Oracle® Hyperion Enterprise Performance Management System

Lifecycle Management Guide

RELEASE 11.1.2.1

ORACLE

ENTERPRISE PERFORMANCE
MANAGEMENT SYSTEM

EPM System Lifecycle Management Guide, 11.1.2.1

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Contents

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1 About Lifecycle Management

In This Chapter

Note: This chapter provides an overview of the Oracle Hyperion Enterprise Performance Management System Lifecycle Management product. Before you start to use Lifecycle Management, make sure to read "Lifecycle Management Requirements" on page 21.

Lifecycle Management and Migration

Subtopics

- Lifecycle Management Features
- Lifecycle Management Components

Lifecycle Management provides a consistent way for Oracle Hyperion Enterprise Performance Management System products to migrate an application, a repository, or individual artifacts across product environments and operating systems.

Note: A migration differs from an upgrade. An upgrade replaces an earlier software release with a current release or one product with another. Migration copies all or part of an application instance from one operating environment to another; for example, it copies an application from development to testing or from testing to production.

Artifacts are individual application or repository items; for example, scripts, Web and data forms, rules files, documents, financial reports, and so forth. The application and repository artifacts are organized into categories by product.

The Lifecycle Management interface is integrated with Oracle's Hyperion® Shared Services Console.

Generally, the Lifecycle Management interface in Shared Services Console is consistent for all EPM System products that support Lifecycle Management. However, EPM System products display different artifact listings and export and import options in the Lifecycle Management

interface. For a listing of artifacts and export and import options by product, see the appendixes at the end of this guide.

Lifecycle Management Features

Lifecycle Management provides these features:

- Viewing applications and directories
- Searching for artifacts
- Migrating directly from one application to another
- Migrating to and from the file system
- Saving and loading migration definition files
- Viewing selected artifacts
- Auditing migrations
- Viewing the status of migrations
- Importing and exporting individual artifacts for quick changes on the file system

Lifecycle Management Components

Lifecycle Management consists of these components:

- **LCM Administrator Role**—Oracle's Hyperion® Shared Services user role that performs Lifecycle Management tasks. The LCM Administrator can use Lifecycle Management to view Shared Services artifacts in the Foundation application group or migrate an application, a repository, or individual artifacts across product environments and operating systems. Any user provisioned with this role has the ability to extract and load artifacts into any EPM System product that is registered with the same Shared Services instance.

  Note: Some EPM System products require that Lifecycle Management users be provisioned additional product roles (in addition to the LCM Administrator role) to perform Lifecycle Management tasks. For additional roles, see the appendixes at the end of this guide.

- **Migration Definition File**—Contains all information about a migration (source, destination, artifacts for migrations, export and import options). Users can create a migration definition automatically using the Migration Wizard or manually using the sample files provided. Migration definition files can be used to run migrations either in Shared Services Console or in Lifecycle Management Utility.
- **Shared Services Console**—Shared Services user interface that enables users to perform administrative tasks such as provisioning and lifecycle management.
- **Migration Wizard**—A part of Shared Services Console that helps users create, execute, and save a migration definition.

- **Lifecycle Management Utility**—A command-line utility that provides an alternatative to migrate artifacts from source to destination. Lifecycle Management Utility can be used with a third-party scheduling service such as Windows Task Scheduler or Oracle Enterprise Manager.
- **Migration Properties File**—Contains the global parameters for migrations; for example, file system and log file locations, grouping size for batch migrations, enabling or disabling estimate reports, and so on.
- **Migration Status Report**—Provides user info, source and destination information, a progress indicator for "In Progress" migrations, migration date, time, and duration, and migration status (In Progress, Completed, or Failed). Migration detail is provided for migrations showing a status of Failed.
- **Lifecycle Management Log Files**—Capture all Lifecycle Management migration activity.
- **Lifecycle Management** Application Programming Interface (API)—Enables users to execute the Lifecycle Management migration definition file.

EPM System Products and Components That Support Lifecycle Management

The following EPM System products and components support Lifecycle Management:

- Shared Services
- Oracle Essbase
- Oracle's Hyperion Reporting and Analysis (Oracle Hyperion Financial Reporting, Fusion Edition, Oracle's Hyperion® Interactive Reporting, Oracle's Hyperion® SQR® Production Reporting, Oracle's Hyperion® Web Analysis)
- Oracle Hyperion Financial Management, Fusion Edition
- Oracle Hyperion Planning, Fusion Edition
- Oracle Hyperion EPM Architect, Fusion Edition
- Hyperion Calculation Manager
- Oracle Hyperion Performance Scorecard, Fusion Edition
- Oracle Hyperion Profitability and Cost Management, Fusion Edition

Table 1 EPM System Product Codes

Product Code	Product Name
HUB	Shared Services
HREG	Oracle's Hyperion Shared Services Registry
ESBAPP	Essbase
HAVA	Reporting and Analysis (Financial Reporting, Interactive Reporting, Production Reporting, Web Analysis)

Product Code	Product Name
HFM	Financial Management
HP	Planning
BPMA	Performance Management Architect
CALC	Calculation Manager
HPS	Performance Scorecard
HPM	Profitability and Cost Management

Appendixes containing product-specific information are provided at the end of this guide.

Note: The following EPM System products are *not* integrated with Lifecycle Management: Oracle Hyperion Data Relationship Management, Fusion Edition, Oracle Hyperion Financial Data Quality Management ERP Integration Adapter for Oracle Applications, Oracle Essbase Integration Services, Oracle Essbase Studio, Oracle Hyperion Financial Data Quality Management, Fusion Edition, and Oracle Hyperion Strategic Finance, Fusion Edition.

Migration Scenarios

Subtopics

You can migrate artifacts directly from one application to another or to and from the file system. You can migrate application artifacts using Shared Services Console or Lifecycle Management Utility.

Migrating To and From the File System

Use this scenario to migrate artifacts to and from a file system location on the Shared Services Web application server computer. The default file system location is *MIDDLEWARE_HOME*/user_projects/epmsystem1/import_export/*username@ProviderName*.

If the final application destination is not on the same network as the source application, the artifacts copied to the file system must be moved to the isolated destination system using File Transfer Protocol (FTP), DVD, or another transfer method.

Note: In a transfer scenario, ensure that the files are copied to the user directory on the destination file system for the user performing the migration from the file system. If they are copied to a directory for a different user, the user performing the migration will not see the files under the File System node in Shared Services Console.

Process flow:

1. The LCM Administrator specifies the source and selects the "File System" destination option in Shared Services Console or Lifecycle Management Utility.
2. **Optional:** The user saves the migration definition to an XML file that can be used for a later migration.
3. When the migration is executed, the artifacts are saved to the file system location.
4. **Optional:** The user can modify artifacts on the file system.
5. **Optional:** The user can use DVD, FTP, or another transfer method to transfer artifacts from one file system location to another.
6. On the destination server, the LCM Administrator uses Shared Services Console or Lifecycle Management Utility to specify the "File System" as the source and then specify the "Applications" destination option.
7. **Optional:** The user saves the migration definition to an XML file that can be used for a later migration.
8. The artifacts are imported from the file system to the destination application.

Migrating Directly from Application to Application

Use this scenario when the source and destination applications are registered with the same instance of Shared Services.

Note: Some EPM System products do not support direct application-to-application migration using Lifecycle Management. See the appendixes at the end of this guide.

Note: The source and destination applications must have the same name.

Process flow:

1. The LCM Administrator defines the source and specifies the 'Applications' option in Shared Services Console or Lifecycle Management Utility.
2. **Optional:** The user saves the migration definition to an XML file that can be used for a later migration.
3. When the migration is executed, the artifacts are copied from the source application or server to the destination application or server.

2 Getting Started With Lifecycle Management

In This Chapter

Lifecycle Management Requirements

Subtopics

Prerequisites to Using

- Install and configure Shared Services and EPM System products and verify that they are running. See the *Oracle Hyperion Enterprise Performance Management System Installation and Configuration Guide*.
- Ensure that the user performing Lifecycle Management operations is assigned the LCM Administrator role. See *Oracle Hyperion Enterprise Performance Management System User and Role Security Guide*.
- Assign additional product-specific roles as required. See the appendixes at the end of this guide.
- Determine the migration scenario that best fits your requirements. See "Migration Scenarios" on page 18.

Source and Destination Considerations

- The source and destination environments must use the same release number. For example, if you use release 11.1.1.1 of Shared Services to export artifacts, you must import using release 11.1.1.1. *Using different releases to export and import artifacts is not supported.*
- The source and destination must use the same user directory.
- When performing a migration, if the source artifacts have an earlier time stamp than the destination artifacts, the artifacts will not be migrated. To migrate such an artifact, update the source artifact so that the time stamp is newer than the destination. The artifact will then migrate.
- Source and destination applications must be registered with an instance of Shared Services. (Note that EPM System supports Lifecycle Management of applications in isolated environments with separate instances of Shared Services in each environment.)
- During export, Shared Services source applications must be running. During import, Shared Services destination applications must be running.

File System Migrations

- If migrating to or from a file system, the file system should be accessible to Shared Services Console or Lifecycle Management Utility on the network.
- The default destination for file system migrations is on the Shared Services Web application server computer; ensure that space is allocated on the Shared Services computer.

  The default file system destination on the Shared Services computer is *MIDDLEWARE_HOME*`/user_projects/epmsystem1/import_export/`*`username@ProviderName`*. The file system location is defined in the migration properties. This can also be customized to use a shared disk. See "Editing Migration Properties" on page 60.

Note: See "Migrating To and From the File System" on page 18 for more information on file system migrations.

Application to Application Migrations

- Direct application-to-application migration can happen only within the same environment (such as Development, Test, and Production). Plan to export to the file system and import from the file system when migrating artifacts across environments.

Note: See "Migrating Directly from Application to Application" on page 19 for more information on application to application migrations.

Applications and Application Groups

- If the application being imported does not exist in the target environment, you can use Lifecycle Management to create the application shell. Before importing information, however, you must edit the migration definition file with target-specific information. See "Creating an Essbase Application Shell" on page 41, "Creating a Planning Application Shell" on page 43, and "Creating a Financial Management Application Shell" on page 45.
- Applications must be assigned to an application group or belong to the Default Application Group before migrations can occur. You cannot migrate applications belonging to the Default Application Group if two applications with the same name exist.

  Note: Only the Default Application Group can have multiple applications with the same name. However, artifact migration cannot occur unless they are assigned to another Application Group.

Availability of the EPM System Environment During Lifecycle Management Migration

Lifecycle Management operations for incremental migration of artifacts can be performed during normal usage of the application with the following exceptions:

- For complete migration of an application or a repository from one environment to another, Oracle recommends the systems to be in maintenance window.
- In Financial Management, if the dimension metadata artifact is imported, the current user sessions of that application are invalidated, and users will need to re-open the application.
- Upon import to Performance Scorecard, existing user sessions are invalidated; therefore, it is recommended that for Performance Scorecard, Lifecycle Management operations be performed in a maintenance window.

Note: There are no limitations for EPMA, Planning, Calculation Manager, Essbase, Financial Reporting, Interactive Reporting. Production Reporting, and Web Analysis.

Other Important Points

- Do not use Lifecycle Management as your only means of backup and recovery. See "Backup and Recovery" on page 26.
- Deployment metadata artifacts contain physical server names and configuration information for the deployment. This information should not be migrated from one environment to another (for example, from Dev to Test). Migrating this data would corrupt the configuration information on the destination environment and would make the system unusable. See Appendix A, "Deployment Metadata and Lifecycle Management."

- Lifecycle Management migration fails for artifacts and folders with the same name as a Windows-reserved name; for example, CON, PRN, AUX, NUL, and so on. (For a complete list of reserved names, refer to the vendor's site for your operating system.)
- Financial Management data migration is not supported in Lifecycle Management. For information on migrating Financial Management data, see the *Oracle Hyperion Financial Management Data Migration* white paper located at http://www.oracle.com/technetwork/middleware/bi-foundation/resource-library-090986.html.
- Planning data migration is not supported in Lifecycle Management.
- When performing a Planning migration, it is recommended that you perform the import operation in a specific order. See "Migration Order Best Practices for Planning" on page 148.
- When performing a Reporting and Analysis migration, you must manually recreate clients/data sources for Production Reporting and Interactive Reporting on the target machine. See "Configure the Production Reporting Job Service Properties on the Destination Application" on page 104 and "Create Interactive Reporting Data Access Service Data Sources in the Destination Application" on page 105.

Installing Lifecycle Management

Lifecycle Management is installed with Shared Services. See the *Oracle Hyperion Enterprise Performance Management System Installation and Configuration Guide* for information about installing Shared Services and deploying it to an application server.

The components of Lifecycle Management are installed in *EPM_ORACLE_HOME*`/common/utilities/LCM/11.1.2.1`.

Configuring Lifecycle Management for Shared Services High Availability

When Shared Services is configured for high availability and is started as a Windows service, there are configuration steps that must be performed for Lifecycle Management. This scenario involves using a shared disk to store artifacts during migrations. See "Configuring Lifecycle Management for Shared Services High Availability" in the *Oracle Hyperion Enterprise Performance Management System High Availability and Disaster Recovery Guide*.

Quick Start to Lifecycle Management

Lifecycle Management migrations follow this high-level process. Each part of the process is described in the guides or sections as noted in the table below.

Caution! Oracle recommends that you back up the destination environment before performing a Lifecycle Management import. Exports and imports using Lifecycle Management are not reversible.

Table 2 Lifecycle Management Process

Task	Additional Information
1. Install and configure Shared Services and EPM System products.	*Oracle Hyperion Enterprise Performance Management System Installation and Configuration Guide*
2. Assign the LCM Administrator role to Lifecycle Management users. **Note:** Essbase, Reporting and Analysis, Financial Management, Planning, Performance Scorecard, and Profitability and Cost Management require that Lifecycle Management users be provisioned additional product roles to perform Lifecycle Management tasks. For additional roles, see the appendixes at the end of this guide.	*Oracle Hyperion Enterprise Performance Management System User and Role Security Guide*
3. Migrate the following Shared Services Native Directory artifacts: ● Roles ● Groups ● Delegated Lists ● Users ● Assigned Roles (only for the application you are migrating)	"Migrating Native Directory (Security)" on page 56
4. Migrate Taskflow artifacts for the application that you are migrating.	Appendix B, "Shared Services and Lifecycle Management"
5. Complete any product-specific migration prerequisites (for example in Financial Management or Planning Classic applications, create a shell application in the destination environment).	See the "Migration Prerequisites" section for each product in the appendixes at the end of this guide.
6. Back up the destination environment.	*Oracle Hyperion Enterprise Performance Management System Backup and Recovery Guide*
7. In Shared Services Console or Lifecycle Management Utility, select the product-specific artifacts and their dependant artifacts.	See the artifact listing for each product in the appendixes at the end of this guide.
8. Choose a migration scenario; for example, migrating to and from the file system.	"Migration Scenarios" on page 18
9. Continue to define the migration.	● For Shared Services Console, see Chapter 6, "Working With Lifecycle Management and Shared Services Console." ● For Lifecycle Management Utility, see Chapter 7, "Using Lifecycle Management Utility."
10. Save the migration definition file for future use.	"Saving a Migration Definition" on page 54
11. Execute the migration.	"Editing or Executing a Migration Definition" on page 55
12. View the Migration Status Report to ensure that everything migrated successfully.	"Viewing Migration Status" on page 62

Backup and Recovery

Lifecycle Management does not replace the need for a physical backup of servers and content. Because Lifecycle Management can export most application artifacts, it is well-suited for archiving application content. You can use Lifecycle Management for the following use cases:

- Making a temporary backup of artifacts when a business user wants to edit the application content. For example, if a change must be made to a dimension in Essbase or Planning, to ensure that the changes can be reverted if something goes wrong, you can perform an Lifecycle Management export of the dimension before making edits. This exported dimension will serve as a temporary backup. Then you can edit the dimension in the product.
- Archiving artifacts before performing an import: If you are migrating content from a test system to production, you may want to archive the production artifacts by exporting them and checking the same into any version control system.

Note: Lifecycle Management can be used only as a logical backup and recovery solution and is not recommended as a solution for backing up and recovering data. Many products provide their own data backup and recovery solutions. These solutions are documented in the *Oracle Hyperion Enterprise Performance Management System Backup and Recovery Guide*.

Security

To use Lifecycle Management, security must be set up for users and groups through provisioning. The user who runs Lifecycle Management must have an LCM Administrator role assignment. The LCM Administrator can perform migrations for any applications registered to Shared Services. In other words, the LCM Administrator can extract and load to any application using the same Shared Services instance.

Note: Deployment metadata, Essbase, Reporting and Analysis, Financial Management, Planning, Performance Scorecard, and Profitability and Cost Management require that Lifecycle Management users be provisioned additional product roles (in addition to the LCM Administrator role) to perform Lifecycle Management tasks. For additional roles, see the appendixes at the end of this guide.

For information about assigning the LCM Administrator role, see the *Oracle Hyperion Enterprise Performance Management System User and Role Security Guide*.

3 Lifecycle Management Use Cases

In This Chapter

Shared Services Use Cases

Subtopics

- Native Directory (Security) Migrations and Bulk Security Updates
- Migrating Taskflows
- Editing Shared Services Registry Data
- Migrating Provisioning Artifacts for a Specific EPM System Application

Native Directory (Security) Migrations and Bulk Security Updates

Lifecycle Management migrates Native Directory artifacts (users, groups, roles, delegated lists, and assigned roles) from one system to another. Lifecycle Management helps you define the Native Directory artifacts to migrate. Additionally, with Lifecycle Management, you can make bulk security updates within an environment; for example, you can change all the security assignments for a user or a set of users. In cases where a large number of users are provisioned to use various EPM System products using Shared Services, while exporting Native Directory artifacts, there is an option to filter the users and groups being exported.

See "Migrating Native Directory (Security)" on page 56.

Migrating Taskflows

You can use Lifecycle Management to migrate Shared Services taskflow artifacts for the following EPM System products:

- Financial Management
- Performance Management Architect

- Profitability and Cost Management

Taskflow artifacts enable you to migrate taskflow definitions from one environment to another or to edit taskflow definitions on the file system. For more information, see Appendix B, "Shared Services and Lifecycle Management."

Editing Shared Services Registry Data

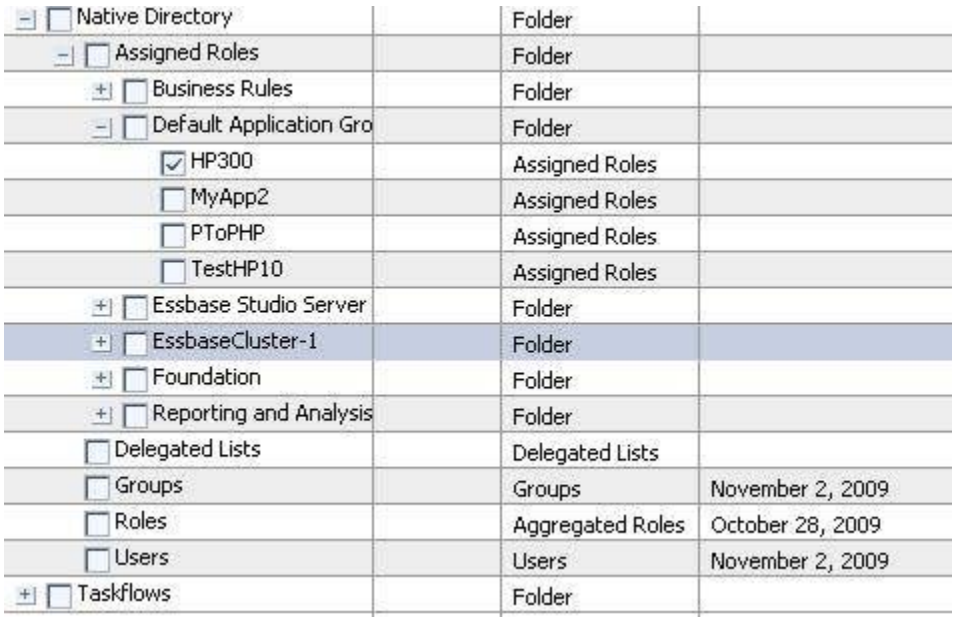
You can use Lifecycle Management to edit Shared Services Registry data to enable or disable Secure Socket Layer (SSL) connections and to perform other manual configuration changes. See "Editing Shared Services Registry Data" on page 57.

Migrating Provisioning Artifacts for a Specific EPM System Application

Lifecycle Management enables you to migrate provisioning artifacts for a specific application without migrating provisioning for all applications. Provisioning artifacts are displayed under the Native Directory (Assigned Roles) node in the Shared Services Console.

Note: The following image illustrates where to find the provisioning artifacts in Shared Services Console. In this example, the HP300 assigned roles artifacts are selected.

Figure 1 Provisioning Artifacts in Shared Services Console



For procedural information, see "Migrating Native Directory (Security)" on page 56.

Artifact Migration Use Cases

Subtopics

Application Migrations with Cross-Product Artifact Dependencies

To ensure a successful migration, Lifecycle Management enforces a specific order when importing artifacts, but only at the product level. Lifecycle Management does not automatically order the import of artifacts across multiple products (at the artifact level). For example, a Financial Management application might consist of dimensions and business rules from Performance Management Architect, user provisioning from Shared Services, and reports from Financial Reporting.

When using Lifecycle Management to migrate artifacts from multiple products, you must ensure that the cross-product dependent artifacts are present at the destination before importing the product artifacts. This is especially important when performing a first-time Lifecycle Management migration.

The Oracle by Example (OBE) series provides step-by-step instructions on how to perform first-time Lifecycle Management migrations for these products:

- Essbase 11.1.1 with Lifecycle Management 11.1.1
- Financial Management 11.1.1 with Lifecycle Management 11.1.1
- Planning 11.1.1 with Lifecycle Management 11.1.1
- Reporting and Analysis 11.1.1 with Lifecycle Management 11.1.1

See http://www.oracle.com/technology/obe/hyp_ss/ssindex.htm.

Exporting and Importing Artifacts for Editing Purposes

Lifecycle Management enables you to export artifacts to the file system, edit them, and import them after editing. For detailed instructions, see "Migrating To and From the File System" on page 18.

Editing a Single Artifact

Shared Services Console enables you to export individual artifacts to the file system, edit them, and import them after editing without defining a migration in the Migration Wizard. For detailed instructions, see "Exporting and Importing Individual Artifacts for Editing" on page 55.

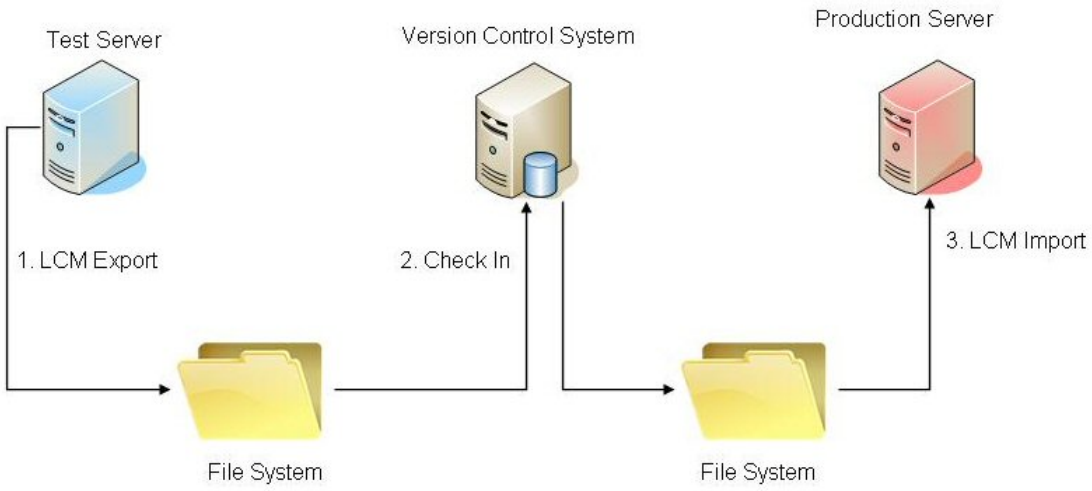
Note: Not all artifacts are editable on the file system. See "Editing Individual Artifacts" on page 56.

Artifacts must be imported back into the same application from which they were exported.

Using Lifecycle Management With Version Control Systems

With Lifecycle Management, you can use your existing document or source code-control systems, such as Oracle® Universal Content Management, to version EPM System artifacts. The most effective approach is to export artifacts to the file system and then import them to the version control system before importing them into production.

Figure 2 Version Management Using Lifecycle Management



This approach can be automated in several ways, depending on the production control tool used. For example, automation can be achieved by writing a script that first imports the exported artifacts to the version control system and then imports to the production system. By inserting this change in the process, we ensure that the artifacts in the production system are always in the corporate version control system with proper date metadata. Then the customer can answer date questions, such as: if the system was working properly last week and it is not working now, what changes to the artifacts have been migrated to production during the last week? If the version control system supports a compare feature, it can provide differences for EPM System artifacts that are text- or XML-based.

For details about migrating to and from the file system, see "Migrating Artifacts" on page 49.

Integrating Lifecycle Management with Existing Workflow Systems

You can integrate Lifecycle Management with existing workflow systems using Java APIs or a command-line utility. In most cases, the command-line utility is sufficient, because the logic of the migration is captured in the migration definition file. The migration definition file (an XML file) can be created using the Lifecycle Management functionality in Shared Services Console, or it can be created programmatically by the workflow system.

If you use the migration definition file created by Shared Services Console, it must be programmatically modified to add the user's credentials to it. These credentials must be in plain text when inserted into the XML file but will be automatically encrypted the first time the migration is executed. Once the migration definition file is created, it can be invoked by the production management system using a command-line utility or Java API.

4 Shared Services Console

In This Chapter

Lifecycle Management and Shared Services Console Integration

Lifecycle Management is integrated with Shared Services Console, and the artifacts are listed under Application Groups and Applications. For example, in Shared Services Console, an application group called Development is displayed. Under the Development application group, an HFM Management Reporting application is displayed. Under the HFM Management Reporting application, dimensional and nondimensional models are displayed (Accounts, Entities, Security, Member Lists, and so on).

Launching Shared Services Console

Subtopics

- Launching the Shared Services Console by Accessing a URL
- Launching Shared Services Console from EPM Workspace

Access Shared Services Console in two ways:

- By accessing the Shared Services URL from a browser
- By using a menu option in Oracle Enterprise Performance Management Workspace, Fusion Edition

Launching the Shared Services Console by Accessing a URL

➤ To launch the Shared Services Console from a URL:

1 **Go to:**

`http://Web_server_name:port_number/interop`

In the URL, *Web_server_name* indicates the name of the computer where the Web server used by Oracle's Hyperion® Foundation Services is running, and *port_number* indicates the Web server port; for example, `http://myWebserver:19000/interop`.

Note: If you are accessing Shared Services Console in secure environments, use `https` as the protocol (not `http`) and the secure Web Server port number; for example, use a URL such as: `https://myserver:19043/interop`.

2 **Click Launch Application.**

Note: Pop-up blockers may prevent Shared Services Console from opening.

3 **On the Logon screen, enter your user name and password.**

Initially, the only user who can access Shared Services Console is `admin` (the password for `admin` is specified in Oracle's Hyperion Enterprise Performance Management System Configurator while deploying Foundation Services).

4 **Click Log On.**

Note: Valid SAP users may get a `CSSAuthenticationException` error message during log on if the SAP account is locked. Contact your SAP Administrator to unlock the account.

Launching Shared Services Console from EPM Workspace

EPM Workspace is a portal from which you can access other EPM System products; for example, Performance Management Architect, and Reporting and Analysis components such as Interactive Reporting and Web Analysis. The process of accessing Shared Services Console from EPM Workspace uses the single sign-on capabilities of EPM System to bypass the Shared Services Log On window.

Note: The Shared Services roles assigned to the current EPM Workspace user determines the resources available to the user in Shared Services Console.

➤ To access Shared Services Console from EPM Workspace:

1 **Access EPM Workspace.**

a. Go to:

`http://Web_server_name:port_number/workspace`

In the URL, *Web_server_name* indicates the name of the computer where the Web server used by Oracle's Hyperion® Foundation Services is running, and *port_number* indicates the Web server port; for example, `https://myWebserver:19043/workspace`.

Note the following:

- If you are accessing EPM Workspace in secure environments, use `https` as the protocol (not `http`) and the secure Web Server port number. For example, use a URL such as: `https://myWebserver:19043/workspace`.
- Pop-up blockers may prevent Shared Services Console from opening.

b. **Optional:** Click **Launch Application** if pop-up blockers prevent the **Log On** window from opening.

c. On the **Log On** window, enter your user name and password.

d. Click **Log On**.

2 From EPM Workspace, select **Navigate**.

3 Select **Administer**, and then **Shared Services Console**.

Overview of Shared Services Console

Shared Services Console consists of a View pane and task tabs. When you initially log in, the Shared Services Console displays the View pane and a Browse tab.

The View pane is a navigation frame where you can choose objects (such as user directories, users, groups, roles, application groups, and applications). Typically, details of your current selection in the View pane are displayed on the Browse tab. Additional task tabs open depending on the task that you perform; for example, a Report tab opens when you generate a report, and a Configure tab opens when you configure a user directory.

Depending on the current configuration, Shared Services Console lists your existing objects in the View pane. You can expand these object listings to view details. For example, you can expand the User Directories object to view a list of all configured user directories. You can also search configured user directories for users and groups.

A shortcut menu, accessible by right-clicking an object, is associated with some objects on the View pane.

Shortcut menus associated with objects in the View pane provides you the quickest method to perform operations on the objects. Options in shortcut menus change dynamically, depending on what you select. The commands in the shortcut menu also are available in a menu in the menu bar. Buttons representing enabled menu options are displayed on the toolbar.

Note: Because Native Directory is administered from Shared Services Console, some shortcut menu options for Native Directory are not available for other user directories.

5 Working with Applications and Application Groups

In This Chapter

Overview

Application groups and applications are important EPM System concepts. An application is a reference to a single instance of an EPM System product that is registered with Shared Services. Provisioning and Lifecycle Management activities are performed against an application. Generally, applications are grouped into application groups.

This chapter contains information about creating and managing application groups and applications.

Working with Application Groups

Subtopics

- Creating Application Groups
- Modifying Application Group Properties
- Deleting Application Groups

Generally, when you deploy an application, EPM System places the application in an existing application group of your choice or into the default application group.

An application group is a container for EPM System applications. For example, an application group may contain a Planning application and Reporting and Analysis applications. While an application can belong to only one application group, an application group can contain multiple applications.

EPM System products place their applications into their own application groups. If an EPM System product does not create its own application group, you can select one; for example, Default Application Group, to organize the applications.

Applications that are registered with Shared Services but are not added to an application group are listed under the Default Application Group node in the View pane. You can provision users

and groups with roles from applications listed in the Default Application Group node and then move the application to an application group without losing provisioning information. You can create custom application groups, if needed.

Note: You must be a Shared Services Administrator or Project Manager to create and manage application groups. Shared Services Administrators can work with all registered applications; a Project Manager can work only with the applications for which that person is the provisioning manager. See the *Oracle Hyperion Enterprise Performance Management System User and Role Security Guide*.

Creating Application Groups

During application group creation, you can also assign applications to the new application group.

➤ To create an application group:

1. Launch Shared Services Console. See "Launching Shared Services Console" on page 33.
2. In the View pane, right-click **Application Groups**, and then select **New**.

   The New Application Group screen opens.
3. For **Name**, enter a unique application group name, and, for **Description**, enter an optional description.
4. To assign applications to this application group:
   a. From **List Applications in Application Group**, select an application group that contains the application that you want to assign.
   b. Click **Update List**. The **Available Applications** list displays the applications that you can assign to the application group.
   c. From **Available Applications**, select the applications to assign to the application group, and then click **Add**.
   d. To remove an assigned application, from **Assigned Applications**, select the application to remove, and then click **Remove**. To remove all applications that you assigned in the current session, click **Reset**.
5. Click **Finish**.
6. Click **Create Another** to create another application group, or click **OK** to close the status screen.

Modifying Application Group Properties

You can modify all properties and settings of an application group, including application assignments.

Note: You can also add applications to application groups by moving them from another application group. See "Moving Applications" on page 40.

➤ To modify an application group:

1. Launch Shared Services Console. See "Launching Shared Services Console" on page 33.
2. From the View pane, select **Application Groups**.
3. On the **Browse** tab, right-click the application group, and then select **Open**.
4. Modify the application group properties as needed. See step 4 on page 38 for information on assigning or removing applications.
5. Click **Save**.

Deleting Application Groups

Deleting an application group removes the association of applications with the application group, removes provisioning assignments from applications, and deletes the application group. You cannot delete the following application groups:

- Default Application Group
- Foundation

Note: You also cannot delete the File System node in Shared Services Console.

➤ To delete an application group:

1. Launch Shared Services Console. See "Launching Shared Services Console" on page 33.
2. In the View pane, right-click the application group, and then select **Delete**.
3. Click **Yes**.

Managing Applications

Subtopics

Shared Services tracks registered EPM System applications. Generally, EPM System products are registered with Shared Services when you deploy them using the EPM System Configurator. EPM System application instances are registered with Shared Services when you deploy them.

Registering some applications creates application groups and assigns applications to them. If registration does not create an application group, the application is listed under the Default Application Group. You can provision these applications. When you move applications from the Default Application Group to an application group, Shared Services retains the provisioning

information. You can migrate applications under the Default Application Group, even if they are not assigned to an application group.

Note: Only the Default Application Group can have multiple applications with the same name. However, artifact migration cannot occur unless applications are assigned to another Application Group.

Moving Applications

Moving an application from an application group removes the association between the application and the application group.

Note: You cannot move Shared Services and Deployment Metadata applications from the Foundation application group.

➤ To move an application:

1. Launch Shared Services Console. See "Launching Shared Services Console" on page 33.
2. Expand the node of the application group that contains the application that you want to move.
3. Right-click the application and select **Move To**.
4. On the **Move To** tab, select the application group to which you want to move the application.
5. Click **Save**.

Deleting Multiple Applications

When Shared Services administrators delete applications, the provisioning information also is deleted.

➤ To delete applications:

1. Launch Shared Services Console. See "Launching Shared Services Console" on page 33.
2. In the View pane, right-click **Application Groups**, and then select **Delete Applications**.
3. Select the applications to delete. To delete all applications within an application group, select the application group.

   Note: You cannot delete application groups from this screen. See "Deleting Application Groups" on page 39.
4. Click **Delete**.
5. Click **OK**.

Deleting an Application

Shared Services administrators can delete applications from application groups. When you delete an application from an application group, all provisioning information for that application is removed.

➤ To delete an application:

1 Launch Shared Services Console. See "Launching Shared Services Console" on page 33.

2 In the View pane, expand the node of the application group that contains the application that you want to delete.

3 Right-click the application, and then select **Delete**.

4 Click **OK**.

Creating an Application Shell

Subtopics

Note: The information in this section only applies to Essbase, Planning, and Financial Management.

Essbase, Planning, and Financial Management require specific input parameters in order to create an application during an import operation.

If Essbase, Planning, or Financial Management do not exist in the target environment, you can use Lifecycle Management to create an application shell.

To create an application shell, you must select the **Application Definition.xapr** artifact in Lifecycle Management, and you must enter the required information in the Migration Definition File.

Creating an Essbase Application Shell

➤ To create an Essbase application shell:

1 Launch Shared Services Console and log in as the user who is provisioned with the appropriate Lifecycle Management roles.

2 In Shared Services Console, expand **Application Groups** and select an Essbase application.

3 In the **Artifact List** tab, complete the following steps:

- Expand **Configuration**, **Properties** and select Application Definition.xapr.
- Expand **Databases**, and select the artifacts to migrate.

4 Click **Define Migration** and enter the requested information in the Migration Wizard. When you get to the **Migration Summary** dialog box, click **Save Migration Definition**.

5 Open the Migration Definition File. In the Options section do the following:

- Add an option to create an application shell:

  ```
  <optionInfo name="operation" value="create"/>
  ```

- Add an additional option in the target connection for cluster name:

  ```
  <optionInfo name="Cluster Name" value="<essbase server name>"/>
  ```

The following is a sample migration definition file. The option to create an application shell and the option in the target connection for cluster name are shown in bold.

```
<?xml version="1.0" encoding="UTF-8"?>
<Package name="web-migration" description="Migrating Product to Product">
   <Credentials user=" " password=" "/<LOCALE>en_US</LOCALE>
   <Connections>
      <ConnectionInfo name="MyHSS-Connection1" type="HSS" description="Hyperion
Shared Service connection"/>
      <ConnectionInfo name="AppConnection1" type="Application" product="ESBAPP"
project="EssbaseCluster-1" application="Demo" HSSConnection="MyHSS-Connection1"
description="Source Application"/>
      <ConnectionInfo name="AppConnection2" type="Application" product="ESBAPP"
description="Destination Application" HSSConnection="MyHSS-Connection1"
project="EssbaseCluster-1" application="lcmbso1"/>
   </Connections>
   <Tasks>
      <Task seqID="-1">
         <Source connection="AppConnection1">
            <Options/>
            <Artifact recursive="true" parentPath="/Configuration" pattern="*"/>
            <Artifact recursive="true" parentPath="/Databases/Basic " pattern="*"/>
         </Source>
         <Target connection="AppConnection2">
            <Options>
               <optionInfo name="operation" value="create"/>
               <optionInfo name="Cluster Name" value="<Hostname>"/>
               <optionInfo name="overWriteArtifact" value="false"/>
               <optionInfo name="restructureCube" value="Retain cube data"/>
            </Options>
         </Target>
      </Task>
   </Tasks>
</Package>
```

6 Save the changes to the Migration Definition File.

7 Execute the migration using the command line utility `utility.bat` found in *EPM_ORACLE_INSTANCE*`/bin` as follows:

```
utility.bat <Migration Definition File Name>
```

Tip: You must set the application group name to the Essbase Cluster name; otherwise, the application group in the migration definition file is ignored. When you set the application group name to the Essbase Cluster name, the newly-created application is registered under the Shared Services application group that is linked to the Essbase cluster.

Note: The Essbase application properties that are exported as part of the application are: Application Name, Application Type, Storage Type, and Essbase Server Name.

Creating a Planning Application Shell

➤ To create a Planning application shell:

1. Launch Shared Services Console and log in as the user who is provisioned with the appropriate Lifecycle Management roles.
2. In Shared Services Console, expand **Application Groups** and select a Planning application.
3. In the **Artifact List** tab, complete the following steps:
   - Expand **Configuration**, **Properties** and select **Application Definition.xapr**.
   - Select the artifacts to migrate.
4. Click **Define Migration** and enter the requested information in the Migration Wizard. When you get to the Migration Summary dialog box, click **Save Migration Definition**.
5. Open the Migration Definition file. In the Options section, do the following:
   - Add an option to create an application shell:

     ```
     <optionInfo name="operation" value="create"/>
     ```
   - Enter these data source properties:
     - Datasource Name
     - Datasource Description
     - DB Type
     - DB Server
     - DB Server Port
     - DB Database
     - DB Connection URL (optional)
     - DB Username
     - DB Password
     - OLAP Server
     - OLAP Username
     - OLAP Password
     - Unicode Mode

The following is a sample Migration Definition File showing the option to create the application shell and the data source properties:

```
<Target connection="AppConnection1">

     <Options>

          <optionInfo name="operation" value="create"/>

          <optionInfo name="Datasource Name" value="PlanningDS"/>

          <optionInfo name="Datasource Description" value="Planning App1 DS"/>

          <optionInfo name="DB Type" value="Oracle"/>

          <optionInfo name="DB Server" value="OraServer1"/>

          <optionInfo name="DB Server Port" value="1521"/>

          <optionInfo name="DB Database" value="PlanningDS"/>

          <optionInfo name="DB Connection URL"
value="jdbc:oracle:thin:@oraserver1.oracle.com:1521:ORCL" />

          <optionInfo name="DB Username" value="Ora User"/>

          <optionInfo name="DB Password" value="password"/>>

          <optionInfo name="OLAP Server" value="EssServer1"/>

          <optionInfo name="OLAP Username" value="admin"/>

          <optionInfo name="OLAP password" value="password"/>

          <optionInfo name="Unicode" value="true" />

     </Options>

</Target>
```

6 **Save the changes to the Migration Definition File.**

7 **Execute the migration using the command line utility** `utility.bat` **found in** *EPM_ORACLE_INSTANCE*`/bin` **as follows:**

```
utility.bat <Migration Definition File Name>
```

Note: The Application Name defined in the Migration Definition File and the Application Definition.xpad file must be the same.

Note: The Planning application properties that are exported as part of the application are: Application Name, Application Description, Application Type (General, PSB, Sample), Shared Services Project, Calculation Module, Planning Instance/Cluster Name, Calendar Type, Time Period Prefix, Periods in Year, FY Start Year, FY Start Month, Weekly Distribution, Total Years, Multiple Currency, Default Currency, ValidForPlan1, Plan1Name, ValidForPlan2, Plan2Name, ValidForPlan3, Plan3Name, ValidForWorkforce, PlanWorkforceName, ValidForCapex, PlanCapexName and PSBWorkforceModel.

Tip: To migrate a Planning application with security artifact, planning unit hierarchy, and user preference settings, create a blank application shell by selecting the Application Settings artifact; then, manually import the User Provisioning and Planning artifacts.

Creating a Financial Management Application Shell

➤ To create a Financial Management application shell:

1 Launch Shared Services Console and log in as the user who is provisioned with the appropriate Lifecycle Management roles.

2 In Shared Services Console, expand **Application Groups** and select a Financial Management application.

3 In the **Artifact List** tab, complete the following steps:

- Expand **Configuration**, **Properties** and select **Application Definition.xapr**.
- Select the artifacts to migrate.

4 Click **Define Migration** and enter the requested information in the Migration Wizard. When you get to the **Migration Summary** dialog box, click **Save Migration Definition**.

5 Open the migration definition file and do the following:

- Add an option to create an application shell:

  ```
  <optionInfo name="operation" value="create"/>
  ```

- Enter a new application name (`APPNAME`)

  Note that Financial Management always registers the application name in all upper case.

The following is a sample migration definition file. The options to create an application shell and to enter a new application name are shown in bold.

```
<?xml version="1.0" encoding="UTF-8"?>
<Package name="web-migration" description="Migrating File System to Product">
   <Credentials user="admin" password="{LCM}EfvQ1OtKE+BSpvzfzrI41EfvHn9RQfk/
8SarfMr0wR+pl1sZ95WYO2aTE9EDBme5"/><LOCALE>en_US</LOCALE>
   <Connections>
      <ConnectionInfo name="MyHSS-Connection1" type="HSS" description="Hyperion
Shared Service connection"/>
      <ConnectionInfo name="FileSystem-Connection1" type="FileSystem"
HSSConnection="MyHSS-Connection1" filePath="C:\Oracle\Middleware\user_projects
\epmsystem1\import_export\admin@Native Directory\AppExtract" description="Source
Application"/>
      <ConnectionInfo name="AppConnection2" type="Application" product="HFM"
description="Destination Application" HSSConnection="MyHSS-Connection1"
project="hfm" application="APPNAME"/>
   <Connections>
   <Tasks>
      <Task seqID="-1">
         <Source connection="FileSystem-Connection1">
            <Options/>
            <Artifact recursive="true" parentPath="/Configuration" pattern="*"/>
            <Artifact recursive="true" parentPath="/InterCompany" pattern="*"/>
```

```
            <Artifact recursive="true" parentPath="/Dimensions" pattern="*"/>
            <Artifact recursive="true" parentPath="/Member Lists" pattern="*"/>
            <Artifact recursive="true" parentPath="/Documents" pattern="*"/>
            <Artifact recursive="true" parentPath="/Rules" pattern="*"/>
            <Artifact recursive="true" parentPath="/Forms" pattern="*"/>
            <Artifact recursive="true" parentPath="/Security" pattern="*"/>
            <Artifact recursive="true" parentPath="/Journals" pattern="*"/>
         <Source>
         <Target connection="AppConnection2">
            <Options>
               <optionInfo name="ImportDimensionMode" value="replace"/>
               <optionInfo name="operation" value="create"/>
           </Options>
         </Target>
      </Task>
   </Tasks>
</Package>
```

6 **Save the changes to the migration definition file.**

7 **Execute the migration using the command line utility** `utility.bat` **found in** *EPM_ORACLE_INSTANCE*`/bin` **as follows:**

```
utility.bat <Migration Definition File Name>
```

Note: The Financial Management application properties that are exported as part of the application are: Server, Domain, Application, Project Name, Web URL, and Profile File (.per).

6 Working With Lifecycle Management and Shared Services Console

In This Chapter

The Lifecycle Management Migration Process

To perform a migration:

1. Back up the destination environment.
2. Launch Shared Services Console.
3. View and select the source artifacts for migration.
4. Launch the Migration Wizard to define the migration or to select a saved migration:
   - Define the source options.
   - Define the destination and destination options.
5. Save the migration definition file.
6. Execute the migration.
7. Launch and view the Migration Status Report.

Shared Services Console Requirements

See "Lifecycle Management Requirements" on page 21.

Viewing Artifacts

The Lifecycle Management interface in Shared Services Console enables you to view, search, migrate, load, export, and import artifacts. The artifacts are sorted into categories so that they are exposed in an organized manner.

The tabular Lifecycle Management interface enables you to view multiple applications.

Note: Artifacts vary by product. For a detailed list of product artifacts and categories, see the appendixes at the end of this guide.

➤ To view artifacts in Shared Services Console:

1 Launch Shared Services Console. See "Launching Shared Services Console" on page 33.

2 Expand the **Application Groups** node in the View pane to view application groups.

3 Expand an application group to view applications.

Note: The **Foundation** application group contains Foundation applications such as Shared Services and Performance Management Architect. The **File System** node reads the default Shared Services file system location (where files are loaded and extracted). To change the default Shared Services file system location, edit the migration properties. See "Editing Migration Properties" on page 60.

4 Click an application to view the artifact listing (or right-click the application and select **Explore**).

An **Artifact List** tab displays the artifact listing.

Above the artifact listing, these view options are displayed:

- **Artifact List**—Displays application and repository artifacts

  A new tab displays for each Application Group. After a migration completes, the tabs close.

- **Selected Artifacts**—Displays all previously selected artifacts on one tab

  The Lifecycle Management interface remembers the artifacts that you have selected as you move between the applications and application groups. This functionality is useful when defining an application migration consisting of multiple products.

- **Search Artifacts**—Displays artifact search options. See "Searching Artifacts" on page 48.

Searching Artifacts

You can view artifact search options using the Search Artifact option above the artifact listing.

➤ To search for artifacts in Shared Services Console:

1 Launch Shared Services Console. See "Launching Shared Services Console" on page 33.

2 View artifacts. See "Viewing Artifacts" on page 48.

3 Click **Search Artifacts** (above the artifact listing).

4 Enter search options:

- **Artifact Name**—The name of the artifact. Use an asterisk (*) as the wildcard in pattern searches or to search for artifacts that match filter conditions. For example, entering `A*` returns all artifacts that begin with A (or lowercase a, because the search is not case-sensitive). `*A` returns all artifacts that end with A (or lowercase a).
- **Date Modified**—Choose from these options:
  - **Today**—Artifacts modified today
  - **Yesterday**—Artifacts modified yesterday
  - **Last 7 days**—Artifacts modified within the last seven days
  - **Last Month**—Artifacts modified last month
  - **Date Range**—Artifacts modified within a specified date range (start and end dates, inclusive).

  Note: Artifacts that do not support the modified date are always displayed. For a listing of artifacts that do not support the modified date or time, see the appendixes at the end of this guide.
- **Start Date**—Beginning date of date range; for example, 01/01/2008
- **End Date**—Ending date of a date range; for example, 01/31/2008
- **Modified By**—Name of the user. Use an asterisk (*) as the wildcard in pattern searches or to search for artifacts that match filter conditions. The search is not case-sensitive.

Note: If no search criteria is entered, all artifacts for the application are displayed.

5 Click **Search**.

Migrating Artifacts

Subtopics

You can migrate to and from the file system or directly from one application to another. Before you begin, you must determine the migration scenario that best fits your requirements. See "Migration Scenarios" on page 18.

The Migration Wizard migrates artifacts when the source and destination are registered to the same Shared Services instance. Alternatively, the Migration Wizard migrates artifacts when the

source and destination are registered to different Shared Services instances but with a shared file system.

If the source and destination are not registered to the same Shared Services instance and are not on the same network, you can export artifacts to an intermediary file system and use FTP, DVD, or another transfer method to transfer the intermediary file system to the destination system.

Note: In a transfer scenario, ensure that the files are copied to the user directory on the destination file system for the user who performs the import from the file system. If the files are copied to a directory for a different user, the user performing the import will not see them under the File System node in Shared Services Console.

In a migration definition, you can specify multiple tasks to migrate multiple applications together.

Exporting to the File System

The file system location is on the Shared Services Web application server computer. The default destination on the Shared Services computer is *MIDDLEWARE_HOME*/user_projects/epmsystem1/import_export/*username@ProviderName*. Applications or artifacts exported (or copied) to the file system location are displayed under the File System node in the View pane. When artifacts are exported to the file system, they retain the last modified time the artifact was updated in the native product.

For migration scenarios, see "Migration Scenarios" on page 18.

Note: On Windows 2003, if Shared Services is started as a Windows service, and the file system path is defined for a mapped drive, you cannot view the file system contents using Shared Services Console. If the file system path is a network-accessible location, ensure that Shared Services is not running as a Windows service.

➤ To export artifacts and applications to the file system using Shared Services Console:

1. Launch Shared Services Console. See "Launching Shared Services Console" on page 33.
2. View artifacts. See "Viewing Artifacts" on page 48.
3. Select the applications or artifacts to be exported.
4. **Optional:** Click **Selected Artifacts** (above the artifact listing) to filter the list of selected artifacts and display only the selected artifacts.
5. Click **Define Migration** to display the Migration Wizard.
6. On the **Source** page, select the source applications for migration, and click **Next**.

   Note the following:

- The **Source** page displays only if you have selected artifacts from multiple applications (or multiple sources). If you have selected artifacts from only one product, the Migration Wizard skips this page and jumps to the **Source Options** page.
- All sources displayed on the **Source** page are included in the migration definition, and you must provide migration options for each source.
- To exclude a source from a migration definition, select it and click **Remove Source**.
- You can execute the migration once at the end after providing migration options for each. After a migration is defined in Migration Wizard, a green check mark is displayed next to the source on the **Source** page.

7 **On the Source Options page, enter information about the source, and click Next.**

Source options differ by product. For a listing of options by product, see the appendixes at the end of this guide.

8 **On the Destination page, expand the nodes to view the destination locations, specify the File System option, and click Next.**

If you specify a directory name that already exists on the file system, and the directory is used by the same application, the preexisting information in that directory is overwritten. If the directory is used by a different application, you will not be allowed to proceed with the migration definition.

9 **On the Destination Options page, review the destination options, and click Next.**

Destination options differ by product. For a listing of options by product, see the appendixes at the end of this guide.

10 **On the Migration Summary page, review the source and destination options you specified. Click Back to make changes.**

11 **Save the migration definition for a later migration or execute the migration immediately:**

- To save a migration definition, see "Saving a Migration Definition" on page 54.
- To execute a migration immediately:
  a. Click **Execute Migration**.
  b. Click **Launch Migration Status Report** to view migration status, or click **OK**.

  See "Viewing Migration Status" on page 62.

Tip: Artifacts that are migrated to the file system can be secured. The first level of security is file system security. To limit access to artifacts on the file system, modify the permissions on the `import_export` folder to ensure that the user who starts Shared Services has full permissions on the `import_export` folder; no other user has these permissions. If an additional level of security is needed, the content of the `import_export` folder can be moved to a password-protected container such as Winzip, or it can be encrypted on the file system using PGP or other data encryption methods. Ensure that before the artifacts are imported from the file system, they are unencrypted by the authorized user.

Importing from the File System

The file system location is on the Shared Services Web application server computer. The default destination on the Shared Services computer is *MIDDLEWARE_HOME*/user_projects/epmsystem1/import_export/*username@ProviderName*. Applications or artifacts exported (or copied) to the file system location are displayed under the File System node in the View pane. When artifacts are exported to the file system, they retain the last modified time the artifact was updated in the native product.

Note: If the files were copied (rather than exported) to the file system location, ensure that they were copied to the user directory on the destination file system for the user who will perform the import from the file system. If the files are copied to a directory for a different user, the user performing the migration will not see them under the File System node in Shared Services Console. In other words, File System artifacts must exist under the user directory for the user who is logged into Shared Services (for example, admin@NativeDirectory).

For migration scenarios, see "Migration Scenarios" on page 18.

➤ To import artifacts and applications from the file system using Shared Services Console:

1. Back up the destination environment. See *Oracle Hyperion Enterprise Performance Management System Backup and Recovery Guide*.
2. Launch Shared Services Console. See "Launching Shared Services Console" on page 33.
3. View artifacts. See "Viewing Artifacts" on page 48.
4. Navigate to the **File System** node in the View pane and select the applications or artifacts to be imported.
5. Click **Define Migration** to display the Migration Wizard.
6. On the **Source** page, select the source applications for migration, and click **Next**.
7. On the **Source Options** page, enter information about the source, and click **Next**.

   Source options differ by product. For a listing of options by product, see the appendixes at the end of this guide.
8. On the **Destination** page, specify the **Applications** option, and click **Next**.

   Some products require that an application exist or a shell application be created in the product before a destination application can be selected. To determine whether this is the case for your product, see the appendixes at the end of this guide.
9. On the **Destination Options** page, review the destination options, and click **Next**.

   Destination options differ by product. For a listing of options by product, see the appendixes at the end of this guide.
10. On the **Migration Summary** page, review the source and destination options that you specified. Click **Back** to make changes.
11. Save the migration definition for a later migration or execute the migration immediately:

- To save a migration definition, see "Saving a Migration Definition" on page 54.
- To execute a migration immediately:
  a. Click **Execute Migration**.
  b. Click **Launch Migration Status Report** to view migration status, or click **OK**.

     See "Viewing Migration Status" on page 62.

Migrating Directly From One Application to Another

Direct application-to-application migrations can occur only between "like" applications that are registered with the same Shared Services instance; for example, Essbase to Essbase, Planning to Planning, or Financial Management to Financial Management. Users cannot migrate from Financial Management to Planning.

Some EPM System products do not support direct application-to-application migration using Lifecycle Management. See the appendixes at the end of this guide to determine whether your product supports application-to-application migration.

Note: Some products require that an application exist or a shell application be created in the product before a destination application can be selected. To determine whether this is the case for your product, see the appendixes at the end of this guide.

➤ To migrate artifacts and applications directly from application to application using Shared Services Console:

1. Back up the destination environment. See *Oracle Hyperion Enterprise Performance Management System Backup and Recovery Guide*.
2. Launch Shared Services Console. See "Launching Shared Services Console" on page 33.
3. View artifacts. See "Viewing Artifacts" on page 48.
4. Select the applications or artifacts to migrate.
5. **Optional:** Click **Selected Artifacts** (above the artifact listing) to filter the list of selected artifacts and display only the artifacts that are selected.
6. Click **Define Migration** to display the Migration Wizard.
7. On the **Source** page, select the source applications for migration, and click **Next**.

   Note the following:

   - The **Source** page displays only if you have selected artifacts from multiple applications (or multiple sources). If you have selected artifacts from only one product, the Migration Wizard skips this page and jumps directly to the **Source Options** page.
   - All sources displayed on the **Source** page are included in the migration definition, and you must provide migration options for each source.
   - To exclude a source from a migration definition, select it and click **Remove Source**.

- You can execute the migration once at the end after providing migration options for each. After a migration is defined in Migration Wizard, a green check mark is displayed next to the source on the **Source** page.

8 On the **Source Options** page, enter information about the source, and click **Next**.

Note: Source options differ by product. For a listing of options by product, see the appendixes at the end of this guide.

9 On the **Destination** page, specify the **Applications** destination, and click **Next**.

10 On the **Destination Options** page, review the destination options, and click **Next**.

Note: Destination options differ by product. For a listing of options by product, see the appendixes at the end of this guide.

11 On the **Migration Summary** page, review the source and destination options you specified. Click **Back** to make changes.

12 Save the migration definition for a later migration or execute the migration immediately:

- To save a migration definition, see "Saving a Migration Definition" on page 54.
- To execute a migration immediately:
  a. Click **Execute Migration**.
  b. Click **Launch Migration Status Report** to view migration status, or click **OK**.

  See "Viewing Migration Status" on page 62.

Saving a Migration Definition

Creating and saving a migration definition saves the migration as an XML file. With this functionality, you can define a migration and reuse the migration later, or use the user interface to repeat a migration either in Shared Services Console or in Lifecycle Management Utility.

You can use the XML migration definition file and Lifecycle Management Utility to execute a "lights-out" migration. In addition, you can schedule a migration with a third-party scheduler.

➤ To create a migration definition using Shared Services Console:

1 Launch Shared Services Console. See "Launching Shared Services Console" on page 33.

2 Define the artifacts or applications to migrate. See "Migrating Artifacts" on page 49.

3 Click **Save Migration Definition**.

4 In **File Download**, click **Save** and specify the save destination.

5 Click **Save**.

Editing or Executing a Migration Definition

You can edit or execute a saved migration definition.

Caution! Before executing a migration, Oracle recommends that you back up the destination environment. Exports and imports using Lifecycle Management are not reversible.

➤ To edit or execute a migration definition using Shared Services Console:

1. Launch Shared Services Console. See "Launching Shared Services Console" on page 33.
2. Define a migration or select a saved migration:
   - To define a new migration, see "Migrating Artifacts" on page 49.
   - To select a saved migration, from the **Administration** menu, select **Edit/Execute Migration**.
3. Navigate to the saved migration and select it.
4. Click **Finish**.
5. Select migration options. See "Migrating Artifacts" on page 49.

Exporting and Importing Individual Artifacts for Editing

Subtopics

Shared Services Console enables you to export individual artifacts to the file system, edit them, and import them after editing without defining a migration in the Migration Wizard.

Note: Not all artifacts are editable on the file system. See "Editing Individual Artifacts" on page 56.

Artifacts must be imported back into the same application from which they were exported.

Exporting Individual Artifacts for Editing

➤ To export individual artifacts using Shared Services Console:

1. Launch Shared Services Console. See "Launching Shared Services Console" on page 33.
2. On the View pane, expand the **Application Groups** node to view application groups.
3. Expand an application group to view applications.

4 Select an application to view the artifact listing (or right-click the application and select **Explore**).

5 Right-click the artifact to export and select **Export for Edit**.

6 In **File Download**, click **Save**.

7 Enter the save location on the local file system and click **Save**.

Note: For Reporting and Analysis only, artifacts are saved to the local file system in a ZIP file. You must unzip the artifact to edit it. For all other products, the artifact is saved directly to the file system and not in a ZIP file.

Editing Individual Artifacts

Because artifacts are individual application or repository items (for example, scripts, Web and data forms, rules files, documents, financial reports, and so forth), the editing method differs depending on the type of artifact. Some artifacts can be edited using a text editor, and others may need to be edited within the product. For example, Calculation Manager artifacts are XML-based and can be edited using a text editor.

Review the artifact listings in the appendixes at the end of this guide to determine if an artifact is editable on the file system.

Caution! Do not rename the files exported for edit, or the import will fail.

Importing Individual Artifacts After Editing

Artifacts must be imported back into the same application from which they were exported. Artifacts must also use the same file name that was used during export.

➤ To import individual artifacts using Shared Services Console:

1 Launch Shared Services Console. See "Launching Shared Services Console" on page 33.

2 Expand the **Application Groups** node in the View pane to view application groups.

3 Expand an application group to view applications.

4 Click an application to view the artifact listing (or right-click the application and select **Explore**).

5 Right-click any artifact within the application and select **Import after Edit**.

6 In **Load Artifact**, enter the local file system location where the artifact is saved, and click **Finish**.

Migrating Native Directory (Security)

The Migration Wizard migrates Native Directory artifacts (users, groups, roles, delegated lists, and assigned roles) in the same way in which it migrates application artifacts. The Migration Wizard helps you define the Native Directory artifacts to migrate.

Shared Services Native Directory artifacts are listed in the Shared Services node under the Foundation application group.

Note: Product application security artifacts (for example, Financial Management security classes or Essbase filters) are listed separately under the product application groups. For a listing of application security artifacts by product, see the appendixes at the end of this guide.

➤ To migrate Shared Services Native Directory (Security) artifacts using Shared Services Console:

1. Back up the destination environment. See the *Oracle Hyperion Enterprise Performance Management System Backup and Recovery Guide*.
2. Launch Shared Services Console. See "Launching Shared Services Console" on page 33.
3. On the View pane, from the **Application Groups** node, expand the **Foundation** application group.
4. Select **Shared Services** (or right-click **Shared Services** and select **Explore**).

   Note: Select from the following view options: Artifact List, Selected Artifacts, and Search Artifacts. For information about these view options, see "Viewing Artifacts" on page 48.
5. Expand **Native Directory** and select the following Native Directory artifacts:
   - **Roles**
   - **Groups**
   - **Delegated Lists**
   - **Users**
6. Expand **Assigned Roles** and select the assigned roles for the application that you are migrating.
7. Click **Define Migration**.
8. Define the migration. See "Migrating Artifacts" on page 49.

   For descriptions of the Native Directory export and import options, see Appendix B, "Shared Services and Lifecycle Management."

Editing Shared Services Registry Data

Shared Services Registry is part of the database that you configure for Shared Services. (It shares the tablespace with the Shared Services database.)

Note: In previous releases, Shared Services Registry was sometimes referred to as EPM System Registry.

Created the first time you configure EPM System products, Shared Services Registry simplifies configuration by storing and reusing the following information for most EPM System products that you install:

- Initial configuration values such as installation directories, database settings, and deployment settings
- The computer names, ports, servers, and URLs that you use to implement multiple, integrated, EPM System products and components
- Dependent service data

Lifecycle Management provides a user interface that enables users to view registry content and export registry data to the file system, where it can be edited and reimported. Users performing Lifecycle Management operations for deployment metadata must be assigned both the LCM Administrator and Shared Services Administrator roles.

Caution! The Shared Services Registry artifacts are available as part of Lifecycle Management for editing configuration information on a given environment only. Do not use Lifecycle Management to migrate Shared Services Registry data from one environment to another.

The Migration Wizard helps you define Shared Services Registry artifacts to export. Shared Services Console also enables you to export individual registry artifacts to the file system, edit them, and import them after editing without defining a migration in the Migration Wizard.

You can view all Shared Services Registry artifacts in the Shared Services Console under the Deployment Metadata node in the Foundation application group:

- All nodes (as per the registry taxonomy) are directories in Lifecycle Management.
- All attributes of a node are artifacts in Lifecycle Management.
- For attributes that are files (for instance, XML files), there is an artifact for the corresponding file type.
- All named value pair attributes for a node (component or product) are grouped into one artifact. This artifact is a file that contains all these attributes and gets copied when an Lifecycle Management export is performed.

For a listing of Shared Services Registry artifacts and Shared Services Registry migration options, see Appendix A, "Deployment Metadata and Lifecycle Management."

In this section:

Viewing Shared Services Registry Data

➤ To view Shared Services Registry data using Shared Services Console:

1 Launch Shared Services Console. See "Launching Shared Services Console" on page 33.

2 From the **Application Groups** node in the View pane, expand the **Foundation** application group.

3 Click **Deployment Metadata** (or right-click **Deployment Metadata** and select **Explore**).

4 Select **Shared Services Registry**.

Exporting Shared Services Registry Data

Caution! The Shared Services Registry artifacts are available as part of Lifecycle Management for editing configuration information on a given environment only. Do not use Lifecycle Management to migrate Shared Services Registry data from one environment to another.

➤ To export Shared Services Registry data using Shared Services Console:

1 Launch Shared Services Console. See "Launching Shared Services Console" on page 33.

2 View Shared Services Registry data. See "Viewing Shared Services Registry Data" on page 59.

3 To export an individual registry artifact to the file system, right-click the artifact to export, select **Export for Edit**, and enter the save location on the file system. See "Exporting Individual Artifacts for Editing" on page 55.

4 To export multiple registry artifacts to the server file system, select the content to export, click **Define Migration**, and define the migration. See "Exporting to the File System" on page 50.

Editing Shared Services Registry Data

➤ To edit Shared Services Registry data on the file system:

1 Navigate to the file system location where the Shared Services Registry data was copied or exported.

2 Edit the data.

3 Save the changes.

Importing Shared Services Registry Data

➤ To import Shared Services Registry data using Shared Services Console:

1 Launch Shared Services Console. See "Launching Shared Services Console" on page 33.

2 View Shared Services Registry data. See "Viewing Shared Services Registry Data" on page 59.

3 To import an individual registry artifact from the file system, right-click the artifact to import, select **Import after Edit**, enter the local file system location where the artifact is saved, and click **Finish**.

See "Importing Individual Artifacts After Editing" on page 56.

4 To import registry artifacts using Migration Wizard, navigate to the File System node, select the Shared Services Registry artifacts, click **Define Migration**, and define the migration.

See "Importing from the File System" on page 52.

Editing Migration Properties

Lifecycle Management uses migration properties to set the global parameters for migrations.

➤ To modify the migration properties:

1 Launch Shared Services Console. See "Launching Shared Services Console" on page 33.

2 On the View pane, expand the **Application Groups** node.

3 Under **Application Groups**, expand **Foundation**, and then **Deployment Metadata**.

4 On the **Artifact List** tab, expand **Shared Services Registry**, then **Foundation Services**, and then **Shared Services**.

5 Select the **Properties** artifact; then, right-click and select **Export for Edit**.

6 In the **File Download** dialog box, save the Properties artifact to the desired location.

7 Edit the migration properties as desired.

8 Return to Lifecycle Management, right-click the **Properties** artifact used in Step 5, and select **Import after Edit**.

9 In the **Import after Edit** dialog box, point to the file system where the edited Properties artifact is available.

10 Restart Shared Services.

Table 3 Migration Properties and Their Descriptions

Property	Description
`double-encoding`	Allows Base64 encoding on top of UTF-8 encoding in Financial Management application migrations. This property is not supported if you are performing Financial Management migrations in a mixed-release environment (for example, using a previous release of Financial Management with this release of Shared Services). If you are performing a Financial Management application migration in a mixed-release environment, set this property to `false`. **Default value:** `true`

Property	Description
filesystem.artifact.path	Location of the directory where the exported applications are to be stored. To customize this parameter, uncomment this line and add a path location. **Default value:** This parameter is commented out and the Lifecycle Management engine uses the default file system location on the Shared Services computer; for example, *MIDDLEWARE_HOME*/user_projects/epmsystem1/import_export/*username@ProviderName*. **Note:** On Windows 2003, if Shared Services is started as a Windows service and the file system path is defined for a mapped drive, you cannot view the file system contents using Shared Services Console. If the file system path is a network-accessible location, use the UNC path (//host/share/path) instead of a mapped drive. Ensure that the separator is a forward slash (/).
fileSystem.friendlyNames	Whether to store the files for an artifact with extended names (a combination of artifact ID and name). If the value is true or if this property is missing, the path for the files corresponds to the artifact path in listing.xml. If the value is false, the pathAlias value in listing.xml is used. Some file systems have a directory path depth limitation. In rare cases, the file system might not allow a depth of more than 256 characters, in other cases 4000 characters. If an application has a directory structure that can be greater than this limit, this property can be set to false and the Lifecycle Management engine will use shorter names (UUIDs) for the directory and artifact names. Recommended value is true. **Default value:** true
hfmCallBackPortRange	Callback port for status updates on Financial Management application creation. **Default value:** 12010-12210
HFM.client_timeout	HTTP Session Time Out setting for Lifecycle Management SOAP calls from Lifecycle Management and Shared Services to Financial Management Web Service. **Default value:** 5000
report.enabled	Enables you to use the [-estimate] argument in Lifecycle Management Utility to estimate the number of artifacts in a proposed migration. For more information about using the [-estimate] argument, see "Running the Utility" on page 74. **Default value:** Y
report.folder_path	Directory where the migration status and artifact estimation reports are stored. **Default value:** ../reports (*MIDDLEWARE_HOME*/user_projects/epmsystem1/diagnostics/logs/migration/reports)

Lifecycle Management Reports

Subtopics

Shared Services provides these Lifecycle Management reports:

- Migration Status Report

- Artifact Audit Report

Note: Shared Services also generates Provisioning Reports, Security Reports, and Config Reports. These reports are described in the *Oracle Hyperion Enterprise Performance Management System User and Role Security Guide*.

Migration Status Reports

Subtopics

Viewing Migration Status

LCM Administrators can view a Migration Status Report for the status of all migrations:

- **In Progress**—Migration in progress
- **Completed**—All artifacts were successfully migrated
- **Completed with Warning**—All artifacts were successfully migrated; however, there are issues that you may wish to look into.
- **Failed**—Some artifacts were not migrated.

Note: For migrations with a status of Complete with Warning or Failed, click the hyperlink to view migration details. Migration details are not available for In Progress or Completed migrations.

➤ To view migration status reports using Shared Services Console:

1 **Launch Shared Services Console. See "Launching Shared Services Console" on page 33.**

2 **From Administration, select Migration Status Report.**

You can view the following information about each migration:

- User
- Source
- Destination
- Start Time
- Completed Time
- Duration
- Status—In Progress, Completed, Completed with Warning, or Failed

Note: A progress indicator in the Source-Destination column provides the number of artifacts processed for In Progress migrations.

3 If a migration has a status of **Completed with Warning** or **Failed**, you can view the following migration details by clicking the hyperlink in the **Status** column:

- Source and Destination Applications
- Artifact Path
- Artifact Name
- Message Type (Error or Warning)
- Message

4 To regenerate the Migration Status Report, click **Refresh**.

5 To close the Migration Status Report, click **Cancel**.

Purging Migration Data

This feature enables you to delete the specified migration data. Only completed or failed migrations can be deleted. In Progress migrations cannot be purged.

➤ To purge migration data using Shared Services Console:

1 Launch Shared Services Console. See "Launching Shared Services Console" on page 33.

2 From **Administration**, select **Purge Migration Status Report**.

3 In **Purge**, specify a value:

- `-1`—Deletes all migration data
- `0`—Deletes all migration data performed prior to today
- *n*—Deletes all migration data before a specified number of days from today; for example, entering `2` deletes all migration data before two days from today. (The value for *n* must be a positive number no greater than `999`.)

4 To delete the specified migration data, click **Purge**.

5 To close the **Purge** dialog box without deleting data, click **Cancel**.

Artifact Reports

The Application Audit Report presents information about the artifacts that were imported or exported using the Lifecycle Management functionality. Only a Shared Services Administrator can generate and view audit reports. An LCM Administrator cannot perform audit tasks.

Note: Auditing must be enabled before you can generate audit reports. To enable auditing, launch Shared Services Console, then select Administration and Configure Auditing, and then select the Enable Auditing checkbox.

For more information, see the *Oracle Hyperion Enterprise Performance Management System User and Role Security Guide*.

If auditing is enabled, audit reports can be generated at the application level or at the application group level. Every action taken within Lifecycle Management is logged to the Artifact Report. The Artifact Report tracks which artifacts were migrated, when they were migrated, and by whom. This report is exportable to an external file.

➤ To generate artifact reports using Shared Services Console:

1. Launch Shared Services Console. See "Launching Shared Services Console" on page 33.
2. From **Administration**, select **Audit Reports** , and then select **Artifact Reports**.

   The **Application Audit Report** is displayed.
3. Enter report parameters:
   - **Performed By**—Select the users for which the report is to be generated or select all users.
   - **Performed During**—Select the period for which the report is to be generated.
     - **5 Days**—Events within the last 5 days
     - **10 Days**—Events within the last 10 days
     - **15 Days**—Events within the last 15 days
     - **20 Days**—Events within the last 20 days
     - **25 Days**—Events within the last 25 days
     - **30 Days**—Events within the last 30 days
     - **Date Range**—Events within a specified date range (inclusive).
4. To view the report, click **View Report**.
5. To view or save the report in a CSV file format, click **Export**.
6. To close the report, click **Close**.

7 Using Lifecycle Management Utility

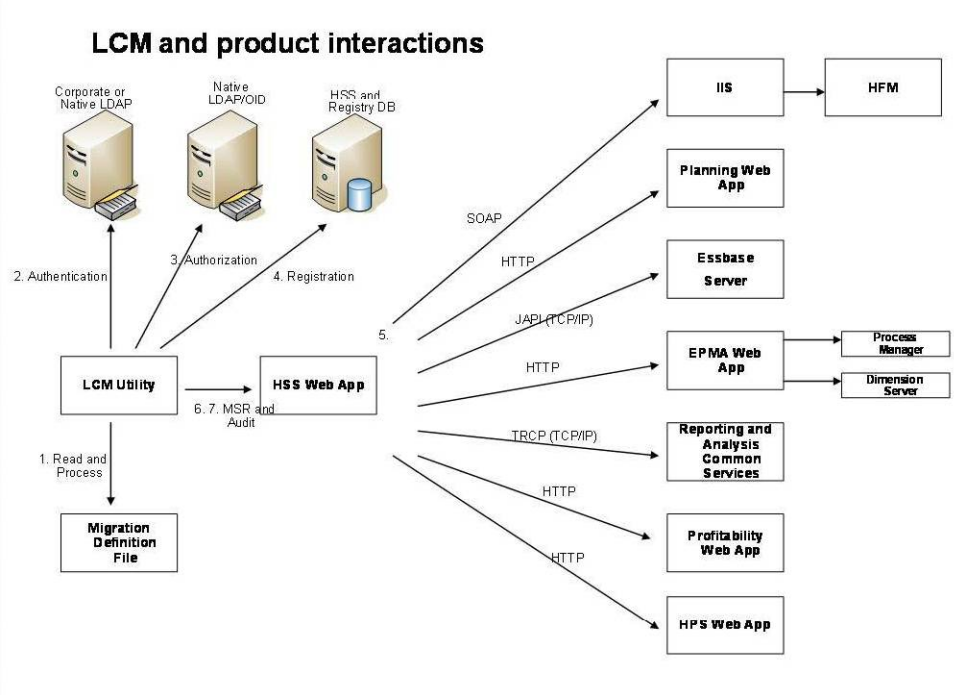
In This Chapter

Lifecycle Management Utility Process

Lifecycle Management Utility is a command-line utility that supports the migration of artifacts across product environments and operating systems. The utility provides an alternate way to migrate entire applications, or individual artifacts, from source to destination.

Figure 3 depicts the communication flow between services and Lifecycle Management Utility:

Figure 3 Lifecycle Management and Product Interactions



1. **Process Migration Definition File:** Lifecycle Management Utility first reads and processes the migration definition file.
2. **Authenticate:** Lifecycle Management Utility then authenticates the user with the corporate LDAP directory or another provider configured for use with Shared Services. The Shared Services Registry database must be running during initialization.
3. **Authorize:** After authentication, Lifecycle Management Utility contacts Shared Services Native Directory to ensure that the user's role authorizes them to perform the requested operation.
4. **Registration Information:** Lifecycle Management Utility communicates with Shared Services Registry and the Shared Services database to obtain EPM System application registration information.
5. **Process each application migration request:** Lifecycle Management Utility processes each import or export operation by contacting the appropriate EPM System application.
6. **Audit:** Lifecycle Management Utility audits each Lifecycle Management action, if auditing is enabled, by contacting the Shared Services Web application over HTTP.
7. **Publish status report:** Lifecycle Management Utility contacts the Shared Services Web application over HTTP to publish the migration status report.

Lifecycle Management Utility Features and Requirements

Subtopics

Features

- Migrates one or more EPM System applications or application artifacts from one environment to another
- Enables users to perform scheduled migrations using a third-party scheduling service such as Windows Task Scheduler or Oracle Enterprise Manager
- Ensures secure access to the utility

  Only users assigned the LCM Administrator role can perform Lifecycle Management operations.
- Supports migration of internationalized data
- Logs errors to facilitate troubleshooting

Lifecycle Management Utility Requirements

See "Lifecycle Management Requirements" on page 21.

Installing Lifecycle Management Utility

Subtopics

System Requirements

Lifecycle Management Utility can be installed on any computer that meets the minimum requirements outlined in Table 4. The computer should be able to establish connections with the source and destination Shared Services instances. Oracle recommends that you run the utility on the server computer that hosts Shared Services.

Table 4 Lifecycle Management Utility System Requirements

Component	Requirements
Processor	Any processor that supports Java 1.4 JVM and is 1 GHz or faster
Memory	256 MB minimum, 512 MB recommended
SDK	Java 2 SDK, Standard Edition, v. 1.4

Installing the Utility

Lifecycle Management Utility is installed with Shared Services. See the *Oracle Hyperion Enterprise Performance Management System Installation and Configuration Guide* for information about installing Shared Services and deploying it to an application server.

The components of Lifecycle Management Utility are installed to *EPM_ORACLE_HOME*/common/utilities/LCM/11.1.2.1.

Note: This directory contains all the files needed to execute Lifecycle Management Utility. Copying and pasting this directory to another computer enables you to use Lifecycle Management Utility on another computer.

Using Lifecycle Management Utility

Subtopics

Before starting migrations:

- Verify that Shared Services is running.
- Determine the migration scenario that best fits your requirements.
- Back up the destination environment.
- Create the migration definition.
- **Optional:** Modify the property file to use for the migration.

Creating Migration Definitions

Artifacts to be migrated must be defined in a migration definition. EPM System provides sample files (in *EPM_ORACLE_HOME*/common/utilities/LCM/11.1.2.1/Sample) for you to model the migration definition to be used during migrations. You can create a migration definition manually or you can create one automatically using Migration Wizard in Shared Services Console.

Migration Definition File XML Schema

Subtopics

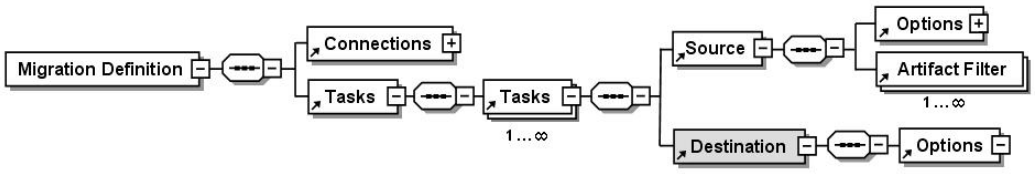
A sample file to model the migration definition is available in *EPM_ORACLE_HOME*/common/utilities/LCM/11.1.2.1/Sample.

For sample migration definition files by product, see the appendixes at the end of this guide.

Migration Definition XML Schema Illustration

An XML schema outline of the migration definition is depicted in Figure 4.

Figure 4 XML Schema Outline of the Migration Definition File



Migration Definition File Elements

Subtopics

This section describes the elements and attributes used in the XML schema for migration definition files.

Connections Element

Defines the connection to use for the operation. Three types of connections can be defined—`HSS`, `FileSystem`, and `Application`.

`HSS` connection attributes:

- `ConnectionInfo name`
- `type`
- `description`
- `user`
- `password`

`FileSystem` connection attributes:

- `ConnectionInfo name`
- `type`
- `description`
- `filePath`

`Application` connection attributes:

- `ConnectionInfo name`
- `type`
- `product`
- `project`

- application
- HSS-Connection
- description

Import operations must have a source and a destination (Shared Services, an application, or a file system).

Table 5 Connection Attributes

Attribute	Description
ConnectionInfo name	Connections used for this task. **Examples**: ● MyHSS-Connection1 ● FileSystem-Connection1 ● AppConnection1 **Note:** The naming convention requires that you use the preceding format. Only the connection number can change; for example, change 1 to 2.
type	Connection types: ● HSS for the Shared Services instance connection ● FileSystem for the file system connection ● Application for the application connection registered with Shared Services
description	Description of the connection. **Example**: My Shared Services Connection
user	Used only for the MyHSS-Connection type, this is the user account that is assigned the LCM Administrator role in Shared Services. Example: pturner **Note:** Ensure that the user and password values are provided if you are using the utility to run a scheduled migration; otherwise, the utility prompts you for those values and will not execute.
password	Used only for the MyHSS-Connection type, this is the plain-text password of the user. This password is encrypted after the first run. Example: pturner_pwd **Note:** Ensure that the user and password values are provided if you are using the utility to run a scheduled migration; otherwise, the utility prompts you for those values and will not execute.
filePath	Used only for the FileSystem-Connection type, this is the directory where artifacts are stored on the file system. **Example:** filePath="/Essbase.Sample.Basic" **Note:** When an .mdf file is generated from the UI, the path is a relative path to the working folder. If the .mdf file is not in the working folder, you can edit the .mdf file to overwrite the relative path with an absolute path.

Attribute	Description
product	Used only for the AppConnection type, this is the product code for the application that is registered with Shared Services. **Examples:** ● HUB (for Shared Services) ● HREG (for Shared Services Registry) ● HAVA (for Reporting and Analysis) ● ESBAPP (for Essbase) ● HFM (for Financial Management) ● HP (for Planning) ● BPMA (for Performance Management Architect) ● CALC (for Calculation Manager) ● HPS (for Performance Scorecard) ● HPM (for Profitability and Cost Management)
HSSConnection	Used only for the AppConnection type, this is the Shared Services connection definition. Must be of type HSS defined in the migration definition **Example:** MyHSS-Connection1
project	Used only for the AppConnection type, this is the name of the Shared Services Application Group (previously known as Project) to which the application belongs. The project name is visible in Shared Services Console. **Example:** DevBIPlus_Proj
application	Used only for the AppConnection type, this is the name with which the application is registered. The application name is visible in Shared Services Console. **Example:** HAVAAPP1

Task Element

Defines the tasks to complete during the operation. The number of tasks defined in the migration definition file depends on the source and destination and the artifact being migrated. If only one source and destination are involved, you need to define only one task.

For multiple sources and destinations, you must define at least one task for each source-destination combination. For example, extracting artifacts to the file system would be defined as task 1. Loading the artifacts from the file system to an application would be defined as task 2.

Table 6 Task Attributes

Attribute	Description
Task seqID	Sequence in which tasks are executed. **Example:** 1,2,3

Source Element

The Source element defines the source for this operation. You must define one source and one destination per task.

Table 7 Source Attributes

Attribute	Description
`Source connection`	Connection to use for this task. Use the connection name defined in the Connection element. **Note:** You cannot use a connection of type `HSS` in source definitions. Only connections of type `AppConnection` or `FileSystem-Connection` can be used in source definitions. **Example:** `AppConnection1`
`Options`	Options are product-specific. Refer to the appendixes at the end of this guide for the import and export options that you can set. The source or destination interprets the options to understand the artifacts being migrated. If options are not set, the default option set in the product registration file is used. `options` attributes: ● `optionInfo name` ● `value`
`optionInfo name`	Option name used to override the option name defined in the Shared Services registration file. **Example:** `ExportJobOutput`
`value`	Value used to override the option value defined in the Shared Services registration file. **Example:** `true`
`artifact`	Filter used for this operation. This element takes these attributes: ● `Artifact recursive` ● `parentPath` ● `pattern` ● `type` ● `startDate` ● `endDate` Note the following: ● The `Artifact recursive` attribute is optional. ● The `parentPath` and `pattern` attributes are required for all products. ● The `type` attribute is available for Reporting and Analysis only (this attribute only can be set in the XML file directly). ● The `startDate` and `endDate` attributes are applicable only to the artifacts that support the modified date parameter (these attributes can be set only directly in the XML file).
`Artifact recursive`	Whether the operation should be performed on artifacts stored in subdirectories. **Example:** `true`

Attribute	Description
parentPath	Top-level directory where artifact or data for the operation is stored. See the appendixes at the end of this guide for information on product directory structures. **Caution!** If the parent path directory contains an ampersand (&) character, replace it with "&" in the migration definition file (see example below). **Example:** /Data Analysis & Report Creation **Note:** If Artifact recursive="true", all artifacts contained in the subdirectories within this directory are imported.
type	This attribute is applicable only to Reporting and Analysis. Type of Reporting and Analysis artifact to import. For a listing of Reporting and Analysis artifact types, see Appendix D, "Reporting and Analysis and Lifecycle Management." **Example:** Financial Reports **Note:** This value can only be set directly in the XML file and not in Shared Services Console.
pattern	Artifact-selection criterion. You can specify the name of an artifact to import or use an * (asterisk) to indicate that you want to import all artifacts that match filter conditions. **Example:** *
startDate	Beginning date of date range. You can specify a date range (start and end date, inclusive) to filter artifacts whose last modified date falls within this range. The specified start and end dates are inclusive. **Example:** 2006-01-01 **Note:** This value can only be set directly in the XML file and not in Shared Services Console.
endDate	Ending date of a date range. **Example:** 2006-01-31 **Note:** This value can only be set directly in the XML file and not in Shared Services Console.

Target Element

Defines the destination for this operation. You must define one destination per task.

Table 8 Target Attributes

Attribute	Description
options	Processing instructions for this operation. Options are product-specific. See the appendixes at the end of this guide for the destination options you can set. The source or destination interprets the options to understand the artifacts being migrated. If options are not set, the default option set in the product registration file is used. options attributes: ● optionInfo name ● value

Attribute	Description
`optionInfo name`	Option name used to override the option name defined in the Shared Services registration file. **Example:** `ExportJobOutput`
`value`	Value used to override the option value set in the Shared Services registration file. **Example:** `true`

Running the Utility

The Lifecycle Management Utility offers the following options:

- Takes the name of the migration definition file
- Helps you estimate the number of artifacts in a proposed migration
- Enables you to migrate to a file system

Errors encountered during migration are defined by `logging.xml` in the *`MIDDLEWARE_HOME`*`/user_projects/epmsystem1/Config/FoundationServices` directory and the `log.directory` property. Monitor the error log to understand issues encountered during the migration process.

➤ To run Lifecycle Management Utility:

1. **If migrating, back up the destination environment. See *Oracle Hyperion Enterprise Performance Management System Backup and Recovery Guide*.**
2. **Open a command prompt window.**
3. **Change the directory to the location of `Utility.bat` (Windows) or `Utility.sh` (UNIX); for example, *`MIDDLEWARE_HOME`*`/user_projects/epmsystem1/bin`.**
4. **Execute Lifecycle Management Utility by entering the following text at the command prompt:**

   ```
   Utility.bat c:/lcm/lcmdefinition.xml
   ```

   where `c:/lcm/lcmdefinition.xml` is the location of the migration definition file

Additional command line arguments:

- "[-estimate]: Estimates the Number of Artifacts in a Migration" on page 74
- "[-d]: Defers Validation" on page 75
- "[-f]: Fully Executes Tasks" on page 75
- "[-b]: Specifies the Base Path" on page 75

[-estimate]: Estimates the Number of Artifacts in a Migration

To estimate the number of artifacts in a proposed migration, Lifecycle Management provides the following optional argument:

```
Utility.bat c:/lcm/lcmdefinition.xml [-estimate]
```

If the `[-estimate]` argument is specified, then the number of artifacts in the migration is computed by communicating with the appropriate source(s) and/or destination(s) specified in the migration definition. The report contains, per task specified in the migration definition, the total number of artifacts, total accumulated size of artifacts, and a list of artifacts and directories that will participate in the migration. You can customize the location of this report by updating the `report.folder_path` property. See "Editing Migration Properties" on page 60.

[-d]: Defers Validation

By default, Lifecycle Management Utility validates the connections used for a task before task execution. However, certain applications may not be available on the system if they are created when a task is executed. You can defer validation of the connections used in a task (as defined in the migration definition file), to when the task is executed by using the `[-d]` command-line argument:

```
Utility.bat c:/lcm/lcmdefinition.xml [-d]
```

If the `[-d]` argument is not specified, Lifecycle Management Utility validates the connection before starting task execution.

[-f]: Fully Executes Tasks

Lifecycle Management Utility, by default, does not execute tasks that occur after a failed task. Specifying the `[-f]` argument instructs Lifecycle Management Utility to execute all tasks in a sequence, even if an earlier task has failed:

```
Utility.bat c:/lcm/lcmdefinition.xml [-f]
```

[-b]: Specifies the Base Path

The `[-b]` command-line argument instructs Lifecycle Management Utility to use the base path relative to where the file system path is set (the file system is the location where all exports and imports are stored).

```
Utility.bat c:/lcm/lcmdefinition.xml [-b path]
```

The path that is specified can be absolute or relative to the current working directory (it can also include "." "and ". ." relative to an absolute path). If no base path is specified, it uses the directory in which Lifecycle Management Utility is being run (which is not necessarily the directory where Lifecycle Management Utility exists).

The following are some examples:

```
c:\import_export
```

```
c:\Oracle\Middleware\user_projects\epmsystem1\import_export
\admin@Native Directory
```

Note: If the specified path does not exist, Lifecycle Management will display an error.

A Deployment Metadata and Lifecycle Management

In This Appendix

About Deployment Metadata Artifacts

Deployment metadata artifacts contain physical server names and configuration information for the deployment. This information should not be migrated from one environment to another (for example, from Dev to Test). Migrating this data would corrupt the configuration information on the destination environment and would make the system unusable. The use case for exporting and importing deployment metadata artifacts is only for archiving configuration information in a version control system to monitor changes in the configuration.

You can use Lifecycle Management to edit these types of deployment metadata artifacts:

- Registration—Registration artifacts enable you to edit application configuration information on a given environment (for example, if updating a product from non-SSL to SSL, you must edit the callback URLs in the Registration instance files).
- Shared Services Registry—Shared Services Registry artifacts enable you to view registry content and export registry data to the file system where it can be edited and reimported.

Caution! Do not use Lifecycle Management to migrate deployment metadata artifacts from one environment to another. Use Lifecycle Management to export deployment metadata artifacts to the file system, use a text editor to edit the artifacts, and then use Lifecycle Management to import the edited artifacts back into Shared Services.

For a listing of deployment metadata artifacts, see "Deployment Metadata Artifact Listing" on page 78.

Deployment Metadata Roles Requirement

Users performing Lifecycle Management operations for deployment metadata must be assigned the following roles:

- LCM Administrator
- Shared Services Administrator

See the *Oracle Hyperion Enterprise Performance Management System User and Role Security Guide*.

Deployment Metadata Export and Import Prerequisites

Before using Lifecycle Management to edit deployment metadata artifacts, you must perform these actions:

- Install and configure Shared Services and EPM System products and verify that they are running. See the *Oracle Hyperion Enterprise Performance Management System Installation and Configuration Guide*.
- Ensure that users performing Lifecycle Management operations are assigned the LCM Administrator and Shared Services Administrator roles. See *Oracle Hyperion Enterprise Performance Management System User and Role Security Guide*.
- Direct application-to-application migrations using Lifecycle Management are not supported. Deployment metadata artifacts must be exported to and imported from the file system. See "Editing Shared Services Registry Data" on page 57.

Deployment Metadata Artifact Listing

Subtopics

Deployment metadata artifacts are listed in the Foundation application group in Shared Services Console. Users must be assigned these roles to view deployment metadata artifacts:

- LCM Administrator
- Shared Services Administrator

Note: The artifacts displayed in Shared Services Console vary by implementation.

About the Registration Artifacts Artifact Listing

Note the following about the artifact listing:

- Artifact—Artifact name
- Description—Artifact description
- Last Modified Time—If this parameter is supported, reflects the time the artifact was imported. Some artifacts do not support the last modified time parameter.
- Last Modified User—If this parameter is supported, reflects the user who last modified the artifact. Some artifacts do not support the last modified user parameter.
- Editable on the File System—If yes, the artifact can be edited on the file system using a text editor. If no, the artifact can be edited only within the product.
- Dependencies—Lists artifact dependencies

Registration Artifacts

The Registration directory contains products, applications, and application groups artifacts.

Table 9 Registration Artifacts

Artifact	Description	Last Modified Time	Last Modified User	Editable on the File System?	Dependencies
Products	In EPM System, an application type, such as Planning or Essbase.	Yes	No	Yes–XML	None
Applications	Instances of EPM System products that are registered with Shared Services.	Yes	No	Yes–XML	None

Shared Services Registry Artifacts

The Shared Services Registry directory contains Shared Services Registry properties and product registry artifacts from previous releases.

Deployment Metadata Migration Considerations

When importing an edited database password under deployment metadata, precede the property name with "ENCR" so that the password gets stored in an encrypted format.

For example, edit the corresponding line in `component.Properties` as follows:

```
ENCR:key1=plaintext
```

Deployment Metadata Export and Import Options

There are no export or import options for Shared Services Registration artifacts and there are no export options for Shared Services Registry artifacts. All deployment metadata artifacts must be exported to and imported from the file system.

Oracle's Hyperion Shared Services Registry import options:

- **Create**—Creates the components not existing in the database. If a component exists, it will not be modified.
- **Update**—Modifies the existing component but will not create a new component.

Lifecycle Management Log Files

Lifecycle Management log files for deployment metadata are listed in the *Oracle Hyperion Enterprise Performance Management System Installation and Configuration Troubleshooting Guide*.

B Shared Services and Lifecycle Management

In This Appendix

About Shared Services Artifacts

Use Lifecycle Management to migrate these types of Shared Services artifacts:

- **Native Directory (Security)**—Shared Services Native Directory artifacts enable you to migrate users, groups, delegated lists, custom aggregate roles, and assigned roles. Product-specific security artifacts (for example, Planning access permissions and Essbase filters) are listed separately under the product application groups in Shared Services Console. For a listing of application security artifacts by product, see the appendixes in this guide.
- **Taskflows**—Shared Services Taskflow artifacts enable you to migrate taskflow definitions from one environment to another or to edit taskflow definitions on the file system. EPM System products that use taskflows are Financial Management, Performance Management Architect, and Profitability and Cost Management.

For a listing of Shared Services artifacts, see "Shared Services Artifact Listing" on page 82.

Shared Services Roles Requirement

Users performing Lifecycle Management operations for Shared Services must be assigned the LCM Administrator role.

See the *Oracle Hyperion Enterprise Performance Management System User and Role Security Guide*.

Shared Services Migration Prerequisites

Before using Lifecycle Management to migrate Shared Services artifacts, you must perform these actions:

- Install and configure Shared Services and EPM System products and verify that they are running. See the *Oracle Hyperion Enterprise Performance Management System Installation and Configuration Guide*.
- Ensure that users performing Lifecycle Management operations are assigned the LCM Administrator role. See the *Oracle Hyperion Enterprise Performance Management System User and Role Security Guide*.
- To export taskflows with the associated user information, taskflow users must have logged in to the taskflow interface at least once.
- Shared Services does not support direct application-to-application migrations using Lifecycle Management. Shared Services artifacts must be migrated to and from the file system. See "Migration Scenarios" on page 18.
- When migrating Shared Services Native Directory artifacts, ensure that the source and destination applications have matching names. If the source and destination names are different, perform these actions:
  1. Migrate the source application artifacts to the file system.
  2. In the source application CSV file (for example, `sourceapp.csv`), replace the source application group name with the destination application group name. Then replace the source application name with the destination application name.
  3. Rename the file to use the destination application name (for example, `destinationapp.csv`).
  4. Migrate the updated CSV file from the file system to the destination application.

Shared Services Artifact Listing

Subtopics

Shared Services artifacts are listed in the Foundation application group in Shared Services Console. Only an LCM Administrator can view Shared Services artifacts in the Foundation application group.

Note: The artifacts displayed in Shared Services Console vary by implementation.

About the Artifact Listing

Note the following about the artifact listing:

- **Artifact**—Artifact name
- **Description**—Artifact description
- **Last Modified Time**—If this parameter is supported, reflects the time the artifact was imported. Some artifacts do not support the last modified time parameter.
- **Last Modified User**—If this parameter is supported, reflects the user who last modified the artifact. Some artifacts do not support the last modified user parameter.
- **Editable on the File System**—If yes, the artifact can be edited on the file system using a text editor. If no, the artifact can be edited only within the product.
- **Dependencies**—Lists artifact dependencies. For example, Native Directory Groups artifacts also require that Native Directory Users artifacts be migrated.

Native Directory (Security) Artifacts

Native Directory is the default LDAP-based user directory that Shared Services uses.

The Native Directory directory contains users, groups, roles, delegated lists, and assigned roles artifacts.

Table 10 Native Directory Artifacts

Artifact	Description	Last Modified Time	Last Modified User	Editable on the File System?	Dependencies
Users	A user directory entry that identifies a user	Yes	No	Yes—CSV	None
Groups	A container for assigning similar access permissions to multiple users	Yes	No	Yes—CSV	Users
Roles	Privileges that provide access to system artifacts and functions	Yes	No	Yes—CSV	Users, Groups
Delegated Lists	A list that identifies the users and groups that a Delegated Administrator can manage	Yes	No	Yes—CSV	Users, Groups
Assigned Roles (by product and application)	Roles granted to users and groups through the provisioning process	Yes	No	Yes—CSV	Users, Groups

Taskflow Artifacts

The Taskflows directory contains process definition, taskflow ACL, and taskflow scheduler artifacts.

Table 11 Taskflow Artifacts

Artifact	Description	Last Modified Time	Last Modified User	Editable on the File System?	Dependencies
Process Definition	Complete taskflow information such as Stage, Link, and Application details	Yes	No	Yes—XML	Native Directory Users, Native Directory Groups
Taskflow ACL	ACL information in the taskflow	Yes	No	Yes—Properties	Native Directory Users, Native Directory Groups
Taskflow Scheduler	Scheduler information in the taskflow	Yes	No	Yes—XML	Native Directory Users, Native Directory Groups

Shared Services Application Migrations and Cross-Product Artifact Dependencies

Shared Services has no cross-product artifact dependencies. However, if you plan to migrate a product that is Performance Management Architect enabled, you must migrate the Performance Management Architect artifacts before migrating the Shared Services artifacts.

Also, Shared Services Native Directory Users and Groups artifacts must be migrated before migrating other Native Directory artifacts and Shared Services taskflow artifacts.

Most EPM System applications require that artifacts from other products be migrated along with the product-specific artifacts. For detailed information about cross-product artifact dependencies for other products, see the appendixes for those products.

Shared Services Native Directory Migration Options

Subtopics

Native Directory Migration Export Options

The following list describes Shared Services Native Directory export options:

- **Native User Filter**—Filter by native user or use * (asterisk) to migrate all artifacts that match filter conditions.
- **Native Group Filter**—Filter by native group or use * (asterisk) to migrate all artifacts that match filter conditions.
- **Native Role Filter**—Filter by native role or use * (asterisk) to migrate all artifacts that match filter conditions.

Native Directory Migration Import Options

The following list describes Shared Services Native Directory import options:

- **Import Operation**—Select an option:
  - **Create**—Creates users, groups and roles if they do not exist in the target. If they exist in the target, the create operation fails. Augments group, role, and provisioning relationships.
  - **Update**—Updates users, groups, and roles. Replaces group, role, and provisioning relationships.
  - **Create/Update**—Attempts a create operation on each entity in the file. If the operation fails, an update operation is attempted.
  - **Delete**—Deletes the users, groups, and roles that are being imported. Deletes group, role, and provisioning relationships.

    Note: To delete a deactivated Native Directory user, the user must be activated first before it can be deleted.
- **Max errors before stopping import**—Specify the number of errors allowed before the import process is stopped.

Native Directory CSV Files

The Native Directory import source files are CSV files.

The CSV file format is a tabular data format that contains fields separated by commas and enclosed in double quotation marks. Lifecycle Management supports only Excel-compliant CSV files. The CSV files that Excel outputs differ from the standard CSV files:

- Leading and trailing white space is significant.
- Back slashes are not special characters and do not escape anything.
- Quotes inside quoted strings are escaped with double quotes rather than back slashes.

Excel converts data before putting it in CSV format.

Conversions that Excel performs on CSV files:

- Tabs are converted to single spaces.
- New lines are always represented as the UNIX new line ("\n").

- Numbers of greater than 12 digits are represented in truncated scientific notation form.

A separate CSV file is available for the following entities:

- Users
- Groups
- Roles
- Provisioning info
- Delegated lists

Each section within a CSV file is identified by two mandatory lines: entity and header. The entity line is identified by a predefined entity name preceded by the # character. The header line follows the entity line. The header line is a comma-separated list of predefined attributes for the entity.

The order of attributes in the header line is insignificant. However, the data lines, which follow the header line, must present data in the order in which the header line presents attributes. If data is not to be specified, use a comma to indicate that a value is not to be set. The entity line, header line, and data lines provide the information required for processing.

Boundaries applied to create, update, and delete operations on CSV files:

- Users, groups, and roles are processed one data line at a time.
- Group members are processed with multiple data lines under one header and one parent group.
- Role members are processed with multiple data lines under one header and one parent role.
- User provisioning is processed with multiple data lines under one header and one group or user.

Error handling is based on the process boundaries. One error is counted for each failure in a process boundary.

See the sections below for sample CSV files and attribute information:

- "CSV File for Users" on page 86
- "CSV File for Groups" on page 88
- "CSV File for Roles" on page 88
- "CSV File for Provisioning" on page 89
- "CSV File for Delegated Lists" on page 89

CSV File for Users

Sample CSV File for User

```
#user
id,provider,login_name,first_name,last_name,description,email,internal_id,password,activ
e
```

```
admin,Native Directory,admin,administrator,user,hss admin
user,admin@hyperion.com,"native://DN=cn=911,ou=People,dc=css,dc=hyperion,dc=com?USER",
{SHA}W6ph5Mm5Pz8GgiULbPgzG37mj9g=,true
```

In this sample, the user CSV file is used to create the user `admin` in a Native Directory with the login name `admin`, first name `administrator`, last name `user`, description `hss admin user`, e-mail id `admin@hyperion.com`, internal id `"native://DN=cn=911,ou=People,dc=css,dc=hyperion,dc=com?USER"`, encrypted password `{SHA}W6ph5Mm5Pz8GgiULbPgzG37mj9g=`, and active `true`:

Note: Plain-text passwords specified in the CSV file are encrypted.

Table 12 User Entity Attributes

Attribute	Description and Example
`id`	User's ID **Example:** `admin`
`provider`	**Optional**: Name of the source user directory **Example:** `Native Directory`
`login_name`	User's login name **Example:** `admin`
`first_name`	**Optional**: User's first name **Example:** `administrator`
`last_name`	**Optional**: User's last name **Example:** `user`
`description`	**Optional**: User description **Example:** `hss admin user`
`email`	**Optional**: User's e-mail address **Example:** `admin@hyperion.com`
`internal_id`	The autogenerated internal identity of the Native Directory user **Example:** `"native://DN=cn=911,ou=People,dc=css,dc=hyperion,dc=com?USER"`
`password`	User's password **Example:** `{SHA}W6ph5Mm5Pz8GgiULbPgzG37mj9g=`
`active`	Indicates whether user is active (true) or not active (false) **Example:** `true`

CSV File for Groups

Sample CSV File for Group

```
#group
id,provider,name,description, internal_id
WORLD,Native Directory,WORLD,Contains all users,611
```

In this sample, the group CSV file is used to create the `WORLD` group in a Native Directory with the group ID `WORLD`, description `Contains all users`, and internal ID `611`:

Table 13 Group Entity Attributes

Attribute	Description and Example
`id`	Group identifier **Example:** `WORLD`
`provider`	**Optional**: Source user directory for the group **Example:** `Native Directory`
`name`	Group name **Example:** `WORLD`
`description`	**Optional**: Group description **Example:**`Contains all users`
`internal_id`	The autogenerated internal identity of the Native Directory group **Example:** `611`

CSV File for Roles

Sample CSV File for Role

```
#role
id,product_type,name,description
Designer_rep,hava-11.1.1,Designer_rep,Report Designer
```

In this sample, the role CSV file is used to create an aggregated role in Native Directory with role id `Designer_rep` for product `hava-11.1.1` (Reporting and Analysis, version 11.1.1), role name `Designer_rep`, and description `Report Designer`. Product type indicates the product to which the aggregated role belongs.

Table 14 Role Entity Attributes

Attribute	Description and Example
`id`	Role identifier **Example:** `Designer_rep`

Attribute	Description and Example
product_type	Product type (specified as *product code-product version*) to which the role belongs **Example:** hava-11.1.1
name	Role name **Example:** Designer_rep
description	**Optional**: Role description **Example:** Report Designer

CSV File for Provisioning

Sample CSV File for Provisioning

```
#provisioning
app_id,product_type,role_id,user_id,group_id
WebAnalysis,hava-11.1.1,Provisioning Manager,pturner,testgroup
```

In this sample, the provisioning CSV file is used to create a role assignment for application name WebAnalysis. The role ID is Provisioning Manager, which belongs to product type hava-11.1.1. User pturner and group testgroup are provisioned with this role.

Table 15 Provisioning Entity Attributes

Attribute	Description and Example
app_id	The application to which the role belongs **Example:** WebAnalysis
product_type	Product type (specified as product code-product version) to which the role belongs **Example:** hava-11.1.1
role_id	Unique role identifier **Example:** Provisioning Manager
user_id	Unique identifier of a user who is provisioned to the role **Example:** pturner
group_id	Unique identifier of a group that is provisioned to the role **Example:** testgroup

CSV File for Delegated Lists

Sample CSV File for Delegated List

```
#delegated list
id,name,description,manager_id,manager_provider,user_id,user_provider,group_id,group_pro
vider
```

```
testlist,testlist,my_list,admin,Native Directory,,testGroup,NativeDirectory
```

In this sample, the delegated list CSV file can be used to create a delegated list with list id and name `testlist`, and description `my_list`. User `admin` defined in Native Directory is the delegated administrator of this list which allows admin to manage group `testGroup` defined on Native Directory.

Table 16 Delegated List Entity Attributes

Attribute	Description and Example
`id`	The list identifier, typically the same as the list name **Example:** `testlist`
`name`	Delegated list name **Example:** `testlist`
`description`	Delegated list description **Example:** `my_list`
`manager_id`	Unique identifier of a user or group who manages the list. Each manager must be identified in a separate definition. **Example:** `admin`
`manager_provider`	The user directory that stores the manager's account **Example:** `Native Directory`
`user_id`	Unique identifier of a user member of the list. Each member must be identified in a separate definition. **Example:** `admin`
`user_provider`	The user directory that stores the user member's account **Example:** `Native Directory`
`group_id`	Unique identifier of a group that is a member of the list. Each member must be identified in a separate definition. **Example:** `myGroup`
`group_provider`	The user directory that stores the group's account **Example:** `Native Directory`

Shared Services Taskflows Migration Export and Import Options

Shared Services has no taskflow-specific export or import options. However, all imports will automatically overwrite destination artifacts.

The EPM System products that use taskflows are Financial Management, Performance Management Architect, and Profitability and Cost Management. Taskflows have associated applications and users that are exported with a taskflow. If a user associated with a taskflow has

never logged in to the taskflow, the user will not be exported when the taskflow is exported using Lifecycle Management.

Note: If the import of access control fails, the artifact will be imported with a default user of `admin`. But if the default admin users password is no longer `password`, the import will fail.

For more information about taskflows, see the product documentation for Financial Management, Performance Management Architect, and Profitability and Cost Management.

Sample Migration Definition Files

The product code used in the migration definition files for Shared Services is `HUB`. All sample migration definition files for Shared Services are provided in *`EPM_ORACLE_HOME`*`/common/utilities/LCM/11.1.2.1/Sample`.

Exporting to the File System

```
<?xml version="1.0" encoding="UTF-8"?>
<Package name="web-migration" description="migrating product to product">
    <Connections>
        <ConnectionInfo name="MyHSS-Connection1" type="HSS" description="Hyperion Shared
Service connection" user="" password=""/>
        <ConnectionInfo name="FileSystem-Connection1" type="FileSystem"
description="File system connection" filePath="/HSS security"/>
        <ConnectionInfo name="AppConnection2" type="Application" product="HUB"
project="Foundation" application="Shared Services" HSSConnection="MyHSS-Connection1"
description="Source Application"/>
    </Connections>
    <Tasks>
        <Task seqID="1">
            <Source connection="AppConnection2">
                <Options>
                    <optionInfo name="userFilter" value="*"/>
                    <optionInfo name="groupFilter" value="*"/>
                    <optionInfo name="roleFilter" value="*"/>
                </Options>
                <Artifact recursive="false" parentPath="/Native Directory"
pattern="Users"/>
                <Artifact recursive="false" parentPath="/Native Directory"
pattern="Roles"/>
        <Artifact recursive="true" parentPath="/Native Directory/Assigned Roles"
pattern="*"/>
        <Artifact recursive="false" parentPath="/Native Directory" pattern="Groups"/>
                <Artifact recursive="false" parentPath="/Native Directory"
pattern="Delegated Lists"/>
                <Artifact recursive="true" parentPath="/Taskflows" pattern="*"/>
            </Source>
            <Target connection="FileSystem-Connection1">
            </Target>
        </Task>
```

```
    </Tasks>
</Package>
```

Importing from the File System

```
<?xml version="1.0" encoding="UTF-8"?>
<Package name="web-migration" description="migrating product to product">
    <Connections>
       <ConnectionInfo name="MyHSS-Connection1" type="HSS" description="Hyperion Shared
Service connection" user="" password=""/>
        <ConnectionInfo name="AppConnection1" type="Application" product="HUB"
description="Destination Application" HSSConnection="MyHSS-Connection1"
project="Foundation" application="Shared Services"/>
        <ConnectionInfo name="FileSystem-Connection2" type="FileSystem" filePath="file:/
C:\Oracle\Middleware\user_projects\epmsystem1\import_export\admin@Native Directory\HSS
security" HSSConnection="MyHSS-Connection1" description="Source Application"/>
    </Connections>
    <Tasks>
        <Task seqID="1">
            <Source connection="FileSystem-Connection2">
                <Options/>
                <Artifact recursive="false" parentPath="/Native Directory"
pattern="Users"/>
                <Artifact recursive="false" parentPath="/Native Directory"
pattern="Roles"/>
                <Artifact recursive="false" parentPath="/Native Directory"
pattern="Groups"/>
        <Artifact recursive="true" parentPath="/Native Directory/Assigned Roles"
pattern="*"/>
        <Artifact recursive="false" parentPath="/Native Directory" pattern="Delegated
Lists"/>
                <Artifact recursive="true" parentPath="/Taskflows" pattern="*"/>

        </Source>
            <Target connection="AppConnection1">
                <Options>
                    <optionInfo name="operation" value="create"/>
                    <optionInfo name="maxerrors" value="1000"/>
                </Options>
            </Target>
        </Task>
    </Tasks>
</Package>
```

Lifecycle Management Log Files

Lifecycle Management log files for Shared Services are listed in the *Oracle Hyperion Enterprise Performance Management System Installation and Configuration Troubleshooting Guide*.

Note: For failed migrations, the Migration Status Report sometimes provides the location of the Lifecycle Management engine log file. The product Lifecycle Management log files are located with the products.

C

Essbase and Lifecycle Management

In This Appendix

About Essbase Artifacts

Use Lifecycle Management to migrate these types of Essbase artifacts:

- Substitution Variables
- Rule Files
- Calculation Scripts
- Report Scripts
- Excel Files
- Location Aliases
- Security Filters
- Text Files
- Database Outlines
- Data

For a listing and description of Essbase artifacts, see "Essbase Artifact Listing" on page 95.

Essbase Roles Requirement

Users performing Lifecycle Management operations for Essbase must be assigned the following roles:

- LCM Administrator
- Server Access
- Calc
- Database Manager

Note: The Server Access role is needed at the Essbase server level. At the application level, the Calc role is required to export source application artifacts, and the Database Manager role is required to import into destination applications.

See the *Oracle Hyperion Enterprise Performance Management System User and Role Security Guide*.

Essbase Migration Prerequisites

- Install and configure Shared Services and Essbase and verify that they are running. See the *Oracle Hyperion Enterprise Performance Management System Installation and Configuration Guide*.
- Ensure that users performing Lifecycle Management operations are assigned the LCM Administrator, Server Access, Calc, and Database Manager roles. See the *Oracle Hyperion Enterprise Performance Management System User and Role Security Guide*.
- Determine the migration scenario that best fits your requirements. See "Migration Scenarios" on page 18.
- Essbase Classic applications—Before migrating security filters, you must migrate Shared Services Native Directory (users, groups, and provisioning). See "Migrating Native Directory (Security)" on page 56. For a listing of Shared Services Native Directory artifacts, see Appendix B, "Shared Services and Lifecycle Management.".

  Note: To use Lifecycle Management for Planning or Essbase, Essbase must use Shared Services Native Directory and not a legacy security mode.
- Essbase Performance Management Architect applications—Before migrating non-dimensional artifacts, Performance Management Architect dimensions must be migrated first and 'deployed after import'. For a listing of Performance Management Architect artifacts, see Appendix H, "Performance Management Architect and Lifecycle Management."
- Before exporting Essbase data, ensure that the database is set to read-only mode to disallow any updates until the export process is complete.
- Before exporting data artifacts, make sure to load data into the database; otherwise, the data migration will fail since the artifacts will not have any value.

Essbase Artifact Listing

Subtopics

Essbase artifacts are listed in the Essbase application group in Shared Services Console.

Note: The artifacts displayed in Shared Services Console vary by implementation.

About the Artifact Listing

Note the following about the artifact listing:

- **Artifact**—Artifact name
- **Description**—Artifact description
- **Last Modified Time**—If this parameter is supported, reflects the time the artifact was imported. Some artifacts do not support the last modified time parameter.
- **Last Modified User**—If this parameter is supported, reflects the user who last modified the artifact. Some artifacts do not support the last modified user parameter.
- **Editable on the File System**—If yes, the artifact can be edited on the file system using a text editor. If no, the artifact can be edited only within the product.
- **Dependencies**—Lists artifact dependencies. For example, Essbase Security Filters artifacts also require that Shared Services security artifacts be migrated.

Essbase Server Artifacts

The Essbase Server directory contains substitution variable artifacts.

Table 17 Essbase Server Artifacts

Artifact	Description	Last Modified Time	Last Modified User	Editable on the File System?	Dependencies
Substitution Variables	Global placeholders for regularly changing information	No	No	No	None

Essbase Application Artifacts

Each application directory (for example, Demo) contains application-specific substitution variable artifacts.

Table 18 Essbase Application Artifacts

Artifact	Description	Last Modified Time	Last Modified User	Editable on the File System?	Dependencies
Substitution Variables	Global placeholders for regularly changing information	No	No	No	None

Essbase Database Artifacts

Each Essbase application contains one or more database directories (for example, Sample.Basic) which, in turn, contain database-specific artifacts.

Table 19 Essbase Database Artifacts

Artifact	Description	Last Modified Time	Last Modified User	Editable on the File System?	Dependencies
Rule Files	Sets of operations that Essbase performs on data values or on dimensions and members when it processes a data source	Yes	No	No	None
Calculation Scripts (or Calc Scripts)	A set of commands that defines how a database is consolidated or aggregated. A calculation script may also contain commands that specify allocation and other calculation rules separate from the consolidation process.	Yes	No	Yes—TXT	None
Report Scripts	Text files containing Essbase Report Writer commands that generate one or more production reports	Yes	No	Yes—TXT, XML	None
Excel Files	External spreadsheet files that you can associate with data cells in Essbase	Yes	No	Yes—TXT, XML	None
Substitution Variables	Global placeholders for regularly changing information	No	No	No	None

Artifact	Description	Last Modified Time	Last Modified User	Editable on the File System?	Dependencies
Location Aliases	Descriptors that identify a data source. The location alias specifies a server, application, database, user name, and password. Location aliases are set by DBAs at the database level using Oracle Essbase Administration Services, ESSCMD, or the API.	No	No	No	None
Security Filters	Restrictions that control security access to data values or cells	No	No	Yes—CSV	Shared Services security artifacts
Text Files	Text files used for loading data into Essbase cubes	Yes	No	Yes—TXT	None
Database Outline	Cube Outline file	Yes	No	No	None
Data	All stored data, whether it is at the input member or aggregated/ consolidated at the parent level; for example, Stored Data, Dynamic Calc and Store.	No	No	Yes—TXT	Database Outline

Essbase Migration Considerations

Note the following:

- Certain text files (for example, MaxL script `*.mxl`, MaxL `*.msh`, and MDX script `*.mdx`) cannot be migrated using Lifecycle Management.
- Triggers cannot be migrated using Lifecycle Management. Instead, they can be migrated using MaxL.
- Partition definitions cannot be migrated using Lifecycle Management. Instead, they can be migrated using MaxL.
- Custom-defined Macros and Functions cannot be migrated using Lifecycle Management. Instead, they can be migrated using MaxL.
- Lifecycle Management does not prevent the migration of BSO artifacts into an ASO application and, conversely, ASO application artifacts to a BSO database as long as the migration does not require creation of a new database at the destination. Outline is the

restriction. Hence, data migration, which is dependent on the Outline, also cannot be migrated.

- Oracle Essbase Spreadsheet Add-in supports Substitution Variables at the Server level.
- To use Lifecycle Management for Essbase, Essbase must be in Shared Services mode.

Essbase destination application considerations:

- Application must be predefined in Administration Services
- Database will be created automatically if it does not exist
- Data source and destination names must be the same
- If a cube does not exist and is automatically created, the outline is forcibly overwritten even if the 'overwrite' flag is not selected.
- If an empty outline exists, the 'Default Calc' artifact will not display in the artifact listing under the Calc Scripts directory.
- If Essbase does not exist in the target environment, you can use Lifecycle Management to create an application shell. See "Creating an Essbase Application Shell" on page 41.

Essbase Application Migrations and Cross-Product Artifact Dependencies

When migrating Essbase applications from one environment to another (development to test or test to production), there are cross-product artifact dependencies. Essbase requires artifacts from other products to be migrated along with the Essbase-specific artifacts.

- Essbase Classic cross-product artifacts:
  - Shared Services security (users, groups, and provisioning)
  - OPTIONAL: Reporting and Analysis (Financial Reporting, Web Analysis, and Interactive Reporting)
- Essbase Performance Management Architect cross-product artifacts:
  - Performance Management Architect
  - Shared Services security (users, groups, and provisioning)
  - OPTIONAL: Reporting and Analysis (Financial Reporting, Web Analysis, and Interactive Reporting)

Migration Export and Import Options

Subtopics

Migration Export Options

Essbase has no product-specific export options.

Migration Import Options

During import, Essbase artifacts will replace any existing artifacts on the destination environment. There is no option to merge artifacts.

The following list describes the Essbase import options:

- **Overwrite Artifacts**—Select to overwrite all artifacts in the destination location
- **Restructure Cube**—Choose from the following options:
  - **Retain cube data**—Retains the data in the cube when restructuring the cube outline
  - **Discard cube data**—Discards the data in the cube when restructuring the cube outline
  - **Keep only input data**—Retains only the input data when restructuring the cube outline
  - **Keep only 0-level data**—Retains only level 0 data when restructuring the cube outline

Sample Migration Definition Files

The product code used in the migration definition files for Essbase is `ESBAPP`. All sample migration definition files are provided in *`EPM_ORACLE_HOME`*`/common/utilities/LCM/11.1.2.1/Sample`.

Application-to-Application Migration

```
<?xml version="1.0" encoding="UTF-8"?>
<Package name="web-migration" description="migrating product to product">
    <Connections>
        <ConnectionInfo name="MyHSS-Connection1" type="HSS" description="Hyperion Shared
Service connection" user="" password=""/>
        <ConnectionInfo name="AppConnection1" type="Application" product="ESBAPP"
description="Destination Application" HSSConnection="MyHSS-Connection1"
project="Analytic Servers:LCMDEV:1" application="Demo"/>
        <ConnectionInfo name="AppConnection2" type="Application" product="ESBAPP"
project="Analytic Servers:LCMDEV:1" application="Sample" HSSConnection="MyHSS-
Connection1" description="Source Application"/>
    </Connections>
    <Tasks>
        <Task seqID="1">
```

```
            <Source connection="AppConnection2">
                <Options/>
                <Artifact recursive="true" parentPath="/Databases" pattern="*"/>
            </Source>
            <Target connection="AppConnection1">
                <Options>
                    <optionInfo name="overWriteArtifact" value="false"/>
                    <optionInfo name="restructureCube" value="Retain cube data"/>
                </Options>
            </Target>
        </Task>
    </Tasks>
</Package>
```

Exporting to the File System

```
<?xml version="1.0" encoding="UTF-8"?>
<Package name="web-migration" description="migrating product to product">
    <Connections>
       <ConnectionInfo name="MyHSS-Connection1" type="HSS" description="Hyperion Shared
Service connection" user="" password=""/>
        <ConnectionInfo name="FileSystem-Connection1" type="FileSystem"
description="File system connection" filePath="/Essbase.Sample.Basic"/>
        <ConnectionInfo name="AppConnection2" type="Application" product="ESBAPP"
project="Analytic Servers:LCMDEV:1" application="Sample" HSSConnection="MyHSS-
Connection1" description="Source Application"/>
    </Connections>
    <Tasks>
        <Task seqID="1">
            <Source connection="AppConnection2">
                <Options/>
        <Artifact recursive="false" parentPath="/Databases/Basic" pattern="Basic
outline"/>
        <Artifact recursive="true" parentPath="/Databases/Basic/Calc scripts"
pattern="*"/>
                <Artifact recursive="true" parentPath="/Databases/Basic/Location
Aliases" pattern="*"/>
                <Artifact recursive="true" parentPath="/Databases/Basic/Rule files"
pattern="*"/>
                <Artifact recursive="true" parentPath="/Databases/Basic/Text files"
pattern="*"/>
                <Artifact recursive="true" parentPath="/Databases/Basic/Report scripts"
pattern="*"/>
                <Artifact recursive="true" parentPath="/Databases/Basic/Substitution
Variables" pattern="*"/>
                <Artifact recursive="true" parentPath="/Databases/Basic/Excel files"
pattern="*"/>
                <Artifact recursive="true" parentPath="/Databases/Basic/Security"
pattern="*"/>
                <Artifact recursive="true" parentPath="/Substitution Variables"
pattern="*"/>
        </Source>
            <Target connection="FileSystem-Connection1">
            </Target>
        </Task>
    </Tasks>
</Package>
```

Importing from the File System

```
<?xml version="1.0" encoding="UTF-8"?>
<Package name="web-migration" description="migrating product to product">
    <Connections>
        <ConnectionInfo name="MyHSS-Connection1" type="HSS" description="Hyperion Shared
Service connection" user="" password=""/>
        <ConnectionInfo name="AppConnection1" type="Application" product="ESBAPP"
description="Destination Application" HSSConnection="MyHSS-Connection1"
project="Analytic Servers:LCMDEV:1" application="Sample"/>
        <ConnectionInfo name="FileSystem-Connection2" type="FileSystem" filePath="file:/
C:\Oracle\Middleware\user_projects\epmsystem1\import_export\admin@Native Directory
\Sample.Basic" HSSConnection="MyHSS-Connection1" description="Source Application"/>
    </Connections>
    <Tasks>
        <Task seqID="1">
            <Source connection="FileSystem-Connection2">
                <Options/>
               <Artifact recursive="false" parentPath="/Databases/Basic" pattern="Basic
outline"/>
        <Artifact recursive="true" parentPath="/Databases/Basic/Calc scripts"
pattern="*"/>
                <Artifact recursive="true" parentPath="/Databases/Basic/Location
Aliases" pattern="*"/>
                <Artifact recursive="true" parentPath="/Databases/Basic/Rule files"
pattern="*"/>
                <Artifact recursive="true" parentPath="/Databases/Basic/Text files"
pattern="*"/>
                <Artifact recursive="true" parentPath="/Databases/Basic/Report scripts"
pattern="*"/>
                <Artifact recursive="true" parentPath="/Databases/Basic/Substitution
Variables" pattern="*"/>
                <Artifact recursive="true" parentPath="/Databases/Basic/Excel files"
pattern="*"/>
                <Artifact recursive="true" parentPath="/Databases/Basic/Security"
pattern="*"/>
        <Artifact recursive="true" parentPath="/Substitution Variables" pattern="*"/>
            </Source>
            <Target connection="AppConnection1">
                <Options>
                    <optionInfo name="overWriteArtifact" value="false"/>
                    <optionInfo name="restructureCube" value="Retain cube data"/>
                </Options>
            </Target>
        </Task>
    </Tasks>
</Package>
```

Lifecycle Management Log Files

Lifecycle Management log files for Essbase are listed in the *Oracle Hyperion Enterprise Performance Management System Installation and Configuration Troubleshooting Guide*.

Note: For failed migrations, the Migration Status Report provides a link to the Lifecycle Management engine log file. The product Lifecycle Management log files are located with the products.

D

Reporting and Analysis and Lifecycle Management

In This Appendix

About Reporting and Analysis Artifacts

Use Lifecycle Management to migrate repository content for these Reporting and Analysis modules:

- Financial Reporting
- Interactive Reporting
- Production Reporting
- Web Analysis

For a listing of Reporting and Analysis artifacts, see "Reporting and Analysis Artifact Listing" on page 106.

Reporting and Analysis Roles Requirement

Users performing Lifecycle Management operations for Reporting and Analysis must be assigned the following roles:

- LCM Administrator
- Reporting and Analysis Global Administrator

Note: The Reporting and Analysis Global Administrator role is required to import Financial Reporting artifacts exported from release 9.3.*x*.

See the *Oracle Hyperion Enterprise Performance Management System User and Role Security Guide*.

Reporting and Analysis Migration Prerequisites

Before using Lifecycle Management to migrate artifacts, you must perform these actions:

- Install and configure Shared Services and Reporting and Analysis and verify that they are running. See the *Oracle Hyperion Enterprise Performance Management System Installation and Configuration Guide*.
- Ensure that users performing Lifecycle Management operations are assigned the LCM Administrator and Reporting and Analysis Global Administrator roles. See the *Oracle Hyperion Enterprise Performance Management System User and Role Security Guide*.
- Reporting and Analysis does not support direct application-to-application migrations using Lifecycle Management. Reporting and Analysis artifacts must be migrated to and from the file system. See "Migration Scenarios" on page 18.
- Migrate the Shared Services Native Directory artifacts (users, groups, roles, and assigned roles). See "Migrating Native Directory (Security)" on page 56.
- Configure the destination host's Job Service properties for Production Reporting. See "Configure the Production Reporting Job Service Properties on the Destination Application" on page 104.
- Create Data Access Service data sources for Interactive Reporting jobs. See "Create Interactive Reporting Data Access Service Data Sources in the Destination Application" on page 105.
- If using Lifecycle Management Utility 9.3.*x* to migrate Financial Reporting artifacts, manually copy properties files to the Shared Services computer. See "Copy Financial Reporting Properties Files to the Shared Services Computer (for Lifecycle Management Utility 9.3.*x*)" on page 105.

Configure the Production Reporting Job Service Properties on the Destination Application

Before importing Production Reporting artifacts, you must configure the destination host's Job Service properties for Production Reporting.

➤ To configure the Production Reporting Job Service properties:

1. **Log in to EPM Workspace as a Reporting and Analysis Administrator.**
2. **Select Navigate, then Administer, then Reporting and Analysis, and then Production Reporting Engines.**

3 If a PR Engine does not exist, right click the empty area on the **Production Reporting Engines** tab, then select **Create New PR Engine**.

4 Add the SQR product binaries location for the **Engine Type**, then click **OK**.

Create Interactive Reporting Data Access Service Data Sources in the Destination Application

Create Data Access Service (DAS) data sources in the destination application for Interactive Reporting jobs.

➤ To create DAS data sources for Interactive Reporting:

1 Log in to EPM Workspace as a Reporting and Analysis Administrator.

2 Select **Navigate**, then **Administer**, then **Reporting and Analysis**, and then **Services**.

3 Edit properties for Interactive Reporting Data Access Services.

4 Select the **Data Sources** tab. Click **New** to create data sources.

5 Add data source details.

Note: The name of the DAS data source should match the name in the source application. If the names do not match, the DAS service cannot find the appropriate data source because its name is used in the Interactive Reporting connection file (`.oce`), which remains unchanged during migration.

Copy Financial Reporting Properties Files to the Shared Services Computer (for Lifecycle Management Utility 9.3.*x*)

If you are using Lifecycle Management Utility 9.3.*x* to perform Financial Reporting migrations in a distributed environment, you must copy certain properties files to the computer hosting Shared Services before performing a migration.

Copy these files to the `%BIPLUS_HOME%/lib` directory on the computer hosting Shared Services:

- From the computer hosting Financial Reporting Report Server: `%BIPLUS_HOME%/lib/fr_global.properties`.
- From the computer hosting Financial Reporting Web Application: `%BIPLUS_HOME%/lib/config.properties`.

Reporting and Analysis Artifact Listing

Subtopics

Reporting and Analysis artifacts are listed in the Reporting and Analysis application group in Shared Services Console.

Note: The artifacts displayed in Shared Services Console vary by implementation.

About the Artifact Listing

Note the following about the artifact listing:

- **Artifact**—Artifact name
- **Description**—Artifact description
- **Last Modified Time**—If this parameter is supported, reflects the time the artifact was imported. Some artifacts do not support the last modified time parameter.
- **Last Modified User**—If this parameter is supported, reflects the user who last modified the artifact. Some artifacts do not support the last modified user parameter.
- **Editable on the File System**—If yes, the artifact can be edited on the file system using a text editor. If no, the artifact can be edited only within the product.

  Note: Reporting and Analysis artifacts have editing considerations. See "Editing Individual Reporting and Analysis Artifacts on the File System" on page 112.
- **Dependencies**—Lists artifact dependencies. For example, Recurring Time Events artifacts may also require that Custom Calendars artifacts be migrated.

Physical Resources Artifacts

The Physical Resources directory contains artifacts that represent objects managed by the system; for example, printers and output directories.

Table 20 Physical Resources Artifacts

Artifact	Description	Last Modified Time	Last Modified User	Editable on the File System?	Dependencies
Printers Defined	Printers available to the print server when jobs are running	No	No	Yes—XML	None
Output Directories	Directories for saving export files or Interactive Reporting documents	No	No	Yes—XML	None

Security Artifacts

The Security directory contains user preferences artifacts.

Table 21 Security Artifacts

Artifact	Description	Last Modified Time	Last Modified User	Editable on the File System?	Dependencies
User Preferences	Default startup options	No	No	Yes—XML	Any related Repository Objects

Schedule Objects Artifacts

The Schedule Objects directory contains artifacts that represent scheduled objects; for example, events, calendars, job schedules, and job parameters.

Table 22 Schedule Objects Artifacts

Artifact	Description	Last Modified Time	Last Modified User	Editable on the File System?	Dependencies
Externally Triggered Events	Triggers for execution of jobs	Yes	Yes	Yes—XML	None
Recurring Time Events	Triggers for execution of jobs	Yes	Yes	Yes—XML	Custom Calendars, Externally Triggered Events
Calendars	User-defined time periods and their relationship to each other. Q1, Q2, Q3, and Q4 comprise a calendar or fiscal year.	No	No	Yes—XML	None
Job Schedules	Specifies the job that you want to run and the time and job parameter list for running the job	Yes	Yes	Yes—XML	Events, Job Parameters, Jobs

Artifact	Description	Last Modified Time	Last Modified User	Editable on the File System?	Dependencies
Job Parameters	There are two types of job parameters: Personal and Public. Personal ones are only accessible by their owner, while public ones are accessible by all the users having access in job parameter ACL.	No	Yes	Yes—XML	Jobs, Physical Resources

Product Preferences Artifacts

The Product Preferences directory contains artifacts that represent product preferences; for example, favorites, personal pages, subscriptions.

Table 23 Product Preferences Artifacts

Artifact	Description	Last Modified Time	Last Modified User	Editable on the File System?	Dependencies
Favorites	A feature that allows the user to add frequently used documents to a special menu	No	No	Yes—XML	None
Personal Pages	A personal window to repository information. You select what information to display and its layout and colors.	No	No	Yes—XML	None
Subscriptions	A control that provides the ability to subscribe to new content	No	Yes	Yes—XML	Any related Repository Objects

Repository Objects Artifacts

The Repository Objects directory contains artifacts that represent repository objects such as, folders, third party content, shortcuts, URLs, Web Analysis documents, presentations, database connections, user preferences, shortcuts, and links, Financial Reporting reports, books, batches, texts, grids, images, row and column templates, and database connections, Interactive Reporting documents, jobs, job outputs, and OCE files, Production Reporting jobs and job outputs, and generic jobs and job outputs.

Table 24 Repository Objects Artifacts

Artifact	Description	Last Modified Time	Last Modified User	Editable on the File System?[1]	Dependencies
Folders	A file containing other files for the purpose of structuring a hierarchy	Yes	Yes	Yes—XML (metadata only)	None
Third Party Content	Content that has been imported from an auxiliary product, such as Microsoft Word or Excel	Yes	Yes	Yes—XML[2]	None
Shortcuts	Shortcuts to existing repository objects	Yes	Yes	Yes - XML (metadata only)	Corresponding existing repository objects
URLs	Web links published as separate objects	Yes	Yes	Yes - XML (metadata only)	None
Web Analysis Documents	Documents that display data values returned from the data source in a data object. Multiple data objects of multiple display types can occupy one document.	Yes	Yes	Yes—XML (metadata only)	None
Web Analysis Presentations	Collections of Web Analysis Reports	Yes	Yes	Yes - XML (metadata only)	Corresponding Web Analysis Reports
Web Analysis Database Connections	Metadata objects for connecting to Web Analysis datasources	Yes	Yes	Yes - XML (metadata only)	None
Web Analysis User Preferences	Objects describing Web Analysis-specific user preferences	Yes	Yes	Yes - XML (metadata only)	None
Web Analysis Shortcuts	Web Analysis objects pointing to other Web Analysis objects	Yes	Yes	Yes - XML (metadata only)	Corresponding Web Analysis Objects
Web Analysis Links	Web Analysis objects linked with other Web Analysis objects	Yes	Yes	Yes - XML (metadata only)	Corresponding Web Analysis Objects

Artifact	Description	Last Modified Time	Last Modified User	Editable on the File System?[1]	Dependencies
Financial Reporting Reports	A Financial Reporting document with predefined behavior or appearance such as text boxes, images, grids and charts	Yes	Yes	Yes—XML (metadata only)	Images
Financial Reporting Books	A container that holds a group of similar Financial Reporting documents. Books may specify dimension sections or dimension changes.	Yes	Yes	Yes—XML (metadata only)	Images, any related Financial Reporting Repository Objects
Financial Reporting Batches	An accumulation of files that have been organized into a single group for transmitting or printing	Yes	Yes	Yes—XML (metadata only)	Reports, any related Financial Reporting Repository Objects
Financial Reporting Texts	Text objects that can be associated with a Financial Reporting report	Yes	Yes	Yes—XML (metadata only)	None
Financial Reporting Grids	A report object in which you retrieve data in the rows, columns, and page axes	Yes	Yes	Yes—XML (metadata only)	None
Financial Reporting Images	A report object that contains a graphic or an image file	Yes	Yes	Yes—XML (metadata only)	None
Financial Reporting Row and Column Templates	A template based on rows and columns in a grid	Yes	Yes	Yes—XML (metadata only)	None
Financial Reporting Database Connections[3]	A file that stores definitions and properties used to connect to data sources and enables database references to be portable and widely used	Yes	Yes	Yes—XML (metadata only)	None

Artifact	Description	Last Modified Time	Last Modified User	Editable on the File System?[1]	Dependencies
Interactive Reporting Documents	Files you create and use to retrieve information from a database, analyze the information, and build reports	Yes	Yes	No[4]	OCE files
Interactive Reporting Jobs	Similar to documents except jobs can be scheduled while documents work only "on-demand"	Yes	Yes	No	OCE files, Custom Calendars
Interactive Reporting Job Outputs	Outputs from Interactive Reporting jobs	Yes	Yes	Yes - XML (metadata only)	Interactive Reporting Jobs
OCE files	Interactive Reporting Database Connections	Yes	Yes	Yes - XML (metadata only)	Other OCE files containing connection metadata
Production Reporting Jobs	Documents with special properties that can be launched to generate output	Yes	Yes	Yes—XML	DataSources, required files (data files, images, and so on)
Production Reporting Job Outputs	Outputs from Production Reporting jobs	Yes	Yes	Yes - XML (metadata only)	Production Reporting Jobs
Generic Jobs	Jobs running against Generic Job Factory	Yes	Yes	Yes - XML (metadata only)	Generic Jobs, required files, custom forms
Generic Job Outputs	Outputs from Generic jobs	Yes	Yes	Yes - XML (metadata only)	Generic Jobs

[1]For most of the Repository Objects artifacts, only artifact metadata can be edited on the file system (XML file containing respective object metadata). For details, see "Editing Individual Reporting and Analysis Artifacts on the File System" on page 112.

[2]Third-party objects must be edited with the appropriate editors. For example, `.doc` file content can be edited with Microsoft Word (rename the file, edit it, and then rename it back).

[3]Migrating Financial Reporting database connections is not supported in the current release.

[4]Though Interactive Reporting documents binary can be edited with Interactive Reporting Client (you would need to rename the file to `.bqy`, edit it, and rename it back), this is not recommended because the file may become inconsistent with its metadata. It is strongly recommended that you edit Interactive Reporting documents within the product only.

Admin Options Artifacts

The Admin Options directory contains artifacts that represent administrative options; for example, Production Reporting datasources and generic job configuration.

Note: Computer-specific artifacts cannot be migrated. They must be manually defined on the destination environment before a migration can occur.

Table 25 Product Preferences Artifacts

Artifact	Description	Last Modified Time	Last Modified User	Editable on the File System?	Dependencies
Production Reporting DataSources	A definition of a datasource to be used by a Production Reporting Job in Reporting and Analysis. It is defined as database connection type (for example, ODBC), database connection name (for example, ODBC datasource name), and optional environment variables.	No	No	Yes—XML	None
Generic job configuration[1]	A definition of a generic application to be used to run generic Reporting and Analysis jobs; for example, any third party application	No	No	Yes—XML	None

[1]A common definition can be migrated but an executable cannot. Executables must be manually defined after migration of generic jobs for each of the generic job configurations.

Editing Individual Reporting and Analysis Artifacts on the File System

When exporting Reporting and Analysis artifacts for editing on the file system, the artifacts are exported as follows:

- General objects (such as docs and PDF files), BQY files and jobs, OCE files, SQR and Generic jobs

  These files are exported for edit as a set of files in a zip archive. The zip archive includes an XML file containing the object's metadata and one or more binary files from the FS repository.

  To edit these files:

  1. Export the artifacts. See "Exporting Individual Artifacts for Editing" on page 55.
  2. Unzip the content.

3. Note the binary file names and rename them to enable the operating system to open the files with the appropriate application (for example, add the `.BQY` extension).
4. Edit the artifacts.
5. Rename the binary files back to the original names noted in step 3.
6. Add the edited file to the archive using the replace option.
7. Import the archive back into the application. See "Importing Individual Artifacts After Editing" on page 56.

- Financial Reporting objects

  Financial Reporting objects are exported the same way as the objects listed previously. After exporting Financial Reporting objects for editing, the resulting zip archive includes an XML file with metadata and a set of files internally representing Financial Reporting objects in Reporting and Analysis. You can only edit the object's metadata since binary representation is not plain/user-friendly.

- Web Analysis objects

  These objects are represented as a zipped XML file that contains both the metadata and the actual content of the Web Analysis artifacts. They can be edited, but there is no tool to work with such objects on the file system, and there is no guarantee that the integrity is preserved after the files are edited and imported back into application.

Reporting and Analysis Artifact Types

Lifecycle Management Utility supports the migration of Reporting and Analysis artifacts based on the artifact type. The following table lists the valid artifact types for Reporting and Analysis artifacts.

Note: The artifact type parameter is not supported in the Shared Services Console nor is it supported for any other EPM System product. Artifact types are only functional for Lifecycle Management Utility.

Table 26 Reporting and Analysis Artifact Types

Artifact	Artifact Type
Production Reporting SubService	PRSubService
Generic product configuration	GenericProduct
Printer definition	Printer
Output directory definition	OutputDirectory
Subscription	Subscription
List of favorites for user	Favorites

Artifact	Artifact Type
Personal Page	PersonalPageContent
Custom calendar	Calendar
Externally Triggered Event	ExternallyTriggeredEvent
Recurring Time Event	RecurringTimeEvent
Job Parameter	JobParameter
Job Schedule	JobSchedule
User Preferences	UserPreferences
Folder	Folder
OCE File	OCEFile
Interactive Reporting documents and jobs	application/x-brioquery
Oracle's Hyperion® Interactive Reporting job outputs	BrioQueryOutputCollection
Production Reporting jobs	application/x-SQR
Oracle's Hyperion® SQR® Production Reporting job outputs	SQRProgramOutput
Generic jobs	ProgramCollection
Generic job outputs	OutputCollection
Shortcut	Shortcut
URL	URL
Third party content	application/pdf, image/gif, image/jpeg (and so on)
Financial Reporting Report	application/hyperion-reports-report
Financial Reporting Snapshot Report	application/hyperion-reports-snapshot_report
Financial Reporting Book	application/hyperion-reports-book
Financial Reporting Snapshot Book	application/hyperion-reports-snapshot_book
Financial Reporting Batch	application/hyperion-reports-batch
Financial Reporting Grid object	application/hyperion-reports-grid
Financial Reporting Image object	application/hyperion-reports-image
Financial Reporting Text object	application/hyperion-reports-text
Financial Reporting Chart object	application/hyperion-reports-chart
Financial Reporting Row-Column Template object	application/hyperion-reports-row_column

Artifact	Artifact Type
Web Analysis DB connection - Essbase	application/hyperion-analyzer-db-essbase
Web Analysis DB connection - Financial Management	application/hyperion-analyzer-db-hfm
Web Analysis DB connection - Relational	application/hyperion-analyzer-db-sql
Web Analysis DB connection - SAP - Infocube	application/hyperion-analyzer-db-sap-infocube
Web Analysis DB connection - SAP - Infoset	application/hyperion-analyzer-db-sap-infoset
Web Analysis DB connection - SAP - Multiprovider	application/hyperion-analyzer-db-sap-multiprovider
Web Analysis DB connection - SAP - ODS	application/hyperion-analyzer-db-sap-ods
Web Analysis DB connection - SAP - Querycube	application/hyperion-analyzer-db-sap-querycube
Web Analysis DB connection - SSAS	application/hyperion-analyzer-db-ssas
Web Analysis Report	application/hyperion-analyzer-report
Web Analysis Presentation	application/hyperion-analyzer-presentation
Web Analysis User Preferences	application/hyperion-analyzer-preferences
Web Analysis Link	application/hyperion-analyzer-link
Web Analysis Shortcut	application/hyperion-analyzer-shortcut

Reporting and Analysis Application Migrations and Cross-Product Artifact Dependencies

When migrating Reporting and Analysis applications from one environment to another (development to test or test to production), there are cross-product artifact dependencies. Reporting and Analysis requires that Shared Services Native Directory (users, groups, and provisioning) artifacts be migrated along with the Reporting and Analysis-specific artifacts.

Migration Export and Import Options

Subtopics

Note: In previous releases, Shared Services Console provided an "Include Dependent Artifacts" option for Reporting and Analysis. This option is no longer available. Instead, you must manually select any necessary dependencies (for example, dependent objects which were not imported during previous migrations).

Migration Export Options

Reporting and Analysis export option:

- **Export Job Output**—If this option is set to `true`, then jobs will be exported along with their outputs even in cases where the outputs do not match export filters. The default value is `true`.

Migration Import Options

During import, Reporting and Analysis artifacts will replace any existing artifacts on the destination environment. This only occurs if the last modified dates for the source and destination (existing) artifacts are different, otherwise no import/replace will occur.

Reporting and Analysis import options:

- **Exclude job output on import**—If this option is set to `true`, all job outputs will be skipped on import, even if they match the import filter. The default value is `false`.

Sample Migration Definition Files

The product code used in the migration definition files for Reporting and Analysis is `HAVA`. Sample migration definition files for Reporting and Analysis are located in *EPM_ORACLE_HOME*`/common/utilities/LCM/11.1.2.1/Sample`.

Exporting to the File System

```
<?xml version="1.0" encoding="UTF-8"?>
<!-- edited with XMLSPY v5 rel. 4 U (http://www.xmlspy.com) by Dongling Ding (Hyperion)
--><Package name="" description="" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance">

  <Credentials user="admin" password="{CSS}MRcYv323uzxGr8rFdvQLcA==/>
  <Connections>
    <ConnectionInfo name="MyHSS-Connection1" type="HSS" description="Hyperion Shared
Service connection" user="" password=""/>
    <ConnectionInfo name="FileSystem-Connection1" type="FileSystem" description="File
system connection" HSSConnection="MyHSS-Connection1" filePath="/test"/>
    <ConnectionInfo name="AppConnection2" type="Application" product="HAVA"
project="Reporting and Analysis" application="Reporting and Analysis"
HSSConnection="MyHSS-Connection1" description="Source Application"/>
  </Connections>
  <Tasks>
    <!-- if multiple tasks, tasks need to be ordered as well-->
    <!-- seqID is optional attribute (default 0); when specified specifies the order
    in which artifacts will be exported -->
    <Task seqID="1">
      <Source connection="AppConnection1">
        <!-- the options listed would match some option specified in product
        registration -->
        <Options>
          <optionInfo name="exportJobOutput" value="true"/>
```

```
        </Options>


        <Artifact parentPath="/Repository Objects" type="folder" recursive="true"
        pattern="*" startDate="2007-03-01" endDate="2007-03-02"/>

        <Artifact parentPath="/Repository Objects/Sample Content" type=
        "application/x-brioquery" recursive="true" pattern="*" startDate=
        "2007-03-01" endDate="2007-03-02"/>
        <Artifact parentPath="/Repository Objects/Sample Content" type=
        "application/x-SQR" recursive="true" pattern="*" startDate=
        "2007-03-01" endDate="2007-03-02"/>

        <Artifact parentPath="/Security" recursive="true" pattern="*" startDate=
        "2007-03-01" endDate="2007-03-02"/>
        <Artifact parentPath="/Product Preferences" recursive="true" pattern=
        "*" startDate="2007-03-01" endDate="2007-03-02"/>
        <Artifact parentPath="/Schedule Objects" recursive="true" pattern=
        "*" startDate="2007-03-01" endDate="2007-03-02"/>
        <Artifact parentPath="/Physical Resources" recursive="true" pattern=
        "*" startDate="2007-03-01" endDate="2007-03-02"/>
      </Source>
      <Target connection="FileSystem-Connection">
        <Options>
        </Options>
        <Transforms>

        </Transforms>
      </Target>
    </Task>
  </Tasks>
</Package>
```

Importing from the File System

```
<?xml version="1.0" encoding="UTF-8"?>
<!-- edited with XMLSPY v5 rel. 4 U (http://www.xmlspy.com) by Dongling Ding (Hyperion)
--><Package name="" description="" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance">

  <Credentials user="admin" password="{CSS}MRcYv323uzxGr8rFdvQLcA==/>
  <Connections>
    <ConnectionInfo name="MyHSS-Connection1" type="HSS" description="Hyperion Shared
Service connection" user="" password=""/>
   <ConnectionInfo name="FileSystem-Connection1" type="FileSystem" HSSConnection="MyHSS-
Connection1" filePath="/test" description="Source Application"/>
    <ConnectionInfo name="AppConnection2" type="Application" product="HAVA"
description="Destination Application" HSSConnection="MyHSS-Connection1"
project="Reporting and Analysis" application="Reporting and Analysis"/>
  </Connections>
  <Tasks>
    <!-- if multiple tasks, tasks need to be ordered as well-->
    <!-- seqID is optional attribute (default 0); when specified specifies the order in
    which artifacts will be exported -->
    <Task seqID="1">
      <Source connection="FileSystem-Connection">
        <!-- the options listed would match some option specified in product
```

```
        registration -->
        <Options>
        </Options>

        <Artifact parentPath="/Repository Objects" type="folder" recursive="true"
        pattern="*" startDate="2007-03-01" endDate="2007-03-02"/>

        <Artifact parentPath="/Repository Objects/Sample Content" type=
        "application/x-brioquery" recursive="true" pattern="*" startDate=
        "2007-03-01" endDate="2007-03-02"/>
        <Artifact parentPath="/Repository Objects/Sample Content" type=
        "application/x-SQR" recursive="true" pattern="*" startDate=
        "2007-03-01" endDate="2007-03-02"/>

        <Artifact parentPath="/Security" recursive="true" pattern="*" startDate=
        "2007-03-01" endDate="2007-03-02"/>
        <Artifact parentPath="/Product Preferences" recursive="true" pattern=
        "*" startDate="2007-03-01" endDate="2007-03-02"/>
        <Artifact parentPath="/Schedule Objects" recursive="true" pattern=
        "*" startDate="2007-03-01" endDate="2007-03-02"/>
        <Artifact parentPath="/Physical Resources" recursive="true" pattern=
        "*" startDate="2007-03-01" endDate="2007-03-02"/>
      </Source>
      <Target connection="AppConnection1">
        <Options>
          <optionInfo name="excludeJobOutputOnImport" value="true"/>
        </Options>
        <Transforms>

        </Transforms>
      </Target>
    </Task>
  </Tasks>
</Package>
```

Lifecycle Management Log Files

Lifecycle Management log files for Reporting and Analysis are listed in the *Oracle Hyperion Enterprise Performance Management System Installation and Configuration Troubleshooting Guide*.

Note: The Lifecycle Management log file is located in *MIDDLEWARE_HOME*/user_projects/epmsystem1/diagnostics/logs/migration. The product log file (Reporting and Analysis Export Import engine) is located in *MIDDLEWARE_HOME*/user_projects/epmsystem1/diagnostics/logs/ReportingAnalysis/eiengine.log.

E

Financial Management and Lifecycle Management

In This Appendix

About Financial Management Artifacts

Use Lifecycle Management to migrate repository content for these types of Financial Management artifacts:

- Security
- Dimension
- Phased Submission
- Rules
- Documents
- Forms
- InterCompany
- Journals
- Member Lists

For a listing of Financial Management artifacts, see "Financial Management Artifact Listing" on page 121.

Financial Management Roles Requirement

Users performing Lifecycle Management operations for Financial Management must be assigned the following roles:

- LCM Administrator
- Application Administrator

See the *Oracle Hyperion Enterprise Performance Management System User and Role Security Guide*.

Financial Management Migration Prerequisites

- Install and configure Shared Services and Financial Management and verify that they are running. See the *Oracle Hyperion Enterprise Performance Management System Installation and Configuration Guide*.
- Ensure that users performing Lifecycle Management operations are assigned the LCM Administrator and Application Administrator roles. See the *Oracle Hyperion Enterprise Performance Management System User and Role Security Guide*.
- Determine the migration scenario that best fits your requirements. See "Migration Scenarios" on page 18.
- Before migrating the Financial Management product-specific artifacts, migrate the Shared Services Native Directory artifacts (users, groups, and provisioning). See "Migrating Native Directory (Security)" on page 56. For a listing of Shared Services artifacts, see Appendix B, "Shared Services and Lifecycle Management."
- Review the Financial Management artifact migration information in the following sections:
  - "Financial Management Classic Application Migrations" on page 120
  - "Financial Management Performance Management Architect Application Migrations" on page 121

Financial Management Classic Application Migrations

- Before migrating, applications must be created in native Financial Management.
- Before a destination application can be selected using the Migration Wizard, the application must exist or a shell application must be created in Financial Management.
- Financial Management Classic requires the following artifacts from other products to be migrated along with the Financial Management-specific artifacts:
  - Shared Services Native Directory (users, groups, and provisioning) and Taskflows
  - Reporting and Analysis (Financial Reporting and Web Analysis)

Financial Management Performance Management Architect Application Migrations

- For the very first migration, the Performance Management Architect dimensions must be migrated and deployed first, then the non-dimensional artifacts can be migrated.
- Financial Management Performance Management Architect requires the following artifacts from other products to be migrated along with the Financial Management-specific artifacts:
  - Performance Management Architect
  - Shared Services Native Directory (users, groups, and provisioning) and Taskflows
  - Calculation Manager
  - Reporting and Analysis (Financial Reporting and Web Analysis)

Financial Management Artifact Listing

Subtopics

Financial Management artifacts are listed in the Financial Management application group in Shared Services Console.

Performance Management Architect enabled applications list dimensions under the EPMA node in the Foundation application group. All other non-dimensional artifacts are listed under the Financial Management application group.

Note: The artifacts displayed in Shared Services Console vary by implementation.

About the Artifact Listing

Note the following about the artifact listing:

- **Artifact**—Artifact name
- **Description**—Artifact description
- **Last Modified Time**—If this parameter is supported, reflects the time the artifact was imported. Some artifacts do not support the last modified time parameter.

- **Last Modified User**—If this parameter is supported, reflects the user who last modified the artifact. Some artifacts do not support the last modified user parameter.
- **Editable on the File System**—If yes, the artifact can be edited on the file system using a text editor. If no, the artifact can be edited only within the product.
- **Dependencies**—Lists artifact dependencies. For example, Financial Management Events artifacts also require that Financial Management Calendars artifacts be migrated.

Security Artifacts

The Security directory contains security class and security class access artifacts.

Table 27 Security Artifacts

Artifact	Description	Last Modified Time	Last Modified User	Editable on the File System?	Dependencies
Security Class	An attribute for dimension members that specifies user permissions	Yes	No	Yes—TXT, XML	None
Security Class Access	Privileges assigned to a user for a security class	No	No	Yes—TXT, XML	Security Class

Dimensions Artifacts

The Dimensions directory contains dimension artifacts; for example, Scenario, Entity, Account, Period, Year, View, Value, ICP, Custom (up to four), Alias, ConsolMethod, Currency, and Appsettings.

Table 28 Dimensions Artifacts

Artifact	Description	Last Modified Time	Last Modified User	Editable on the File System?	Dependencies
Scenario	A dimension for classifying data (for example, Actuals, Budget, Forecast1, and Forecast2)	Yes	No	Yes—XML	Security Class
Entity	A dimension representing organizational units. Examples: divisions, subsidiaries, plants, regions, products, or other financial reporting units.	Yes	No	Yes—XML	Security Class
Account	A dimension type that makes accounting intelligence available. Only one dimension can be defined as Accounts.	Yes	No	Yes—XML	Security Class

Artifact	Description	Last Modified Time	Last Modified User	Editable on the File System?	Dependencies
Period	A dimension representing time periods, such as quarters and months	Yes	No	Yes—XML	Security Class
Year	A dimension representing the fiscal or calendar year for data	Yes	No	Yes—XML	Security Class
View	A dimension representing various modes of calendar intelligence; for example, Periodic, Year-to-Date, and Quarter-to-Date frequencies	Yes	No	Yes—XML	Security Class
Value	A dimension representing the different types of values stored in your application, and can include the input currency, parent currency, adjustments, and consolidation detail such as proportion, elimination, and contribution detail	Yes	No	Yes—XML	Security Class
ICP	A dimension representing all intercompany balances that exist for an account. This is a reserved dimension that is used in combination with the Account dimension and any custom dimension.	Yes	No	Yes—XML	Security Class
Custom (1–4)	A dimension created and defined by users. Channel, product, department, project, or region could be custom dimensions.	Yes	No	Yes—XML	Security Class
ConsolMethod	A metadata attribute	Yes	No	Yes—XML	Security Class
Currency	A metadata attribute	Yes	No	Yes—XML	Security Class
Appsettings	A metadata attribute	Yes	No	Yes—XML	Security Class

Phased Submission Artifacts

The Phased Submission directory contains phased submission artifacts.

Note: To migrate Phased Submission artifacts, both the Source and Destination must be phase submission enabled.

Table 29 Phased Submission Artifact

Artifact	Description	Last Modified Time	Last Modified User	Editable on the File System?	Dependencies
Phased Submission	A stage of a process management unit	Yes	No	Yes—XML	None

Rules Artifacts

The Rules directory contains rules artifacts.

Table 30 Rules Artifacts

Artifact	Description	Last Modified Time	Last Modified User	Editable on the File System?	Dependencies
Rules	Automates the calculation of data within an application	Yes	No	Yes—XML	Dimensions

Documents Artifacts

The Documents directory contains folders, tasklists, links, custom documents, data explorer reports, and related content artifacts.

Table 31 Documents Artifacts

Artifact	Description	Last Modified Time	Last Modified User	Editable on the File System?	Dependencies
Folders	A file containing other files for the purpose of structuring a hierarchy	Yes	No	Yes—TXT, XML	Security Class
Tasklists	A detailed status list of tasks for a particular user	Yes	No	Yes—TXT, XML	Security Class
Links	A reference to a repository object. Links can reference folders, files, shortcuts, and other links.	Yes	No	Yes—TXT, XML	Security Class
Custom Documents	User-defined documents such as Microsoft Word or Excel documents	Yes	No	No	Security Class
Data Explorer Reports	Displays information from data grids	Yes	No	Yes—TXT, XML	Security Class, Dimensions, Member Lists

Artifact	Description	Last Modified Time	Last Modified User	Editable on the File System?	Dependencies
Related Content	A link to content in another Oracle product, such as a report	Yes	No	Yes—TXT, XML	Security Class

Forms Artifacts

The Forms directory contains Web forms and Web grids artifacts.

Table 32 Forms Artifacts

Artifact	Description	Last Modified Time	Last Modified User	Editable on the File System?	Dependencies
Web Forms	Grid display on the Web that enables users to enter data into the database	Yes	No	Yes—TXT, XML	Security Class, Dimensions, Member Lists
Web Grids	An object for entering and displaying data	Yes	No	Yes—TXT, XML	Security Class, Dimensions, Member Lists

InterCompany Artifacts

The InterCompany directory contains InterCompany artifacts such as, ICT matching template, ICT reason codes, Intercompany system report, ICT system reports, IC matching by account, and IC matching by transaction ID.

Table 33 InterCompany Artifacts

Artifact	Description	Last Modified Time	Last Modified User	Editable on the File System?	Dependencies
ICT matching template	Set of predefined components for intercompany matching processes	Yes	No	Yes—TXT, XML	Security Class, Dimensions, Member Lists
ICT reason codes	An explanation of an intercompany transaction's status	Yes	No	Yes—TXT, XML	None
Intercompany system report	Information from intercompany matching processes	Yes	No	Yes—TXT, XML	Security Class, Dimensions, MemberLists
ICT system reports	Information from intercompany transactions	Yes	No	Yes—TXT, XML	Security Class, Dimensions, Member Lists

Artifact	Description	Last Modified Time	Last Modified User	Editable on the File System?	Dependencies
IC Matching By Account	InterCompany matching reports based on accounts selected	Yes	No	Yes—TXT, XML	Security Class, Dimensions, Member Lists
IC Matching By Trans ID	InterCompany matching reports based on transaction ID	Yes	No	Yes—TXT, XML	Security Class, Dimensions, Member Lists

Journals Artifacts

The Journals directory contains journal templates, journal groups, and journal system reports artifacts.

Table 34 Journals Artifacts

Artifact	Description	Last Modified Time	Last Modified User	Editable on the File System?	Dependencies
Journal Templates	A journal function used to post adjustments that have common adjustment information for each period; for example, you can create a standard template that contains the common account IDs, entity IDs, or amounts, then use the template as the basis for many regular journals	Yes	No	Yes—TXT, XML	Security Class, Dimensions, Member Lists, Journal Groups
Journal Groups	A user-defined element	No	No	Yes—TXT, XML	None
Journal System reports	Displays information from journals	Yes	No	Yes—TXT, XML	Security Class, Dimensions, Member Lists

Member Lists Artifacts

The Member Lists directory contains member lists artifacts.

Table 35 Member Lists Artifacts

Artifact	Description	Last Modified Time	Last Modified User	Editable on the File System?	Dependencies
Member Lists	A named group, system- or user-defined, that references members, functions, or member lists within a dimension	Yes	No	Yes—XML	Dimensions

Financial Management Migration Considerations

- EA Template migrations are not supported in Lifecycle Management.
- Favorites migrations are not supported in Lifecycle Management.
- Financial Management data migration is not supported in Lifecycle Management.
- The "Include Dependent Artifacts" import and export option is no longer available. You must manually select any necessary dependencies.
- If Financial Management does not exist in the target environment, you can use Lifecycle Management to create an application shell. See "Creating a Financial Management Application Shell" on page 45.

Financial Management Application Migrations and Cross-Product Artifact Dependencies

Financial Management has no cross-product artifact dependencies.

Migration Export and Import Options

Subtopics

Note: In previous releases, Shared Services Console provided an "Include Dependent Artifacts" option for Financial Management. This option is no longer available. Instead, you must manually select any necessary dependencies.

Migration Export Options

Financial Management has no product-specific export options.

Migration Import Options

During import, only Dimensions and Phased Submission artifacts have options to Replace or Merge existing artifacts on the destination environment. All other Financial Management artifacts will replace any existing artifacts during import.

Financial Management import options:

- **Import Dimension Mode**—Choose from the following import operations (Dimensions only):
  - **Replace**—Overwrites the artifacts with the imported artifacts
  - **Merge**—Merges the artifacts with the imported artifacts

  Note: This option is applicable to all dimensions defined in a migration.
- **Import Phase Submission Assignment Mode**—Choose from the following import operations:
  - **Replace**—Overwrites the artifacts with the imported artifacts
  - **Merge**—Merges the artifacts with the imported artifacts

Sample Migration Definition Files

The sample migration definition files provided are for Financial Management Classic application migrations. The product code used in the migration definition files for Financial Management is `HFM` and the sample application is `COMMA`. All sample migration definition files are provided in *EPM_ORACLE_HOME*`/common/utilities/LCM/11.1.2.1/Sample`.

Application to Application Migration

```
<?xml version="1.0" encoding="UTF-8"?>
<Package name="web-migration" description="migrating product to product">
    <Connections>
       <ConnectionInfo name="MyHSS-Connection1" type="HSS" description="Hyperion Shared
Service connection" user="" password=""/>
        <ConnectionInfo name="AppConnection1" type="Application" product="HFM"
description="Destination Application" HSSConnection="MyHSS-Connection1" project="HFM"
application="COMMATEST"/>
        <ConnectionInfo name="AppConnection2" type="Application" product="HFM"
project="HFM" application="COMMADEV" HSSConnection="MyHSS-Connection1"
description="Source Application"/>
    </Connections>
    <Tasks>
        <Task seqID="1">
            <Source connection="AppConnection2">
                <Options/>
                <Artifact recursive="true" parentPath="/Forms" pattern="*"/>
                <Artifact recursive="true" parentPath="/Documents" pattern="*"/>
                <Artifact recursive="true" parentPath="/Dimensions" pattern="*"/>
                <Artifact recursive="true" parentPath="/InterCompany" pattern="*"/>
                <Artifact recursive="true" parentPath="/Journals" pattern="*"/>
```

```
            <Artifact recursive="true" parentPath="/Member Lists" pattern="*"/>
        </Source>
        <Target connection="AppConnection1">
            <Options>
                <optionInfo name="ImportDimensionMode" value="replace"/>
            </Options>
        </Target>
    </Task>
</Tasks>
</Package>
```

Exporting to the File System

```
<?xml version="1.0" encoding="UTF-8"?>
<Package name="web-migration" description="migrating product to product">
    <Connections>
       <ConnectionInfo name="MyHSS-Connection1" type="HSS" description="Hyperion Shared
Service connection" user="" password=""/>
        <ConnectionInfo name="FileSystem-Connection1" type="FileSystem"
description="File system connection" filePath="/Comma"/>
        <ConnectionInfo name="AppConnection2" type="Application" product="HFM"
project="HFM" application="COMMA" HSSConnection="MyHSS-Connection1" description="Source
Application"/>
    </Connections>
    <Tasks>
        <Task seqID="1">
            <Source connection="AppConnection2">
                <Options/>
                <Artifact recursive="true" parentPath="/Forms" pattern="*"/>
                <Artifact recursive="true" parentPath="/Rules" pattern="*"/>
                <Artifact recursive="true" parentPath="/Documents" pattern="*"/>
                <Artifact recursive="true" parentPath="/Dimensions" pattern="*"/>
                <Artifact recursive="true" parentPath="/Security" pattern="*"/>
                <Artifact recursive="true" parentPath="/InterCompany" pattern="*"/>
                <Artifact recursive="true" parentPath="/Journals" pattern="*"/>
                <Artifact recursive="true" parentPath="/Member Lists" pattern="*"/>
            </Source>
            <Target connection="FileSystem-Connection1">
            </Target>
        </Task>
    </Tasks>
</Package>
```

Importing from the File System

```
<?xml version="1.0" encoding="UTF-8"?>
<Package name="web-migration" description="migrating product to product">
    <Connections>
       <ConnectionInfo name="MyHSS-Connection1" type="HSS" description="Hyperion Shared
Service connection" user="" password=""/>
        <ConnectionInfo name="AppConnection1" type="Application" product="HFM"
description="Destination Application" HSSConnection="MyHSS-Connection1" project="HFM"
application="COMMA"/>
        <ConnectionInfo name="FileSystem-Connection2" type="FileSystem" filePath="file:/
C:\Oracle\Middleware\user_projects\epmsystem1\import_export\admin@Native Directory\HFM
Comma" HSSConnection="MyHSS-Connection1" description="Source Application"/>
    </Connections>
```

```
    <Tasks>
        <Task seqID="1">
            <Source connection="FileSystem-Connection2">
                <Options/>
                <Artifact recursive="true" parentPath="/Forms" pattern="*"/>
                <Artifact recursive="true" parentPath="/Rules" pattern="*"/>
                <Artifact recursive="true" parentPath="/Documents" pattern="*"/>
                <Artifact recursive="true" parentPath="/Dimensions" pattern="*"/>
                <Artifact recursive="true" parentPath="/Security" pattern="*"/>
                <Artifact recursive="true" parentPath="/InterCompany" pattern="*"/>
                <Artifact recursive="true" parentPath="/Journals" pattern="*"/>
                <Artifact recursive="true" parentPath="/Member Lists" pattern="*"/>
            </Source>
            <Target connection="AppConnection1">
                <Options>
                    <optionInfo name="ImportDimensionMode" value="replace"/>
                </Options>
            </Target>
        </Task>
    </Tasks>
</Package>
```

Lifecycle Management Log Files

Lifecycle Management log files for Financial Management are listed in the *Oracle Hyperion Enterprise Performance Management System Installation and Configuration Troubleshooting Guide*.

Note: For failed migrations, the Migration Status Report provides a link to the Lifecycle Management engine log file. The product Lifecycle Management log files are located with the products.

F

Financial Close Management and Lifecycle Management

In This Appendix

About Financial Close Management Artifacts

Use Lifecycle Management to migrate repository content for these types of Oracle Hyperion Financial Close Management artifacts:

- Period Dimension
- Year Dimension
- Alert Types
- Custom Attributes
- Integration Applications
- Integration Types
- Task Types
- Templates

For a description of these types of Financial Close Management artifacts, see "Financial Close Management Artifact Listing" on page 132.

Financial Close Management Roles Requirement

Users performing Lifecycle Management operations for Financial Close Management must be assigned the following roles:

- FCM Administrator
- LCM Administrator

See the *Oracle Hyperion Enterprise Performance Management System User and Role Security Guide*.

Financial Close Management Migration Prerequisites

- Install and configure Shared Services and Financial Close Management and verify that they are running. See the *Oracle Hyperion Enterprise Performance Management System Installation and Configuration Guide*.
- Ensure that users performing Lifecycle Management operations are assigned the LCM Administrator and FCM Administrator roles. See the *Oracle Hyperion Enterprise Performance Management System User and Role Security Guide*.
- Determine the migration scenario that best fits your requirements. See "Migration Scenarios" on page 18.
- Before migrating the Financial Close Management product-specific artifacts, migrate the Shared Services Native Directory artifacts (users, groups, and provisioning). See "Migrating Native Directory (Security)" on page 56. For a listing of Shared Services native directory artifacts, see Appendix B, "Shared Services and Lifecycle Management."
- Before migrating Integration Types, ensure that the following programs are up and running:
  - External asynchronous web services of any migrated system-automated Integration Types
  - Administration Server
  - Oracle SOA Suite Server

Financial Close Management Artifact Listing

Subtopics

Financial Close Management artifacts are listed in the Financial Close Management application group in Shared Services Console.

Note: The artifacts displayed in Shared Services Console vary by implementation.

About the Artifact Listing

Note the following about the artifact listing:

- **Artifact**—Artifact name
- **Description**—Artifact description
- **Last Modified Time**—If this parameter is supported, reflects the time the artifact was imported. Some artifacts do not support the last modified time parameter.
- **Last Modified User**—If this parameter is supported, reflects the user who last modified the artifact. Some artifacts do not support the last modified user parameter.
- **Editable on the File System**—If yes, the artifact can be edited on the file system using a text editor. If no, the artifact can be edited only within the product.
- **Dependencies**—Lists artifact dependencies. For example, Financial Close Management Integration Types artifacts also require that Financial Close Management Integration Applications artifacts be migrated.

Financial Close Management Artifacts

Financial Close Management artifacts include alert types, custom attributes, integration types, integration applications, period dimension, year dimension, task types, and template artifacts.

Table 36 Financial Close Management Artifacts

Artifact	Description	Last Modified Time	Last Modified User	Editable on the File System?	Dependencies
Period Dimension	A hierarchical dimension that designates the time period to which the close activities apply; for example, a month or a quarter.	Yes	No	Yes—XML	None
Year Dimension	A flat list that designates the year to which the close activities apply; for example, 2009, 2010, FY09, or FY10.	Yes	No	Yes—XML	None
Alert Types	Categorize alerts into types such as hardware failure, software issues, and system failures.	Yes	No	Yes—XML	None
Custom Attributes	Categorize templates, schedules, task types, and tasks.	Yes	No	Yes—XML	None

Artifact	Description	Last Modified Time	Last Modified User	Editable on the File System?	Dependencies
Integration Applications	Denote an external application with which Financial Close Management is integrated.	Yes	No	Yes—XML	None
Integration Types	A definition of a service provided by an application that is integrated with Financial Close Management.	Yes	No	Yes—XML	Integration Applications
Task Types	Identify and categorize tasks commonly performed during a close period, for example, Data Entry, or G/L Extract.	Yes	No	Yes—Zip Note: Editing is not recommended since the artifact must be extracted and the format of the zipped contents should be retained.	Period, Year, Alert Types, Custom Attributes, Integration Applications, Integration Types
Templates	A set of tasks that are repeatable over close periods. Administrators can create templates for different types of close periods, such as monthly or quarterly.	Yes	No	Yes—Zip Note: Editing is not recommended since the artifact must be extracted and the format of the zipped contents should be retained.	Period, Year, Alert Types, Custom Attributes, Integration Applications, Integration Types, Task Types

Financial Close Management Migration Considerations

- All Financial Close Management users will be migrated as part of Shared Services.
- When migrating Financial Close Management artifacts, the Period, Year, Alert Type, Custom Attribute, and Integration Applications artifacts should be migrated first followed by Integration Types, then Task Types, and then Templates.
- The following Financial Close Management artifacts cannot be migrated:
  - Filters
  - User Preferences
  - Schedules
  - Alerts

Financial Close Management Application Migrations and Cross-Product Artifact Dependencies

Financial Close Management has no cross-product artifact dependencies.

Migration Export and Import Options

Subtopics

Migration Export Options

Financial Close Management has no product-specific export options.

Migration Import Options

Financial Close Management has the following import options under "Import Dimension Mode":

- "Replace"—Overwrites a selected artifact with an imported artifact
- "Replace All"—Overwrites all the existing artifacts with the imported artifacts

Sample Migration Definition Files

The product code used in the migration definition files for Financial Close Management is FCC. All sample migration definition files are provided in *EPM_ORACLE_HOME*/common/utilities/LCM/11.1.2.1/Sample.

Exporting to the File System

```
<?xml version="1.0" encoding="UTF-8"?>
<Package name="web-migration" description="Migrating Product to File System">
   <LOCALE>en_US</LOCALE>
   <Connections>
      <ConnectionInfo name="MyHSS-Connection1" type="HSS" description="Hyperion Shared
Service connection" user="" password=""/>
      <ConnectionInfo name="FileSystem-Connection1" type="FileSystem" description="File
system connection" HSSConnection="MyHSS-Connection1" filePath="/FCM Artifacts"/>
      <ConnectionInfo name="AppConnection2" type="Application" product="FCC"
project="Financial Close" application="Financial Close Manager" HSSConnection="MyHSS-
Connection1" description="Source Application"/>
   </Connections>
   <Tasks>
      <Task seqID="-1">
```

```
         <Source connection="AppConnection2">
            <Options/>
            <Artifact recursive="true" parentPath="/Templates" pattern="*"/>
            <Artifact recursive="true" parentPath="/Periods" pattern="*"/>
            <Artifact recursive="true" parentPath="/Years" pattern="*"/>
            <Artifact recursive="true" parentPath="/Custom Attributes" pattern="*"/>
            <Artifact recursive="true" parentPath="/Integration Applications"
pattern="*"/>
            <Artifact recursive="true" parentPath="/Task Types" pattern="*"/>
            <Artifact recursive="true" parentPath="/Alert Types" pattern="*"/>
            <Artifact recursive="true" parentPath="/Integration Types" pattern="*"/>
         </Source>
         <Target connection="FileSystem-Connection1">
            <Options/>
         </Target>
      </Task>
   </Tasks>
</Package>
```

Importing from the File System

```
<?xml version="1.0" encoding="UTF-8"?>
<Package name="web-migration" description="Migrating File System to Product">
   <LOCALE>en_US</LOCALE>
   <Connections>
      <ConnectionInfo name="MyHSS-Connection1" type="HSS" description="Hyperion Shared
Service connection" user="" password=""/>
      <ConnectionInfo name="AppConnection1" type="Application" product="FCC"
description="Destination Application" HSSConnection="MyHSS-Connection1"
project="Financial Close" application="Financial Close Manager"/>
      <ConnectionInfo name="FileSystem-Connection2" type="FileSystem"
HSSConnection="MyHSS-Connection1" filePath="/FCM Artifacts" description="Source
Application"/>
   </Connections>
   <Tasks>
      <Task seqID="-1">
         <Source connection="FileSystem-Connection2">
            <Options/>
            <Artifact recursive="true" parentPath="/Templates" pattern="*"/>
            <Artifact recursive="true" parentPath="/Periods" pattern="*"/>
            <Artifact recursive="true" parentPath="/Years" pattern="*"/>
            <Artifact recursive="true" parentPath="/Custom Attributes" pattern="*"/>
            <Artifact recursive="true" parentPath="/Integration Applications"
pattern="*"/>
            <Artifact recursive="true" parentPath="/Task Types" pattern="*"/>
            <Artifact recursive="true" parentPath="/Alert Types" pattern="*"/>
            <Artifact recursive="true" parentPath="/Integration Types" pattern="*"/>
         </Source>
         <Target connection="AppConnection1">
            <Options>
               <optionInfo name="replaceOption" value="Replace"/>
            </Options>
         </Target>
      </Task>
   </Tasks>
</Package>
```

Lifecycle Management Log Files

Lifecycle Management log files for Oracle Hyperion Financial Close Management are listed in the *Oracle Hyperion Enterprise Performance Management System Installation and Configuration Troubleshooting Guide*

G

Planning and Lifecycle Management

In This Appendix

About Planning Artifacts

Use Lifecycle Management to migrate these types of Planning artifacts:

- Configuration
- Relational Data
- Global Artifacts
- Plan Types
- Security

For a listing of Planning artifacts, see "Planning Artifact Listing" on page 141.

Planning Roles Requirement

Users performing Lifecycle Management operations for Planning must be assigned the following roles:

- LCM Administrator
- Planning Administrator
- Application Creator

Note: The Planning Administrator role is required to perform Lifecycle Management listing, export, and import operations, and the Application Creator role is needed to create a Planning application.

See the *Oracle Hyperion Enterprise Performance Management System User and Role Security Guide*.

Planning Migration Prerequisites

- Install and configure Shared Services and Planning and verify that they are running. See the *Oracle Hyperion Enterprise Performance Management System Installation and Configuration Guide*.
- Ensure that users performing Lifecycle Management operations are assigned the LCM Administrator, Planning Administrator, and Application Creator roles. See the *Oracle Hyperion Enterprise Performance Management System User and Role Security Guide*.
- Ensure read access permissions are assigned to the LCM Administrator for task lists. See the *Oracle Hyperion Enterprise Performance Management System User and Role Security Guide*.
- Determine the migration scenario that best fits your requirements. See "Migration Scenarios" on page 18.
- Before migrating a Planning application, migrate the Shared Services Native Directory artifacts (users, groups, and provisioning). See "Migrating Native Directory (Security)" on page 56. For a listing of Shared Services Native Directory artifacts, see Appendix B, "Shared Services and Lifecycle Management."

  Note: To use Lifecycle Management for Planning or Essbase, Essbase must use Shared Services Native Directory and not a legacy security mode.
- Planning Classic application migrations—Before a destination application can be selected using the Migration Wizard, the application must exist or a shell application needs to be created in Planning.
- Planning Performance Management Architect application migrations—Before migrating non-dimensional artifacts, Performance Management Architect dimensions must be migrated first and 'deployed after import'. For a listing of Performance Management Architect artifacts, see Appendix H, "Performance Management Architect and Lifecycle Management."
- The following application-level Calendar properties must match in both the source and destination applications:
  - Start year
  - Base time period (for example, 12 months, Quarters, and Custom)
  - Start month

- The Period Dimension members must match in both the source and destination applications. For example, if the Period dimension in the source has a “Quarter 1” member, a “Quarter 1 member must exist in the destination.
- Source and destination plan types must match (for example, if the source application has a plan type called Plan1, a Plan1 plan type must exist and in the destination application).
- Source and destination plan types must be assigned in the same order (for example, if the source application has Plan1 and Plan2, Plan1 and Plan2 plan types must appear in the same order in the destination application).
- If the source has a “Single Currency” application type, then the destination application should be of the same type

Planning Artifact Listing

Subtopics

Planning artifacts are listed in the Planning application group in Shared Services Console.

Performance Management Architect enabled applications list dimensions under the EPMA node in the Foundation application group. All other non-dimensional artifacts are listed under the Planning application group.

Note: The artifacts displayed in Shared Services Console vary by implementation.

About the Artifact Listing

Note the following about the artifact listing:

- **Artifact**—Artifact name
- **Description**—Artifact description
- **Last Modified Time**—If this parameter is supported, reflects the time the artifact was last modified. Some artifacts do not support the last modified time parameter.
- **Last Modified User**—If this parameter is supported, reflects the user who last modified the artifact. Some artifacts do not support the last modified user parameter.
- **Editable on the File System**—If yes, the artifact can be edited on the file system using a text editor. If no, the artifact can be edited only within the product.

- **Dependencies**—Lists artifact dependencies. For example, User Preferences artifacts also require that User Variables artifacts be migrated.

Configuration Artifacts

The Configuration directory contains user preferences, user variables, configuration properties, and data load settings artifacts.

Table 37 Configuration Artifacts

Artifact	Description	Last Modified Time	Last Modified User	Editable on the File System?	Dependencies
User Preferences	Preferences that users can set for applications, display, printing, and user variables	No	No	Yes—XML	User Variables
User Variables	Dynamically render data forms based on a users member selection, displaying only the specified entity; for example, a user variable named Department displays specific departments and employees	No	No	Yes—XML	Associated Dimensions
Properties—Application Settings	Functionality that allows users to set preferences for such aspects as e-mail notification, alias tables, and display options	No	No	Yes—XML	None
Data Load settings	Parameters that users can set to enable data to be loaded directly into an Essbase database	No	No	Yes—XML	Associated Dimensions

Relational Data Artifacts

The Relational Data directory contains Planning units, cell text, text values, account annotations, and supporting detail artifacts.

Table 38 Relational Data Artifacts

Artifact	Description	Last Modified Time	Last Modified User	Editable on the File System?	Dependencies
Planning Units	A data slice at the intersection of a scenario, version, and entity; the basic unit for preparing, reviewing, annotating, and approving plan data	No	No	Yes—XML	Entity, Scenario, and Version Dimensions
Cell text	Text annotations associated with cells	No	No	Yes—XML	None
Text Values	Text that is stored as data in cells whose data type is text	No	No	Yes—XML	None
Account Annotations	Comments associated with accounts that can be plain text or URL links	No	No	Yes—XML	Account, Entity, Scenario, and Version Dimensions
Supporting Detail	Calculations and assumptions from which the values of cells are derived	No	No	Yes—XML	None

Global Artifacts

The Global Artifacts directory contains substitution variables, business rules, Calculation Manager rulesets, spread patterns, smart lists, common dimensions, exchange rates, task lists, composite forms, custom menus, Planning unit hierarchies, and report mappings artifacts.

Standard dimensions associated with more than one plan type are listed under Common Dimensions. This section also includes any associated attribute dimensions.

Table 39 Global Artifacts

Artifact	Description	Last Modified Time	Last Modified User	Editable on the File System?	Dependencies
Substitution Variables	Global placeholders for information that changes regularly	No	No	No	None
Business Rules—Rules[1]	Logical expressions or formulas that are created within an application to produce a preferred set of resulting values	Yes	No	Yes—XML	None

Artifact	Description	Last Modified Time	Last Modified User	Editable on the File System?	Dependencies
Business Rules—Sequences*	An ordered grouping of business rules created with Business Rules	Yes	No	Yes—XML	None
Business Rules—Macros*	A reusable part of a business rule that can be referenced by other business rules and macros to save you time when you are writing business rules and sequences	Yes	No	Yes—XML	None
Business Rules—Global Variables*	A variable that is used in more than one business rule or macro	Yes	No	Yes—XML	None
Business Rules—Project*	An instance of EPM System products grouped together in an implementation; for example, a Planning project may consist of a Planning application, an Essbase cube, and a Financial Reporting server instance	Yes	No	Yes—XML	None
Calculation Manager Rulesets[2]	Objects that contain rules and other rulesets that can be calculated simultaneously or sequentially	Yes	Yes	Yes—XML	None
Spread Patterns	A custom spreading pattern that determines how data is distributed from a parent to its children. The pattern is available from the Mass Allocate and Grid Spread menus.	No	No	Yes—XML	None
Smart Lists[3]	Custom drop-down lists that users access from data form cells (instead of entering data)	No	No	Yes—XML	None
Common Dimensions—Attribute‡	A type of dimension that enables analysis based on the attributes or qualities of dimension members. Associated with common standard dimensions.	Yes	No	Yes—XML	None
Common Dimensions (Standard—Account)‡	A dimension type that makes accounting intelligence available. Only one dimension can be defined as Accounts.	Yes	No	Yes—XML	None

Artifact	Description	Last Modified Time	Last Modified User	Editable on the File System?	Dependencies
Common Dimensions (Standard—Version)‡	Possible outcome used within the context of a scenario of data; for example, Budget - Best Case and Budget - Worst Case where Budget is scenario and Best Case and Worst Case are versions	Yes	No	Yes—XML	None
Common Dimensions (Standard—Currency)‡	A dimension representing currency	Yes	No	Yes—XML	None
Common Dimensions (Standard—Entity)‡	A dimension representing organizational units; for example: divisions, subsidiaries, plants, regions, products, or other financial reporting units	Yes	No	Yes—XML	Currency dimension gets loaded first
Common Dimensions (Standard—Year)‡	A dimension representing the fiscal or calendar year for data	Yes	No	Yes—XML	None
Common Dimensions (Standard—Scenario)‡	A dimension for classifying data; for example, Actuals, Budget, Forecast1, and Forecast2	Yes	No	Yes—XML	Period and Year dimensions, Exchange Rates
Common Dimensions (Standard—Period)‡	A dimension representing time periods, such as quarters and months	Yes	No	Yes—XML	Year
Exchange Rates	A numeric value for converting one currency to another; for example, to convert 1 USD into EUR, the exchange rate of 0. 8936 is multiplied with the U.S. dollar. The European euro equivalent of $1 is 0.8936.	Yes	No	Yes—XML	Currency, Period, and Year
Task Lists	A detailed status list of tasks for a particular user	Yes	No	Yes—XML	If task is of type Business Rule, then associated Business Rule. If task is of type Data Form, then associated Data Form. If task is of type Workflow, then Planning Units.
Composite Forms	Displays members from several data forms simultaneously so you can; for example, enter data into one grid and see the results —such as Total Revenue— aggregated in another	Yes	No	Yes—XML	Associated Data Forms and Business Rules.

Artifact	Description	Last Modified Time	Last Modified User	Editable on the File System?	Dependencies
Custom Menus	Menus that administrators create that are company- or application-specific. Users can right-click a member and select a menu item to open a URL, data form, workflow, or business rule.	Yes	No	Yes—XML	If menu is of type Business Rule, then associated Business Rule. If menu is of type Workflow, then Planning Units.
Planning Unit Hierarchies	Specifies which application planning units and members are part of the budget process	Yes	Yes	Yes—XML	Entity, Scenario, Version and other associated dimensions.
Report Mappings	Maps dimensions between Planning applications and reporting applications to enable reporting on Planning data in a reporting application, aggregations and queries on Smart Lists, and linking Planning data to multiple reporting applications for consolidations	Yes	Yes	Yes—XML	Associated dimensions and Smart Lists.

[1]Only visible for Classic applications with Oracle's Hyperion® Business Rules set as the calculation module.

[2]Only visible for Classic applications with Calculation Manager set as the calculation module.

[3]Only visible for Classic applications.

Plan Type Artifacts

Plan types are used to store Planning application information in the Essbase database. A separate database stores data for each plan type in the application, and contains information relevant to that plan type to optimize application design, size, and performance. The default Planning plan types include Plan1, Plan2, and Plan3.

The Plan Types directory contains attribute dimensions, standard dimensions, data forms, rules files, calc scripts, substitution variables, and Calculation Manager rules artifacts.

Table 40 Plan Type Artifacts

Artifact	Description	Last Modified Time	Last Modified User	Editable on the File System?	Dependencies
Attribute Dimensions[1]	A list of dimensions whose type enables analysis based on the attributes or qualities of dimension members	Yes	No	Yes—XML	None
Standard Dimensions*	A list of dimensions associated with a single plan type	Yes	No	Yes—XML	Attribute Dimensions, if any

Artifact	Description	Last Modified Time	Last Modified User	Editable on the File System?	Dependencies
Data Forms	A grid display that enables users to enter data into the database from an interface such as a Web browser, and to view and analyze data or related text. Certain dimension member values are fixed, giving users a specific view into the data. Data forms can include predefined data validation rules that help implement business policies and practices. Errors or warnings are generated on the data form if entered data violates a validation rule.	Yes	No	Yes—XML	Associated menus, user variables, business rules, and dimensions
Rules files	Logical expressions or formulas that are created within an application to produce a preferred set of resulting values	Yes	No	No (Yes—Oracle Essbase Administration Services)	None
Calc Scripts	A set of commands that define how a database is consolidated or aggregated. A calculation script may also contain commands that specify allocation and other calculation rules separate from the consolidation process.	Yes	No	Yes	None
Substitution Variables	Global placeholders for information that changes regularly	No	No	No	None
Calculation Manager Rules[2]	Objects that can contain templates and calculations that are grouped in components	Yes	Yes	Yes—XML	None

[1]Only visible for Classic applications.

[2]Only visible for Classic applications with Calculation Manager set as the calculation module.

Security Artifacts

The Security directory contains access permissions artifacts for users and groups. Access permissions are a set of operations that a user can perform on a resource.

Table 41 Security Artifacts

Artifact	Description	Last Modified Time	Last Modified User	Editable on the File System?	Dependencies
Access Permissions—Users	Company personnel who are provisioned as valid system users	No	No	Yes—XML	None
Access Permissions—Groups	A container for assigning similar access permissions to multiple users	Yes	No	Yes—XML	None

Planning Migration Considerations

- Planning data migration is not supported in Lifecycle Management.
- Some Planning artifacts have dependencies; for example, forms have dimension dependencies. Instead of migrating only the dimension members required for a form, Lifecycle Management migrates the entire dimension. See "Migrating Artifacts" on page 49.
- Lifecycle Management migration to and from Planning is a long-running operation.
- Essbase must be in Shared Services mode to use Lifecycle Management.
- Essbase artifacts and the Business Rules artifacts display under the Planning application node.
- The source and destination applications must have exactly the same settings for Plan Type, Calendar, and Single- or Multi-currency.
- In previous releases, Shared Services Console provided an "Include Dependent Artifacts" option for Planning. This option is no longer available. Instead, you must manually select any necessary dependencies.
- If Planning does not exist in the target environment, you can use Lifecycle Management to create an application shell. See "Creating a Planning Application Shell" on page 43.

Migration Order Best Practices for Planning

If you are migrating artifacts individually, Oracle recommends that you migrate Planning artifacts in this order:

1. Shared Services Native Directory (Security)
2. Application Settings under Configuration Properties
3. Global Artifacts:
   - Spread Patterns
   - Smart Lists
   - Common Dimensions
   - Exchange Rates
4. All Standard and Attribute Dimensions under Plan Type
5. Configuration:
   - User Variables
   - User Preferences
6. Substitution Variables under Global Artifacts
7. Plan Type:
   - Substitution Variables
   - Calc Scripts

- Rules files
- Calculation Manager Rules

8. Global Artifacts:
   - Business Rules
   - Custom Menus
   - Calculation Manager Rule sets
   - Planning Unit Hierarchies
   - Report Mappings
9. Data Forms under Plan Type
10. Global Artifacts:
    - Composite Forms
    - Task Lists
11. Relational Data
12. Access Permissions under Security
13. Reporting and Analysis (Financial Reporting and Web Analysis)

Planning Application Migrations and Cross-Product Artifact Dependencies

When migrating Planning applications from one environment to another (development to test or test to production), there are cross-product artifact dependencies. Planning requires artifacts from other products to be migrated along with the Planning-specific artifacts.

- Planning Classic cross-product artifacts:
  - Shared Services Native Directory (users, groups, and provisioning)
  - Essbase

    Note: Essbase artifacts displayed with the Planning artifacts are Rules files, Calc Scripts, and Substitution Variables.
  - OPTIONAL: Reporting and Analysis (Financial Reporting and Web Analysis)
- Planning Performance Management Architect requires the following cross-product artifacts:
  - Performance Management Architect
  - Shared Services Native Directory (users, groups, and provisioning)
  - Calculation Manager
  - Oracle's Hyperion Reporting and Analysis (Oracle Hyperion Financial Reporting, Fusion Edition and Oracle's Hyperion® Web Analysis)

Note: Essbase artifacts are displayed with the Planning artifacts.

Migration Export and Import Options

During import, Planning artifacts will replace any existing artifacts on the destination environment. There is no option to merge or delete artifacts during an import. Oracle's Hyperion® Business Rules import does not replace or update any artifacts.

Planning has no product-specific export or import options.

Note: In previous releases, Shared Services Console provided an "Include Dependent Artifacts" option for Planning. This option is no longer available. Instead, you must manually select any necessary dependencies.

Sample Migration Definition Files

The sample migration definition files provided are for Planning Classic application migrations. The product code used in the migration definition files for Planning is `HP` and the sample application is `SampApp`. All sample migration definition files are provided in *EPM_ORACLE_HOME*`/common/utilities/LCM/11.1.2.1/Sample`.

Application to Application Migration

```
<?xml version="1.0" encoding="UTF-8"?>
<Package name="web-migration" description="migrating product to product">
    <Connections>
       <ConnectionInfo name="MyHSS-Connection1" type="HSS" description="Hyperion Shared
Service connection" user="" password=""/>
        <ConnectionInfo name="AppConnection1" type="Application" product="HP"
description="Destination Application" HSSConnection="MyHSS-Connection1"
project="Planning" application="SampTest"/>
        <ConnectionInfo name="AppConnection2" type="Application" product="HP"
project="Planning" application="SampDev" HSSConnection="MyHSS-Connection1"
description="Source Application"/>
    </Connections>
    <Tasks>
        <Task seqID="1">
            <Source connection="AppConnection2">
                <Options>
                </Options>
          <Artifact recursive="false" parentPath="/Configuration" pattern="User
Variables"/>
                <Artifact recursive="false" parentPath="/Configuration" pattern="User
Preferences"/>
                <Artifact recursive="false" parentPath="/Configuration"
pattern="Properties"/>
                <Artifact recursive="false" parentPath="/Relational Data"
pattern="Supporting Detail"/>
                <Artifact recursive="false" parentPath="/Relational Data" pattern="Text
Values"/>
                <Artifact recursive="false" parentPath="/Relational Data"
```

```
pattern="Planning Units"/>
                <Artifact recursive="false" parentPath="/Relational Data"
pattern="Account Annotations"/>
                <Artifact recursive="false" parentPath="/Relational Data" pattern="Cell
Texts"/>
                <Artifact recursive="true" parentPath="/Global Artifacts/Smart Lists"
pattern="*"/>
                <Artifact recursive="true" parentPath="/Global Artifacts/Substitution
Variables" pattern="*"/>
               <Artifact recursive="true" parentPath="/Global Artifacts/Exchange Rates"
pattern="*"/>
                <Artifact recursive="true" parentPath="/Global Artifacts/Spread
Patterns" pattern="*"/>
               <Artifact recursive="true" parentPath="/Global Artifacts/Business Rules"
pattern="*"/>
                <Artifact recursive="true" parentPath="/Global Artifacts/Custom Menus"
pattern="*"/>
                <Artifact recursive="true" parentPath="/Global Artifacts/Common
Dimensions" pattern="*"/>
                <Artifact recursive="true" parentPath="/Global Artifacts/Composite
Forms" pattern="*"/>
                <Artifact recursive="true" parentPath="/Global Artifacts/Task Lists"
pattern="*"/>
                <Artifact recursive="true" parentPath="/Plan Type/Consol/Standard
Dimensions" pattern="*"/>
        <Artifact recursive="true" parentPath="/Plan Type/Consol/Calc scripts"
pattern="*"/>
                <Artifact recursive="true" parentPath="/Plan Type/Consol/Rule files"
pattern="*"/>
                <Artifact recursive="true" parentPath="/Plan Type/Consol/Attribute
Dimensions" pattern="*"/>
                <Artifact recursive="true" parentPath="/Plan Type/Consol/Data Forms"
pattern="*"/>
                <Artifact recursive="true" parentPath="/Plan Type/Consol/Substitution
Variables" pattern="*"/>
                <Artifact recursive="true" parentPath="/Security" pattern="*"/>
         </Source>
            <Target connection="AppConnection1">
            </Target>
        </Task>
    </Tasks>
</Package>
```

Exporting to the File System

```
<?xml version="1.0" encoding="UTF-8" ?>
<Package name="web-migration" description="Migrating Product to File System">
  <LOCALE>en_US</LOCALE>
  <Connections>
    <ConnectionInfo name="MyHSS-Connection1" type="HSS" description="Hyperion Shared
Service connection" user="" password="" />
    <ConnectionInfo name="FileSystem-Connection1" type="FileSystem" description="File
system connection" HSSConnection="MyHSS-Connection1" filePath="/SampleAppFileSystem" />
    <ConnectionInfo name="AppConnection2" type="Application" product="HP"
project="Default Application Group" application="SampleApp" HSSConnection="MyHSS-
Connection1" description="Source Application" />
  </Connections>
```

```
  <Tasks>
    <Task seqID="-1">
      <Source connection="AppConnection2">
        <Options />
        <Artifact recursive="true" parentPath="/Configuration" pattern="*" />
        <Artifact recursive="true" parentPath="/Relational Data" pattern="*" />
        <Artifact recursive="true" parentPath="/Plan Type" pattern="*" />
        <Artifact recursive="true" parentPath="/Security" pattern="*" />
        <Artifact recursive="true" parentPath="/Global Artifacts" pattern="*" />
      </Source>
      <Target connection="FileSystem-Connection1">
        </Options>
      </Target>
    </Task>
  </Tasks>
</Package>
```

Importing from the File System

```
<?xml version="1.0" encoding="UTF-8"?>
<Package name="web-migration" description="migrating product to product">
    <Connections>
       <ConnectionInfo name="MyHSS-Connection1" type="HSS" description="Hyperion Shared
Service connection" user="" password=""/>
        <ConnectionInfo name="FileSystem-Connection1" type="FileSystem" filePath="file:/
C:\Oracle\Middleware\user_projects\epmsystem1\import_export\admin@Native Directory
\SampleApplication" HSSConnection="MyHSS-Connection1" description="Source Application"/>
        <ConnectionInfo name="AppConnection2" type="Application" product="HP"
description="Destination Application" HSSConnection="MyHSS-Connection1"
project="Planning" application="SampApp"/>
    </Connections>
    <Tasks>
        <Task seqID="1">
            <Source connection="FileSystem-Connection1">
                <Options/>
                <Artifact recursive="false" parentPath="/Configuration" pattern="User
Variables"/>
                <Artifact recursive="false" parentPath="/Configuration" pattern="User
Preferences"/>
                <Artifact recursive="false" parentPath="/Configuration"
pattern="Properties"/>
                <Artifact recursive="false" parentPath="/Relational Data"
pattern="Supporting Detail"/>
                <Artifact recursive="false" parentPath="/Relational Data" pattern="Text
Values"/>
                <Artifact recursive="false" parentPath="/Relational Data"
pattern="Planning Units"/>
                <Artifact recursive="false" parentPath="/Relational Data"
pattern="Account Annotations"/>
                <Artifact recursive="false" parentPath="/Relational Data" pattern="Cell
Texts"/>
                <Artifact recursive="true" parentPath="/Global Artifacts/Smart Lists"
pattern="*"/>
                <Artifact recursive="true" parentPath="/Global Artifacts/Substitution
Variables" pattern="*"/>
               <Artifact recursive="true" parentPath="/Global Artifacts/Exchange Rates"
pattern="*"/>
```

```
                <Artifact recursive="true" parentPath="/Global Artifacts/Spread
Patterns" pattern="*"/>
               <Artifact recursive="true" parentPath="/Global Artifacts/Business Rules"
pattern="*"/>
                <Artifact recursive="true" parentPath="/Global Artifacts/Custom Menus"
pattern="*"/>
                <Artifact recursive="true" parentPath="/Global Artifacts/Common
Dimensions" pattern="*"/>
                <Artifact recursive="true" parentPath="/Global Artifacts/Composite
Forms" pattern="*"/>
                <Artifact recursive="true" parentPath="/Global Artifacts/Task Lists"
pattern="*"/>
                <Artifact recursive="true" parentPath="/Plan Type/Consol/Standard
Dimensions" pattern="*"/>
        <Artifact recursive="true" parentPath="/Plan Type/Consol/Calc scripts"
pattern="*"/>
                <Artifact recursive="true" parentPath="/Plan Type/Consol/Rule files"
pattern="*"/>
                <Artifact recursive="true" parentPath="/Plan Type/Consol/Attribute
Dimensions" pattern="*"/>
                <Artifact recursive="true" parentPath="/Plan Type/Consol/Data Forms"
pattern="*"/>
                <Artifact recursive="true" parentPath="/Plan Type/Consol/Substitution
Variables" pattern="*"/>
                <Artifact recursive="true" parentPath="/Security" pattern="*"/>
             </Source>
             <Target connection="AppConnection2">
             </Target>
        </Task>
    </Tasks>
</Package>
```

Lifecycle Management Log Files

Lifecycle Management log files for Planning are listed in the *Oracle Hyperion Enterprise Performance Management System Installation and Configuration Troubleshooting Guide*.

Note: For failed migrations, the Migration Status Report provides a link to the Lifecycle Management engine log file. The product Lifecycle Management log files are located with the products.

H

Performance Management Architect and Lifecycle Management

In This Appendix

About Performance Management Architect Artifacts

Use Lifecycle Management to migrate repository content for these types of Performance Management Architect artifacts:

- Application Metadata
- Shared Dimensions
- Dimension Access
- Data Synchronization

For a listing of Performance Management Architect artifacts, see "Performance Management Architect Artifact Listing" on page 156.

Performance Management Architect Roles Requirement

Users performing Lifecycle Management operations for Performance Management Architect must be assigned the LCM Administrator role.

See the *Oracle Hyperion Enterprise Performance Management System User and Role Security Guide*.

Performance Management Architect Migration Prerequisites

- Install and configure Shared Services and Performance Management Architect and verify that they are running. See the *Oracle Hyperion Enterprise Performance Management System Installation and Configuration Guide*.
- Ensure that users performing Lifecycle Management operations are assigned the LCM Administrator role. See the *Oracle Hyperion Enterprise Performance Management System User and Role Security Guide*.
- Determine the migration scenario that best fits your requirements. See "Migration Scenarios" on page 18.
- Before migrating the Performance Management Architect-specific artifacts, you must migrate the Shared Services Native Directory artifacts (users, groups, and provisioning). See "Migrating Native Directory (Security)" on page 56. For a listing of Shared Services Native Directory artifacts, see Appendix B, "Shared Services and Lifecycle Management."

Performance Management Architect Artifact Listing

Subtopics

Performance Management Architect artifacts are listed in the Foundation application group in Shared Services Console.

Note: The artifacts displayed in Shared Services Console vary by implementation.

About the Artifact Listing

Note the following about the artifact listing:

- **Artifact**—Artifact name
- **Description**—Artifact description
- **Last Modified Time**—If this parameter is supported, reflects the time the artifact was imported. Some artifacts do not support the last modified time parameter.
- **Last Modified User**—If this parameter is supported, reflects the user who last modified the artifact. Some artifacts do not support the last modified user parameter.
- **Editable on the File System**—If yes, the artifact can be edited on the file system using a text editor. If no, the artifact can be edited only within the product.

- **Dependencies**—Lists artifact dependencies

Application Metadata Artifacts

The Application Metadata directory contains artifacts for Consolidation applications, Planning applications, Essbase applications, Profitability applications, and generic applications.

Table 42 Application Metadata Artifacts

Artifact	Description	Last Modified Time	Last Modified User	Editable on the File System?	Dependencies
Consolidation Applications—Local Dimensions—Entity	A dimension representing organizational units; for example: divisions, subsidiaries, plants, regions, products, or other financial reporting units	Yes	Yes	Yes—XML	None
Consolidation Applications—Local Dimensions—Account	A dimension type that makes accounting intelligence available; only one dimension can be defined as Account	Yes	Yes	Yes—XML	None
Consolidation Applications—Application Properties	When an application is created, it takes on a default set of properties and property values; property values can be a string, integer, boolean, and so on	Yes	Yes	Yes—XML	None
Consolidation Applications—Import Profiles	Includes important information about the dimensions to import such as new dimensions, whether to merge or replace existing dimensions, and dimension properties	Yes	Yes	Yes—XML	None
Planning Applications—Local Dimensions—Entity	A dimension representing organizational units; for example, divisions, subsidiaries, plants, regions, products, or other financial reporting units	Yes	Yes	Yes—XML	None
Planning Applications—Local Dimensions—Account	A dimension type that makes accounting intelligence available; only one dimension can be defined as Account	Yes	Yes	Yes—XML	None

Artifact	Description	Last Modified Time	Last Modified User	Editable on the File System?	Dependencies
Planning Applications—Application Properties	When an application is created, it takes on a default set of properties and property values; property values can be a string, integer, boolean, and so on	Yes	Yes	Yes—XML	None
Planning Applications—Import Profiles	Important information about the dimensions to import such as new dimensions, whether to merge or replace existing dimensions, and dimension properties	Yes	Yes	Yes—XML	None
Essbase Applications—Local Dimensions—Entity	A dimension representing organizational units; for example, divisions, subsidiaries, plants, regions, products, or other financial reporting units	Yes	Yes	Yes—XML	None
Essbase Applications—Local Dimensions—Account	A dimension type that makes accounting intelligence available; only one dimension can be defined as Account	Yes	Yes	Yes—XML	None
Essbase Applications—Application Properties	When an application is created, it takes on a default set of properties and property values; property values can be a string, integer, boolean, and so on	Yes	Yes	Yes—XML	None
Essbase Applications—Import Profiles	Important information about the dimensions to import such as new dimensions, whether to merge or replace existing dimensions, and dimension properties	Yes	Yes	Yes—XML	None
Profitability Applications—Import Profiles	Important information about the dimensions to import such as new dimensions, whether to merge or replace existing dimensions, and dimension properties	Yes	Yes	Yes—XML	None
Profitability Applications—Local Dimensions	All dimension members that are local to an application	Yes	Yes	Yes	Shared Library Dimensions, application settings

Artifact	Description	Last Modified Time	Last Modified User	Editable on the File System?	Dependencies
Profitability Applications—Profitability Settings	Application settings includes: Application level properties, Shared dimensions, Filters, and property overrides	No	No	Yes—format not published	Shared Library Dimensions
Generic Applications—Local Dimensions—Entity	A dimension representing organizational units; for example, divisions, subsidiaries, plants, regions, products, or other financial reporting units	Yes	Yes	Yes—XML	None
Generic Applications—Local Dimensions—Account	A dimension type that makes accounting intelligence available; only one dimension can be defined as Account	Yes	Yes	Yes—XML	None
Generic Applications—Application Properties	When an application is created, it takes on a default set of properties and property values; property values can be a string, integer, boolean, and so on	Yes	Yes	Yes—XML	None
Generic Applications—Import Profiles	Important information about the dimensions to import such as new dimensions, whether to merge or replace existing dimensions, and dimension properties	Yes	Yes	Yes—XML	None

Shared Dimensions Artifacts

The Shared Dimensions directory contains shared dimensions artifacts; for example, entity, account, and product.

Table 43 Shared Dimensions Artifacts

Artifact	Description	Last Modified Time	Last Modified User	Editable on the File System?	Dependencies
Entity	A dimension representing organizational units; for example, divisions, subsidiaries, plants, regions, products, or other financial reporting units	Yes	Yes	Yes—XML	None

Artifact	Description	Last Modified Time	Last Modified User	Editable on the File System?	Dependencies
Account	A dimension type that makes accounting intelligence available; only one dimension can be defined as Account	Yes	Yes	Yes—XML	None
Product	A dimension representing the products or services a company produces. Product is generally represented as a dimension of type "generic."	Yes	Yes	Yes—XML	None

Dimension Access Artifacts

The Dimension Access directory contains import profiles artifacts.

Table 44 Dimension Access Artifacts

Artifact	Description	Last Modified Time	Last Modified User	Editable on the File System?	Dependencies
Import Profiles	Important information about the dimensions to imported such as new dimensions, whether to merge or replace existing dimensions, and dimension properties	Yes	Yes	Yes—XML	None

Data Synchronization Artifacts

The Data Synchronization directory contains artifacts for synchronizations, mapping tables, external file definitions, and interface table definitions.

Table 45 Data Synchronization Artifacts

Artifact	Description	Last Modified Time	Last Modified User	Editable on the File System?	Dependencies
Synchronizations	Enables you to synchronize and map data between Oracle Hyperion Enterprise Performance Management System applications, interface tables, and external files	Yes	Yes	Yes—XML	None

Artifact	Description	Last Modified Time	Last Modified User	Editable on the File System?	Dependencies
Mapping Tables	Mappings that you can reuse in data synchronizations. If you have created mapping tables, you can insert them into a synchronization.	Yes	Yes	Yes—XML	None
External File Definitions	External files that are used as sources in data synchronizations	Yes	Yes	Yes—XML	None
Interface Table Definitions	Database tables used to import data and metadata from external systems into Performance Management Architect	Yes	Yes	Yes—XML	None

Performance Management Architect Migration Considerations

The destination import result of the Shared or Local dimension state will depend on the artifact that is selected in the source. For considerations, review the following table:

Table 46 Shared and Local Dimension Migration Considerations

Source Selection	Source Application Dimension State	Destination Action	If Application Properties is Selected
Application Metadata Only	Local	The dimension is imported as LOCAL into the destination application. The dimension is created, merged, or replaced. The Shared Dimensions Library is not affected.	Only Application-level properties are updated

Source Selection	Source Application Dimension State	Destination Action	If Application Properties is Selected
Shared Dimensions Library Only	Shared	The dimension is created, merged, or replaced in the destination Shared Dimensions Library. The dimension is not included in any destination Application.	• Application-level properties are updated • Dimension is included in the selected application as SHARED • Dimension- and Member-level overrides for the application are imported. Overrides include member filters and application-specific property values.

Performance Management Architect Application Migrations and Cross-Product Artifact Dependencies

When migrating Performance Management Architect applications from one environment to another (development to test or test to production), there are cross-product artifact dependencies. Performance Management Architect requires Shared Services Native Directory (users, groups, and provisioning) artifacts be migrated along with the Performance Management Architect-specific artifacts. See "Migrating Native Directory (Security)" on page 56.

Migration Export and Import Options

Subtopics

Note: In previous releases, Shared Services Console provided an "Include Dependent Artifacts" option for Performance Management Architect. This option is no longer available. Instead, you must manually select any necessary dependencies.

Migration Export Options

Performance Management Architect has no product-specific export options.

Migration Import Options

During import, all Performance Management Architect artifacts will replace any existing artifacts on the destination environment. The only exception is Dimensions artifacts, which provide options to Merge or Replace.

Performance Management Architect import options:

- Consolidation Application (Financial Management) Properties
  - **Deploy after Import**—Deploys the view to the application.
  - **Instance Name**—Name of the product instance to which the application will be deployed after the migration. If the application is already deployed in the destination, then specify the current instance to which it is already deployed.

    Note: Each product defines a product instance differently. A Consolidation Application instance is composed of a Web server with the application servers or clusters registered to it that communicate to one database. For example, a Consolidation instance could be composed of the Web server and the application servers or clusters used for consolidation that all communicate to one database.
  - **Application Server**—Application server that is defined as part of the installation.
  - **Shared Services Project**—Select the Shared Services project for the application you are migrating.
  - **Clear All Metadata and Data**—Deletes all dimension members in the application database as well as any corresponding data, journals, and intercompany transactions.
  - **Check Referential Integrity**—Checks the metadata against the data to ensure integrity. Issues are logged in the log file.
- Planning Application Properties
  - **Deploy after Import**—Deploys the view to the application.
  - **Instance Name**—The name of the product instance to which the application will be deployed after the migration. If the application is already deployed in the destination, then specify the current instance to which it is already deployed.

    Note: Each product defines a product instance differently. For example, a Planning instance consists of a group of Planning Applications and every application gets associated with an instance when created. You can change the association using the Re-associate Cluster and Application task in Oracle's Hyperion Enterprise Performance Management System Configurator. The instance is registered with Shared Services.
  - **Shared Services Project**—Select the Shared Services project for the application you are migrating.
  - **Data Source**—The datasource for the Essbase or Planning application.
  - **Create Outline**—Select if the target Essbase or Planning application is being created for the first time.
  - **Refresh Outline**—Select if the target Essbase or Planning application exists, and an update to the outline is needed.
  - **Create Security Filters**—Select to store access permissions in an encrypted data file (`Essbase.sec`). To generate security filters for all users in the application, select this option but do not select the Validate Security Filter Limit option.

- **Shared Members Security Filters**—Select to store access permissions in an encrypted data file (`Essbase.sec`). To generate security filters for all users in the application, select this option but do not select the Validate Security Filter Limit option.
- **Validate Security Filter Limit**—Identifies security filters that exceed the Essbase security filter limit of 64 KB per row. Select to ensure that the size limit is not exceeded before building Essbase security filters.

- Essbase Application Properties
  - **Deploy after Import**—Deploys the view to the application.
  - **Instance Name**—The name of the product instance to which the application will be deployed after the migration. If the application is already deployed in the destination, then specify the current instance to which it is already deployed.
  - **Application Server**—Application server that is defined as part of the installation.
- Profitability and Cost Management Application Properties
  - **Deploy after Import**—Deploys the view to the application.
  - **Instance Name**—The name of the product instance to which the application will be deployed after the migration. If the application is already deployed in the destination, then specify the current instance to which it is already deployed.
  - **Application Server**—Application server that is defined as part of the installation.
  - **Shared Services Project**—Select the Shared Services project for the application you are migrating.
  - **Create Outline**—Select if the target Essbase or Planning application is being created for the first time.
  - **Refresh Outline**—Select if the target Essbase or Planning application exists, and an update to the outline is needed.
  - **Create Security Filters**—Select to store access permissions in an encrypted data file (`Essbase.sec`).
- Dimensions
  - **Replace Dimensions**—Replaces any dimensions and properties in the destination with the extracted metadata from the source instance. The default value is Merge.

> **Note:** The Merge and Replace options only work at the member hierarchy level and not at the application or dimension level. In cases where a property is updated at the member level, Merge or Replace will overwrite the property according to the source.

Sample Migration Definition Files

The product code used in the migration definition files for Performance Management Architect is `BPMA`. All sample migration definition files are provided in *`EPM_ORACLE_HOME`*`/common/utilities/LCM/11.1.2.1/Sample`.

Exporting to the File System (Performance Management Architect Example)

```
<?xml version="1.0" encoding="UTF-8"?>
<Package name="web-migration" description="migrating product to product">
    <Connections>
        <ConnectionInfo name="MyHSS-Connection1" type="HSS" description="Hyperion Shared
Service connection" user="" password=""/>
        <ConnectionInfo name="FileSystem-Connection1" type="FileSystem"
description="File system connection" filePath="/EPMA"/>
        <ConnectionInfo name="AppConnection2" type="Application" product="BPMA"
project="Foundation" application="EPM Architect lcmdev" HSSConnection="MyHSS-
Connection1" description="Source Application"/>
    </Connections>
    <Tasks>
        <Task seqID="1">
            <Source connection="AppConnection2">
                <Options/>
                <Artifact recursive="true" parentPath="/Data Synchronization"
pattern="*"/>
                <Artifact recursive="true" parentPath="/Shared Library Dimensions"
pattern="*"/>
                <Artifact recursive="true" parentPath="/Dimension Access" pattern="*"/>
                <Artifact recursive="true" parentPath="/Application Metadata/Generic
Application Views" pattern="*"/>
            </Source>
            <Target connection="FileSystem-Connection1">
            </Target>
        </Task>
    </Tasks>
</Package>
```

Importing From the File System (Performance Management Architect Example)

```
<?xml version="1.0" encoding="UTF-8"?>
<Package name="web-migration" description="migrating product to product">
    <Connections>
        <ConnectionInfo name="MyHSS-Connection1" type="HSS" description="Hyperion Shared
Service connection" user="" password=""/>
        <ConnectionInfo name="FileSystem-Connection1" type="FileSystem"
description="File system connection" filePath="/EPMA"/>
        <ConnectionInfo name="AppConnection2" type="Application" product="BPMA"
project="Foundation" application="EPM Architect lcmdev" HSSConnection="MyHSS-
Connection1" description="Source Application"/>
    </Connections>
    <Tasks>
        <Task seqID="1">
            <Source connection="AppConnection2">
                <Options/>
                <Artifact recursive="true" parentPath="/Data Synchronization"
pattern="*"/>
                <Artifact recursive="true" parentPath="/Shared Library Dimensions"
pattern="*"/>
                <Artifact recursive="true" parentPath="/Dimension Access" pattern="*"/>
                <Artifact recursive="true" parentPath="/Application Metadata/Generic
Application Views" pattern="*"/>
            </Source>
            <Target connection="FileSystem-Connection1">
                <Options>
```

```
                    <optionInfo name="replaceDimension" value="false"/>
                </Options>
            </Target>
        </Task>
    </Tasks>
</Package>
```

Exporting to the File System (Essbase Example)

```
<?xml version="1.0" encoding="UTF-8"?>
<Package name="web-migration" description="migrating product to product">
    <Connections>
       <ConnectionInfo name="MyHSS-Connection1" type="HSS" description="Hyperion Shared
Service connection" user="" password=""/>
        <ConnectionInfo name="FileSystem-Connection1" type="FileSystem"
description="File system connection" filePath="/Essbase"/>
        <ConnectionInfo name="AppConnection2" type="Application" product="BPMA"
project="Foundation" application="EPM Architect lcmdev" HSSConnection="MyHSS-
Connection1" description="Source Application"/>
    </Connections>
    <Tasks>
        <Task seqID="1">
            <Source connection="AppConnection2">
                <Options/>
                <Artifact recursive="true" parentPath="/Application Metadata/Essbase
(BSO) Applications/EssBSO/Essbase (BSO) Application Properties" pattern="*"/>
                <Artifact recursive="true" parentPath="/Application Metadata/Essbase
(BSO) Applications/EssBSO/Local Dimensions" pattern="*"/>
                <Artifact recursive="true" parentPath="/Application Metadata/Essbase
(BSO) Applications/EssBSO/Import Profile" pattern="*"/>
            </Source>
            <Target connection="FileSystem-Connection1">
            </Target>
        </Task>
    </Tasks>
</Package>
```

Importing From the File System (Essbase Example)

```
<?xml version="1.0" encoding="UTF-8"?>
<Package name="web-migration" description="migrating product to product">
    <Connections>
       <ConnectionInfo name="MyHSS-Connection1" type="HSS" description="Hyperion Shared
Service connection" user="" password=""/>
        <ConnectionInfo name="FileSystem-Connection1" type="FileSystem"
description="File system connection" filePath="/Essbase"/>
        <ConnectionInfo name="AppConnection2" type="Application" product="BPMA"
project="Foundation" application="EPM Architect lcmdev" HSSConnection="MyHSS-
Connection1" description="Source Application"/>
    </Connections>
    <Tasks>
        <Task seqID="1">
            <Source connection="AppConnection2">
                <Options/>
                <Artifact recursive="true" parentPath="/Application Metadata/Essbase
(BSO) Applications/EssBSO/Essbase (BSO) Application Properties" pattern="*"/>
                <Artifact recursive="true" parentPath="/Application Metadata/Essbase
```

```
(BSO) Applications/EssBSO/Local Dimensions" pattern="*"/>
                <Artifact recursive="true" parentPath="/Application Metadata/Essbase
(BSO) Applications/EssBSO/Import Profile" pattern="*"/>
            </Source>
            <Target connection="FileSystem-Connection1">
                <Options>
                    <optionInfo name="replaceDimension" value="false"/>
                    <optionInfo name="deployAfterImport" value="false"/>
                    <optionInfo name="instanceName" value="String"/>
                    <optionInfo name="applicationServer" value="String"/>
                    <optionInfo name="hssProject" value="String"/>
                </Options>
            </Target>
        </Task>
    </Tasks>
</Package>
```

Exporting to the File System (Financial Management Example)

```
<?xml version="1.0" encoding="UTF-8"?>
<Package name="web-migration" description="migrating product to product">
    <Connections>
        <ConnectionInfo name="MyHSS-Connection1" type="HSS" description="Hyperion Shared
Service connection" user="" password=""/>
        <ConnectionInfo name="FileSystem-Connection1" type="FileSystem"
description="File system connection" filePath="/EPMAComma"/>
        <ConnectionInfo name="AppConnection2" type="Application" product="BPMA"
project="Foundation" application="EPM Architect lcmdev" HSSConnection="MyHSS-
Connection1" description="Source Application"/>
    </Connections>
    <Tasks>
        <Task seqID="1">
            <Source connection="AppConnection2">
                <Options/>
                <Artifact recursive="true" parentPath="/Application Metadata/
Consolidation Applications/EPMAComma/Consolidation Application Properties" pattern="*"/>
                <Artifact recursive="true" parentPath="/Application Metadata/
Consolidation Applications/EPMAComma/Local Dimensions" pattern="*"/>
                <Artifact recursive="true" parentPath="/Application Metadata/
Consolidation Applications/EPMAComma/Import Profile" pattern="*"/>
            </Source>
            <Target connection="FileSystem-Connection1">
            </Target>
        </Task>
    </Tasks>
</Package>
```

Importing From the File System (Financial Management Example)

```
<?xml version="1.0" encoding="UTF-8"?>
<Package name="web-migration" description="migrating product to product">
    <Connections>
        <ConnectionInfo name="MyHSS-Connection1" type="HSS" description="Hyperion Shared
Service connection" user="" password=""/>
        <ConnectionInfo name="AppConnection1" type="Application" product="BPMA"
description="Destination Application" HSSConnection="MyHSS-Connection1"
project="Foundation" application="EPM Architect lcmdev"/>
```

```
        <ConnectionInfo name="FileSystem-Connection2" type="FileSystem"
HSSConnection="MyHSS-Connection1" filePath="/EPMAComma" description="Source
Application"/>
    </Connections>
    <Tasks>
        <Task seqID="1">
            <Source connection="FileSystem-Connection2">
                <Options/>
                <Artifact recursive="true" parentPath="/Application Metadata/
Consolidation Applications/EPMAComma/Consolidation Application Properties" pattern="*"/>
                <Artifact recursive="true" parentPath="/Application Metadata/
Consolidation Applications/EPMAComma/Local Dimensions" pattern="*"/>
                <Artifact recursive="true" parentPath="/Application Metadata/
Consolidation Applications/EPMAComma/Import Profile" pattern="*"/>            </Source>
            <Target connection="AppConnection1">
                <Options>
                    <optionInfo name="replaceDimension" value="false"/>
                    <optionInfo name="deployAfterImport" value="false"/>
                    <optionInfo name="instanceName" value="String"/>
                    <optionInfo name="applicationServer" value="String"/>
                    <optionInfo name="hssProject" value="String"/>
                    <optionInfo name="clearAllMetadata" value="false"/>
                    <optionInfo name="checkReferentialIntegrity" value="false"/>
                </Options>
            </Target>
        </Task>
    </Tasks>
</Package>
```

Exporting to the File System (Planning Example)

```
<?xml version="1.0" encoding="UTF-8"?>
<Package name="web-migration" description="migrating product to product">
    <Connections>
       <ConnectionInfo name="MyHSS-Connection1" type="HSS" description="Hyperion Shared
Service connection" user="" password=""/>
        <ConnectionInfo name="FileSystem-Connection1" type="FileSystem"
description="File system connection" filePath="/EPMASamp"/>
        <ConnectionInfo name="AppConnection2" type="Application" product="BPMA"
project="Foundation" application="EPM Architect lcmdev" HSSConnection="MyHSS-
Connection1" description="Source Application"/>
    </Connections>
    <Tasks>
        <Task seqID="1">
            <Source connection="AppConnection2">
                <Options/>
                <Artifact recursive="true" parentPath="/Application Metadata/Planning
Applications/EPMASamp/Planning Application Properties" pattern="*"/>
                <Artifact recursive="true" parentPath="/Application Metadata/Planning
Applications/EPMASamp/Local Dimensions" pattern="*"/>
        <Artifact recursive="true" parentPath="/Application Metadata/Planning
Applications/EPMASamp/Import Profile" pattern="*"/>
            </Source>
            <Target connection="FileSystem-Connection1">
            </Target>
        </Task>
```

```
    </Tasks>
</Package>
```

Importing From the File System (Planning Example)

```
<?xml version="1.0" encoding="UTF-8"?>
<Package name="web-migration" description="migrating product to product">
    <Connections>
        <ConnectionInfo name="MyHSS-Connection1" type="HSS" description="Hyperion Shared
Service connection" user="" password=""/>
        <ConnectionInfo name="FileSystem-Connection1" type="FileSystem"
HSSConnection="MyHSS-Connection1" filePath="/EPMASamp" description="Source Application"/
>
        <ConnectionInfo name="AppConnection2" type="Application" product="BPMA"
description="Destination Application" HSSConnection="MyHSS-Connection1"
project="Foundation" application="EPM Architect lcmdev"/>
    </Connections>
    <Tasks>
        <Task seqID="1">
            <Source connection="FileSystem-Connection1">
                <Options/>
                <Artifact recursive="true" parentPath="/Application Metadata/Planning
Applications/EPMASamp/Planning Application Properties" pattern="*"/>
                <Artifact recursive="true" parentPath="/Application Metadata/Planning
Applications/EPMASamp/Local Dimensions" pattern="*"/>
        <Artifact recursive="true" parentPath="/Application Metadata/Planning
Applications/EPMASamp/Import Profile" pattern="*"/>
            </Source>
            <Target connection="AppConnection2">
                <Options>
                    <optionInfo name="replaceDimension" value="false"/>
                    <optionInfo name="deployAfterImport" value="false"/>
                    <optionInfo name="instanceName" value="String"/>
                    <optionInfo name="applicationServer" value="String"/>
                    <optionInfo name="hssProject" value="String"/>
                    <optionInfo name="dataSource" value="String"/>
                    <optionInfo name="createOutline" value="false"/>
                    <optionInfo name="refreshOutline" value="false"/>
                    <optionInfo name="createSecurityFilters" value="false"/>
                    <optionInfo name="sharedMemberSecurityFilters" value="false"/>
                    <optionInfo name="validateSecurityFilterLimit" value="false"/>
                </Options>
            </Target>
        </Task>
    </Tasks>
</Package>
```

Exporting to the File System (Profitability and Cost Management Example)

```
<?xml version="1.0" encoding="UTF-8"?>
<Package name="web-migration" description="migrating product to product">
    <Connections>
        <ConnectionInfo name="MyHSS-Connection1" type="HSS" description="Hyperion Shared
Service connection" user="" password=""/>
        <ConnectionInfo name="FileSystem-Connection1" type="FileSystem"
description="File system connection" filePath="/HPCMapp"/>
        <ConnectionInfo name="AppConnection2" type="Application" product="BPMA"
```

```
project="Foundation" application="EPM Architect lcmdev" HSSConnection="MyHSS-
Connection1" description="Source Application"/>
    </Connections>
    <Tasks>
        <Task seqID="1">
            <Source connection="AppConnection2">
                <Options/>
                <Artifact recursive="true" parentPath="/Application Metadata/
Profitability Applications/HPCM/Local Dimensions" pattern="*"/>
                <Artifact recursive="true" parentPath="/Application Metadata/
Profitability Applications/HPCM/Profitability Application Properties" pattern="*"/>
                <Artifact recursive="true" parentPath="/Application Metadata/
Profitability Applications/HPCM/Import Profile" pattern="*"/>            </Source>
            <Target connection="FileSystem-Connection1">
            </Target>
        </Task>
    </Tasks>
</Package>
```

Importing From the File System (Profitability and Cost Management Example)

```
<?xml version="1.0" encoding="UTF-8"?>
<Package name="web-migration" description="migrating product to product">
    <Connections>
       <ConnectionInfo name="MyHSS-Connection1" type="HSS" description="Hyperion Shared
Service connection" user="" password=""/>
        <ConnectionInfo name="AppConnection1" type="Application" product="BPMA"
description="Destination Application" HSSConnection="MyHSS-Connection1"
project="Foundation" application="EPM Architect lcmdev"/>
        <ConnectionInfo name="FileSystem-Connection2" type="FileSystem"
HSSConnection="MyHSS-Connection1" filePath="/HPCMapp" description="Source Application"/>
    </Connections>
    <Tasks>
        <Task seqID="1">
            <Source connection="FileSystem-Connection2">
                <Options/>
                <Artifact recursive="true" parentPath="/Application Metadata/
Profitability Applications/HPCM/Local Dimensions" pattern="*"/>
                <Artifact recursive="true" parentPath="/Application Metadata/
Profitability Applications/HPCM/Profitability Application Properties" pattern="*"/>
                <Artifact recursive="true" parentPath="/Application Metadata/
Profitability Applications/HPCM/Import Profile" pattern="*"/>
            </Source>
            <Target connection="AppConnection1">
                <Options>
                    <optionInfo name="replaceDimension" value="false"/>
                    <optionInfo name="deployAfterImport" value="false"/>
                    <optionInfo name="instanceName" value="String"/>
                    <optionInfo name="applicationServer" value="String"/>
                    <optionInfo name="hssProject" value="String"/>
                    <optionInfo name="dataSource" value="String"/>
                    <optionInfo name="createOutline" value="false"/>
                    <optionInfo name="refreshOutline" value="false"/>
                    <optionInfo name="createSecurityFilters" value="false"/>
                </Options>
            </Target>
        </Task>
```

```
    </Tasks>
</Package>
```

Lifecycle Management Log Files

Lifecycle Management log files for Performance Management Architect are listed in the *Oracle Hyperion Enterprise Performance Management System Installation and Configuration Troubleshooting Guide*.

Note: For failed migrations, the Migration Status Report provides a link to the Lifecycle Management engine log file. The product Lifecycle Management log files are located with the products.

I

Calculation Manager and Lifecycle Management

In This Appendix

About Calculation Manager Artifacts

Use Lifecycle Management to migrate these types of Calculation Manager artifacts:

- Rules
- Rule Sets
- Formulas
- Scripts
- Templates

For a listing of Calculation Manager artifacts, see "Calculation Manager Artifact Listing" on page 174.

Calculation Manager Roles Requirement

Users performing Lifecycle Management operations for Calculation Manager must be assigned the following roles:

- LCM Administrator
- Calculation Manager Administrator
- Any application level roles

See the *Oracle Hyperion Enterprise Performance Management System User and Role Security Guide*.

Calculation Manager Migration Prerequisites

- Install and configure Shared Services and Calculation Manager and verify that they are running. See the *Oracle Hyperion Enterprise Performance Management System Installation and Configuration Guide*.
- Ensure that users performing Lifecycle Management operations are assigned the LCM Administrator role, a Calculation Manager Administrator role, and any application level roles. See the *Oracle Hyperion Enterprise Performance Management System User and Role Security Guide*.
- Calculation Manager does not support direct application to application migrations using Lifecycle Management. Calculation Manager artifacts must be migrated to and from the file system. See "Migration Scenarios" on page 18.
- Before migrating the product-specific artifacts, migrate the Shared Services Native Directory artifacts (users, groups, and provisioning). See "Migrating Native Directory (Security)" on page 56. For a listing of Shared Services Native Directory artifacts, see Appendix B, "Shared Services and Lifecycle Management."
- Migrate the Financial Management or Planning Performance Management Architect application views (and plan types). For more information about Performance Management Architect artifacts, see Appendix H, "Performance Management Architect and Lifecycle Management."
- For classic Planning, Financial Management, or Essbase, those application must be created before importing their artifacts into Calculation Manager.

Calculation Manager Artifact Listing

Subtopics

Calculation Manager artifacts are listed under the Calculation Manager node in the Foundation application group in Shared Services Console.

About the Artifact Listing

Note the following about the artifact listing:

- **Artifact**—Artifact name
- **Description**—Artifact description
- **Last Modified Time**—If this parameter is supported, reflects the time the artifact was imported. Some artifacts do not support the last modified time parameter.
- **Last Modified User**—If this parameter is supported, reflects the user who last modified the artifact. Some artifacts do not support the last modified user parameter.
- **Editable on the File System**—If yes, the artifact can be edited on the file system using a text editor. If no, the artifact can be edited only within the product.
- **Dependencies**—Lists artifact dependencies

Rules Artifacts

The Rules directory contains rules artifacts.

Table 47 Rules Artifacts

Artifact	Description	Last Modified Time	Last Modified User	Editable on the File System?	Dependencies
Rules	Objects that can contain templates and calculations that are grouped in components	Yes	Yes	Yes–XML	None

Rule Sets Artifacts

The Rule Sets directory contains rules artifacts.

Table 48 Rule Sets Artifacts

Artifact	Description	Last Modified Time	Last Modified User	Editable on the File System?	Dependencies
Rule Sets	Objects that contain rules and other rulesets that can be calculated simultaneously or sequentially	Yes	Yes	Yes–XML	None

Formulas Artifacts

The Formulas directory contains formula component artifacts.

Table 49 Formulas Artifacts

Artifact	Description	Last Modified Time	Last Modified User	Editable on the File System?	Dependencies
Formulas	Component that can be used in business rules and templates and contains calculation statements that users can write or design using members and functions, and optionally, conditional statements	Yes	Yes	Yes—XML	None

Scripts Artifacts

The Scripts directory contains script component artifacts.

Table 50 Scripts Artifacts

Artifact	Description	Last Modified Time	Last Modified User	Editable on the File System?	Dependencies
Scripts	Component that can be used in business rules and templates and contains only Visual Basic (for Oracle Hyperion Financial Management, Fusion Edition) or Essbase (for Oracle Hyperion Planning, Fusion Edition and Essbase) calc script statements	Yes	Yes	Yes—XML	None

Templates Artifacts

The Templates directory contains templates artifacts.

Table 51 Templates Artifacts

Artifact	Description	Last Modified Time	Last Modified User	Editable on the File System?	Dependencies
Templates	User created components that perform a calculation or calculations	Yes	Yes	Yes—XML	None

Calculation Manager Application Migrations and Cross-Product Artifact Dependencies

When migrating Calculation Manager applications from one environment to another (development to test or test to production), there are cross-product artifact dependencies. Calculation Manager requires artifacts from other products to be migrated along with the Calculation Manager-specific artifacts.

- Performance Management Architect
- Shared Services Native Directory (users, groups, and provisioning)

Migration Export and Import Options

During import, Calculation Manager artifacts will replace any existing artifacts on the destination environment. There is no option to merge artifacts.

Calculation Manager has no product-specific export or import options.

Sample Migration Definition Files

The product code used in the migration definition files for Calculation Manager is `CALC`. All sample migration definition files are provided in *EPM_ORACLE_HOME*`/common/utilities/LCM/11.1.2.1/Sample`.

Exporting to the File System (Financial Management Example)

```
<?xml version="1.0" encoding="UTF-8"?>
<Package name="web-migration" description="Migrating Product to File System">
    <LOCALE>en_US</LOCALE>
    <Connections>
        <ConnectionInfo name="MyHSS-Connection1" type="HSS" description="Hyperion Shared
Service connection" user="" password=""/>
        <ConnectionInfo name="AppConnection1" type="Application" product="CALC"
project="Foundation" application="Calculation Manager" HSSConnection="MyHSS-
Connection1" description="Source Application"/>
        <ConnectionInfo name="FileSystem-Connection2" type="FileSystem"
description="File system connection" HSSConnection="MyHSS-Connection1" filePath="/
ConsolidationArtifactstForCalcManager"/>
    </Connections>
    <Tasks>
        <Task seqID="-1">
            <Source connection="AppConnection1">
                <Options/>
                <Artifact recursive="true" parentPath="/Consolidation/SampleHFM"
pattern="*"/>
            </Source>
            <Target connection="FileSystem-Connection2">
                <Options/>
            </Target>
        </Task>
    </Tasks>
</Package>
```

Importing From the File System (Financial Management Example)

```
<?xml version="1.0" encoding="UTF-8"?>
<Package name="web-migration" description="Migrating File System to Product">
    <LOCALE>en_US</LOCALE>
    <Connections>
        <ConnectionInfo name="MyHSS-Connection1" type="HSS" description="Hyperion Shared
Service connection" user="" password=""/>
        <ConnectionInfo name="FileSystem-Connection1" type="FileSystem"
HSSConnection="MyHSS-Connection1" filePath="/ConsolidationArtifactsForCalcManager"
description="Source Application"/>
        <ConnectionInfo name="AppConnection2" type="Application" product="CALC"
```

```
description="Destination Application" HSSConnection="MyHSS-Connection1"
project="Foundation" application="Calculation Manager"/>
    </Connections>
    <Tasks>
        <Task seqID="-1">
            <Source connection="FileSystem-Connection1">
                <Options/>
                <Artifact recursive="true" parentPath="/Consolidation" pattern="*"/>
            </Source>
            <Target connection="AppConnection2">
                <Options/>
            </Target>
        </Task>
    </Tasks>
</Package>
```

Exporting to the File System (Planning Example)

```
<?xml version="1.0" encoding="UTF-8"?>
<Package name="web-migration" description="Migrating Product to File System">
    <LOCALE>en_US</LOCALE>
    <Connections>
       <ConnectionInfo name="MyHSS-Connection1" type="HSS" description="Hyperion Shared
Service connection" user="" password=""/>
        <ConnectionInfo name="AppConnection1" type="Application" product="CALC"
project="Foundation" application="Calculation Manager" HSSConnection="MyHSS-
Connection1" description="Source Application"/>
        <ConnectionInfo name="FileSystem-Connection2" type="FileSystem"
description="File system connection" HSSConnection="MyHSS-Connection1" filePath="/
CalcSamp"/>
    </Connections>
    <Tasks>
        <Task seqID="-1">
            <Source connection="AppConnection1">
                <Options/>
                <Artifact recursive="true" parentPath="/Planning/CalcSamp/RuleSets"
pattern="*"/>
                <Artifact recursive="true" parentPath="/Planning/CalcSamp/Plan1/
Formulas" pattern="*"/>
               <Artifact recursive="true" parentPath="/Planning/CalcSamp/Plan1/Scripts"
pattern="*"/>
                <Artifact recursive="true" parentPath="/Planning/CalcSamp/Plan1/Rules"
pattern="*"/>
            </Source>
            <Target connection="FileSystem-Connection2">
                <Options/>
            </Target>
        </Task>
    </Tasks>
</Package>
```

Importing From the File System (Planning Example)

```
<?xml version="1.0" encoding="UTF-8"?>
<Package name="web-migration" description="Migrating File System to Product">
    <LOCALE>en_US</LOCALE>
    <Connections>
```

```
       <ConnectionInfo name="MyHSS-Connection1" type="HSS" description="Hyperion Shared
Service connection" user="" password=""/>
        <ConnectionInfo name="AppConnection1" type="Application" product="CALC"
description="Destination Application" HSSConnection="MyHSS-Connection1"
project="Foundation" application="Calculation Manager"/>
        <ConnectionInfo name="FileSystem-Connection2" type="FileSystem"
HSSConnection="MyHSS-Connection1" filePath="/CalcSamp" description="Source Application"/
>
    </Connections>
    <Tasks>
        <Task seqID="-1">
            <Source connection="FileSystem-Connection2">
                <Options/>
                <Artifact recursive="true" parentPath="/Planning/CalcSamp/RuleSets"
pattern="*"/>
                <Artifact recursive="true" parentPath="/Planning/CalcSamp/Plan1/
Formulas" pattern="*"/>
               <Artifact recursive="true" parentPath="/Planning/CalcSamp/Plan1/Scripts"
pattern="*"/>
                <Artifact recursive="true" parentPath="/Planning/CalcSamp/Plan1/Rules"
pattern="*"/>
            </Source>
            <Target connection="AppConnection1">
                <Options>
                    <optionInfo name="deployRulesOnly" value="false"/>
                </Options>
            </Target>
        </Task>
    </Tasks>
</Package>
```

Exporting to the File System (Essbase Example)

```
<?xml version="1.0" encoding="UTF-8"?>
<Package name="web-migration" description="Migrating Product to File System">
  <LOCALE>en_US</LOCALE>
  <Connections>
    <ConnectionInfo name="MyHSS-Connection1" type="HSS" description="Hyperion Shared
Service connection" user="" password=""/>
    <ConnectionInfo name="AppConnection1" type="Application" product="CALC"
project="Foundation" application="Calculation Manager" HSSConnection="MyHSSConnection1"
description="Source Application"/>
    <ConnectionInfo name="FileSystem-Connection2" type="FileSystem" description="File
system connection" HSSConnection="MyHSS-Connection1" filePath="/CalcSamp"/>
  </Connections>
  <Tasks>
    <Task seqID="-1">
      <Source connection="AppConnection1">
        <Options/>
        <Artifact recursive="true" parentPath="/Essbase/Sample/Basic/Formulas"
pattern="*"/>
        <Artifact recursive="true" parentPath="/Essbase/Sample/Basic/Scripts"
pattern="*"/>
        <Artifact recursive="true" parentPath="/Essbase/Sample/Basic/Rules" pattern="*"/
>
        <Artifact recursive="true" parentPath="/Essbase/Sample/Basic/Templates"
pattern="*"/>
```

```
      </Source>
      <Target connection="FileSystem-Connection2">
        <Options/>
      </Target>
    </Task>
  </Tasks>
</Package>
```

Lifecycle Management Log Files

Lifecycle Management log files for Hyperion Calculation Manager are listed in the *Oracle Hyperion Enterprise Performance Management System Installation and Configuration Troubleshooting Guide*.

Note: For failed migrations, the Migration Status Report provides a link to the Lifecycle Management engine log file. The product Lifecycle Management log files are located with the products.

J

Performance Scorecard and Lifecycle Management

In This Appendix

About Performance Scorecard Artifacts

Use Lifecycle Management to migrate these types of Performance Scorecard artifacts:

- Administrative Options
- Objects

For a listing of Performance Scorecard artifacts, see "Performance Scorecard Artifact Listing" on page 182.

Performance Scorecard Roles Requirement

Users performing Lifecycle Management operations for Performance Scorecard must be assigned the following roles:

- LCM Administrator
- HPS Power Manager
- Administrator

Note: The Administrator security role must be assigned to the Performance Scorecard application group.

See the *Oracle Hyperion Enterprise Performance Management System User and Role Security Guide*.

Performance Scorecard Migration Prerequisites

- Install and configure Shared Services and Performance Scorecard and verify that they are running. See the *Oracle Hyperion Enterprise Performance Management System Installation and Configuration Guide*.
- Ensure that users performing Lifecycle Management operations are assigned the LCM Administrator and HPS Power Manager roles, and the Administrator role is assigned to the Performance Scorecard application group. See the *Oracle Hyperion Enterprise Performance Management System User and Role Security Guide*.
- Because only one Performance Scorecard application instance can be registered to Shared Services, direct Performance Scorecard application to application migrations using Lifecycle Management are not possible. Performance Scorecard artifacts must be migrated to and from the file system. See "Migration Scenarios" on page 18.

Performance Scorecard Artifact Listing

Subtopics

Performance Scorecard artifacts are listed in the Scorecard application group in Shared Services Console.

About the Artifact Listing

Note the following about the artifact listing:

- **Artifact**—Artifact name
- **Description**—Artifact description
- **Last Modified Time**—If this parameter is supported, reflects the time the artifact was imported. Some artifacts do not support the last modified time parameter.
- **Last Modified User**—If this parameter is supported, reflects the user who last modified the artifact. Some artifacts do not support the last modified user parameter.
- **Editable on the File System**—If yes, the artifact can be edited on the file system using a text editor. If no, the artifact can be edited only within the product.
- **Dependencies**—Lists artifact dependencies

Administrative Options Artifacts

The Administrative Options directory contains model security artifacts.

Note: The Performance Scorecard accounts that users can migrate may also contain the following security settings assigned to accounts (displayed in the CSV file): SR=Security role; AE=Associated employee; PD=Primary domain; Object Name=security role name.

Table 52 Administrative Options Artifacts

Artifact	Description	Last Modified Time	Last Modified User	Editable on the File System?	Dependencies
Model Security	A CSV file containing information such as associated employee, user primary domain, and custom security role assignments that govern user and group access to Performance Scorecard metadata and data	No	No	Yes—CSV	None

Objects Artifacts

The Objects directory contains an application model artifact.

Note: You can only migrate an entire Performance Scorecard application model metadata object that is contained as an Application Model artifact. However, using the incremental export option enables you to export metadata objects that were changed since last export. The Application Model artifact export file cannot be reimported back to the source server.

Table 53 Objects Artifacts

Artifact	Description	Last Modified Time	Last Modified User	Editable on the File System?	Dependencies
Application Model	An XML file or content string containing Performance Scorecard metadata	No	No	No	None

Performance Scorecard Application Migrations and Cross-Product Artifact Dependencies

Performance Scorecard has no cross-product artifact dependencies.

Migration Export and Import Options

Subtopics

Migration Export Options

Performance Scorecard export option:

- **Incremental option**—Exports only artifacts that were changed since the last export operation was performed.

Migration Import Options

During import, Performance Scorecard artifacts will merge with any existing artifacts on the destination environment. Performance Scorecard has no product-specific import options.

Sample Migration Definition Files

The product code used in the migration definition files for Performance Scorecard is `HPS`. All sample migration definition files are provided in *EPM_ORACLE_HOME*`/common/utilities/LCM/11.1.2.1/Sample`.

Exporting to the File System

```
<?xml version="1.0" encoding="UTF-8"?>
<Package name="web-migration" description="migrating product to product">
    <Logging option="IgnoreError" logfile=""/>
    <Connections>
       <ConnectionInfo name="MyHSS-Connection1" type="HSS" description="Hyperion Shared
Service connection" user="" password=""/>
        <ConnectionInfo name="AppConnection1" type="Application" product="HPS"
project="Scorecard" application="Hyperion Performance Scorecard" HSSConnection="MyHSS-
Connection1" description="Source Application"/>
        <ConnectionInfo name="FileSystem-Connection2" type="FileSystem" filePath="/
HPS_Export"/>
    </Connections>
    <Tasks>
        <Task seqID="1">
            <Source connection="AppConnection1">
                <Options>
                    <optionInfo name="incremental" value="false"/>
                </Options>
                <Artifact recursive="true" parentPath="/Administrative Options"
pattern="*"/>
                <Artifact recursive="true" parentPath="/Objects" pattern="*"/>
            </Source>
            <Target connection="FileSystem-Connection2">
```

```
                <Options/>
            </Target>
        </Task>
    </Tasks>
</Package>
```

Importing from the File System

```
<?xml version="1.0" encoding="UTF-8"?>
<Package name="web-migration" description="migrating product to product">
    <Logging option="IgnoreError" logfile=""/>
    <Connections>
        <ConnectionInfo name="MyHSS-Connection1" type="HSS" description="Hyperion Shared
Service connection" user="" password=""/>
        <ConnectionInfo name="AppConnection1" type="Application" product="HPS"
project="Scorecard" application="Hyperion Performance Scorecard" HSSConnection="MyHSS-
Connection1" description="Source Application"/>
        <ConnectionInfo name="FileSystem-Connection2" type="FileSystem" filePath="/
HPS_Export"/>
    </Connections>
    <Tasks>
        <Task seqID="1">
            <Source connection="FileSystem-Connection2">
                <Options>
                    <optionInfo name="incremental" value="false"/>
                </Options>
                <Artifact recursive="true" parentPath="/Administrative Options"
pattern="*"/>
                <Artifact recursive="true" parentPath="/Objects" pattern="*"/>
            </Source>
            <Target connection="AppConnection1">
                <Options/>
            </Target>
        </Task>
    </Tasks>
</Package>
```

Lifecycle Management Log Files

Lifecycle Management log files for Oracle Hyperion Performance Scorecard, Fusion Edition are listed in the *Oracle Hyperion Enterprise Performance Management System Installation and Configuration Troubleshooting Guide*.

Note: For failed migrations, the Migration Status Report provides a link to the Lifecycle Management engine log file. The product Lifecycle Management log files are located with the products.

K

Profitability and Cost Management and Lifecycle Management

In This Appendix

About Profitability and Cost Management Artifacts

Profitability and Cost Management has two types of artifacts: metadata or dimensional and model artifacts.

The metadata or dimensional artifacts are Performance Management Architect enabled. The Profitability and Cost Management Performance Management Architect enabled artifacts are listed under the EPMA node in the Foundation application group and are described in Appendix H, "Performance Management Architect and Lifecycle Management."

The model artifacts are listed in a folder that is defined by the user during Profitability and Cost Management deployment from Performance Management Architect.

You use Lifecycle Management to migrate repository content for these types of Profitability and Cost Management model artifacts:

- Stage definition
- POV definition
- Assignments
- Assignment rules
- Assignment rule selections
- Driver definition
- Driver selections
- Application preferences

For a listing of Profitability and Cost Management model artifacts, see "Profitability and Cost Management Artifact Listing" on page 188.

Profitability and Cost Management Roles Requirement

Users performing Lifecycle Management operations for Profitability and Cost Management must be assigned the following roles:

- LCM Administrator
- Power User
- Administrator

See the *Oracle Hyperion Enterprise Performance Management System User and Role Security Guide*.

Profitability and Cost Management Migration Prerequisites

- Install and configure Shared Services and Profitability and Cost Management and verify that they are running. See the *Oracle Hyperion Enterprise Performance Management System Installation and Configuration Guide*.
- Ensure that users performing Lifecycle Management operations are assigned the LCM Administrator, Power User, and Administrator roles. See the *Oracle Hyperion Enterprise Performance Management System User and Role Security Guide*.
- Deploy the application from Performance Management Architect to Profitability and Cost Management (ensure all dimensions are available).
- Profitability and Cost Management Performance Management Architect applications—Before migrating non-dimensional artifacts, Performance Management Architect dimensions must be migrated first and 'deployed after import'. For a listing of Performance Management Architect artifacts, see Appendix H, "Performance Management Architect and Lifecycle Management."

Profitability and Cost Management Artifact Listing

Subtopics

Profitability and Cost Management model artifacts are listed in a folder that is defined by the user during Profitability and Cost Management deployment from Performance Management Architect.

Note: The artifacts displayed in Shared Services Console vary by implementation.

About the Artifact Listing

Note the following about the artifact listing:

- **Artifact**—Artifact name
- **Description**—Artifact description
- **Last Modified Time**—If this parameter is supported, reflects the time the artifact was imported. Some artifacts do not support the last modified time parameter.
- **Last Modified User**—If this parameter is supported, reflects the user who last modified the artifact. Some artifacts do not support the last modified user parameter.
- **Editable on the File System**—If yes, the artifact can be edited on the file system using a text editor. If no, the artifact can be edited only within the product. If NA, the artifact is not editable.
- **Dependencies**—Lists artifact dependencies. For example, Profitability and Cost Management Assignment rules artifacts also require that Profitability and Cost Management Stage definition artifacts be migrated.

Model Artifacts

Table 54 Profitability and Cost Management Model Artifacts

Artifact	Description	Last Modified Time	Last Modified User	Editable on the File System?	Dependencies
Stage definition	In a Profitability and Cost Management model, the processes or activities within the model	Yes	No	NA	None
POV definition	A particular version of a model for a selected snapshot, such as year, period, and status. At least one, and up to four POVs can be defined in the model.	Yes	No	NA	None
Assignments	Define the flow of data from sources to destinations	No	No	NA	POV definition, Stage definition
Assignment rule selections	Assignment rule selections are similar to Assignments except that destinations are defined by assignment rules	No	No	NA	POV definition, Stage definition, Assignment rules
Assignment rules	A collection of member sets and optional filter sets for a single destination stage. These can be created and reused for multiple assignments that use the same parameters.	Yes	No	NA	Stage definition

Artifact	Description	Last Modified Time	Last Modified User	Editable on the File System?	Dependencies
Driver definition	In a Profitability and Cost Management model, these calculate the value of the allocations. They provide the formulas for allocating source intersection values to destination intersections.	Yes	No	NA	None
Driver selections	These are applied to drivers after a driver is created. They must be associated with the dimension members to which they apply.	No	No	NA	POV definition, Stage definitions, Driver definition
Application preferences	Settings that apply to the entire model. Preferences might include whether intrastage assignments are allowed or whether you can have multidimensional stages. Essbase connection information for a selected model is specified in the application preferences.	Yes	No	NA	None

Profitability and Cost Management Application Migrations and Cross-Product Artifact Dependencies

When migrating Profitability and Cost Management applications from one environment to another (development to test or test to production), there are cross-product artifact dependencies. Profitability and Cost Management requires artifacts from the following other products to be migrated along with the Profitability and Cost Management-specific artifacts.

- Oracle Hyperion EPM Architect, Fusion Edition Dimensions
- Shared Services Native Directory (users, groups, and provisioning)
- Essbase

Migration Export and Import Options

Subtopics

Migration Export Options

Profitability and Cost Management has no product-specific export options.

Note: The Essbase artifacts are exported (outlines, data, calc scripts) under the Oracle Essbase application.

Migration Import Options

When importing, if an artifact already exists on the destination environment, the existing artifact is automatically deleted before the import occurs.

Sample Migration Definition Files

The product code used in the migration definition files for Profitability and Cost Management is `HPM`. All sample migration definition files are provided in *EPM_ORACLE_HOME*`/common/utilities/LCM/11.1.2.1/Sample`.

Exporting to the File System

```
<Package name="web-migration" description="Migrating Product to File System">
    <LOCALE>en_US</LOCALE>
    <Connections>
        <ConnectionInfo name="MyHSS-Connection1" type="HSS" description="Hyperion Shared
Service connection" user="" password=""/>
        <ConnectionInfo name="AppConnection1" type="Application" product="HPM"
project="Default Application Group" application="B1" HSSConnection="MyHSS-Connection1"
description="Source Application"/>
        <ConnectionInfo name="FileSystem-Connection2" type="FileSystem"
description="File system connection" HSSConnection="MyHSS-Connection1" filePath="/
B1_hpm"/>
    </Connections>
    <Tasks>
        <Task seqID="1">
            <Source connection="AppConnection1">
                <Options/>
                <Artifact recursive="true" parentPath="/Stages" pattern="*"/>
                <Artifact recursive="true" parentPath="/Preferences" pattern="*"/>
                <Artifact recursive="true" parentPath="/Drivers" pattern="*"/>
                <Artifact recursive="true" parentPath="/POV" pattern="*"/>
                <Artifact recursive="true" parentPath="/Model" pattern="*"/>
                <Artifact recursive="true" parentPath="/AssignmentRules" pattern="*"/>
            </Source>
            <Target connection="FileSystem-Connection2">
                <Options/>
            </Target>
        </Task>
    </Tasks>
</Package>
```

Importing from the File System

```
<Package name="web-migration" description="Migrating File System to Product">
    <LOCALE>en_US</LOCALE>
    <Connections>
        <ConnectionInfo name="MyHSS-Connection1" type="HSS" description="Hyperion Shared
Service connection" user="" password=""/>
        <ConnectionInfo name="AppConnection1" type="Application" product="HPM"
description="Destination Application" HSSConnection="MyHSS-Connection1"
project="Default Application Group" application="B2"/>
```

```
        <ConnectionInfo name="FileSystem-Connection2" type="FileSystem"
HSSConnection="MyHSS-Connection1" filePath="/B1_hpm" description="Source Application"/>
    </Connections>
    <Tasks>
        <Task seqID="1">
            <Source connection="FileSystem-Connection2">
                <Options/>
                <Artifact recursive="true" parentPath="/Stages" pattern="*"/>
                <Artifact recursive="true" parentPath="/Preferences" pattern="*"/>
                <Artifact recursive="true" parentPath="/Drivers" pattern="*"/>
                <Artifact recursive="true" parentPath="/POV" pattern="*"/>
                <Artifact recursive="true" parentPath="/Model" pattern="*"/>
                <Artifact recursive="true" parentPath="/AssignmentRules" pattern="*"/>
            </Source>
            <Target connection="AppConnection1">
                <Options/>
            </Target>
        </Task>
    </Tasks>
</Package>
```

Lifecycle Management Log Files

Lifecycle Management log files for Oracle Hyperion Profitability and Cost Management, Fusion Edition are listed in the *Oracle Hyperion Enterprise Performance Management System Installation and Configuration Troubleshooting Guide*.

Note the following:

- Details are documented in the logging section of S9 Logging.
- For failed migrations, the Migration Status Report provides a link to the Lifecycle Management engine log file. The product Oracle Hyperion Enterprise Performance Management System Lifecycle Management log files are located with the products.

L

Accessibility

In This Appendix

About Accessibility

Subtopics

- Viewing Shared Services Console in an Accessible Mode
- Using JAWS Screen Reading Software

This appendix describes the accessibility features of Shared Services Console. For information regarding supported assistive technologies, refer to the *Oracle Hyperion Enterprise Performance Management System Installation Start Here*.

Viewing Shared Services Console in an Accessible Mode

To view Shared Services Console in an accessible mode, append `accessibilityMode=true` to the Shared Services URL; for example, `http://Web_server_name:port_number/interop/index.jsp?accessibilityMode=true`.

If launching Shared Services Console from EPM Workspace, enable the accessibility mode in the Oracle Enterprise Performance Management Workspace, Fusion Edition user preferences.

To view Shared Services Console with high contrast, append `themeSelection=BpmTadpoleHc` to Shared Services URL, for example, `http://Web_server_name:port_number/interop/index.jsp?themeSelection=BpmTadpoleHc`.

Using JAWS Screen Reading Software

If you are using JAWS® Screen Reading Software, we recommend using the Internet Explorer browser.

For JAWS to read the content of some editable text fields within Shared Services Console, enable the Virtual PC Cursor mode. The following procedures provide two methods for enabling the JAWS Virtual PC Cursor mode.

Note: These procedures are only applicable if you are viewing Shared Services Console in an accessible mode (by appending `accessibilityMode=true` to the Oracle's Hyperion® Shared Services URL).

➤ To enable the Virtual PC Cursor in JAWS Configuration Manager:

1. From the JAWS **Utilities** menu, select **Configuration Manager**.
2. From the **Set Options** menu, select **Advanced Options**.
3. Select **Use Virtual PC Cursor**.
4. Click **OK**.

➤ To toggle between enabling or disabling the JAWS Virtual PC Cursor using a keyboard shortcut, press the numpad plus (+) key.

Caution! The other Shared Services Console components will not work while in Virtual PC Cursor mode (for example, users will not be able to traverse the provisioning tree). To work with other components, you must disable the Virtual PC Cursor mode after reading the text field content. Therefore, we recommend using the keyboard shortcut method to toggle between enabling and disabling the Virtual PC Cursor mode.

Using Keyboard Shortcuts

Subtopics

Use shortcut keys as an alternative to the mouse when working in Shared Services Console. You can activate interface components, menu items, or tasks using keyboard shortcuts.

This section lists the keyboard shortcuts for interface components, menu items, and tasks completed in Shared Services Console.

Note the following:

- The underlined letter that typically appears in a menu title, menu item, or the text of a button or other component is called a mnemonic. Since we consider mnemonics to be "self-documenting," no additional documentation of these keys is provided. However, it is important to note that some mnemonics are repeated. For example, on the File menu the

underlined mnemonic D is used for both the Delete menu item and the Deactivate menu item. When this occurs, the first time you press D will highlight the Delete item. Press Enter to Delete or press D again to highlight the Deactivate button, then press Enter to Deactivate.

- If you are using a version of the Firefox browser later than release 1.5, substitute Alt+Shift for Alt as the modifier.

Global Keyboard Shortcuts

These global keyboard shortcuts help you navigate Shared Services Console.

Table 55 Global Keyboard Shortcuts

Task	Keyboard Shortcut
Focus and activate the first menu on the menu bar	F10
Focus on the first object listed in the View pane	Ctrl+0
Focus on the task tabs. Focus shifts to the current task tab.	Ctrl+G
Focus on the toolbar. Focus shifts to the toolbar itself, and then you can use <Tab> to select individual buttons.	Ctrl+T
Focus on the current task tab in the content area.	Ctrl+Y
Close the current tab (except the Browse tab)	Ctrl+F4
Activate the selected object in the View pane	Space bar
Display the shortcut menu for the selected object in the View pane	F9
Focus away from a task tab to the page frame	Ctrl+F6

For an overview of Shared Services Console (View pane, task tabs, and so on), see Chapter 4, "Shared Services Console."

Menus

Use these keyboard shortcuts when Oracle's Hyperion® Shared Services Console is displayed.

Note: Keyboard shortcuts for menus are context sensitive. In other words, different menu options are available for each type of task.

Table 56 File Menu

Menu Item	Keyboard Shortcut
New	Ctrl+N
Open	Ctrl+O

Menu Item	Keyboard Shortcut
Properties	Ctrl+Shift+R
Delete	Ctrl+D or DEL
Activate	Ctrl+E
Deactivate	Ctrl+D

Table 57 View Menu

Menu Item	Keyboard Shortcut
View Masthead	Ctrl+Alt+O
Refresh	Ctrl+F
Explore	Ctrl+X

Table 58 Administration Menu

Menu Item	Keyboard Shortcut
View Provisioning Report	Ctrl+Shift+T
Security Reports/Performed By	Ctrl+Shift+B
Security Reports/Performed On	Ctrl+O
Provision	Ctrl+Shift+P
Deprovision	Ctrl+Shift+D
Delete Applications	Ctrl+L
Audit Report	Ctrl+U
Config Report	Ctrl+P
Configure Auditing	Ctrl+R

Note: To access the Security Reports, Artifact Reports, and Config Reports sub-menu items under Audit Reports, use the down arrow key to highlight Audit Reports, then press the right arrow key to display the sub-menu items. Press S (for Security Reports), F (for Artifact Reports), or P (for Config Reports) to launch the corresponding reports.

Administration Tasks

Use these keyboard shortcuts when performing administration tasks.

Table 59 Configure User Directories: Provider Configuration Tab

Interface Component	Keyboard Shortcut
New	Alt+N
Edit	Alt+I
Delete	Alt+E
Move Up	Alt+P
Move Down	Alt+W
Include	Alt+U
Exclude	Alt+X
Test	Alt+T

Table 60 Audit Configuration Window

Interface Component	Keyboard Shortcut
Purge	Alt+P

Table 61 Audit Reports

Interface Component	Keyboard Shortcut
View Report	Alt+E
Export	Alt+X

Table 62 Select User or Group Screen

Interface Component	Keyboard Shortcut
Select All	Alt+E
Select	Alt+T
Close	Alt+L
Search	Alt+R

Provisioning Tasks

Use these keyboard shortcuts when provisioning users, groups, tasks, or delegated lists.

Table 63 Provisioning Users

Task	Keyboard Shortcut
New	Ctrl+N

Task	Keyboard Shortcut
Properties	Ctrl+Shift+R
Delete	DEL
Activate	Ctrl+E, then Enter
Deactivate	Ctrl+D, then Enter
View Provisioning Report	Ctrl+Shift+T
Security Reports/Performed By	Ctrl+Shift+B
Security Reports/Performed On	Ctrl+O
Provision	Ctrl+Shift+P
Deprovision	Ctrl+Shift+D

Table 64 Provisioning Groups

Task	Keyboard Shortcut
New	Ctrl+N
Properties	Ctrl+Shift+R
Delete	DEL
Security Reports/Performed On	Ctrl+O
Provision	Ctrl+Shift+P
Deprovision	Ctrl+Shift+D

Table 65 Provisioning Roles

Task	Keyboard Shortcut
New	Ctrl+N
Properties	Ctrl+Shift+R
Delete	DEL
View Provisioning Report	Ctrl+Shift+T

Table 66 Provisioning Delegated Lists

Task	Keyboard Shortcut
New	Ctrl+N
Properties	Ctrl+Shift+R
Delete	DEL

Task	Keyboard Shortcut
View Delegated Report	Ctrl+Shift+T

Table 67 Users, Groups, Roles, or Delegated Lists Properties: Member Of Tab

Interface Component	Keyboard Shortcut
Reset	Alt+R

Application Management Tasks

You can use these keyboard shortcuts when working with application groups.

Table 68 Application Management Tasks

Interface Component	Keyboard Shortcut
New	Ctrl+N
Delete Applications	Ctrl+D
Open	Ctrl+O
Delete	Ctrl+D
Audit Report	Ctrl+U
Config Report	Ctrl+P
Configure Auditing	Ctrl+R
Move To	Ctrl+M
Copy Provisioning	Ctrl+I
Explore	Ctrl+X

Table 69 Artifact List Tab

Interface Component	Keyboard Shortcut
Artifact List button	Alt+T
Selected Artifacts button	Alt+E
Search Artifacts button	Alt+S
Select All/Clear Selections button	Alt+C
Define Migration button	Alt+M
View Audit Report button	Alt+U
Search button	Alt+R

Table 70 New/Modify Application Group Screen

Interface Component	Keyboard Shortcut
Update List	Alt+U
Reset	Alt+R

Table 71 Migration Wizard

Interface Component	Keyboard Shortcut
Source	Alt+E
Source Option	Alt+U
Destination	Alt+T
Destination Option	Alt+I
Summary	Alt+M
Execute Migration button	Alt+G
Save Migration Definition button	Alt+V

Table 72 Move To Tab

Interface Component	Keyboard Shortcut
Search	Alt+R
Display All	Alt+Y

Table 73 Copy Provisioning Tab

Interface Component	Keyboard Shortcut
Search	Alt+R
Display All	Alt+Y

Table 74 Edit/Execute Migration Screen

Interface Component	Keyboard Shortcut
Finish	Alt+I

Table 75 Purge Screen

Interface Component	Keyboard Shortcut
Purge	Alt+E

Table 76 Migration Status Report

Interface Component	Keyboard Shortcut
Refresh	Alt+R

Glossary

access permissions A set of operations that a user can perform on a resource.

aggregated role A custom role that aggregates multiple predefined roles within a Hyperion product.

application 1) A software program designed to run a specific task or group of tasks such as a spreadsheet program or database management system. 2) A related set of dimensions and dimension members that are used to meet a specific set of analytical requirements, reporting requirements, or both.

Application Migration Utility A command-line utility for migrating applications and artifacts.

artifact An individual application or repository item; for example, scripts, forms, rules files, Interactive Reporting documents, and financial reports. Also known as an object.

authentication Verification of identity as a security measure. Authentication is typically based on a user name and password. Passwords and digital signatures are forms of authentication.

automated stage A stage that does not require human intervention; for example, a data load.

backup A duplicate copy of an application instance.

business process A set of activities that collectively accomplish a business objective.

context variable A variable that is defined for a particular task flow to identify the context of the taskflow instance.

external authentication Logging on to Oracle EPM System products with user information stored outside the application. The user account is maintained by the EPM System, but password administration and user authentication are performed by an external service, using a corporate directory such as Oracle Internet Directory (OID) or Microsoft Active Directory (MSAD).

filter A constraint on data sets that restricts values to specific criteria; for example, to exclude certain tables, metadata, or values, or to control access.

group A container for assigning similar access permissions to multiple users.

identity A unique identification for a user or group in external authentication.

integration A process that is run to move data between Oracle's Hyperion applications using Shared Services. Data integration definitions specify the data moving between a source application and a destination application, and they enable the data movements to be grouped, ordered, and scheduled.

lifecycle management The process of migrating an application, a repository, or individual artifacts across product environments.

link (1) A reference to a repository object. Links can reference folders, files, shortcuts, and other links. (2) In a taskflow, the point where the activity in one stage ends and another begins.

link condition A logical expression evaluated by the taskflow engine to determine the sequence of launching taskflow stages.

load balancing Distribution of requests across a group of servers, which helps to ensure optimal end user performance.

managed server An application server process running in its own Java Virtual Machine (JVM).

manual stage A stage that requires human intervention.

migration The process of copying applications, artifacts, or users from one environment or computer to another; for example, from a testing environment to a production environment.

migration audit report A report generated from the migration log that provides tracking information for an application migration.

migration definition file (.mdf) A file that contains migration parameters for an application migration, enabling batch script processing.

migration log A log file that captures all application migration actions and messages.

migration snapshot A snapshot of an application migration that is captured in the migration log.

model 1) In data mining, a collection of an algorithm's findings about examined data. A model can be applied against a wider data set to generate useful information about that data. 2) A file or content string containing an application-specific representation of data. Models are the basic data managed by Shared Services, of two major types: dimensional and nondimensional application objects. 3) In Business Modeling, a network of boxes connected to represent and calculate the operational and financial flow through the area being examined.

product In Shared Services, an application type, such as Planning or Performance Scorecard.

project An instance of Oracle's Hyperion products grouped together in an implementation. For example, a Planning project may consist of a Planning application, an Essbase cube, and a Financial Reporting Server instance.

provisioning The process of granting users and groups specific access permissions to resources.

repository Storage location for metadata, formatting, and annotation information for views and queries.

role The means by which access permissions are granted to users and groups for resources.

security agent A Web access management provider (for example, Oracle Access Manager, Oracle Single Sign-On, or CA SiteMinder) that protects corporate Web resources.

security platform A framework enabling Oracle EPM System products to use external authentication and single sign-on.

Shared Services Registry The part of the Shared Services repository that manages EPM System deployment information for most EPM System products, including installation directories, database settings, computer names, ports, servers, URLs, and dependent service data.

single sign-on (SSO) The ability to log on once and then access multiple applications without being prompted again for authentication.

stage 1) A task description that forms one logical step within a taskflow, usually performed by an individual. A stage can be manual or automated. 2) For Profitability, logical divisions within the model that represent the steps in the allocation process within your organization.

stage action For automated stages, the invoked action that executes the stage.

sync Synchronization of Shared Services and application models.

synchronized The condition that exists when the latest version of a model resides in both the application and in Shared Services. See also model.

task list A detailed status list of tasks for a particular user.

taskflow The automation of a business process in which tasks are passed from one taskflow participant to another according to procedural rules.

taskflow definition Business processes in the taskflow management system that consist of a network of stages and their relationships; criteria indicating the start and end of the taskflow; and information about individual stages, such as participants, associated applications, associated activities, and so on.

taskflow instance A single instance of a taskflow including its state and associated data.

taskflow management system A system that defines, creates, and manages the execution of a taskflow, including definitions, user or application interactions, and application executables.

taskflow participant The resource that performs the task associated with the taskflow stage instance for both manual and automated stages.

token An encrypted identification of one valid user or group on an external authentication system.

transformation 1) A process that transforms artifacts so that they function properly in the destination environment after application migration. 2) In data mining, the modification of data (bidirectionally) flowing between the cells in the cube and the algorithm.

upgrade The process of replacing a software release with a newer release. The term upgrade does not apply to installing a maintenance release. See also maintenance release, migration.

user directory A centralized location for user and group information, also known as a repository or provider. Popular user directories include Oracle Internet Directory (OID), Microsoft Active Directory (MSAD), and Sun Java System Directory Server.

Index

E

F

M

N

O

P

Q

R

S

T

U

V