transaction type. Please turn the "Create Serials for Shipments" flag off prior to this processing and ensure that the serials being processed already exist in OPSM.
CREATE_TRANSACTION_COMPOSITE_DETAILS	Please review composite instance {0} using the Oracle Enterprise Manager application for more details.
CREATE_TRANSACTION_EXCEPTION	An exception has occurred while attempting to create a transaction. Please review the incoming message from the external transaction system for transaction type {0}, transaction source {1}, transaction date {6}, location {2}, document {3}, item number {4}, product {8}, quantity {5}, and lot {7}.
CREATE_TRANSACTION_EXCEPTION_DETAILS	An exception has occurred while processing the createTransaction web service. The exception is as follows: {0}
CREATE_TRANSACTION_FAULTED	A fault has occurred during the processing of the createTransaction web service for composite instance {0}. Please contact your system administrator to investigate the fault using the Oracle Enterprise Manager application.

Error/Warning Code	Error/Warning Message
CREDENTIALS_REQUIRED	The user id and password fields are required. Provide valid user id and password credentials.
CRITICAL_GREATER_THAN_AT_RISK	The critical threshold value must be greater than zero, and less than the at-risk threshold if one is populated.
CUSTOM_SN_METHOD_FAILED	Call to custom serial generation PL/SQL pas_serial_gen.generate_serial method failed. The message is as follows: {0}
CUSTOM_SN_VALIDATION_METHOD_FAILED	Call to custom serial generation PL/SQL pas_serial_val.validate_serial method failed for item serial number {0} of serial type {1}.The message is as follows: {2}
DASHBOARD_REFRESH_EXCEPTION	The data refresh for this dashboard component has failed. Try again later, or contact your system administrator for further support.
DEACTIVATION_DATE_INVALID	The deactivation date must be after the current date.
DECOMMISSION_REASON_CODE_REQUIRED	A reason code is required when decommissioning serials. Provide a valid reason code.
DEFAULT_RANGE_CAN_OVERLAP_FLAG_INVALID	The default range can overlap flag value is invalid. Enter a value of 0 or 1.
DEF_CREATE_SER_FOR_ACCEPT_FLAG_INVALID	The default create serial for accept flag value is invalid. Enter a value of 0 or 1.
DEF_CREATE_SER_FOR_RECEIPT_FLAG_INVALID	The default create serial for receipt flag value is invalid. Enter a value of 0 or 1.
DEF_CREATE_SER_FOR_REPKG_FLAG_INVALID	The default create serial for repackaging flag value is invalid. Enter a value of 0 or 1.
DEF_CREATE_SER_FOR_SHIP_FLAG_INVALID	The default create serial for shipment flag value is invalid. Enter a value of 0 or 1.

Error/Warning Code	Error/Warning Message
DEF_DASH_COUNT_TIME_PERIOD_INVALID	The default activity period for the counterfeit serials analysis dashboard component is invalid. Enter or select a value for this field using the associated lookup table.
DEF_DASH_EXCEPT_TIME_PERIOD_INVALID	The default activity period for the transaction exceptions dashboard component is invalid. Enter or select a value for this field using the associated lookup table.
DEF_DASH_LOC_TIME_PERIOD_INVALID	The default activity period for the location details dashboard component is invalid. Enter or select a value for this field using the associated lookup table.
DEF_LOT_CONTROL_INVALID	The default value for the lot control attribute is invalid. Enter or select a value for this field using the associated lookup table.
DEF_PROD_LEVEL_RANGE_CTRL_FLAG_INVALID	The default use serial ranges flag value is invalid. Enter a value of 0 or 1.
DEF_RECORD_INT_ACCEPT_FLAG_INVALID	The default record internal accepts flag value is invalid. Enter a value of 0 or 1.
DEF_RECORD_INT_RECEIPT_FLAG_INVALID	The default record internal receipts flag value is invalid. Enter a value of 0 or 1.
DEF_RECORD_INT_RETURN_FLAG_INVALID	The default record internal return flag value is invalid. Enter a value of 0 or 1.
DEF_RECORD_INT_SHIPMENT_FLAG_INVALID	The default record internal shipments flag value is invalid. Enter a value of 0 or 1.
DELETE_DESTINATION_ON_TRANSACTION_EXCEPTION	This serial destination exists on a transaction and cannot be deleted.
DELETE_JOB_INS_EXPT	The job id {0} you are attempting to delete has been in processing. This job cannot be deleted.
DELETE_LOC_GROUP_NOT_ALLOWED_RANGE_ASSOCIATED	This Location Group is associated to a Serial Range and cannot be deleted.

Error/Warning Code	Error/Warning Message
DELETE_LOCATION_CONTACT_EXCEPTION	The location you are attempting to delete has an associated location contact. This location cannot be deleted until the associated location contact is deleted.
DELETE_LOCATION_PRODUCT_EXCEPTION	The location you are attempting to delete has been used in the creation of product location. This location cannot be deleted.
DELETE_LOCATION_RANGE_EXCEPTION	The location you are attempting to delete has been used in the creation of serial range. This location cannot be deleted.
DELETE_LOCATION_SERIALS_EXCEPTION	The location you are attempting to delete has been used in the creation of serials. This location cannot be deleted.
DELETE_LOCATION_TRANSACTION_EXCEPTION	The location you are attempting to delete has been used in the creation of transaction. This location cannot be deleted.
DELETE_PRODUCT_DETAIL_EXCEPTION	The product detail you are attempting to delete has been used in the creation of serials. This product detail cannot be deleted.
DELETE_PRODUCT_DETAIL_ITEM_XREF_EXCEPTION	This product detail has an associated item UOM cross reference. It cannot be removed until you remove the associated item UOM cross reference.
DELETE_PRODUCT_ITEM_TRANS_EXCEPTION	The item you are attempting to delete has been used in the creation of transactions. This item cannot be deleted.
DELETE_PRODUCT_ITEM_UOM_TRANS_EXCEPTION	The item UOM you are attempting to delete has been used in the creation of transactions. This item UOM cannot be deleted.
DELETE_PRODUCT_LOT_EXCEPTION	The product you are attempting to delete has been used in the creation of lots. This product cannot be deleted.

Error/Warning Code	Error/Warning Message
DELETE_PRODUCT_SERIAL_EXCEPTION	The product you are attempting to delete has been used in the creation of serials. This product cannot be deleted.
DELETE_RANGE_SERIALS_EXCEPTION	The serial range you are attempting to delete has been used in the creation of serials. This range cannot be deleted.
DELETE_SERIAL_DESTINATION_EXCEPTION	This serial destination has an associated serial destination rules. Remove any associated serial destination rules prior to removal of the serial destination.
DELETE_SERIAL_GEN_REQ_EXPT	The request {0} you are attempting to delete has been processed or is processing. This request cannot be deleted.
DELETE_SERIAL_GEN_REQUEST_EXCEPTION	The request you are attempting to delete has been in processing. This request cannot be deleted.
DELETE_SERIAL_TYPE_GROUP_EXCEPTION	The serial type group you are attempting to delete has been used in the creation of serial type. This serial type group cannot be deleted.
DELETE_SERIAL_TYPE_SERIALS_EXCEPTION	The serial type you are attempting to delete has been used in the creation of serials. This serial type cannot be deleted.
DEST_BUSINESS_ADDRESS_MISSING	The transaction address is missing for the business destination for the transaction.
DESTINATION_GROUP_INVALID	The destination group entered is invalid. Enter or select a value for this field using the associated lookup table.
DIGI_SIGN_METHOD_EXCEPTION	The Digital Signature Method cannot be set to blank if one or more Locations has the Digital Signature Required flag checked. Please ensure that the Digital Signature Required flag is unchecked on all Locations prior to setting the Digital Signature Required flag to blank

Error/Warning Code	Error/Warning Message
DIGISIGN_FLAG_NOTENABLED	Digital Signature Flag is not enabled for this location.
DIGISIGN_NOT_SUCCESS	The Document is not Digitally Signed
DIGISIGN_SIGNED	pedigree(s) were successfully signed.
DIGISIGN_SUCCESS	The Document is Digitally Signed
DIGITAL_SIGNATURE_REQ_FLAG_INVALID	The default value for digital signature required flag is
DOC_TYPE_ADDED	The transaction document type {0} has been added to the lookup table.
DOC_TYPE_NOT_FOUND	Document Type {0}, does not exist.
DOCUMENT_TYPE_INVALID	The document type entered is invalid. Enter or select a value for this field using the associated lookup table.
DOCUMENT_TYPE_REQUIRED	The document type is required when providing a document value. Enter a valid document type.
DOSAGE_FORM_INVALID	The dosage form entered is invalid. Enter or select a value for this field using the associated lookup table.
DUPLICATE_CONTACT_USER_ID	Location contact user id entered already exist.
DUPLICATE_ITEM_SERIAL_NUMBER	Duplicate serial numbers were found in the system for item serial number {0}. Please remove this serial number from the request and resend.
DUPLICATE_ITEM_UOM_ERROR	The product item UOM information entered already exists.

Error/Warning Code	Error/Warning Message
DUPLICATE_LABEL_LABEL_TYPE	Duplicate label and label type were found in the system for label {0} and label type {1}. Status and Usage can not be updated by this web service because the instance of the label can not be determined.
DUPLICATE_LOC_GRP	The Location Group entered already exists. Please enter a unique value.
DUPLICATE_LOCATION	The Location entered already exists. Please enter a unique value.
DUPLICATE_LOT_ERROR	The lot number, product detail information, lot source and lot location provided will result in a duplicate lot.
DUPLICATE_LOT_WARNING	The lot number and product detail information provided will result in a duplicate lot.
DUPLICATE_PACKAGE_IDENTIFIER	A duplicate package identifier / package identifier type combination cannot exist within the same package. Enter a unique package identifier / package identifier type combination.
DUPLICATE_PRIMARY_DOCUMENT_SERIAL	Duplicate item serial number was found in the system for item serial number {0}. Status and Usage can not be updated by this web service because the instance of the item serial number can not be determined.
DUPLICATE_PRODUCT_DETAIL_ERROR	The product detail information entered already exists.
DUPLICATE_PRODUCT_ERROR	The product information entered already exists.
DUPLICATE_PRODUCT_ITEM_ERROR	The product item information entered already exists.
DUPLICATE_PRODUCT_LOCATION_ERROR	The product location information entered already exists.

Error/Warning Code	Error/Warning Message
DUPLICATE_QUERY_PARAMETERS	The query contains the following duplicate parameter(s): {0}. Please correct the query and resubmit.
DUPLICATE_SERIAL_DESTINATION	The serial destination entered already exists. Provide a different serial destination.
DUPLICATE_SERIAL_DESTINATION_RULE	The serial destination rule entered already exists. Provide a different serial destination rule.
DUPLICATE_TRANSACTION_LABEL	The selected container/product serial already exists in the transaction.
DUPLICATE_TRANSACTION_LABEL_INCLUDED	The selected container/product serial includes a package identifier that already exists in the transaction.
EMAIL_ADDRESS_INVALID	Enter valid format for e-mail address.
EMPTY_OR_NULL_EPCIS_DOCUMENT	The EPCIS document received is empty or null. Please correct the document and resubmit.
ENABLED_FLAG_INVALID	The enabled flag value is invalid. Enter a value of 0 or 1.
ENTER_LABEL_LABEL_TYPE	Enter the package identifier and package identifier type first.
EPCCLASS_REQUIRED_ERROR	epcClass is required in the Quantity Event. Please provide the epcClass information and resubmit.
EPCFILTER_NULL_EXCEPTION	Enter EPC filter
EPCNUMBER_EPCTYPE_EXCEPTION	GTIN and EPC filter values are required for this serial type.
EPCNUMBER_FILTER_NULL_EXCEPTION	Enter GTIN and EPC filter
EPCNUMBER_GTIN_LENGTH_EXCEPTION	The GTIN must consist of 14 digits.

Error/Warning Code	Error/Warning Message
EPCNUMBER_NULL_EXCEPTION	Enter GTIN
EPC_COMPANY_PREFIX_INVALID	The length of the EPC company prefix entered is not between 6 to 12, or one portion of the EPC company prefix entered is not numeric. Enter valid one.
EPC_COMPANY_PREFIX_REQ	No company prefix is on the location. There must be a EPC company prefix on the location in order to generate product specific serial numbers.
EPC_FILTER_INVALID	The EPC filter value entered is invalid. Enter or select a value for this field using the associated lookup table.
EPC_NUMBER_EXCEPTION	GTIN is required for this serial type.
EPC_NUMBER_FILTER_EXCEPTION	GTIN and EPC filter are required for this serial type.
EPC_NUMBER_INCORRECT	The serial number could not be created because the required GTIN is incorrect.
EPC_NUMBER_REQUIRED	The serial number could not be created because the required GTIN does not exist for the product unit of measure.
EPC_TYPE_INVALID	The EPC filter value entered is invalid. Enter or select a value for this field using the associated lookup table.
ERROR_CLEARED_FLAG_INVALID	The error cleared flag value is invalid. Enter a value of 0 or 1.
ERROR_STATUS_INVALID	The error status entered is invalid. Enter or select a value for this field using the associated lookup table.
EXECUTION_JOB_FAILED	Unrecoverable error for serial generation request id {0}. Please contact system administrator.

Error/Warning Code	Error/Warning Message
EXECUTION_REQ_FAILED	The serial generation request failed. Please navigate to the serial generation messages from the link provided in the serial generation request row.
EXT_CREATED_SERIAL_NUMBER_FLAG_INVALID	The externally created serial number flag value is invalid. Enter a value of 0 or 1.
GENERATION_STATUS_INVALID	The generation status entered is invalid. Enter or select a value for this field using the associated lookup table.
GEN_EPC_NUMBER_INCORRECT	The GTIN on the product code {0} is the wrong type or wrong number of characters for the serial type on the product. Update the product with the correct GTIN. Navigate to the Maintain Serial Generation Request page and submit the request to generate the serials.
GEN_EPC_NUMBER_REQUIRED	There is no GTIN on product code {0} and the serial type for this product requires an GTIN. Update the product with an GTIN. Navigate to the Maintain Serial Generation Request page and submit a new request to generate the serials.
GEN_INVALID_LOT_ID	The lot is invalid. Change the lot information on the transaction or enter the correct lot information in OPSM. Navigate to the Maintain Serial Generation Request page and submit a new request to generate the serials.
GEN_LOCATION_DEACTIVATED	Location {0} is deactivated in OPSM. Transaction cannot be completed. Change the location on the transaction or reactivate existing location. Navigate to the Maintain Serial Generation Request page and submit a new request to generate the serials.

Error/Warning Code	Error/Warning Message
GEN_LOCATION_REQUIRED	Location is required for generation and a location was not passed in with the transaction. Add the location on the transaction. Navigate to the Maintain Serial Generation Request page and submit a new request to generate the serials.
GEN_LOT_PRODUCT_CONFLICT	The product detail on the generate transaction is different than the product detail on the lot. Product {0} Type {1} Variant {2} Unit of Measure {3} is on the generate transaction and not on lot {4}.
GEN_QUANTITY_WARNING	The following number of serials have been requested: {0}, the following number of serials have been generated: {1}. Verify the serial range "Range To", or the serial type "Max" values. Once more numbers have been made available, submit a new generation request.
GEN_SERIAL_TYPE_GROUP_INVALID	Serial type group does not exist in OPSM. Navigate to the Maintain Serial Type Groups page and add the serial type group or correct the product information.
GEN_SERIAL_TYPE_INVALID	Serial type does not exist in OPSM. Navigate to the Maintain Serial Type Groups page and add the serial type or correct the product information.
GTIN_ALLOW_SINGLE_DETAIL	Products with a code type of GTIN can only have one packaging unit. Please define only one product detail for the product.
GTIN_HAS_EXISTING_DETAIL	This product already has a packaging unit defined. Products with a code type of GTIN can only have one packaging unit. Please use the existing package unit for this product.
GTIN_NOT_FOUND	A product detail for the provided GTIN was not found. Please verify the GTIN and resubmit.

Error/Warning Code	Error/Warning Message
GTIN_NOT_UNIQUE	Duplicate products with GTIN {0} were found. Please correct the issue and resubmit.
IGNORE_OVERAGE_FLAG_INVALID	The ignore overage flag entered is invalid. Enter 0 or 1.
IMPLEMENTATION_EXCEPTION_HEADER	Unknown Exception
IMPORT_SERIALS_NOT_SUPPORTED	The import serials flag is on for this product. This service does not currently support importing serials for this transaction type. Please import the serials prior to this processing using the Import Transaction or the Import and Pack Transaction.
IMPORT_TRANS_DIF_LOTS	Lot on the transaction is different than the lot on the transaction product. On an import transaction, they must be the same.
IMPORT_TRANS_DIF_PRODUCTS	Product on the transaction is different than the product on the transaction product. On an import transaction, they must be the same.
IMPORT_TRANS_MULT_PRODUCTS	More than one transaction product is on this import transaction. Import transaction is limited to one transaction product.
IMPORTED_SERIAL_INVALID	The item serial number {0} contains invalid characters. The imported serial number is for product {1} {2} {3}.
IMPORTED_SERIAL_IS_DUPLICATE	The imported item serial number {0} has not been imported because it already exists in the Serial table.
IMPORTED_SERIAL_MARKED_AS_COUNT ERFEIT	Imported item serial number {0} has been marked as a suspected counterfeit because a duplicate item serial number has been found.
INTERNAL_TRANSACTION_FLAG_INVALID	The internal transaction flag value is invalid. Enter a value of 0 or 1.

Error/Warning Code	Error/Warning Message
INVALID_ATTRIBUTE_IN_ADD_LOT	An attribute was attempted to be added to a lot.
INVALID_ATTRIBUTE_IN_ADD_SERIAL	An attribute was attempted to be added to a serial.
INVALID_CHILD_LABEL	The child label and label type combination provided is invalid. Provide a valid child label and label type combination for a package, or packages, that have not yet been shipped.
INVALID_CONTACT_EMAIL_FORMAT	The contact e-mail address you provided appears to be in an invalid format. Enter a valid e-mail address.
INVALID_DATE_RANGE	The from date is greater than the thru date. Enter valid from and thru dates.
INVALID_DESTINATION_EMAIL_FORMAT	The destination e-mail address you provided appears to be in an invalid format. Enter a valid e-mail address.
INVALID_DOC_TYPE_FROM_EBS	The specific document type is invalid. Provide a valid document type.
INVALID_EFFECTIVE_END_DATE	The effective start date is greater than the effective end date. Enter valid effective start and end dates.
INVALID_EPCIS_DOCUMENT	The EPCIS document does not match the standard EPCIS format. Please correct the format and resubmit.
INVALID_ERROR_CODE	The error code {0} being issued does not exist in the resource bundle for the system. Please report this issue to your system administrator.
INVALID_EVENT_TIMEZONE_FAILURE	An incorrect value for eventTimeZoneOffset was provided in the event. The event was not captured.

Error/Warning Code	Error/Warning Message
INVALID_EXCEPTION_EMAIL_FORMAT	The exception e-mail address you provided appears to be in an invalid format. Enter a valid e-mail address.
INVALID_HOST_PORT_CONFIG	Invalid Hostname or Port information has been provided. Please correct the Hostname and / or Port for Email Notifications and resubmit.
INVALID_ITEM_SERIAL_NUMBER	An exception has occurred while processing the editSerialStatusAndUsageByList web service. Item Serial Number is a required input parameter. Please include at least one Item Serial Number in your input file and resubmit.
INVALID_KEYSTORE_FILE_LOCATION	No such file available. Enter a valid keystore file location.
INVALID_KEYSTORE_PROVIDER	No such provider available. Enter a valid keystore provider.
INVALID_KEYSTORE_TYPE	No such keystore type available. Enter a valid keystore type.
INVALID_LABEL	The label and label type combination provided is invalid. Provide a valid label and label type combination for a package, or packages.
INVALID_LABEL_DELETE	The label and label type combination provided is either the primary label for a package, or invalid. Provide a valid, non-primary label.
INVALID_LOCATION	The location {0} does not exist in OPSM. Change the location, or add the location to OPSM.
INVALID_LOCATION_FROM_EBS	The combination of location and source system is invalid. Provide a valid location or source system.

Error/Warning Code	Error/Warning Message
INVALID_LOCATION_ID	Location Id {0} does not exist in OPSM. Change the location or add the location to OPSM.
INVALID_LOCATION_NAME	Location {0} is invalid. Please provide a valid location, or enter this location into OPSM using Maintain Locations.
INVALID_LOT	The lot entered is invalid. Provide a valid lot.
INVALID_LOT_FROM_EBS	The specific lot is invalid. Provide a valid lot.
INVALID_PACK_ID	The pack identifier entered is invalid. Provide a valid pack identifier.
INVALID_PARENT_ID_FOR_AGGREGATION	The Parent ID for this aggregation event is null. Please include the Parent ID for this aggregation event and resubmit.
INVALID_PHONE_NUMBER	The contact phone number you provided appears to be in an invalid format. Enter a valid phone number.
INVALID_PRIMARY_LABEL	The label and label type fields provided are invalid. Please verify the label and label type values provided are for a primary label within the system.
INVALID_PRODUCT	Product code {0}, product type {1} and product variant {2} does not exist in OPSM. Change the product information or add the product to OPSM.
INVALID_PRODUCT_DETAILS	Product unit of measure {0} for product code {1}, product code type {2} and product code variant {3}, does not exist in OPSM. Change the product or add the product information to OPSM.
INVALID_PRODUCT_DETAIL_ID	Product Detail Id {0} does not exist in OPSM. Change the product or add the product information to OPSM.

Error/Warning Code	Error/Warning Message
INVALID_PRODUCT_ID	Product Id {0} does not exist in OPSM. Change the product information or add the product to OPSM.
INVALID_PRODUCT_ITEM	The combination of item number {0} and item source {1} does not exist in OPSM. Change the item information or add the item information in OPSM.
INVALID_PRODUCT_ITEM_ID	Product Item Id {0} does not exist in OPSM. Change the item information or add the item information in OPSM.
INVALID_PRODUCT_ITEM_UOM	Item number {0}, item source {1} and item unit of measure {2} combination does not exist in OPSM. Change the item information or add the item information to OPSM.
INVALID_PRODUCT_ITEM_UOM_ID	Product Item UOM Id {0} does not exist in OPSM. Change the item information or add the item information to OPSM.
INVALID_PRODUCT_MISSING_VARIANT	Multiple products exist with this product code, product code type combination (Product Code {0} / Product Code Type {1}). Please supply the correct product code variant to successfully process this transaction.
INVALID_PURE_IDENTITY_COMPONENT	A non-numeric value was encountered in one of the Pure Identity components. Only numeric values are supported. Please correct the data and resubmit.
INVALID_QUERY_PARAMETERS	The requested query contains invalid parameter(s): {0}. Please correct the parameters in the query and resubmit.
INVALID_RANGE	This serial range from entered is greater than serial range to. Enter valid range.
INVALID_SERIAL_DESTINATION	The serial destination entered is invalid. Enter a valid serial destination.

Error/Warning Code	Error/Warning Message
INVALID_SERIAL_FORMAT	The format of the imported item serial number {0} is invalid. Based on the setup of the product {1} {2} {3}, the imported item serial number should begin with {4}.
INVALID_SERIAL_NUMBER	The serial number entered is invalid. Provide a valid serial number.
INVALID_SERIAL_RANGE	The serial range entered is invalid. Provide a valid serial range.
INVALID_SERIAL_TYPE	The serial type entered is invalid. Provide a valid serial type.
INVALID_SERIAL_TYPE_GROUP	The serial type group entered is invalid. Provide a valid serial type group.
INVALID_SOURCE_SYSTEM	The source system entered is invalid. Enter or select a value for this field using the associated lookup table.
INVALID_TRANSACTION	The transaction entered is invalid. Enter a valid transaction.
ITEM_NUMBER_REQUIRED	Item Number is required in item cross reference.
ITEM_SERIAL_NUMBER_NOT_UNIQUE	Item serial number {0} already exists. The item serial number was not generated. Enter another unique number for generation. Navigate to the Maintain Serial Generation Request page and submit a new request to generate the serials.
ITEM_SERIAL_REQUIRED	Item serial number is required.
ITEM_SOURCE_INVALID	The item source entered is invalid. Enter or select a value for this field using the associated lookup table.

Error/Warning Code	Error/Warning Message
ITEM_SOURCE_NOT_SAME_AS_SYSTEM_SOURCE	The source system on the location does not match the source system on the item. Please provide a location and item with matching source systems.
ITEM_SOURCE_REQUIRED	Item source is required in item cross reference.
ITEM_UNIT_OF_MEASURE_REQUIRED	Item unit of measure is required in item cross reference.
JOB_IN_PROCESS	There is a job instance already in progress. As a result, this new job instance can not be submitted.
JOB_INSTANCE_NO_SELECTION	Select one or more records for action.
JOB_MAIL_ERR_SUMMARY	For Job Instance Id {0} Job Type {1} :
JOB_STATUS_INVALID	The job status entered is invalid. Enter or select a value for this field using the associated lookup table.
JOB_SUBMIT_EXCEPTION	At least one request within this job was failed.
LABEL_FORMAT_INVALID	The label print format entered is invalid. Enter or select a value for this field using the associated lookup table.
LABEL_ID_NOT_UNIQUE	The LABEL_ID is not unique. Contact your system administrator to verify the database sequence number used by this field.
LABEL_MULTIPLE_PACKAGES_EXCEPTION	The label / label type combination provided exists on more than one package. Provide a label / label type combination that uniquely identifies a package.
LABEL_REQUIRED	The label and label type fields are required. Please provide a valid label and label type combination.

Error/Warning Code	Error/Warning Message
LABEL_TYPE_INVALID	The label type entered is invalid. Enter or select a value for this field using the associated lookup table.
LABEL_TYPE_NULL_LOCATION_TABLE	Process is trying to get default label type from the location table for label type or parent label type and the default label type is null in the location table. Go to Maintain Location for the location on the transaction and enter a valid default label type.
LANGUAGE_TABLE_ERROR	There was a problem retrieving language information for one or more languages. Please contact your system administrator to verify both the base and installed languages.
LOCAL_INSTANCE_FLAG_INVALID	The local instance flag value is invalid. Enter a value of 0 or 1.
LOCALIZED_SERIAL_CTRL_FLAG_INVALID	The localized serialization control flag value is invalid. Enter a value of 0 or 1.
LOCATIONPRODUCT_BUT_NO_PRODUCT	The serial type group is set to Location and Product Level range control, but the product is not specified. Provide the product, or change the range control to something other than Location and Product Level.
LOCATIONPRODUCT_BUT_NO_PUI	The serial type group is set to Location and Product Level range control, but the product unit identifier is not specified. Either provide the product, or set a product unit identifier on the product.
LOCATION_BLANK	The location must not be blank if product unit identifier is not blank.
LOCATION_DEACTIVATED	Location is no longer active. Serials can not be generated using this location.
LOCATION_DEACTIVATION	The location entered has been deactivated. Enter a valid location for this request.

Error/Warning Code	Error/Warning Message
LOCATION_ID_NOT_UNIQUE	The LOCATION_ID is not unique. Contact your system administrator to verify the database sequence number used by this field.
LOCATION_IS_REQUIRED	Location is required.
LOCATION_MAIL_SUMMARY	Location: {0}
LOCATION_NOT_UNIQUE	The location provided will result in a duplicate location. Enter a unique one.
LOCATION_TYPE_INVALID	The location type entered is invalid. Enter or select a value for this field using the associated lookup table.
LOGIN_ERROR_MESSAGE	An unexpected login error has occurred during login. Please contact your system administrator to review the logs for more information.
LOOKUP_CODE_LANGUAGE_NOT_UNIQUE	The lookup code and language for this lookup type is not unique. Enter a different value for the lookup code and language fields.
LOOKUP_CODE_NOT_UNIQUE	The lookup code is not unique for this specific lookup type. Enter a different value for the lookup code field.
LOOKUP_TYPE_LANGUAGE_NOT_UNIQUE	The lookup type and language combination is not unique. Enter a different value for the lookup type and language fields.
LOOKUP_TYPE_NOT_UNIQUE	The lookup type is not unique. Enter a different value for the lookup type field.
LOT_DELETION_EXCEPTION	The lot cannot be deleted because one or more serials exist for this lot.
LOT_DOES_NOT_EXIST	Lot {0} {1} for location {2} does not exist.

Error/Warning Code	Error/Warning Message
LOT_ID_NOT_UNIQUE	The LOT_ID is not unique. Contact your system administrator to verify the database sequence number used by this field.
LOT_LOCATION_CAN_NOT_BE_CHANGED	Location on an existing Lot can not be changed.
LOT_NUMBER_CAN_NOT_BE_CHANGED	Lot Number on an existing lot can not be changed.
LOT_NUMBER_REQUIRED	The lot number is required and has not been provided. Provide valid lot number.
LOT_PRODUCT_DETAIL_CAN_NOT_BE_CHANGED	Product detail information on an existing lot can not be changed.
LOT_PRODUCT_REQUIRED	The item or product is required for the lot and it has not been provided. Provide a valid item or product.
LOT_REQUIRED_FOR_COMMISSIONING	The lot information is required in order to commission serials. Please provide valid lot information.
LOT_SOURCE_CAN_NOT_BE_CHANGED	Lot Source on an existing Lot can not be changed.
LOT_SOURCE_INVALID	The lot source entered is invalid. Enter or select a value for this field using the associated lookup table.
LOT_SOURCE_REQUIRED	The lot source is required and has not been provided. Provide valid lot source.
LOT_VALIDATION_FAILED	The lot information provided resulted in a validation error. Please verify the data provided and ensure it is valid.
LOTS_SHIPPED_SERIALS_EXIST	You are changing lot information for a lot that has serials that have already been shipped.

Error/Warning Code	Error/Warning Message
LOWEST_LEVEL_OF_DETAIL_NOT_SET	At least one record must represent the lowest level of detail with both Lowest Saleable Unit and Product Quantity set to 1.
LS_BEST_BY_EXP_DATE_ERROR	The best by date must be prior to the expiration date. Record Id: {0}
LS_BEST_BY_ORIG_DATE_ERROR	The best by date must be after the origination date. Record Id: {0}
LS_DEACTIVATION_DATE_INVALID	The deactivation date must be after the current date. Record Id: {0}
LS_DUPLICATE_LOT_WARNING	Source system = {0}, lot = {1}, product = {2}: The lot number and product detail information provided will result in a duplicate lot. (Record Id = {3}).
LS_EXISTING_RECORD_CNT	{0} records in interface table prior to extract from source system {1}.
LS_INVALID_EFFECTIVE_END_DATE	The effective start date is greater than the effective end date. Enter valid effective start and end dates. Record Id: {0}
LS_INVALID_LOCATION	Source system = {0}, product = {1}, lot = {2}: The location {3} entered is invalid. Provide a valid location. (Record Id = {4}).
LS_INVALID_LOCATION_NAME	Source system = {0}, product = {1}, lot = {2}: The location {3} entered is invalid. Provide a valid location. (Record Id = {4}).
LS_INVALID_LOT	Source system = {0}, product = {1}, item = {2}: The lot {3} entered is invalid. Provide a valid lot. (Record Id = {4}).
LS_INVALID_PRODUCT	Source system = {0}, item = {1}, product = {2}: The product code is invalid. (Record Id = {3}).
LS_INVALID_PRODUCT_DETAILS	Source system = {0}, item = {1}, product = {2}, product UOM = {3}: The product UOM is invalid. (Record Id = {4}).

Error/Warning Code	Error/Warning Message
LS_INVALID_PRODUCT_ITEM	Source system = {0}, item = {1}, product = {2}: The item is invalid. (Record Id = {3}).
LS_INVALID_PRODUCT_ITEM_UOM	Source system = {0}, item = {1}, item UOM = {2}, product = {3} : The item UOM is invalid. (Record Id = {4}).
LS_LOCATION_DEACTIVATED	Source system = {0}, product = {1}, lot = {2}: The location {3} entered is no longer active. Provide a active location. (Record Id = {4}).
LS_LOT_PRODUCT_REQUIRED	Source system = {0}, lot = {1}: The item or product is required for the lot and it has not been provided. Provide a valid item or product. (Record Id = {2}).
LS_ORIGINATION_DATE_ERROR	The origination date must be prior to the expiration date. Record Id: {0}
LS_PRODUCT_REQUIRED_FOR_SERIAL	Source system = {0}, item = {1}, product = {2}: Location {3} is set to require a product for serial creation. (Record Id = {4}).
LS_RETEST_ORIG_DATE_ERROR	The retest date must be after the origination date. Record Id: {0}
LS_SELECTED_JOB_OPTIONS_EXT	Selected job options: Synchronization Action = {0}, Extract Scenario Code = {1}, Source System = {2}.
LS_SELECTED_JOB_OPTIONS_EXTMRG	Selected job options: Synchronization Action = {0}, Extract Scenario Code = {1}, Source System = {2}.
LS_SELECTED_JOB_OPTIONS_MRG	Selected job options: Synchronization Action = {0}, Source System = {1}.
LS_SELECTED_SYNC_RECORD_CNT	{0} records selected for synchronization.
LS_SELL_BY_EXP_DATE_ERROR	The sell by date must be prior to the expiration date. Record Id: {0}

Error/Warning Code	Error/Warning Message
LS_SELL_BY_ORIG_DATE_ERROR	The sell by date must be after the origination date. Record Id: {0}
LS_SUCCESSFUL_SYNC_RECORD_CNT	{0} records synchronized successfully.
LS_UNKNOWN_ERROR_CODE	The error code {0} being issued does not exist in the resource bundle for the system. Please report this error to your system administrator. (Record Id = {1})
MAIL_PROGRESS_SUMMARY	The following processes have been in an "In Progress" status for greater than the Execution Interval time period:
MANDATORY_QUERY_PARAMETERS_REQUIRED	The query is missing the following required parameter(s): {0}. Please supply the required parameters in the query and resubmit.
MAXEVENTCOUNT_EVENTCOUNTLIMIT_PRESENT_ERROR	The query submitted contains both the maxEventCount and eventCountList parameters and only one of those is allowed per query. Please correct the query to contain only one of these parameters and resubmit.
MERGE_LOT_COMPOSITE_DETAILS	Please review composite instance {0} using the Oracle Enterprise Manager application for more details.
MERGE_LOT_EXCEPTION	An exception has occurred while attempting to perform a lot synchronization. Please review the incoming message from the external transaction system for Lot Number {0}, Lot Source {1}, Location {2}, Item Number {3}, and Product Code {4}.
MERGE_LOT_EXCEPTION_DETAILS	An exception has occurred while processing the mergeLot web service. The exception is as follows: {0}

Error/Warning Code	Error/Warning Message
MERGE_LOT_FAULTED	A fault has occurred during the processing of the mergeLot web service for composite instance {0}. Please contact your system administrator to investigate the fault using the Oracle Enterprise Manager application.
MERGE_PACK_FAILED	An error occurred and the packaging was not updated. Check the packaging and resubmit.
MULT_DUP_SERIALS_FOUND	When trying to create serial number {0} during the shipment transaction, existing non-counterfeit serials for the same serial number were found in the OPSM system. Please review these serial numbers in OPSM to determine if they are valid and not counterfeit.
NDC_NUMBER_EXCEEDS_FIELD_LENGTH	The NDC Number provided for Product {0} exceeds the maximum field length of 20 characters. Please correct the information and resend.
NEGATIVE_AT_RISK_THRESHOLD_INVALID	The at-risk threshold value cannot be a negative number. Enter a valid, non-negative number.
NEGATIVE_CRITICAL_THRESHOLD_INVALID	The critical threshold value cannot be a negative number. Enter a valid, non-negative number.
NEGATIVE_VALUE_NOT_ALLOWED_LOWEST_SALEABLE	A negative value is not allowed for the lowest saleable unit quantity. Please enter a value that is zero or greater.
NEGATIVE_VALUE_NOT_ALLOWED_OVERAGE	A negative value is not allowed for the overage amount. Please enter a value that is zero or greater.
NEXT_SERIAL_OUT_OF_RANGE	This next serial number is out of serial range. Enter valid next serial number and ensure it is within range from and range to.

Error/Warning Code	Error/Warning Message
NO_GEN_SERIAL_TYPE	A serial type was not found for the product or location. If a product was used, enter a serial type for the product. If a product was not used, enter a non-product serial type on the location.
NO_PRODUCT_DETAILS	A product must have at least one packaging unit. Please define a product detail for the product.
NO_ROWS_SELECTED	No rows have been selected.
NO_ROWS_SELECTED_PACK_SOURCE	You must select the rows to pack.
NO_ROWS_SELECTED_PACK_SOURCE_OR_TARGET	You must select the rows to be packed as well as a destination package.
NO_ROWS_SELECTED_PACK_TARGET	A package in the tree must be selected as a destination.
NO_SERIALS_CREATED	No serials have been generated. The serials requested are either out of range or they are all duplicates.
NO_SERIALS_IMPORTED	No serials have been imported for product {0} {1} {2} requested quantity {3}. None of the serials sent in on the import transactions were created.
NO_SERIALS_REQUESTED	No quantity of serials were requested to be generated.
NO_SERIAL_TYPE_RANGE_LOC	The product level range control is on and the serial type group range control is "Location Level", so a range is required. No range exists for serial type group {0}, and location {1}. Enter a valid range.

Error/Warning Code	Error/Warning Message
NO_SERIAL_TYPE_RANGE_LOCPROD	The product level range control is on and the serial type group range control is "Location and Product Level", so a range is required. No range exists for serial type group {0}, location {1}, and product unit identifier {2}. Enter a valid range.
NO_SHIPMENTS	No shipments were sent. Invoke the shipment web service passing at least one shipment.
NUMBER_NOT_VALID_FOR_SERIAL_TYPE	The unique number {0} is not within the minimum {1} and maximum {2} for the serial type {3}. Select another unique number within the min and max for the serial type.
NUMBER_NOT_WITHIN_SERIAL_RANGE	The unique number {0} is not within a serial range for serial type group {1}, location {2} and/or product unit identifier {3}. Select a unique number within an existing range or add a new range that contains the unique number.
NUMBER_WITHIN_EXHAUSTED_RANGE	The unique number {0} is within range {1} {2} {3} that has been exhausted. Either expand the range or select another unique number within another range.
NUMBER_WITHIN_INACTIVE_SERIAL_RANGE	The unique number {0} exist within an inactive serial range {1} {2} {3}. Either reactivate range or select another unique number.
ODI_CONNECTION_CONFIG_ERROR	An error occurred retrieving the ODI connection configuration information. There is no active record in the connection configuration table. Create a new active record in the table or modify an existing record to make it active.
ODI_EXCEPTION_ERROR	The following error occurred while attempting to connect to the ODI agent: {0}.
ODI_INVOCATION_ERROR	The following error occurred during ODI invocation: {0}

Error/Warning Code	Error/Warning Message
ODI_INVOCATION_SUCCESS	ODI invocation successful. ODI Session Id = {0}
ODI_SCENARIO_NOT_SETUP	The scenario {0} has not been setup correctly in the ODI properties bundle. Contact your system administrator to verify that the required scenario name, version, and optional variable properties are defined.
ODI_SCN_CODE_INVALID	No records were found for scenario code {0} in the extract definition table. Enter scenario details in the table for this scenario code or select a different scenario code.
ODI_SCN_NAME_NULL_EXCEPTION	Scenario name is null or missing. Enter a scenario name in the extract definition table for the selected scenario code {0}.
ODI_SCN_VERSION_NULL_EXCEPTION	Scenario version is null or missing. Enter a scenario version in the extract definition table for the selected scenario code {0}.
ONE_PACKAGE_ID_REQUIRED	At least one package identifier has to be entered and flagged as primary. Enter a package identifier before submitting.
ORDERBY_MISSING	The query submitted does not specify the orderBy parameter which is required when using either the eventCountLimit or orderDirection parameter. Please resubmit the query with the orderBy parameter specified.
ORIGINAL_TRANSACTION_ID_REQ	Original transaction id is required.
ORIGINATION_DATE_ERROR	The origination date must be prior to the expiration date.
OWNING_SOURCE_SYSTEM_DIFFERENT	The attempt to update the product failed because the product is owned by another source system.

Error/Warning Code	Error/Warning Message
OWNING_SOURCE_SYSTEM_INVALID	The owning source system entered is invalid. Enter or select a value for this field using the associated lookup table.
PACK_ASSOCIATION_ID_NOT_UNIQUE	The PACK_ASSOCIATION_ID is not unique. Contact your system administrator to verify the database sequence number used by this field.
PACK_FAILED_TO_INSERT	An error occurred while inserting a pack and label.
PACK_ID_NOT_UNIQUE	The PACK_ID is not unique. Contact your system administrator to verify the database sequence number used by this field.
PACKAGE_ALREADY_PACKED_EXCEPTION	The package you are attempting to pack, already exists in another package.
PACKAGE_ID_AND_PACKAGE_ID_TYPE_REQUIRED	Package identifier and package identifier type are required fields.
PACKAGE_ID_TYPE_REQUIRED	Package identifier type is a required field.
PACKAGE_NOT_FOUND_EXCEPTION	A package for the provided label / label type combination was not found.
PACKAGING_UNIT_INVALID	The packaging unit entered is invalid. Enter or select a value for this field using the associated lookup table.
PACKAGING_UNIT_INVALID_SUB	The packaging unit {0} is invalid. Enter or select a value for this field using the associated lookup table.
PACKAGING_UNIT_REQUIRED	Packaging Unit is a required field.
PARENT_AND_CHILD_LABEL_REQUIRED	Parent and child label are required to merge the packaging. Send both parent and child label and label type.

Error/Warning Code	Error/Warning Message
PARENT_LABEL_MULTIPLE_PACKAGES_EXCEPTION	The parent label / label type combination provided exists on more than one package. Provide a label / label type combination that uniquely identifies a package.
PARENT_LABEL_SERIALIZED	In the selected container, a parent package of a transacted unit is serialized. The system cannot add a transacted unit that is contained in another product serial.
PARENT_SERIAL_IDENTIFICATION_NOT_FOUND	Parent Serial Identification {0} for item serial number {1}, serial type {2} is not found in the Trans Serial Assoc Table in the serial identification field so this serial can not be packed.
PEDIGREE_CTRL_FLAG_INVALID	The pedigree control flag value is invalid. Enter a value of 0 or 1.
PEDIGREE_CONTACT_REQUIRED	Required location contact information is missing. Contact name, title, email and telephone are all required for a pedigree and must be added to the location contact record before the pedigree can be created.
PEDIGREE_DOCUMENT_NUMBER_REQUIRED	Document Number information is missing. This data is required for a pedigree. A Pedigree cannot be created for this transaction.
PEDIGREE_MULTIPLE_PRODUCTS	Multiple products exist on the associated serials, all of which are flagged as lowest saleable unit. The system cannot determine which Product is required on the Pedigree due to this setup issue.
PEDIGREE_NO_LOWEST_SALEABLE	The pedigree controlled flag is on for product {0}, but there are no product details that have the lowest saleable quantity set to 0.

Error/Warning Code	Error/Warning Message
PEDIGREE_PRODUCT_REQUIRED	Required product information is missing. Product name, manufacturer, dosage form, container size and strength are all required for a pedigree and must be added to the product record before the pedigree can be created.
PLSQL_CHILD_LABEL_MULTIPLE_PACKAGES_EXCEPTION	The child label {0} / label type {1} combination provided exists on more than one package. Provide a label / label type combination that uniquely identifies a package.
PLSQL_COUNTERFEIT_FUTURE_DATE	The counterfeit date must be on or before current date.
PLSQL_DOCUMENT_PRIMARY_FLAG_ERROR	Cannot have more than one primary document for batch id {id}.
PLSQL_EDIT_SERIAL_LIST_ERROR_STATUSES_FLAG_IS_ENABLED	Error status flag value for the edit serial list id {0}, for the batch {1} cannot be 1
PLSQL_ERROR_STATUS_FLAG_IS_ENABLED	Error status flag value for the package interface id {0}, for the batch {1} cannot be 1
PLSQL_INVALID_CHILD_LABEL	The child label {0} and label type {1} combination provided is invalid. Provide a valid child label and label type combination for a package, or packages, that have not yet been shipped.
PLSQL_INVALID_ITEM_SERIAL_NUMBER	The serial number {0} is invalid. Provide a valid serial number.
PLSQL_INVALID_LOT	The lot {0} for the item serial number {1} is invalid. Provide a valid lot.
PLSQL_LABEL_FORMAT_INVALID	The label print format {0} does not exist in OPSM. Change the label print format on the transaction or add the label print format to the lookup table in OPSM.
PLSQL_LABEL_TYPE_INVALID	The label type {0} entered is invalid. Enter or select a value for this field using the associated lookup table.

Error/Warning Code	Error/Warning Message
PLSQL_NO_RECORDS_FOUND_PROD_SHP_TRANS_SERIAL_ASSOC	No records found in the PAS_S_SHP_SERIAL_ASSOC_INT table for transaction product id {0}, in batch id {1}.
PLSQL_NO_RECORDS_FOUND_PROD_TRANS_SERIAL_ASSOC	No records found in the PAS_S_IMP_SERIAL_ASSOC_INT table for transaction product id {0}, in batch id {1}.
PLSQL_NO_RECORDS_FOUND_PROD_TRANS_SERIAL_ASSOC	No records found for the transaction product id {0}, for the batch id {1} in PAS_S_IMP_SERIAL_ASSOC_INT table
PLSQL_NO_RECORDS_FOUND_SERIAL_LIST	No records found for the batch id {0} in PAS_S_EDIT_SERIAL_LIST_INT table
PLSQL_NO_RECORDS_FOUND_TRANS_PRODUCT	No records found for the batch id {0} in PAS_S_IMP_SERIAL_PRODS_INT table
PLSQL_NO_RECORDS_FOUND_TRANS_SERIAL_ASSOC	No records found for the batch id {0} in PAS_S_IMP_SERIAL_ASSOC_INT table
PLSQL_NO_SERIALS_EDITED	No serials have been edited for the batch id {0}
PLSQL_NO_SERIALS_IMPORTED	No serials have been imported for the batch id {0}
PLSQL_PACKAGING_UNIT_INVALID	The packaging unit {0} entered is invalid. Enter or select a value for this field using the associated lookup table.
PLSQL_PARENT_LABEL_AND_LABEL_TYPE_CANNOT_BE_NULL	The parent label/parent label type for the package interface id {0} cannot be NULL for pack operation.
PLSQL_PARENT_LABEL_MULTIPLE_PACKAGES_EXCEPTION	The parent label {0} / label type {1} combination provided exists on more than one package. Provide a label / label type combination that uniquely identifies a package.
PLSQL_RUNTIME_ERROR	An error was encountered {0} -ERROR- {1}

Error/Warning Code	Error/Warning Message
PLSQL_SHIPMENT_NO_RECORDS_FOUND_TRANS_PRODUCT	No records found for the batch id {0} in PAS_S_SHP_SERIAL_PRODS_INT table
PLSQL_TRANS_ADDR_ERROR_STATUS_FLAG_IS_ENABLED	Error status flag value for the transaction address id {0}, for the batch {1} cannot be 1
PLSQL_TRANS_DOCS_ERROR_STATUS_FLAG_IS_ENABLED	Error status flag value for the transaction document id {0}, for the batch {1} cannot be 1
PLSQL_TRANS_ERROR_STATUS_FLAG_IS_ENABLED	Error status flag value for the transaction interface batch id {0} cannot be 1
PLSQL_TRANS_LABEL_ERROR_STATUS_FLAG_IS_ENABLED	Error status flag value for the transaction label id {0}, for the batch {1} cannot be 1
PLSQL_TRANS_PRODUCT_ERROR_STATUS_FLAG_IS_ENABLED	Error status flag value for the transaction product id {0}, for the batch {1} cannot be 1
PLSQL_TRANS_PRODUCT_MULTIPLE_PRODUCTS	Multiple products found for the batch id {0}. Only one product is allowed per transaction.
PLSQL_TRANS_SERIAL_ASSOC_ERROR_STATUS_FLAG_IS_ENABLED	Error status flag value for the transaction serial assoc id {0}, for the batch {1} cannot be 1
PLSQL_TRANSACTION_TYPE_INVALID	The transaction type entered is invalid. Enter a valid transaction type
PREVIOUS_PRIMARY_ID_NOT_REUSABLE	The primary identifier on this package already exists in the system and has not been marked as reusable. A different primary identifier must be chosen.
PREVIOUS_PRIMARY_ID_NOT_SHIPPED	The primary identifier on this package already exists in the system and has not been shipped. A different primary identifier must be chosen.
PRIMARY_DOCUMENT_REQUIRED	The primary document information is required and has not been provided. Provide valid primary document information.
PRIMARY_ID_FLAG_INVALID	The primary id flag value is invalid. Enter a value of 0 or 1.

Error/Warning Code	Error/Warning Message
PRIMARY_ID_NOT_SELECTED	A primary identifier has not been selected. Mark one of the identifiers as the primary prior to saving the package.
PROCESSED_FLAG_INVALID	The processed flag value is invalid. Enter a value of 0 or 1.
PROD_INFO_NOT_AVAILABLE_ON_TRAN S	The transaction does not include valid information of transacted item or product. A new container or serial cannot be added to this transaction.
PROD_INFO_REQUIRED	The product information cannot be blank for the location. Please specify a product.
PROD_LEVEL_RANGE_CTRL_FLAG_INVA LID	The product level range control flag value is invalid. Enter a value of 0 or 1.
PROD_LOT_INCONSISTENT	The lot number is not for the product. Enter a correct lot number.
PROD_SERVICE_SUCCESS	The mergeProducts web service completed successfully.
PROD_SERVICE_WARNINGS	The mergeProducts web service completed with warnings. Please refer to Job Instance {0} in the Product Synchronization UI for details.
PROD_SERVICE_ERRORS	The mergeProducts web service completed with errors. Please refer to Job Instance {0} in the Product Synchronization UI for details.
PRODUCT_CATEGORY_INVALID	The product category entered is invalid. Enter or select a value for this field using the associated lookup table.
PRODUCT_CHANGE_NOT_ALLOWED	The product cannot be changed for this serial because it has a serial state of shipped or returned.
PRODUCT_CODE_LENGTH_INVALID	The length of the product code entered does not match the product code type selected. Correct and resubmit.

Error/Warning Code	Error/Warning Message
PRODUCT_CODE_NOT_ENTERED	Enter product code
PRODUCT_CODE_NOT_UNIQUE	Multiple Product Code matches. If only the product code is being provided as input, the product codes must be unique for OPSM to be able to process.
PRODUCT_CODE_TYPE_INVALID	The product code type entered is invalid. Enter or select a value for this field using the associated lookup table.
PRODUCT_CODE_TYPE_MISMATCH	The format of the product code entered does not match the product code type selected. Correct and resubmit.
PRODUCT_CODE_TYPE_NOT_ENTERED	Enter or select a value for product code type field using the associated lookup table.
PRODUCT_DETAIL_NOT_UNIQUE	Multiple Product Code Details. If only the product code is being provided as input, only one product code detail can exist for the Product Code being provided.
PRODUCT_DETAIL_ID_NOT_UNIQUE	The PRODUCT_DETAIL_ID is not unique. Contact your system administrator to verify the database sequence number used by this field.
PRODUCT_ID_NOT_UNIQUE	The PRODUCT_ID is not unique. Contact your system administrator to verify the database sequence number used by this field.
PRODUCT_INVALID_FOR_PRIMARY_DOC	Product Detail Id {0} and provided Primary Document are associated with different serial types, so this product cannot be used to update the serials. Please provide product information and Primary Document associated with same serial types.

Error/Warning Code	Error/Warning Message
PRODUCT_INVALID_FOR_SERIAL	Product Detail Id {0} and item serial number {1} are associated with different serial types, so this product cannot be used to update the serial. Please provide product information and item serial number associated with same serial types.
PRODUCT_ITEM_ID_NOT_UNIQUE	The PRODUCT_ITEM_ID is not unique. Contact your system administrator to verify the database sequence number used by this field.
PRODUCT_ITEM_UOM_ID_NOT_UNIQUE	The PRODUCT_ITEM_UOM_ID is not unique. Contact your system administrator to verify the database sequence number used by this field.
PRODUCT_LOCATION_ID_NOT_UNIQUE	The PRODUCT_LOCATION_ID is not unique. Contact your system administrator to verify the database sequence number used by this field.
PRODUCT_MAIL_SUMMARY	Product: {0}
PRODUCT_MISSING_PRODUCT_SPECIFIC	Serial was not created because serial type group {0} is product specific and not product was provided.
PRODUCT_NAME_NOT_ENTERED	Enter Product Name
PRODUCT_NOT_FOUND_OR_DUPLICATE_PRODUCT_CODE	Either the product data provided does not match a product found in OPSM or duplicate product codes exist. If duplicate product codes exist within OPSM, the product code type, product variant and product UOM must also be provided. Please correct the product data provided and resubmit.
PRODUCT_REQUIRED_FOR_COMMISSIONING	The product information is required in order to commission serials. Please provide valid product code information.

Error/Warning Code	Error/Warning Message
PRODUCT_REQUIRED_FOR_SERIAL	Location {0} is set to require a product for serial creation.
PRODUCT_SPECIFIC_FLAG_INVALID	The product specific flag value is invalid. Enter a value of 0 or 1.
PRODUCT_SPECIFIC_SERIAL	You are attempting to change the product information on a product specific serial number. This change is not allowed.
PRODUCT_UNIT_ID_FORMULA_REQUIRED	The product unit identifier formula is required when the serial type is defined as product specific. Enter a valid product unit identifier formula.
PRODUCT_UNIT_IDENTIFIER_FORMULA_INVALID	The product unit identifier formula entered is invalid. Enter or select a value for this field using the associated lookup table.
PRODUCT_UOM_INVALID	The product unit of measure entered is invalid. Enter or select a value for this field using the associated lookup table.
PRODUCT_UOM_NOT_ENTERED	Enter or select a value for packaging unit field using the associated lookup table.
PS_CONTAINER_TYPE_INVALID	Source system = {0}, item = {1}, product = {2}: The container type {3} is invalid. (Record Id = {4})
PS_CONTROLLED_SUBSTANCE_FLAG_INVALID	Source system = {0}, item = {1}, product = {2}: The controlled substance flag value {3} is invalid. Enter a value of 0 or 1. (Record Id = {4})
PS_CREATE_SER_FOR_ACCEPT_FLAG_INVALID	Source system = {0}, item = {1}, product = {2}: The create serials for accept flag value {3} is invalid. Enter a value of 0 or 1. (Record Id = {4})

Error/Warning Code	Error/Warning Message
PS_CREATE_SER_FOR_RECEIPT_FLAG_INVALID	Source system = {0}, item = {1}, product = {2}: The create serials for receipt flag value {3} is invalid. Enter a value of 0 or 1. (Record Id = {4})
PS_CREATE_SER_FOR_REPKG_FLAG_INVALID	Source system = {0}, item = {1}, product = {2}: The create serials for repackaging flag value {3} is invalid. Enter a value of 0 or 1. (Record Id = {4})
PS_CREATE_SERIALS_FOR_SHIP_FLAG_INVALID	Source system = {0}, item = {1}, product = {2}: The create serials for shipment flag value {3} is invalid. Enter a value of 0 or 1. (Record Id = {4})
PS_DOSAGE_FORM_INVALID	Source system = {0}, item = {1}, product = {2}: The dosage form {3} is invalid. (Record Id = {4})
PS_DUPLICATE_ITEM_UOM_ERROR	Source system = {0}, item = {1}, product = {2}: The unit of measure {3} already exists for this item. (Record Id = {4})
PS_DUPLICATE_PRODUCT_DETAIL_ERROR	Source system = {0}, item = {1}, product = {2}: The packaging unit {3} already exists for this product. (Record Id = {4})
PS_DUPLICATE_PRODUCT_ERROR	Source system = {0}, item = {1}, product = {2}: This product already exists. (Record Id = {3})
PS_DUPLICATE_PRODUCT_ITEM_ERROR	Source system = {0}, item = {1}, product = {2}: This item already exists for this source system. (Record Id = {3})
PS_EPC_COMPANY_PREFIX_INVALID	Source system = {0}, item = {1}, product = {2}: The EPC Company Prefix value {3} is invalid. (Record Id = {4})
PS_EPC_FILTER_INVALID	Source system = {0}, item = {1}, product = {2}: The EPC filter value {3} is invalid. (Record Id = {4})

Error/Warning Code	Error/Warning Message
PS_EPC_NUMBER_FILTER_EXCEPTION	Source system = {0}, item = {1}, product = {2}, Serial Type = {3}: GTIN and EPC filter are required for this serial type. (Record Id = {4})
PS_EPC_NUMBER_LENGTH_INVALID	Source system = {0}, item = {1}, product = {2}: The GTIN {3} is invalid Length. (Record Id = {4})
PS_EPC_NUMBER_EXCEPTION	Source system = {0}, item = {1}, product = {2} serial type = {3}: The GTIN is required for this serial type. (Record Id = {4})
PS_EPCNUMBER_EPCTYPE_EXCEPTION	Source system = {0}, item = {1}, product = {2} serial type = {3}: GTIN and EPC filter values are required for this serial type. (Record Id = {4})
PS_EPC_TYPE_INVALID	Source system = {0}, item = {1}, product = {2}: The EPC type {3} is invalid. (Record Id = {4})
PS_EXISTING_RECORD_CNT	{0} records in interface table prior to extract from source system {1}.
PS_EXTRACTED_RECORD_CNT	{0} records inserted, {1} records updated by the extract.
PS_INVALID_PRODUCT	Source system = {0}, item = {1}, product = {2}: The product code is invalid. (Record Id = {3})
PS_INVALID_PRODUCT_DETAILS	Source system = {0}, item = {1}, product = {2}: The product details are invalid. (Record Id = {3})
PS_INVALID_PRODUCT_ITEM	Source system = {0}, item = {1}, product = {2}: The product item is invalid. (Record Id = {3})
PS_INVALID_PRODUCT_ITEM_UOM	Source system = {0}, item = {1}, product = {2}: The product item unit of measure {3} is invalid.
PS_ITEM_NUMBER_REQUIRED	Source system = {0}, item = {1}, product = {2}: Item Number is required in item cross reference. (Record Id = {3})

Error/Warning Code	Error/Warning Message
PS_ITEM_SOURCE_INVALID	Source system = {0}, item = {1}, product = {2}: The source system is invalid.
PS_ITEM_SOURCE_REQUIRED	Source system = {0}, item = {1}, product = {2}: Item source is required in item cross reference. (Record Id = {3})
PS_ITEM_UNIT_OF_MEASURE_REQUIRED	Source system = {0}, item = {1}, product = {2}: Item unit of measure is required in item cross reference. (Record Id = {3})
PS_LABEL_FORMAT_INVALID	Source system = {0}, item = {1}, product = {2}, product uom = {3}: The label print format {4} is invalid. Enter a valid value for this field. (Record Id = {5})
PS_LOWEST_SALEABLE_UNIT_QTY_INVALID	Source system = {0}, item = {1}, product = {2}, product uom = {3}: The lowest saleable unit quantity {4} is a negative value. Enter a value that is zero or greater. (Record Id = {5})
PS_PACKAGING_UNIT_INVALID	Source system = {0}, item = {1}, product = {2}: The packaging unit {3} is invalid. (Record Id = {4})
PS_PEDIGREE_CTRL_FLAG_INVALID	Source system = {0}, item = {1}, product = {2}: The pedigree control flag value {3} is invalid. Enter a value of 0 or 1. (Record Id = {4})
PS_PRODUCT_CATEGORY_INVALID	Source system = {0}, item = {1}, product = {2}: The product category {3} is invalid. Enter a value for this field. (Record Id = {4})
PS_PRODUCT_CODE_LENGTH_INVALID	Source system = {0}, item = {1}, product = {2}: The length of the product code does not match the product code type {3}. (Record Id = {4})
PS_PRODUCT_CODE_TYPE_INVALID	Source system = {0}, item = {1}, product = {2}: The product code type {3} is invalid. (Record Id = {4})

Error/Warning Code	Error/Warning Message
PS_PRODUCT_CODE_TYPE_MISMATCH	Source system = {0}, item = {1}, product = {2}: The format of the product code does not match the product code type {3}. (Record Id = {4})
PS_PRODUCT_UOM_INVALID	Source system = {0}, item = {1}, product = {2}: The packaging unit (Product UOM) {3} is invalid. (Record Id = {4})
PS_PRODUCT_UOM_NOT_ENTERED	Source system = {0}, item = {1}, product = {2}: Packaging unit (Product UOM) is required. (Record Id = {3})
PS_PROD_DTL_SRC_SYS_PRECEDENCE_WARNING	Source system = {0}, item = {1}, product = {2}, product UOM = {3}, owning system = {4}: A source system precedence exception occurred. The product detail record was not updated because the product is owned by source system {4} and the system parameter is set to only allow updates by the owning system. (Record Id = {5})
PS_PROD_LEVEL_RANGE_CTRL_FLAG_INVALID	Source system = {0}, item = {1}, product = {2}: The product level range control flag value {3} is invalid. Enter a value of 0 or 1. (Record Id = {4})
PS_PROD_SRC_SYS_PRECEDENCE_WARNING	Source system = {0}, item = {1}, product = {2}, owning system = {3}: A source system precedence exception occurred. The product record was not updated because the product is owned by source system {3} and the system parameter is set to only allow updates by the owning system. (Record Id = {4})
PS_RECORD_INTERNAL_ACCEPT_FLAG_INVALID	Source system = {0}, item = {1}, product = {2}: The record internal accepts flag value {3} is invalid. Enter a value of 0 or 1. (Record Id = {4})
PS_RECORD_INTERNAL_RETURN_FLAG_INVALID	Source system = {0}, item = {1}, product = {2}: The record internal returns flag value {3} is invalid. Enter a value of 0 or 1. (Record Id = {4})

Error/Warning Code	Error/Warning Message
PS_RECORD_INTERNAL_SHIPMENT_FLAG_INVALID	Source system = {0}, item = {1}, product = {2}: The record internal shipments flag value {3} is invalid. Enter a value of 0 or 1. (Record Id = {4})
PS_SELECTED_JOB_OPTIONS	Selected job options Synchronization Action = {0}, Extract Scenario Name = {1}, Source System = {2}, Source System Precedence = {3}, Disregard Source System Exceptions = {4}
PS_SELECTED_JOB_OPTIONS_EXT	Selected job options: Synchronization Action = {0}, Extract Scenario Name = {1}, Source System = {2}.
PS_SELECTED_JOB_OPTIONS_EXTMRG	Selected job options: Synchronization Action = {0}, Extract Scenario Name = {1}, Source System = {2}, Source System Precedence = {3}, Disregard Source System Exceptions = {4}.
PS_SELECTED_JOB_OPTIONS_MRG	Selected job options: Synchronization Action = {0}, Source System = {1}, Source System Precedence = {2}, Disregard Source System Exceptions = {3}.
PS_SELECTED_SYNC_RECORD_CNT	{0} records selected for synchronization.
PS_SERIAL_CTRL_FLAG_INVALID	Source system = {0}, item = {1}, product = {2}: The serial control flag value {3} is invalid. Enter a value of OPSMSERIALIZED or EXTERNALLYGENERATED. (Record Id = {4})
PS_SERIAL_INCREASE_AMOUNT_INVALID	Source system = {0}, item = {1}, product = {2}: The overage amount {3} is a negative value. Enter a value that is zero or greater. (Record Id = {4})
PS_SERIAL_INCREASE_TYPE_INVALID	Source system = {0}, item = {1}, product = {2}: The serial increase type {3} is invalid. (Record Id = {4})

Error/Warning Code	Error/Warning Message
PS_SERIAL_TYPE_IS_REQUIRED	Source system = {0}, item = {1}, product = {2}, product UOM = {3}: The serial type is required when importing products. Please provide a valid serial type. (Record Id = {4})
PS_SERIAL_TYPE_INVALID	Source system = {0}, item = {1}, product = {2}, product UOM = {3}: The serial type {4} is invalid. Enter a valid value for this field. (Record Id = {5})
PS_SUCCESSFUL_SYNC_RECORD_CNT	{0} records synchronized successfully.
PUI_MISSING_PRODUCT_SPECIFIC	Serial was not created because product unit identifier is required to create the serial type. Product {0} {1} {2} uses serial type {3} of product specific serial type group {4}.
PUID_SERIAL_RANGES_MAY_EXIST_ERROR	You are changing the GTIN which will result in a new product unit identifier value. This may cause orphaned serial ranges if you have already defined serial ranges using the existing product unit identifier.
PUIFORMULA_PRODUCT_DETAILS_EXIST	The product unit identifier formula cannot be changed because products have been defined that utilize the serial types related to this serial type group.
PUIFORMULA_REQUIRED	The product unit identifier (PUI) formula is required because the product specific flag is checked. Please provide a valid PUI formula value.
PUIFORMULA_SERIAL_RANGES_EXIST	The product unit identifier formula cannot be changed because serial ranges exist that utilize this serial type group.
PUIFORMULA_SERIALS_EXIST	The product unit identifier formula cannot be changed because serials have been generated that utilize the serial types related to this serial type group.

Error/Warning Code	Error/Warning Message
PURE_IDENTITY_FAILURE	The pure identity validation on the following items has failed:{0}. Please correct the EPC(s) and resubmit.
QUERY_TOO_LARGE	The requested query has exceeded the number of bytes or the number of elements set for the EPCIS Repository. Please simplify the query and resubmit.
QUERY_TOO_COMPLEX	The requested query has exceeded the query time limit set for the EPCIS Repository. Please simplify the query and resubmit.
QUERY_NAME_INVALID	The name of the query submitted is invalid. Recognized values are 'SimpleEventQuery' and 'SimpleMasterDataQuery'. Please correct the queryName and resubmit.
QUERY_PARAMETER_EXCEPTION_HEADER	Query Parameter Exception
QUERY_PARAMETER_VALUES_INCORRECT	The value of the following parameter(s): {0} is invalid. Please supply the corrected value in the query and resubmit.
QUERY_NAME_INCORRECT_HEADER	Query Name Incorrect Error
QUERY_TOO_COMPLEX_EXCEPTION_HEADER	Query Too Complex Exception
QUERY_TOO_LARGE_EXCEPTION_HEADER	Query Too Large Exception
RANDOM_INCREMENT_MINIMUM_ERROR	The minimum of random increment must be less than the maximum of the random increment.
RANGE_CONTROL_INVALID	The range control entered is invalid. Enter or select a value for this field using the associated lookup table.

Error/Warning Code	Error/Warning Message
RANGE_CONTROL_LEVEL_INVALID	The range control level entered is invalid. Enter or select a value for this field using the associated lookup table.
RANGE_DETAIL_ID_NOT_UNIQUE	The RANGE_DETAIL_ID is not unique. Contact your system administrator to verify the database sequence number used by this field.
RANGE_EXHAUSTED	The requested quantity of serials could not be generated. Check the minimum and maximum for your serial type or range.
RANGE_EXHAUSTED_DATE_ERROR	The range exhausted date must be greater than current date.
RANGE_FROM_REQUIRED	Range From is required and was not provided.
RANGE_ID_NOT_UNIQUE	The RANGE_ID is not unique. Contact your system administrator to verify the database sequence number used by this field.
RANGE_LEVEL_CONTROL_CHANGE_EXCEPTION	This change may affect serial range setup if the related serial ranges exist.
RANGE_LEVEL_CONTROL_VALIDATION	The product unit identifier (PUID) formula is required and the product specific flag must be checked if range level control is set to 'Location and Product Level'.
RCV_TRANS_QTY_NE_RCV_QTY	The transaction quantity {0} must equal the number of received packages which is {1}. Correct the transaction and resend.
REASON_CODE_INVALID	The reason code entered is invalid. Enter or select a value for this field using the associated lookup table.
REASON_CODE_REQUIRED	The reason code is required. Provide a valid reason code.

Error/Warning Code	Error/Warning Message
RECORD_INTERNAL_ACCEPT_FLAG_INVALID	The record internal accepts flag value is invalid. Enter a value of 0 or 1.
RECORD_INTERNAL_RECEIPT_FLAG_INVALID	The record internal receipts flag value is invalid. Enter a value of 0 or 1.
RECORD_INTERNAL_RETURN_FLAG_INVALID	The record internal return flag value is invalid. Enter a value of 0 or 1.
RECORD_INTERNAL_SHIPMENT_FLAG_INVALID	The record internal shipments flag value is invalid. Enter a value of 0 or 1.
RECORD_LOCKING_ERROR	The record you are attempting to edit has been modified by another user.
RELATED_PACKAGING_UNIT_REQUIRED	Related packaging unit is required in item cross reference.
REQUIRE_PRODUCT_FOR_GEN_FLAG_INVALID	The require product for generation flag value is invalid. Enter a value of 0 or 1.
RESERVED_STATUS_INVALID	The status of the serial cannot be "Reserved" once both product code and lot number are determined. Select a different status.
RESERVING_NOT_SUPPORTED	The serial status provided = RESERVED, however, the ability to reserve serials is not supported by this web service. Please select a different serial status value.
RETEST_ORIG_DATE_ERROR	The retest date must be after the origination date.
REUSEABLE_FLAG_INVALID	The reusable flag value is invalid. Enter a value of 0 or 1.
RTN_SERIAL_ALREADY_PACKED	Cannot return serial {0} which is already packed.
RTN_SERIAL_IS_COUNTERFEIT	Serial number {0} on the Return transaction is marked as suspect or counterfeit.

Error/Warning Code	Error/Warning Message
RTN_SERIAL_NOT_COMMISSIONED	Serial number {0} is not commissioned. The serial is at a status of {1}.
RTN_SERIAL_NOT_FOUND	The serial number {0} sent in with the transaction does not exist in OPSM.
RTN_SERIAL_NOT_SHIPPED	Serial number {0} in OPSM is not at a shipped state. OPSM cannot create a Return transaction for a serial that has not previously been shipped.
RULES_DEST_TRANS_TYPE_INVALID	The destination rules transaction type entered is invalid. Enter or select a value for this field using the associated lookup table.
SALEABLE_UNIT_FLAG_INVALID	The saleable unit flag value is invalid. Enter a value of 0 or 1.
SCENARIO_NAME_INVALID	The scenario name should not be blank. Enter a valid scenario name value.
SECURITY_EXCEPTION_HEADER	Security Exception
SEEDED_FLAG_INVALID	The seeded flag value is invalid. Enter a value of 0 or 1.
SELECT_ONE_DESTINATION_NODE	Select only one row to pack.
SELECT_ONE_ROW	Only one row can be selected for this action.
SELL_BY_EXP_DATE_ERROR	The sell by date must be prior to the expiration date.
SELL_BY_ORIG_DATE_ERROR	The sell by date must be after the origination date.
SERIAL_CTRL_FLAG_INVALID	The serial control flag value is invalid. Enter a value of OPSMSERIALIZED or EXTERNALLYGENERATED.

Error/Warning Code	Error/Warning Message
SERIAL_DEST_RULES_ID_NOT_UNIQUE	The SERIAL_DEST_RULES_ID is not unique. Contact your system administrator to verify the database sequence number used by this field.
SERIAL_DESTINATION_ID_NOT_UNIQUE	The SERIAL_DESTINATION_ID is not unique. Contact your system administrator to verify the database sequence number used by this field.
SERIAL_FACTORY_FAILURE	The Serial Factory has failed to generate serials due to a null Application Module.
SERIAL_FAILED_TO_INSERT	An error occurred while inserting a serial.
SERIAL_FAILED_TO_UPDATE	An error occurred while updating a serial.
SERIAL_GEN_MAIL_ERR_SUMMARY	For Serial Generation Request Id {0} Serial Generation Request Method {1} :
SERIAL_GEN_MAIL_PROGRESS_TEXT	For Serial Generation Request Id {0} -Serial Generation Request Method {1}
SERIAL_GEN_METHOD_INVALID	The serial generation method entered is invalid. Enter or select a value for this field using the associated lookup table.
SERIAL_GEN_REQ_MSG_CREATION_ERROR	The serial generation request message record using Id {0} failed to create and initialize.
SERIAL_GEN_REQ_MSG_INSERTION_ERROR	The serial generation request message record using Id {0} failed to insert.
SERIAL_GEN_REQ_MSGS_ID_NOT_UNIQUE	The SERIAL_GEN_REQ_MSGS_ID is not unique. Contact your system administrator to verify the database sequence number used by this field.
SERIAL_GEN_REQUEST_EXCEPTION_DETAILS	An exception has occurred while processing the serialGenerationRequest web service. The exception is as follows: {0}

Error/Warning Code	Error/Warning Message
SERIAL_GEN_REQUEST_FAULTED	A fault has occurred during the processing of the serialGenerationRequest web service for composite instance {0}. Please contact your system administrator to investigate the fault using the Oracle Enterprise Manager application.
SERIAL_GEN_REQUEST_ID_NOT_UNIQUE	The SERIAL_GEN_REQUEST_ID is not unique. Contact your system administrator to verify the database sequence number used by this field.
SERIAL_GEN_REQUEST_NO_SELECTION	Select one or more records.
SERIAL_GEN_SYNC_REQ_GENERIC_ERROR	No serials were generated. Please see the Maintain Serial Generation Request page in OPSM for details.
SERIAL_GEN_SYNC_REQ_GENERIC_WARNING	Warning messages were generated during serial generation. Please see the Maintain Serial Generation Request page in OPSM for details.
SERIAL_ID_NOT_UNIQUE	The SERIAL_ID is not unique. Contact your system administrator to verify the database sequence number used by this field.
SERIAL_INCREASE_TYPE_INVALID	The serial increase type entered is invalid. Enter or select a value for this field using the associated lookup table.
SERIAL_LOT_CANNOT_BE_CHANGED	The lot cannot be changed for this serial because it has been shipped or decommissioned.
SERIAL_MARKED_AS_COUNTERFEIT	Item serial number {0} has been marked as a suspected counterfeit because a duplicate item serial number has been imported.
SERIAL_MINIMUM_ERROR	The minimum of serial number must be less than the maximum of serial number.

Error/Warning Code	Error/Warning Message
SERIAL_NOT_FOUND	Item serial number {0} was not updated because it does not exist in OPSM.
SERIAL_NOT_FOUND_FOR_PRIMARY_DOCUMENT	No serials were found for Document {0} Document Type {1}. No serials were updated.
SERIAL_NOT_EXISTING	No serial records are found in OPSM using the package identifier as the item serial number. The product serial does not exist in OPSM.
SERIAL_NUMBER_RANGE_INVALID	The starting serial number is greater than the ending serial number. This is invalid range. Enter valid one and make sure the starting serial number is less than the ending serial number.
SERIAL_QUANTITY_INVALID	The serial quantity entered is zero . Enter valid value for it.
SERIAL_QUANTITY_NEGATIVE	The serial quantity entered must be greater than zero.
SERIAL_RANGE_FROM_LESS_THAN_SERIAL_MIN	The Serial Range From must be greater than or equal to minimum of serial number.
SERIAL_RANGE_FROM_LESSTHAN_SERIAL_TYPE_MIN	The serial range with serial type group {0} location {1} and product unit identifier {2} has a from number = {3}. It must be equal or greater than the serial type group {4} serial type {5} minimum of {6}. Correct the serial range.
SERIAL_RANGE_FROM_GREATERTHAN_SERIAL_TYPE_MAX	The serial range with serial type group {0} location {1} and product unit identifier {2} has a from number = {3}. It must be less than the serial type group {4} serial type {5} maximum of {6}. Correct the serial range.
SERIAL_RANGE_INVALID	The serial starting number entered is zero. Enter valid value for it.

Error/Warning Code	Error/Warning Message
SERIAL_RANGE_KEY_INVALID	The key of serial type group, product unit identifier (PUID) and serial range from provided caused a duplicated record. Provide a unique one.
SERIAL_RANGE_OUT_OF_SCOPE	The serial range you are attempting for serial generation is not between minimum serial number and maximum serial number. Make sure the range is in scope.
SERIAL_RANGE_OVERLAP	The serial range entered overlaps with another range. Enter a valid range and make sure ranges do not overlap each other.
SERIAL_RANGE_TO_LESS_THAN_NEXT_SERIAL	The serial range to must be greater than or equal to next serial number.
SERIAL_RANGE_TO_LESSTHAN_SERIAL_TYPE_MIN	The serial range with serial type group {0} location {1} and product unit identifier {2} has a to number = {3}. It must be equal or greater than the serial type group {4} serial type {5} minimum of {6}. Correct the serial range.
SERIAL_RANGE_TO_GREATER_THAN_SERIAL_MAX	The serial range to must be less than or equal to maximum of serial number.
SERIAL_RECORD_CREATION_ERROR	The serial record using Id {0} failed to create and initialize.
SERIAL_RECORD_INSERTION_ERROR	The serial record using Id {0} failed to insert.
SERIAL_STATE_INVALID	The serial state entered is invalid. Enter or select a value for this field using the associated lookup table.
SERIAL_STATUS_INVALID	The serial status entered is invalid. Enter or select a value for this field using the associated lookup table.
SERIAL_TYPE_GROUP_INVALID	The serial type group entered is invalid. Enter or select a value for this field using the associated lookup table.

Error/Warning Code	Error/Warning Message
SERIAL_TYPE_GROUP_KEY_INVALID	The serial type group entered caused a duplicated record. Provide a unique one.
SERIAL_TYPE_GRP_DTL_ID_NOT_UNIQUE	The SERIAL_TYPE_GRP_DTL_ID is not unique. Contact your system administrator to verify the database sequence number used by this field.
SERIAL_TYPE_GRP_ID_NOT_UNIQUE	The SERIAL_TYPE_GRP_ID is not unique. Contact your system administrator to verify the database sequence number used by this field.
SERIAL_TYPE_GRP_USED_BY_LOCATION	The product specific flag cannot be changed because locations have been defined that utilize the serial types related to this serial type group.
SERIAL_TYPE_ID_NOT_UNIQUE	The SERIAL_TYPE_ID is not unique. Contact your system administrator to verify the database sequence number used by this field.
SERIAL_TYPE_INVALID	The serial type entered is invalid. Enter or select a value for this field using the associated lookup table.
SERIAL_TYPE_IS_REQUIRED	The serial type is required when importing products. Please provide a valid serial type.
SERIAL_TYPE_MAX_EXCEEDED	The maximum serial number for your serial type {0} has been exceeded.
SERIAL_TYPE_MAX_EXHAUSTED	The maximum serial number for your serial type has been exceeded.
SERIAL_TYPE_NOT_CORRECT_FOR_LOCATION	The serial type {0} is not the non-product serial type for location {1}. This location {2} is set up for non-product serial type of {3}
SERIAL_TYPE_NOT_CORRECT_FOR_PRODUCT	The serial type {0} is not correct for the product {1} {2} {3} unit of measure {4}. Check the product and use its serial type, or change the product serial type.

Error/Warning Code	Error/Warning Message
SERIAL_TYPE_NOT_UNIQUE	The Serial Type provided will cause a duplicated record, Enter a unique one.
SERIAL_USAGE_INVALID	The serial usage entered is invalid. Enter or select a value for this field using the associated lookup table.
SERIAL_USAGE_INVALID_SUB	The serial usage {0} for item serial number {1} is invalid. Enter or select a value for this field using the associated lookup table.
SERIALIZATION_CONTROL_REQUIRED	Serialization control is required.
SHIP_COUNTERFEIT_STATUS	Serial number {0} on the transaction is at a counterfeit status of {1}.
SHIP_DOCUMENT_NUMBER_REQUIRED	Document number required on the transaction document record for a pedigreed control product.
SHIP_DOC_TYPE_ADDED	The transaction document type {0} has been added to the lookup table.
SHIP_DUP_SERIAL_NOT_ADDED	Serial number {0} has not been added because the Serial already exists in OPSM.
SHIP_DUPLICATE_SERIALS	For serial number {0} sent into the transaction duplicate serials have been found in OPSM. Update the serials.
SHIP_DUPLICATE_SERIAL_OR_ERRORS	For serial number {0} sent into the transaction either multiple serial records have been found in OPSM or all serial records found have errors. Validate the serial number in OPSM.
SHIP_EXPIRE_DATE_NOT_ON_LOT	The expiration date is missing from lot number {0}, lot source {1}. Expiration date is required on the lot for shipment transactions. Update the lot with the expiration date and reprocess the transaction.

Error/Warning Code	Error/Warning Message
SHIP_IMPORT_SERIALS_ERROR	The import serials flag is on for this transaction. The OPSM system is not set up to import serials for this product code {0}, product code type {1} and location {2}.
SHIP_INVALID_LOT	The Lot {0}, Lot Source {1} and Lot Location {2} do not exist in OPSM for Product Code {3}, Product Code Type {4}. Change the lot information on the transaction or enter the information in OPSM.
SHIP_INVALID_LOT_LOCATION	The Lot Location {0} does not exist in OPSM. Change the Lot Location on the transaction or add the Lot Location to OPSM.
SHIP_LABEL_ALREADY_PACKED	Cannot ship label {0} and label type {1} which is already packed.
SHIP_LABEL_ERROR	The serial or package {0}, {1} sent in with the transaction does not exist or duplicates exist in OPSM. The serial or package {0}, {1} must be researched in OPSM and the transaction reprocessed.
SHIP_LOCATION_REQUIRED	The transaction location is missing. Location is required. Add a location to the transaction and resend the transaction.
SHIP_LOT_REQUIRED	The lot information is missing from the transaction. Lot information is required for the transaction and must be added to the transaction in the transactional system and resend the transaction.
SHIP_NO_LOT_ON_SERIAL	Serial number {0} is missing lot information. Lot information is required on the serial for the transaction. Update the serial in OPSM with the lot information and reprocess the transaction

Error/Warning Code	Error/Warning Message
SHIP_NO_PRODUCT_ON_SERIAL	Serial number {0} is missing product information. Product information is required on the serial for the transaction. Update the serial in OPSM with the product information and reprocess the transaction
SHIP_PACK_QTY_NOT_CORRECT	The (label) serial {0}, should have {1}, serials contained in it and it has {2} in it.
SHIP_PARENT_LABEL_ERROR	The parent package {0}, {1} sent in with the transaction does not exist or duplicates exist in OPSM. The package {0}, {1} must be researched in OPSM and the transaction reprocessed.
SHIP_PRODUCT_LOT_REQUIRED	The lot information is missing from the transaction product. Lot information is required for the transaction and must be added to the transaction product in the transactional system and resend the transaction.
SHIP_PRODUCT_REQUIRED	The product information is missing from the transaction. Product information is required for the transaction and must be added to the transaction in the transactional system and resend the transaction.
SHIP_SERIAL_ALREADY_PACKED	Cannot ship serial {0} which is already packed.
SHIP_SERIAL_LOT_NE_OPSPM_LOT	The lot on serial number {0} being passed into the transaction does not match the lot for the serial in the OPSM system.
SHIP_SERIAL_NOT_COMM_RESEND	Serial number {0} must be commissioned in order to ship. Navigate to Maintain Serials and enter a product and lot on the serial, then resend the transaction.
SHIP_SERIAL_NOT_COMMISSIONED	Serial number {0} must be commissioned. Navigate to Maintain Serials and enter a product and lot on the serial, then reprocess the transaction.

Error/Warning Code	Error/Warning Message
SHIP_SERIAL_NOT_FOUND	The serial number {0} sent in with the transaction does not exist in OPSM. The serial number {0} must be added to OPSM.
SHIP_SERIAL_OR_PACK_NOT_FOUND	The serial or package {0} sent in with the transaction does not exist in OPSM. The serial or package {0} must be added to OPSM and the transaction reprocessed.
SHIP_SERIAL_PROD_NE_OPSM_PROD	The product code {0} and product code type {1} on serial number {2} being passed into the Transaction does not match the product code {3} and product code type {4} for the serial in the OPSM system.
SHIP_STATE_RECEIVED	Serial number {0} already exists in OPSM. OPSM cannot create a receipt transaction for this serial when Multiple Receipts is not allowed.
SHIP_STATE_SHIPPED	Serial number {0} in OPSM has already been shipped. OPSM cannot create a shipment transaction for this serial.
SHIP_TRANS_LOT_NE_SERIAL_LOT	Lot {0} on the transaction does not match the lot on serial number {1}.
SHIP_TRANS_PROD_NE_SERIAL_PROD	Product {0} on the transaction does not match product {1} on serial number {2}.
SHIP_TRANS_QTY_NE_SHIP_QTY	The transaction quantity {0} must equal the number of shipped packages which is {1}. Correct the transaction and resend.
SHIPPED_ITEM_FLAG_INVALID	The shipped item flag is invalid. Enter a value of 0 or 1.
SHIPPED_PACKAGE_CHILD_PACK_ERROR	The serialized item you are attempting to pack has already been shipped, therefore it cannot be packed into another serialized item.

Error/Warning Code	Error/Warning Message
SHIPPED_PACKAGE_PACK_ERROR	The package you are attempting to pack into has already been shipped, therefore, you cannot pack anything into it.
SHIPPED_PACKAGE_UNPACK_ERROR	The package you are attempting to unpack has already been shipped, therefore, you cannot unpack it.
SHIPPED_SERIAL_CANNOT_BE_CHANGED	The serial cannot be changed because it has been shipped.
SOURCE_SYSTEM_INVALID	The source system entered {0} is invalid. Enter or select a value for this field using the associated lookup table.
SOURCE_SYSTEM_NOT_EQUAL_LOCATION_SOURCE	The source system being passed in does not equal the location source system in OPSM.
SOURCE_BUSINESS_ADDRESS_MISSING	The transaction address is missing for the Business Source for the transaction.
SUBMIT_SERIAL_GEN_REQ_EXPT	The request {0} you are attempting to submit has been processed or is processing. This request cannot be submitted again.
SYNC_ACTION_INVALID	The synchronization actions should not be blank. Enter a valid synchronization action value.
SYSTEM_PARAMETER_ID_NOT_UNIQUE	The SYSTEM_PARAMETER_ID is not unique. Contact your system administrator to verify the database sequence number used by this field.
SYSTEM_PARAMETER_NOT_FOUND	The system parameter does not exist. Go to Maintain System Parameters to add the information.
SYSTEM_PRECEDENCE_INVALID	The source system precedence should not be blank. Enter a valid source system precedence value.

Error/Warning Code	Error/Warning Message
TAG_ID_REQUIRED	tagId is required. You must provide tagId as part of the input request parameters.
TAG_ID_NOT_FOUND	tagId was not found in the OPSM system. Verify the tagId in the input request parameters and resubmit.
THE_SALEABLE_FLAG_INVALID	The saleable flag entered is invalid. Enter 0 or 1.
THE_WO_FIRM_PLANNED_FLAG_ENTER	The wo firm planned flag entered is invalid. Enter 0 or 1.
THE_WO_TERMINATED_FLAG_ENTERED	The wo terminated flag entered is invalid. Enter 0 or 1.
TRANS_EVENT_ADD_OBS_ERROR	At least one childEPC should be provided on a Transaction Event with the action of Add or Observe. Please correct the event and resubmit.
TRANS_ITEM_SOURCE_NOT_EQUAL_LOCATION_SOURCE	The source system of the item, {0}, does not match the source system of the transaction location, {1}.
TRANS_LABEL_FORMAT_INVALID	The label print format {0} does not exist in OPSM. Change the label print format on the transaction or add the label print format to the lookup table in OPSM.
TRANS_LABEL_TYPE_INVALID	The label type {0} does not exist in OPSM. Change the label type on the transaction or add the label type to the lookup table in OPSM.
TRANS_LABEL_TYPE_IS_SERIAL_TYPE	The label {0}, label type {1} can not be created in OPSM because label type {1} is a serial type in OPSM. A serial type can not be used for a packing label type.
TRANS_LOT_NE_TRANS_PROD_LOT	The Lot {0},{1},{2} in the TransactionVO does not match with Lot {3},{4},{5} in TransactionProductVO.

Error/Warning Code	Error/Warning Message
TRANS_LOT_SOURCE_INVALID	The lot source {0} sent into the transaction does not exist in the lookup tables. Add the lot source to the source system lookup.
TRANS_LOT_SOURCE_NOT_EQUAL_LOT_LOCATION_SOURCE	The transaction lot source {0} does not equal the transaction lot locations source system {1}.
TRANS_PACKAGING_UNIT_INVALID	The packaging unit {0} does not exist in OPSM. Change the packaging unit on the transaction or add the packaging unit to the lookup table in OPSM.
TRANS_PROCESS_FAILURE	Transaction processing has failed. Please see the Maintain Transactions page in OPSM for details.
TRANS_PROD_ITEM_SOURCE_NOT_EQUAL_LOCATION_SOURCE	The transaction product item source {0} does not equal the transaction locations source system {1}.
TRANS_PROD_LOT_SOURCE_NOT_EQUAL_LOT_LOCATION_SOURCE	The transaction product lot source {0} does not equal the lot locations source system {1}.
TRANS_PROD_NOT_FOUND	No record for the transacted item is found in Transaction Product table.
TRANS_PROD_RECORD_CREATION_ERROR	The transaction product record using Id {0} failed to create and initialize
TRANS_PROD_RECORD_INSERTION_ERROR	The transaction product record using Id {0} failed to insert.
TRANS_QTY_NOT_MATCH_SERIALS	Transaction quantity {0} is different than the number of serials found.
TRANS_SERIAL_ASSOC_ID_NOT_UNIQUE	The TRANS_SERIAL_ASSOC_ID is not unique. Contact your system administrator to verify the database sequence number used by this field.
TRANS_SERIAL_ASSOC_RECORD_CREATION_ERROR	The transaction serial association record using Id {0} failed to create and initialize.

Error/Warning Code	Error/Warning Message
TRANS_SERIAL_ASSOC_RECORD_INSERTION_ERROR	The transaction serial association record using Id {0} failed to insert.
TRANS_SOURCE_NOT_EQUAL_LOCATION_SOURCE	The source system of the transaction, {0}, does not match the source system of the transaction location, {1}.
TRANSACTION_ADDRESS_ID_NOT_UNIQUE	The TRANSACTION_ADDRESS_ID is not unique. Contact your system administrator to verify the database sequence number used by this field.
TRANSACTION_ALT_DOC_ID_NOT_UNIQUE	The TRANSACTION_ALT_DOC_ID is not unique. Contact your system administrator to verify the database sequence number used by this field.
TRANSACTION_DOC_ID_NOT_UNIQUE	The TRANSACTION_DOC_ID is not unique. Contact your system administrator to verify the database sequence number used by this field.
TRANSACTION_ERROR_FAILURE	The transaction error record failed to create and initialize or insert.
TRANSACTION_ERROR_ID_NOT_UNIQUE	The TRANSACTION_ERROR_ID is not unique. Contact your system administrator to verify the database sequence number used by this field.
TRANSACTION_ERROR_INVALID	Transaction error invalid
TRANSACTION_ERROR_TYPE_INVALID	Transaction Error Type Invalid
TRANSACTION_ERROR_WITH_NO_MESSAGE_SETUP	Transaction error occurred, but no error message is set up for the error code.
TRANSACTION_FACTORY_FAILURE	The transaction factory has failed to commit the transaction.

Error/Warning Code	Error/Warning Message
TRANSACTION_ID_NOT_UNIQUE	The TRANSACTION_ID is not unique. Contact your system administrator to verify the database sequence number used by this field.
TRANSACTION_LABEL_ID_NOT_UNIQUE	The TRANSACTION_LABEL_ID is not unique. Contact your system administrator to verify the database sequence number used by this field.
TRANSACTION_MAIL_ERR_SUMMARY	For Transaction Id {0} with Transaction Type {1} :
TRANSACTION_MAIL_PROGRESS_TEXT	Transaction Id {0} with Transaction Type {1}
TRANSACTION_PRODUCT_REQUIRED_ITEM	The PAS_S_TRANSACTION_PRODUCT record for item {0}, {1}, {2} and lot {3}, {4} in this transaction is required. This transaction cannot be processed.
TRANSACTION_PRODUCT_REQUIRED_PRODUCT	The PAS_S_TRANSACTION_PRODUCT record for product {0}, {1}, {2}, {3}, lot {4}, {5} in this transaction is required. This transaction cannot be processed.
TRANSACTION_RECORD_CREATION_ERROR	The transaction record using Id {0} failed to create and initialize.
TRANSACTION_RECORD_INSERTION_ERROR	The transaction record using Id {0} failed to insert.
TRANSACTION_TYPE_INVALID	The transaction type entered is invalid. Enter or select a value for this field using the associated lookup table.
TRANSACTION_TYPE_REQUIRED	The transaction type is required. Provide a valid transaction type.
TRANSMIT_FAILED	The transmit transaction failed for {0} method of communication. The intended destination was {1}.

Error/Warning Code	Error/Warning Message
UNIQUE_NUMBER_INVALID	The unique number is not within a valid range.
UNIQUE_NUMBER_REQUIRED	The unique number is required. Provide the required unique number.
UNIQUE_SERIAL_METHOD_INVALID	The attempt to identify serial range failed because its serial generation method is random.
UNIQUE_SERIAL_NUMBER_METHOD_INVALID	The unique serial number method entered is invalid. Enter or select a value for this field using the associated lookup table.
UNIT_TEST_SHOULD_HAVE_ERRORED	Unit Test did not throw error when it should have.
USE_PROD_SPEC_RANGE_FLAG_INVALID	The use product specific range flag value is invalid. Enter a value of 0 or 1.
USER_NOT_AUTHORIZED	The user specified in the requested query is not authorized to query the EPCIS repository. Please correct the user information and resubmit or contact the EPCIS repository owner for access.
USERNAME_PASSWORD_INVALID	Either the Username or Password entered is invalid. Enter a valid user name and password
WEB_SERVICE_INVALID	The web service entered is invalid. Enter or select a value for this field using the associated lookup table.
WO_COMM_SERIAL_TO_LOT_FLAG_INVALID	The work order commission to lot flag value is invalid. Enter a value of 0 or 1.
WOS_EXISTING_RECORD_CNT	{0} records in interface table prior to extract from source system {1}.

Error/Warning Code	Error/Warning Message
WOS_EXISTING_SERIAL_GEN_REQ_ERROR	Source system = {0}, work order = {1}, product = {2}: This work order serialization record is for a cancelled or terminated work order. This record cannot be processed because there are one or more pending serial generation requests for the work order. You must either manually delete the existing request(s) or wait until the serial generation request(s) have been processed before re-processing the serialization record. (The system will automatically attempt to re-process this work order serialization record during the next serialization job.) (Record Id = {3})
WOS_EXTRACTED_RECORD_CNT	{0} records inserted by the extract.
WOS_INVALID_PRODUCT_ERROR	Source system = {0}, work order = {1}, product = {2}, lot = {3}: The product code and/or product UOM is invalid. (Record Id = {4})
WOS_LOCATION_INVALID	Source system = {0}, work order = {1}, product = {2}, location = {3}: The location is invalid. (Record Id = {4})
WOS_NOT_OPSM_SERIALIZED_ERROR	Source system = {0}, work order = {1}, product = {2}, lot = {3}: The serial control attribute for the product indicates that it is not serialized by OPSM. (Record Id = {4})
WOS_SELECTED_JOB_OPTIONS_EXT	Selected job options: Synchronization Action = {0}, Extract Scenario Code = {1}, Source System = {2}, Purge Interface Flag = {3}
WOS_SELECTED_JOB_OPTIONS_EXTPROC	Selected job options: Synchronization Action = {0}, Extract Scenario Code = {1}, Source System = {2}, Purge Interface Flag = {3}
WOS_SELECTED_JOB_OPTIONS_PROC	Selected job options: Synchronization Action = {0}, Source System = {1}, Purge Interface Flag = {2}
WOS_SELECTED_RECORD_CNT	{0} records selected for serialization.

Error/Warning Code	Error/Warning Message
WOS_SOURCE_SYSTEM_NOT_EQUAL_LOCATION_SOURCE	Source system = {0}, work order = {1}, product = {2}, location = {3}: The source system is not equal to the location source system. (Record Id = {4})
WOS_SUCCESSFUL_RECORD_CNT	{0} records processed successfully.
ZERO_OR_BLANK_QUANTITY_ERROR	The quantity provided on the Quantity Event is blank or invalid. Please provide a valid quantity and resubmit.
ZERO_VALUE_NOT_ALLOWED	A value that is either zero or negative is not allowed. Please enter a value that is greater than zero.

Index

A

- adding
 - containers and/or product serials transaction, 10-49
 - destination rules to serial destination, 4-271
 - location security definitions, 4-221
 - lookup codes to lookup type, 4-19
 - packages to packaging hierarchy, 9-13
 - policy details, 5-14, 5-22
 - URLs Operations Dashboard, 12-22
- auditing
 - context attributes, 13-12
 - overview, 13-1
- audit trail history
 - exporting to Excel, 13-40
 - searching, 13-28
 - viewing, 13-36
- audit trail setup
 - setting up, 13-17
 - updating, 13-25
 - viewing, 13-23
- audit trail setup information
 - exporting to Excel, 13-27
 - synchronizing, 13-28

C

- CaptureService
 - capture operation, 14-202
- CaptureService wsdl, C-2
- changing
 - columns in table, 3-3

- changing and reordering
 - columns in table, 3-11
- commissioning
 - serials, 7-85
 - single, 7-84
- 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, 10-49
 - deleting transaction, 10-69
 - updating transaction, 10-71
 - viewing transaction, 10-66
- context attributes
 - auditing, 13-12
- Counterfeit Serials Analysis component
 - using, 12-12
- creating
 - location groups, 4-80
 - locations, 4-53
 - location security roles, 4-206
 - lots, 6-16
 - packages, 8-8
 - packaging hierarchy, 9-32

- packaging hierarchy, 9-13
- pedigree, 11-6
- policies, 5-12
- products, 4-99
- saved search, 3-15
- serial destinations, 4-265
- serial generation requests, 7-17
- serial ranges, 4-256
- serial type groups, 4-233
- transactions using JMS queue, 10-75
- user groups, 4-190
- users, 4-179
- custom serial number logic
 - generating, E-4

D

- deactivating
 - locations, 4-70
- decommissioning
 - serials, 7-110
 - single, 7-85
- decommission serials transactions
 - overview, 10-2
- defining
 - lot synchronization scenarios, 4-289
 - product and item cross reference integrated transactional systems, 4-123
 - product synchronization scenarios, 4-289
 - work order serialization scenarios, 4-289
- deleting
 - alternate identifier from package, 8-19
 - alternate identifier from package (alternate method), 8-20
 - containers and/or product serials transaction, 10-69
 - destination rules for a serial destination, 4-276
 - item cross-reference for product, 4-121
 - item UOM cross-reference for products, 4-121
 - job instances, 3-34
 - location groups, 4-86
 - locations, 4-72
 - location security definitions, 4-225
 - location security roles, 4-213
 - lookup codes from lookup types, 4-23
 - lots, 6-24
 - packages complete, 8-17

- policy details, 5-17, 5-22
- product details, 4-121
- products, 4-119
 - item cross-references, 4-121
 - item UOM cross-reference, 4-121
 - location overrides, 4-122
 - product details, 4-121
 - serial generation details, 4-120
- saved search, 3-18
- serial destinations, 4-271
- serial generation requests, 7-29
- serial ranges, 4-261
- serial type groups, 4-244
- serial types from serial type groups, 4-244
- user groups, 4-197
- users, 4-181

- deleting policies, 5-22

- destination rules

- adding serial destination, 4-271
 - deleting serial destination, 4-276
 - editing serial destination, 4-276

- detaching

- tables, 3-1

- digitally signing

- pedigree

- Digital Signature Worklist page, 11-21

- Maintain Transactions page, 11-9

- disregarding

- transactions, 10-47

E

- editing

- destination rules for a serial destination, 4-276

- location groups, 4-85

- locations, 4-69

- location security definitions, 4-225

- location security roles, 4-212

- lookup types and codes, 4-17

- lots, 6-21

- packages, 8-15

- policies, 5-20

- policy details, 5-21

- products, 4-118

- serial destinations, 4-269

- serial ranges, 4-261

- serials, 7-74

- serial type groups, 4-242
- status and usage serialized items
 - packaging hierarchy, 9-27
- user groups, 4-195
- users, 4-181
- edit serials transactions
 - overview, 10-3
- e-mail notifications
 - web service, 14-243
- e-mail notifications process flow
 - web service, 14-245
- endpoint
 - CaptureService, 14-202
 - JobInstanceServiceAMService, 14-4
 - LotsServiceAMService, 14-7
 - PackagingServiceAMService, 14-23
 - ProductServiceAMService, 14-39
 - QueryService, 14-230
 - SerialGenRequestServiceAMService, 14-52
 - SerialsServiceAMService, 14-77
 - TransactionsServiceAMService, 14-122
 - wsdls, C-1
- 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, 14-242
- exporting to Excel
 - audit trail history, 13-40
 - audit trail setup information, 13-27
- extensible lookup types and codes
 - list, 4-12

G

- generating
 - custom serial number logic, E-4
 - serials

- serial_next parameter, E-5
- generating serials
 - using serial_next parameter, E-5

I

- import serials transactions
 - overview, 10-3
- integrated transactional systems
 - defining product and item cross reference, 4-123
 - searching for transactions, 10-32

J

- job instances
 - deleting, 3-34
 - searching advanced, 3-24
 - searching basic, 3-19
 - using, 3-19
 - viewing details, 3-33
- JobInstanceServiceAMService
 - createJobInstanceAysnc operation, 14-4
 - createJobInstance operation, 14-4
- JobInstanceServiceAMService wsdl, C-7

K

- key features
 - Oracle Pedigree and Serialization Manager, 1-5

L

- Location Details component
 - using, 12-2
- location groups
 - associating locations, 4-82
 - creating, 4-80
 - deleting, 4-86
 - deleting locations, 4-84
 - editing, 4-85
 - maintaining, 4-73
- location groups
 - searching
 - advanced search, 4-76
 - basic search, 4-74
- locations
 - associating location groups, 4-82

- creating, 4-53
- deactivating, 4-70
- deleting, 4-72
- deleting location groups, 4-84
- editing, 4-69
- maintaining, 4-47
- searching, 4-50
- viewing details, 4-52
- location security
 - maintaining, 4-214
 - overview, 1-9
- location security definitions
 - adding, 4-221
 - deleting, 4-225
 - editing, 4-225
 - searching
 - advanced search, 4-217
 - basic search, 4-214
- location security roles
 - creating, 4-206
 - deleting, 4-213
 - editing, 4-212
 - maintaining, 4-198
 - searching
 - advanced search, 4-200
 - basic search, 4-198
 - viewing, 4-204
- lookup codes
 - adding to lookup type, 4-19
 - deleting from lookup types, 4-23
 - maintaining, 4-5
- lookup types
 - adding lookup codes, 4-19
 - deleting lookup codes, 4-23
 - maintaining, 4-5
 - searching, 4-14
 - viewing details, 4-16
- lookup types and codes
 - editing, 4-17
 - list, B-1
 - list of extensible, 4-12
 - list of user defined, 4-6
 - maintaining, 4-5
- lot definition
 - overview, 6-1
- lots
 - creating, 6-16

- deleting, 6-24
- editing, 6-21
- merging using JMS queue, 6-41
- searching, 6-3
 - advanced search, 6-8
 - basic search, 6-4
- synchronizing (lot interface table), 6-25
- viewing, 6-15
- viewing detail information, 6-15
- LotsServiceAMService
 - mergeLotAsync operation, 14-7
 - mergeLot operation, 14-7
- LotsServiceAMService wsdl, C-10

M

- maintaining
 - EPCIS preferences, 5-2
 - location groups, 4-73
 - locations, 4-47
 - location security, 4-214
 - location security roles, 4-198
 - lookup codes, 4-5
 - lookup types, 4-5
 - lookup types and codes, 4-5
 - packaging hierarchy, 9-26
 - policies, 5-5
 - products, 4-87
 - serial destination rules, 4-262
 - serial destinations, 4-262
 - serial ranges, 4-245
 - serial type groups, 4-226
 - serial types, 4-226
 - system parameters, 4-24
 - user groups, 4-182
 - users, 4-173
- Maintain Transaction page
 - overview, 10-9
- merging
 - lots using JMS queue, 6-41
- modifying
 - EPCIS preferences, 5-5
 - system parameters, 4-46

O

- Operations Dashboard
 - adding custom URLs, 12-22

- refreshing information, 12-23
 - using Counterfeit Serials Analysis component, 12-12
 - using Location Details component, 12-2
 - using Serial Range Management component, 12-18
 - using Transaction Exceptions component, 12-8
 - Oracle E-Business Suite
 - adding containers and/or product serials to transaction, 10-49
 - defining product and item cross reference, 4-123
 - deleting containers and/or product serials to transaction, 10-69
 - performing work order serialization OPSM, 7-30
 - synchronizing lots, 6-25
 - synchronizing products OPSM, 4-155
 - updating containers and/or product serials to transaction, 10-71
 - viewing containers and/or product serials to transaction, 10-66
 - Oracle Pedigree and Serialization Manager
 - key features, 1-5
 - overview, 1-1
 - set up process, 4-2
 - overview
 - auditing, 13-1
 - commission serials transactions, 10-2
 - decommission serials transactions, 10-2
 - defining serial ranges by location, 4-246
 - defining serial ranges by location and product unit identifier, 4-247
 - defining serial ranges by location group, 4-248
 - defining serial ranges by location group and product unit identifier, 4-249
 - edit serials transactions, 10-3
 - EPCIS, 2-1
 - EPCIS repository, 2-1
 - EPCIS repository setup process, 5-1
 - import serials transactions, 10-3
 - location security, 1-9
 - lot definition, 6-1
 - Maintain Transactions page, 10-9
 - Oracle Pedigree and Serialization Manager, 1-1
 - packages, 8-1
 - pedigree, 11-1
 - pedigree setup process, 11-4
 - PL/SQL services, 14-1
 - product code types supported, 1-8
 - product definition, 4-3
 - product unit identifier (PUID), 4-226
 - receipt transactions, 10-4
 - reserve serials transactions, 10-4
 - return transactions, 10-5
 - serial generation, 7-1
 - serial generation transactions, 10-5
 - serial transmission transactions, 10-6
 - serial types, 4-228
 - setting up OPSM, 4-2
 - shipment transactions, 10-7
 - transactions, 10-1
 - transactions OPSM integration with Oracle E-Business Suite, 10-7
 - web services, 14-1
-
- ## P
- packages
 - adding to packaging hierarchy, 9-13
 - creating, 8-8
 - creating Maintain Packaging Hierarchy page, 9-32
 - deleting alternate identifier, 8-19
 - deleting alternate identifier (alternate method), 8-20
 - deleting complete, 8-17
 - editing, 8-15
 - overview, 8-1
 - packing into packaging hierarchy, 9-13
 - searching, 8-2
 - Maintain Packaging Hierarchy page, 9-5
 - viewing detail information, 8-7
 - packaging hierarchy
 - creating, 9-13
 - maintaining, 9-26
 - removing packages, 9-23
 - searching, 9-1
 - unpacking packages, 9-23
 - viewing, 9-9
 - PackagingServiceAMService
 - packPackageAsync operation, 14-23
 - packPackage operation, 14-23

- processPackageSQLAsync operation, 14-23
- processPackageSQL operation, 14-23
- processUnpackSQLAsync operation, 14-23
- processUnpackSQL operation, 14-23
- unpackPackageAsync operation, 14-23
- unpackPackage operation, 14-23
- PackagingServiceAMService wsdl, C-12
- packing
 - packages to packaging hierarchy, 9-13
- pages and navigation paths, A-2
- PAS_SERIAL_GEN.generate_serial procedure, E-1
- PAS_SERIAL_VAL.validate_serial procedure, E-5
- pedigree
 - creating, 11-6
 - digitally signing Digital Signature Worklist page, 11-21
 - digitally signing Maintain Transactions page, 11-9
 - overview, 11-1
 - overview setup process, 11-4
 - printing Digital Signature Worklist page, 11-27
 - printing Maintain Transactions page, 11-24
 - searching for signed or unsigned, 11-13
 - viewing Digital Signature Worklist page, 11-33
 - viewing Maintain Transactions page, 11-32
- performing
 - work order serialization external system, 7-30
- personalizing
 - saved search, 3-17
- PL/SQLservices
 - processImportAndPackSQLAsync, 14-122
- PL/SQL services
 - detail, 14-4
 - editSerialStatusAndUsageByListSQL, 14-77
 - editSerialStatusAndUsageByListSQLAsync, 14-77
 - overview, 14-1
 - processImportAndPackSQL, 14-122
 - processPackageSQL, 14-23
 - processPackageSQLAsync, 14-23
 - processTransactionSQL, 14-122
 - processTransactionSQLAsync, 14-122
 - processUnpackSQL, 14-23
 - processUnpackSQLAsync, 14-23
- policies
 - creating, 5-12
 - deleting, 5-22
 - editing, 5-20
 - maintaining, 5-5
 - searching (advanced), 5-7
 - searching (basic), 5-5
- policy details
 - adding, 5-14, 5-22
 - deleting, 5-17, 5-22
 - editing, 5-21
- printing
 - pedigree
 - Digital Signature Worklist page, 11-27
 - Maintain Transactions page, 11-24
- procedures
 - to add a child package (create child package action or button)
 - packaging hierarchy, 9-20
 - to add a child package (drag and drop)
 - packaging hierarchy, 9-19
 - to add a child package (using pack icon)
 - packaging hierarchy, 9-15
 - to add containers and/or product serials to a transaction, 10-50
 - to add custom URLs to the Operations Dashboard
 - Operations Dashboard, 12-22
 - to add destination rules to a serial destination, 4-271
 - to add location security definitions, 4-221
 - to add lookup codes to a lookup type, 4-19
 - to add policy details, 5-14, 5-22
 - to associate locations to a location group, 4-82
 - 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, 7-84
 - to commission serials (Commission Serials page), 7-93
 - to commission serials (Edit Serial page), 7-93
 - to commission serials (Maintain Serials page), 7-87
 - to create a saved search, 3-15
 - to create location groups, 4-80
 - to create locations, 4-53

- to create location security roles, 4-206
- to create lots, 6-17
- to create packages, 8-9
- to create packages using the Maintain Packaging Hierarchy page (Packages region), 9-34
- to create packages using the Maintain Packaging Hierarchy page (within packaging hierarchy tree), 9-33
- to create packaging hierarchies, 9-14
- to create policies, 5-12
- to create products, 4-99
- to create serial destinations, 4-265
- to create serial generation requests, 7-18
- to create serial ranges, 4-256
- to create serial type groups, 4-233
- to create user groups, 4-190
- to create users, 4-179
- to deactivate locations, 4-70
- to decommission a single serial number, 7-85
- to decommission serials (Commission Serials page), 7-112
- to decommission serials (Edit Serial page), 7-112
- to decommission serials (Maintain Serials page), 7-111
- to define product and packaging information from an external system (product does not exist in OPSM), 4-124
- to define product and packaging information from an external system (product exists in OPSM), 4-136
- to delete a complete package, 8-18
- to delete all of the product information, 4-119
- to delete an alternate identifier from a package, 8-19
- to delete an alternate identifier from a package (alternate method), 8-20
- to delete a saved search, 3-18
- to delete containers and/or product serials from a transaction, 10-70
- to delete destination rules for a serial destination, 4-276
- to delete item cross-reference, 4-121
- to delete item unit of measure cross-reference, 4-121
- to delete job instances, 3-34
- to delete location groups, 4-86
- to delete location overrides for a product, 4-122
- to delete locations, 4-72
- to delete location security definitions, 4-225
- to delete location security roles, 4-213
- to delete locations from a location group, 4-84
- to delete lookup codes associated with a lookup type, 4-23
- to delete lots, 6-24
- to delete policies, 5-22
- to delete policy details, 5-17, 5-22
- to delete product details, 4-121
- to delete serial destinations, 4-271
- to delete serial generation details for a product, 4-120
- to delete serial generation requests, 7-29
- to delete serial ranges, 4-261
- to delete serial type groups, 4-244
- to delete serial types associated with a serial type groups, 4-244
- to delete user groups, 4-197
- to delete users, 4-181
- to detach a table, 3-1
- to digitally sign a pedigree using the Digital Signature Worklist page, 11-22
- to digitally sign a pedigree using the Maintain Transactions page, 11-10
- to disregard transactions, 10-47
- to edit a serial number, 7-75
- to edit destination rules for a serial destination, 4-276
- to edit location groups, 4-85
- to edit locations, 4-69
- to edit location security definitions, 4-225
- to edit location security roles, 4-212
- to edit lookup types and codes, 4-17
- to edit lots, 6-22
- to edit packages, 8-16
- to edit policies, 5-20
- to edit policy details, 5-21
- to edit product and packaging information from an external system, 4-150
- to edit products, 4-118
- to edit serial destinations, 4-269
- to edit serial ranges, 4-261
- to edit serial type groups, 4-242

- to edit status and usage of serialized items, 9-28
- to edit user groups, 4-195
- to edit users, 4-181
- to export audit trail setup information to Excel, 13-27
- to export the audit trail history to Excel, 13-40
- to extract and merge item information from an external system, 4-166
- to extract and merge lot information from an external system, 6-26
- to extract and process work order serialization from an external system, 7-31
- to extract item information from an external system, 4-157
- to extract lot information from an external system, 6-32
- to extract work orders from an external system, 7-40
- to maintain packaging hierarchies, 9-27
- to manually create a pedigree, 11-7
- to merge the extracted items into OPSM, 4-161
- to merge the extracted lots into OPSM, 6-38
- to modify EPCIS preferences, 5-5
- to modify system parameters, 4-46
- to personalize a saved search, 3-17
- to print a pedigree using the Digital Signature Worklist page, 11-28
- to print a pedigree using the Maintain Transactions page, 11-25
- to process transactions, 10-46
- to process work order serialization in OPSM, 7-46
- to refresh the information that displays on the Operations Dashboard (entire dashboard)
 - Operations Dashboard, 12-23
- to refresh the information that displays on the Operations Dashboard (individual component)
 - Operations Dashboard, 12-23
- to remove (unpack) packages from a packaging hierarchy, 9-24
- 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, 13-29
- 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), 4-76
- to search for location groups (basic search), 4-74
- to search for locations, 4-50
- to search for location security definitions (advanced search), 4-217
- to search for location security definitions (basic search), 4-214
- to search for location security roles (advanced search), 4-200
- to search for location security roles (basic search), 4-198
- to search for lookup types, 4-14
- to search for lots (advanced search), 6-8
- to search for lots (basic search), 6-4
- to search for packages, 8-2
- to search for packages using the Maintain Packaging Hierarchy page, 9-6
- to search for packaging hierarchies, 9-2
- to search for policies (advanced search), 5-7
- to search for policies (basic search), 5-5
- to search for products (advanced search, 4-92
- to search for products (basic search, 4-88
- to search for serial destinations, 4-262
- to search for serial generation requests, 7-6
- to search for serial ranges, 4-251
- to search for serials (advanced search), 7-58
- to search for serials (basic search), 7-53
- to search for serial type groups, 4-229
- to search for signed or unsigned pedigree documents (advanced search), 11-17
- to search for signed or unsigned pedigree documents (basic search), 11-13
- to search for transactions (advanced search), 10-22
- to search for transactions (basic search), 10-11
- to search for transactions from integrated transactional systems, 10-32
- to search for user groups (advanced search), 4-184
- to search for user groups (basic search), 4-182
- to search for users (advanced search), 4-175
- to search for users (basic search), 4-173

- to set EPCIS preferences, 5-2
- to set system parameters, 4-25
- to set up the audit trail, 13-18
- to submit serial generation requests, 7-27
- to synchronize audit trail setup information, 13-28
- to transmit serials, 10-74
- to update containers and/or product serials for a transaction, 10-72
- to update the audit trail setup, 13-25
- to view a pedigree using the Digital Signature Worklist, 11-34
- to view a pedigree using the Maintain Transactions page, 11-32
- to view containers and/or product serials for a transaction, 10-66
- to view counterfeit serials analysis summary information
 - Operations Dashboard, 12-13
- to view counterfeit serials detail information
 - Operations Dashboard, 12-15
- to view EPCIS preferences, 5-2
- to view initiating transaction detail information, 10-44
- to view job instance details, 3-33
- to view location detail information, 4-52
- to view location details (map view)
 - Operations Dashboard, 12-6
- to view location details (table view)
 - Operations Dashboard, 12-4
- to view location detail summary information
 - Operations Dashboard, 12-3
- to view location security roles, 4-204
- to view lookup type details, 4-16
- to view lot detail information, 6-15
- to view package detail information, 8-7
- to view packaging hierarchies, 9-10
- to view serial destination detail information, 4-264
- to view serial destination rules (advanced search), 4-282
- to view serial destination rules (basic search), 4-277
- to view serial detail information, 7-67
- to view serial generation request messages, 7-15
- to view serial range detail information
 - Operations Dashboard, 12-20
- to view serial range summary information
 - Operations Dashboard, 12-19
- to view serial type group information, 4-232
- to view system parameters, 4-25
- to view the audit trail history, 13-36
- to view the audit trail setup, 13-24
- to view transaction detail information, 10-35
- to view transaction detail information using the Digital Signature Worklist page, 11-31
- to view transaction exception information, 10-42
- to view transaction exceptions detail information
 - Operations Dashboard, 12-10
- to view transaction exceptions summary information
 - Operations Dashboard, 12-8
- to view user group detail information, 4-188
- to view web service exceptions, 6-43, 10-77
- process flow
 - serial generation, 7-4
 - web service exceptions, 6-42
- processing
 - transactions, 10-45
- product and item cross reference
 - defining integrated transactional systems, 4-123
- product code types
 - overview, 1-8
- product definition
 - overview, 4-3
- products
 - creating, 4-99
 - deleting complete, 4-119
 - deleting location overrides, 4-122
 - deleting serial generation details, 4-120
 - editing, 4-118
 - maintaining, 4-87
 - searching
 - advanced search, 4-92
 - basic search, 4-88
 - synchronizing (products interface table), 4-155
- product serials
 - adding to transaction, 10-49
 - deleting transaction, 10-69
 - updating transaction, 10-71

- viewing transaction, 10-66
- ProductServiceAMService
 - mergeProductsAsync operation, 14-39
 - mergeProducts operation, 14-39
- ProductServiceAMService WSDL, C-16
- product unit identifier (PUID)
 - overview, 4-226

Q

- QueryService
 - getQueryNames operation, 14-230
 - getStandardVersion operation, 14-230
 - getSubscriptionIDs operation, 14-230
 - getVendorVersion operation, 14-230
 - poll operation, 14-230
 - subscribe operation, 14-230
 - unsubscribe operation, 14-230

R

- receipt transactions
 - overview, 10-4
- refreshing information
 - Operations Dashboard, 12-23
- removing
 - packages
 - packaging hierarchy, 9-23
- 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, 10-5
 - 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, 4-289
 - defining product synchronization, 4-289

- defining work order serialization, 4-289
- searching
 - audit trail history, 13-28
 - job instances
 - advanced, 3-24
 - basic, 3-19
 - location groups
 - advanced search, 4-76
 - basic search, 4-74
 - locations, 4-50
 - location security definitions (advanced search), 4-217
 - location security definitions (basic search), 4-214
 - location security roles (advanced search), 4-200
 - location security roles (basic search), 4-198
 - lookup types, 4-14
 - lots, 6-3
 - advanced search, 6-8
 - basic search, 6-4
 - package hierarchy, 9-1
 - packages, 8-2
 - Maintain Packaging Hierarchy page, 9-5
 - pedigree signed or unsigned, 11-13
 - products
 - advanced search, 4-92
 - basic search, 4-88
 - serial destinations, 4-262
 - serial generation requests, 7-5
 - serial ranges, 4-251
 - serials, 7-52
 - serial type groups, 4-229
 - transactions, 10-10
 - transactions integrated transactional systems, 10-32
 - user groups
 - advanced search, 4-184
 - basic search, 4-182
 - users
 - advanced search, 4-175
 - basic search, 4-173
- searching (advanced)
 - policies, 5-7
- searching (basic)
 - policies, 5-5
- serial_next parameter

- using to generate serials, E-5
- serial destination rules
 - maintaining, 4-262
 - viewing, 4-277
 - advanced search, 4-282
 - basic search, 4-277
- serial destinations
 - creating, 4-265
 - deleting, 4-271
 - editing, 4-269
 - maintaining, 4-262
 - searching, 4-262
 - viewing details, 4-264
- serial generation
 - overview, 7-1
 - process flow OPSM, 7-4
- serial generation request messages
 - viewing, 7-14
- serial generation requests
 - creating, 7-17
 - deleting, 7-29
 - searching, 7-5
 - submitting, 7-26
- serial generation transactions
 - overview, 10-5
- SerialGenRequestServiceAMService
 - createProcessSerialGenerationRequestAsync operation, 14-52
 - createProcessSerialGenerationRequest operation, 14-52
 - createSerialGenerationRequestAsync operation, 14-52
 - createSerialGenerationRequest operation, 14-52
- SerialGenRequestServiceAMService wsdl, C-18
- serial numbers
 - validating
 - PAS_SERIAL_VAL.validate_serial procedure, E-6
- Serial Range Management component
 - using, 12-18
- serial ranges
 - creating, 4-256
 - deleting, 4-261
 - editing, 4-261
 - maintaining, 4-245
 - searching, 4-251
- serials
 - commissioning, 7-85
 - single, 7-84
 - decommissioning, 7-110
 - single, 7-85
 - editing, 7-74
 - searching, 7-52
 - transmitting
 - transactions, 10-73
 - viewing detail information, 7-67
- SerialsServiceAMService
 - editSerialStatusAndUsageByLabelAsync operation, 14-77
 - editSerialStatusAndUsageByLabel operation, 14-77
 - editSerialStatusAndUsageByListAsync operation, 14-77
 - editSerialStatusAndUsageByList operation, 14-77
 - editSerialStatusAndUsageByListSQLAsync operation, 14-77
 - editSerialStatusAndUsageByListSQL operation, 14-77
 - editSerialStatusAndUsageByPrimaryDocumentAsync operation, 14-77
 - editSerialStatusAndUsageByPrimaryDocument operation, 14-77
- SerialsServiceAMService wsdl, C-26
- serial transmission transactions
 - overview, 10-6
- serial type groups
 - creating, 4-233
 - deleting, 4-244
 - editing, 4-242
 - maintaining, 4-226
 - searching, 4-229
- serial types
 - deleting serial type groups, 4-244
 - maintaining, 4-226
 - overview, 4-228
 - viewing, 4-232
- setting
 - EPCIS preferences, 5-2
- setting up
 - audit trail setup, 13-17
- set up
 - system parameters, 4-25

- shipment transactions
 - overview, 10-7
 - overview OPSM integration with Oracle E-Business Suite, 10-8
- status and usage
 - editing for serialized items
 - packaging hierarchy, 9-27
- submitting
 - serial generation requests, 7-26
- synchronizing
 - audit trail setup information, 13-28
 - lots (lot interface table), 6-25
 - products (products interface table), 4-155
- system parameters
 - maintaining, 4-24
 - modifying, 4-46
 - setting, 4-25
 - viewing, 4-25

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, 12-8
- transactions
 - adding containers and/or product serials, 10-49
 - creating using JMS queue, 10-75
 - deleting containers and/or product serials, 10-69
 - disregarding, 10-47
 - overview, 10-1
 - overview OPSM integration with Oracle E-Business Suite, 10-7
 - processing, 10-45
 - searching, 10-10
 - searching integrated transactional systems, 10-32
 - transmitting serials, 10-73
 - updating containers and/or product serials, 10-71

- viewing containers and/or product serials, 10-66
- viewing details, 10-34
 - Digital Signature Worklist page, 11-30
- viewing exception information, 10-41
- viewing initiating transaction details, 10-43
- TransactionsServiceAMService
 - createTransactionAsync operation, 14-122
 - createTransaction operation, 14-122
 - processImportAndPackSQLAsync operation, 14-122
 - processImportAndPackSQL operation, 14-122
 - processTransactionSQLAsync operation, 14-122
 - processTransactionSQL operation, 14-122
- TransactionsServiceAMService wsdl, C-32
- transmitting
 - serials
 - transactions, 10-73

U

- uniqueness check
 - using, E-4
- unpacking
 - packages
 - packaging hierarchy, 9-23
- updating
 - audit trail setup, 13-25
 - containers and/or product serials transaction, 10-71
- URLs
 - adding Operations Dashboard, 12-22
- user defined lookup types and codes
 - list, 4-6
- user groups
 - creating, 4-190
 - deleting, 4-197
 - editing, 4-195
 - maintaining, 4-182
 - searching (advanced search), 4-184
 - searching (basic search), 4-182
- users
 - creating, 4-179
 - deleting, 4-181
 - editing, 4-181
 - maintaining, 4-173

- searching (advanced search), 4-175
- searching (basic search), 4-173
- using
 - Counterfeit Serials Analysis component
 - Operations Dashboard, 12-12
 - job instances functionality, 3-19
 - Location Details component
 - Operations Dashboard, 12-2
 - Serial Range Management component
 - Operations Dashboard, 12-18
 - Transaction Exceptions component
 - Operations Dashboard, 12-8
 - uniqueness check, E-4

V

- validating
 - serial numbers
 - PAS_SERIAL_VAL.validate_serial procedure, E-6
- version and build information
 - viewing, D-1
- viewing
 - audit trail history, 13-36
 - audit trail setup, 13-23
 - containers and/or product serials transaction, 10-66
 - EPCIS preferences, 5-2
 - initiating transaction detail information, 10-43
 - job instance details, 3-33
 - location details, 4-52
 - location security roles, 4-204
 - lookup type details, 4-16
 - lot detail information, 6-15
 - lots, 6-15
 - packages detail information, 8-7
 - packaging hierarchy, 9-9
 - pedigree
 - Digital Signature Worklist page, 11-33
 - Maintain Transactions page, 11-32
 - serial destination rules, 4-277
 - advanced search, 4-282
 - basic search, 4-277
 - serial destinations, 4-264
 - serial detail information, 7-67
 - serial generation request messages, 7-14
 - serial type groups, 4-232

- system parameters, 4-25
- transaction detail information, 10-34
 - Digital Signature Worklist page, 11-30
- transaction exception information, 10-41
- user group detail information, 4-188
- version and build information, D-1

W

- web service
 - e-mail notifications, 14-243
 - e-mail notifications process flow, 14-245
 - exceptions, 14-242
 - exceptions process flow, 6-42
- web services
 - capture, 14-202
 - createJobInstance, 14-4
 - createJobInstanceAsync, 14-4
 - createProcessSerialGenerationRequest, 14-52
 - createProcessSerialGenerationRequestAsync, 14-52
 - createSerialGenerationRequest, 14-52
 - createSerialGenerationRequestAsync, 14-52
 - createTransaction, 14-122
 - createTransactionAsync, 14-122
 - detail, 14-4
 - editSerialStatusAndUsageByLabel, 14-77
 - editSerialStatusAndUsageByLabelAsync, 14-77
 - editSerialStatusAndUsageByList, 14-77
 - editSerialStatusAndUsageByListAsync, 14-77
 - editSerialStatusAndUsageByPrimaryDocument, 14-77
 - editSerialStatusAndUsageByPrimaryDocumentAsync, 14-77
 - getQueryNames, 14-230
 - getStandardVersion, 14-230
 - getSubscriptionIDs, 14-230
 - getVendorVersion, 14-230
 - mergeLot, 14-7
 - mergeLotAsync, 14-7
 - mergeProducts, 14-39
 - mergeProductsAsync, 14-39
 - overview, 14-1
 - packPackage, 14-23
 - packPackageAsync, 14-23
 - poll, 14-230

- subscribe, 14-230
- unpackPackage, 14-23
- unsubscribe, 14-230
- unpackPackageAsync, 14-23
- work order serialization
 - performing external system, 7-30
- wsdls, C-1
 - CaptureService, C-2
 - EPCGlobalEPCISService, C-3
 - JobInstanceServiceAMService, C-7
 - LotsServiceAMService, C-10
 - PackagingServiceAMService, C-12
 - ProductServiceAMService WSDL, C-16
 - SerialGenRequestServiceAMService, C-18
 - SerialsServiceAMService, C-26
 - TransactionsServiceAMService, C-32