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About Lifecycle Management

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- Lifecycle Management Features ....................................................................... 17
- Lifecycle Management Components ............................................................... 18
- EPM System Products and Components That Support Lifecycle Management .......... 18

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

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

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 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 to and from the file system
● Viewing selected artifacts
● Auditing migrations
● Viewing the status of migrations
● Importing and exporting individual artifacts for quick changes on the file system
● Downloading and uploading Lifecycle Management File System folders
● Migrating complete application suites
● Migrating multiple applications

Lifecycle Management Components

Lifecycle Management consists of these components:

● **LCM Administrator Role**—Oracle 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.

● **LCM Designer Role**—Shared Services user role that performs Lifecycle Management tasks. Users provisioned with the LCM Designer role can define a migration and perform an export operation, but cannot perform an import operation.

● **Shared Services Console**—Shared Services user interface that enables users to perform administrative tasks such as provisioning and lifecycle management.

● **Migration Options**—A part of Shared Services Console where you input migration export and import options to use during migrations.

● **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.

EPM System Products and Components That Support Lifecycle Management

The following EPM System products support Lifecycle Management:
- Shared Services
- Oracle Hyperion Calculation Manager
- Oracle Essbase
- Oracle Hyperion Financial Data Quality Management, Enterprise Edition
- Oracle Hyperion Planning

**Table 1  EPM System Product Codes**

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Product Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUB</td>
<td>Shared Services</td>
</tr>
<tr>
<td>HREG</td>
<td>Oracle Hyperion Shared Services Registry</td>
</tr>
<tr>
<td>CALC</td>
<td>Calculation Manager</td>
</tr>
<tr>
<td>ESBAPP</td>
<td>Essbase</td>
</tr>
</tbody>
</table>

Appendixes containing product-specific information are provided at the end of this guide.
Getting Started With Lifecycle Management

In This Chapter

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Lifecycle Management Requirements

Subtopics
- Prerequisites to Using
- Source and Destination Considerations
- File System Considerations
- Upgrade Considerations
- Applications and Application Groups
- Availability of the EPM System Environment During Lifecycle Management Migration
- Other Important Points

Prerequisites to Using

- Install and configure Shared Services and EPM System products and verify that they are running. See the Oracle 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.

Source and Destination Considerations

- The source and destination environments must use the same user directory.
During Lifecycle Management export and import operations, the product services must be up and running.

File System Considerations

- When migrating to and 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 the file system is on the Shared Services Java 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 $MIDDLEWARE_HOME/user_projects/epmsystem1/import_export$. 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.

Upgrade Considerations

When upgrading from Release 11.1.2.3 to Release 11.1.2.4, the content exported from Lifecycle Management must be unzipped in the import_export location.

Applications and Application Groups

- If the application being imported does not exist in the target environment, Lifecycle Management creates an application shell.
- 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.

- If the application being imported belongs to an application group that does not exist in the target environment, Lifecycle Management will create the 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 that the systems be in maintenance window.
In Oracle Hyperion Financial Management, if the dimension metadata artifact is imported, the current user sessions of that application are invalidated, and users must re-open the application.

**Note:** There are no limitations for EPMA, Planning, Calculation Manager, Essbase, Oracle Hyperion Financial Reporting, Oracle Hyperion Interactive Reporting, Oracle Hyperion SQR Production Reporting, and Oracle Hyperion 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.)
- Single-artifact export should only be used with artifacts that can be modified on the file system. See the product appendixes for information on which artifacts can be modified on the file system.
- When performing a Oracle Hyperion Reporting and Analysis migration, you must manually recreate clients/data sources for Production Reporting and Interactive Reporting on the target machine. See “Configuring the Production Reporting Job Service Properties on the Destination Application” on page 172 and “Creating Interactive Reporting Data Access Service Data Sources in the Destination Application” on page 172.

**Installing Lifecycle Management**

Lifecycle Management is installed with Shared Services. See the *Oracle 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/11.1.2.0`.

**Configuring Lifecycle Management for Shared Services High Availability**

When Shared Services is configured for high availability and is started as a Windows service, configuration steps must be performed for Lifecycle Management. This scenario involves using
a shared disk to store artifacts during migrations. You enter the shared disk location in the LCM Shared Disk Location field in Oracle Hyperion Enterprise Performance Management System Configurator.

For information on the LCM Shared Disk Location field in EPM System Configurator, see “Foundation-Specific Configuration Tasks” in the Oracle Hyperion Enterprise Performance Management System Installation and Configuration Guide. For information on configuring for high availability, 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>
<thead>
<tr>
<th>Task</th>
<th>Additional Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Install and configure Shared Services and EPM System products.</td>
<td>Oracle Enterprise Performance Management System Installation and Configuration Guide</td>
</tr>
<tr>
<td><strong>Note:</strong> Most products require that users be provisioned with additional roles to perform Lifecycle Management tasks. For additional roles, see the appendices at the end of this guide.</td>
<td></td>
</tr>
<tr>
<td>3. Define import and export options for the migration.</td>
<td>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.”</td>
</tr>
<tr>
<td>Task</td>
<td>Additional Information</td>
</tr>
<tr>
<td>---------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>4. In Shared Services Console or Lifecycle Management Utility, export the artifacts to the file system.</td>
<td>See “Exporting to the File System” on page 45.</td>
</tr>
<tr>
<td><strong>For Classic Applications:</strong></td>
<td></td>
</tr>
<tr>
<td>1. Select all Shared Services artifacts as required.</td>
<td></td>
</tr>
<tr>
<td>2. Select all product-specific artifacts as required.</td>
<td></td>
</tr>
<tr>
<td>All related artifacts can also be selected; for example, Calculation Manager rules, Financial Reporting reports, Essbase global substitution variables, and so on.</td>
<td></td>
</tr>
<tr>
<td>3. Export the selected artifacts to a single File System folder.</td>
<td></td>
</tr>
<tr>
<td><strong>For EPMA Applications:</strong></td>
<td></td>
</tr>
<tr>
<td>1. Select all Shared Services artifacts as required.</td>
<td></td>
</tr>
<tr>
<td>2. Select all EPMA artifacts as required.</td>
<td></td>
</tr>
<tr>
<td>3. Export the selected Shared Services and EPMA artifacts to a single File System folder.</td>
<td></td>
</tr>
<tr>
<td>4. Select all product-specific artifacts as required.</td>
<td></td>
</tr>
<tr>
<td>All related artifacts can also be selected; for example, Calculation Manager rules, Financial Reporting reports, Essbase global substitution variables, and so on.</td>
<td></td>
</tr>
<tr>
<td>5. Export the selected product-specific artifacts to a second File System folder.</td>
<td></td>
</tr>
<tr>
<td>5. Complete any product-specific migration prerequisites.</td>
<td>See the “Migration Prerequisites” section for each product in the appendixes at the end of this guide.</td>
</tr>
<tr>
<td>7. In Shared Services Console or Lifecycle Management Utility, import the artifacts from the file system.</td>
<td>See “Importing from the File System” on page 47.</td>
</tr>
<tr>
<td><strong>For Classic Applications:</strong></td>
<td></td>
</tr>
<tr>
<td>Right click the exported File System folder, and then select Import.</td>
<td></td>
</tr>
<tr>
<td><strong>For EPMA Applications:</strong></td>
<td></td>
</tr>
<tr>
<td>1. Right-click the File System folder that contains the EPMA application artifacts, and the select Import.</td>
<td></td>
</tr>
<tr>
<td>2. Deploy the EPMA application manually from the EPMA Application library.</td>
<td></td>
</tr>
<tr>
<td>3. Right-click the File System folder that contains the product-specific artifacts, and then select Import.</td>
<td></td>
</tr>
<tr>
<td>8. View the Migration Status Report to ensure that everything migrated successfully.</td>
<td>“Migration Status Report” on page 62</td>
</tr>
</tbody>
</table>
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 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, Oracle Essbase Studio, Reporting and Analysis, Financial Management, Planning, and Oracle Hyperion 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*. 
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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
- Migrating with the LCM Designer Role

Native Directory (Security) Migrations and Bulk Security Updates

Lifecycle Management migrates Native Directory artifacts (assigned roles, delegated lists, groups, roles, and users) 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.

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
- Oracle Hyperion EPM 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 L, “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.

The following image illustrates where to find the provisioning artifacts in Shared Services Console.

![Figure 1: Provisioning Artifacts in Shared Services Console](image)
For procedural information, see “Migrating Native Directory (Security)” on page 56.

**Migrating with the LCM Designer Role**

Import operations in Lifecycle Management require an analysis of the target environment and are typically performed by administrators. The content to migrate, however, is typically defined by the business users of the application because they are aware of the changes in the system. The LCM Designer role allows a user to define a migration and perform an export operation, but restricts the user from performing an import operation.

For example, consider the following scenario:

A planning administrator who is responsible for managing the expense budgets modifies the data form pertaining to expense accounts in the test environment. Assigning the planning administrator the LCM Designer role allows the administrator to define the migration to move the data form into production. The administrator then notifies the IT Manager that the artifacts are exported. The IT Manager copies the exported folder to production and performs the import operation. (The exported folder contains the definition for performing an import in the Import.xml file.)

The LCM Designer role is assigned in Shared Services Console. (See “EPM System Roles” in the User Roles and Security Guide.)
When a user is assigned the LCM Designer role, Shared Services Console has the following changes:

- The ability to import a single artifact after editing is disabled.
- The Import option displayed when you right-click a File System folder is disabled.
- The Import button at the bottom of Shared Services Console is disabled.
Artifact Migration Use Cases

Subtopics

- Application Migrations with Cross-Product Artifact Dependencies
- Exporting and Importing Artifacts for Editing Purposes
- Editing a Single Artifact

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 following documents provide step-by-step instructions on how to perform first-time Lifecycle Management migrations:

- Oracle Enterprise Performance Management System Migrating Oracle Hyperion Planning Applications
- Oracle Enterprise Performance Management System Migrating Oracle Hyperion Performance Management Architect Applications

See the documentation library at http://docs.oracle.com/cd/E57185_01/index.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 “Exporting and Importing Individual Artifacts for Editing” on page 53.

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 requiring a migration definition file. For detailed instructions, see “Exporting and Importing Individual Artifacts for Editing” on page 53.
Note: Not all artifacts are editable on the file system. See “Editing Individual Artifacts” on page 53.

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 3  Version Management Using Lifecycle Management](image)

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 them 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 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 45.
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.
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 provide 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.

Launching Shared Services Console

You use a menu option in Oracle Hyperion Enterprise Performance Management Workspace to access Shared Services Console.
Note: 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 Shared Services roles assigned to the current EPM Workspace user determines the resources available to the user in Shared Services Console.

To launch Shared Services Console:

1. 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 Hyperion Foundation Services is running, and \(port_number\) indicates the Web server port; for example, \(https://myWebserver:19000/workspace\).

   Note: 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: \(https://myWebserver:19043/workspace\).

2. Click Launch Application.

   Note that pop-up blockers may prevent EPM Workspace from opening.

3. In the Log On window, enter your user name and password.

   Initially, the only user who can access Shared Services Console is the EPM System Administrator whose user name and password were specified during the deployment process.

4. Click Log On.

5. From EPM Workspace, select Navigate, then Administer, and then Shared Services Console.

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).
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.

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.
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 35.

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 35.

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.

To delete an application group:

1. Launch Shared Services Console.
   
   See “Launching Shared Services Console” on page 35.

2. In the View pane, right-click the application group, and then select **Delete**.

3. Click **Yes**.

**Note:** You cannot delete the Default Application Group or the Foundation Application Group.

You also cannot delete the File system node in Shared Services Console.

### Managing Applications

**Subtopics**

- Moving Applications
- Deleting Multiple Applications
- Deleting an Application

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

To move an application:

1. **Launch Shared Services Console.**
   - See “Launching Shared Services Console” on page 35.
2. Expand the node of the application group that contains the application 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 multiple applications:

1. **Launch Shared Services Console.**
   - See “Launching Shared Services Console” on page 35.
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 35.

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

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

4. Click OK.
Viewing Artifacts

The Lifecycle Management interface in Shared Services Console enables you to view, search, 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 35.

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 Calculation Manager, Deployment Metadata, Shared Services, and Performance Management Architect. The **File System** node reads the default Shared Services file system location (defined in Oracle Hyperion Enterprise Performance Management System Configurator).
Select 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 is displayed 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

## Searching Artifacts

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

1. **To search for artifacts in Shared Services Console:**
   1. **Launch Shared Services Console.**
      
      See “Launching Shared Services Console” on page 35.
   2. **View artifacts.** See “Viewing Artifacts” on page 43.
   3. **On the Artifact List tab, click Search Artifacts.**
   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**
- Exporting to the File System
- Re-exporting Artifacts to the File System
- Importing from the File System
- Setting Migration Options
- Exporting and Importing Individual Artifacts for Editing
- Downloading and Uploading Application Artifacts
- Migrating Native Directory (Security)

You can migrate artifacts to and from the file system in the following instances:
- When the source and destination are registered to the same Shared Services instance
- 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 file system folder is copied directly into the `import_export` folder in `MIDDLEWARE_HOME/user_projects/epmsystem1`.

### Exporting to the File System

The file system location is on the Shared Services Java web application server computer. The default destination on the Shared Services computer is `MIDDLEWARE_HOME/user_projects/epmsystem1/import_export`. 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.

1. **To export artifacts and applications to the file system using Shared Services Console:**
See “Launching Shared Services Console” on page 35.

2 Select Administration, and then Migration Options.

3 On the Migration Options tab, review the export options for the migration.

Only the options for the products that are installed are displayed. The options differ by product, and not all products have export options. You can accept the default options without making any changes if desired.

For a listing of options by product, see “Setting Migration Options” on page 48, or refer to the appendixes at the end of this guide.

4 If you made any changes to the migration options, click Save.

5 Expand the Application Groups node and select the applications to export.

When you select an application, an Artifact List tab displays the application and repository artifacts for that application.

6 On the Artifact List tab for each application, select the artifacts to export.

To select an individual artifact, click the checkbox next to the artifact. To select all the artifacts, click Select All.

7 Click the Export button at the bottom right of Shared Services Console.

8 In the Export dialog box, enter the File System Folder where the artifacts will be exported, and then click Export.

A default file system folder name is displayed in the format of username DD-MM-YY Hour_Min; for example, admin 03-01-12 09_32. You can either accept the default or enter a different file system folder name.

Note that Lifecycle Management does not allow characters in a folder name that are not supported by the native operating system. For example, Windows does not allow colons in a folder name, so neither does Lifecycle Management.

All the applications and artifacts selected are exported to the specified file system folder. (You do not need to specify different file system folders if you have more than one application.)

If you specify a file system folder name that already exists on the file system, you will be prompted to provide a new file system folder name.

9 View the migration status on the Migration Status Report tab.

See “Migration Status Report” on page 62.

After the artifacts are successfully migrated, a new file system folder is created under the File System node in Shared Services Console. When you expand the file system folder, the applications are displayed with the product name followed by the application name.
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.

Re-exporting Artifacts to the File System

You can re-export artifacts to the file system if desired. To re-export artifacts, right-click a folder under the File System node and select Reexport.

When you repeat an export, the artifacts get exported into a new file system folder. To re-import the artifacts, right-click the folder under the File System node and select Import. (You should check the migration options set for the product before importing.)

Importing from the File System

The file system location is on the Shared Services Java web application server computer. The default destination on the Shared Services computer is MIDDLEWARE_HOME/user_projects/epmsystem1/import_export. 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.

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

1 Back up the destination environment.
   See Oracle Enterprise Performance Management System Backup and Recovery Guide.

2 Launch Shared Services Console.
   See “Launching Shared Services Console” on page 35.

3 Select Administration, and then Migration Options.

4 On the Migration Options tab, define the import options for the migration.
   Only the options for the products that are installed are displayed. The options differ by product, and not all products have import options. You can accept the default options without making changes if desired.

   For a listing of options by product, see “Setting Migration Options” on page 48, or refer to the appendixes at the end of this guide.

5 Expand the File System node and select the applications to import.
   When you select an application, an Artifact List tab displays the application and repository artifacts for that application.

6 Import the artifacts in one of the following ways:
Right-click a File System folder, and then select **Import**.

This imports all the applications in that folder. If you select to import a File System folder, a dialog box is displayed asking you to confirm that you want to proceed with the import.

Right-click an individual application under a File System folder, and then select **Import**.

On the **Artifact List** tab for each application, select the artifacts to import, and then click the **Import** button at the bottom right of Shared Services Console.

The Import button is disabled for users assigned the Designer Role.

1. In the **Import** dialog box, select the application to import, and click **Import**.
   By default, the application name from the File System (migration definition file) is displayed. The application will be created if it does not already exist.

2. View the migration status on the **Migration Status Report** tab.
   See “Migration Status Report” on page 62.

### Setting Migration Options

Subtopics

- **Migration Import Options**
- **Migration Export Options**
- **Sample Migration Definition File With Migration Options**

You can set the import and export options for Lifecycle Management migrations. Only the options for the installed products are displayed. The options differ by product, and not all products have options. You can accept the default options without making any changes if desired.

Migration options are globally applicable for all Lifecycle Management migrations. They can be overridden by specifying the options explicitly in the migration definition file.

To set migration options:

1. **Launch Shared Services Console.**
   See “Launching Shared Services Console” on page 35.

2. **Select Administration, and then Migration Options.**

3. **On the Migration Options tab, enter the desired options for migration.**
## Migration Import Options

### Table 3 Import Options

<table>
<thead>
<tr>
<th>Import Option</th>
<th>Description</th>
</tr>
</thead>
</table>
| **Essbase Studio - Import Mode** | Select an import option:  
  - **Replace**—If the element already exists in the catalog database, it is overwritten with the new element from the catalog file.  
  - **Merge**—If the element already exists in the catalog database, it is retained and the duplicate element in the XML file is not used. A catalog database is created using the XML file. The import process is terminated if at least one of the imported object exists in the catalog.  
  - **Abort if element exists**—A catalog database is created using the XML file. The import process is terminated if at least one of the imported object exists in the catalog.  
  
  **Note:** To overwrite the value specified in the Migration Options dialog box, enter the following directly in the migration definition file:  
  `<Options option="OverwriteCatalogObjects" Value="value"/>`
  
  For example:  
  `<Options option="OverwriteCatalogObjects" Value="SKIP"/>`
  
  Valid values when entering directly in the migration definition file: Replace/Merge/Abort if element exists |
| **EPM Architect - Dimension Import Mode** | Select an import operation:  
  - **Replace**—Replaces the dimensions and properties in the destination with the extracted metadata from the source instance.  
  - **Merge**—Merges the dimension and properties in the destination with the extracted metadata from the source instance.  
  
  **Note:** To overwrite the value specified in the Migration Options dialog box, enter the following directly in the migration definition file:  
  `<Options option="replaceDimension" Value="value"/>`
  
  For example:  
  `<Options option="replaceDimension" Value="Merge"/>`
  
  Valid values when entering directly in the migration definition file: Replace/Merge |
| **Essbase Application - Overwrite Artifacts** | If Yes, Overwrites all artifacts in the destination location. The default value is No.  
  
  **Note:** To overwrite the value specified in the Migration Options dialog box, enter the following directly in the migration definition file:  
  `<Options option="overWriteArtifact" Value="value"/>`
  
  For example:  
  `<Options option="overWriteArtifact" Value="false"/>`
  
  Valid values when entering directly in the migration definition file: true/false |
<table>
<thead>
<tr>
<th>Import Option</th>
<th>Description</th>
</tr>
</thead>
</table>
| **Essbase Application - Restructure Cube** | Select an option:  
- **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  
**Note:** To overwrite the value specified in the Migration Options dialog box, enter the following directly in the migration definition file:  
```xml
<Options option="restructureCube" Value="value"/>
```
For example:  
```xml
<Options option="restructureCube" Value="Retain cube data"/>
```
Valid values when entering directly in the migration definition file: **Retain cube data/Discard cube data/Keep only input data/Keep only 0 level data.**

| **FDMEE - Skip Validation** | Skips the validation of target dimension members in the destination location during import.  
**Note:** To overwrite the value specified in the Migration Options dialog box, enter the following directly in the migration definition file:  
```xml
<Options option="skipValidation" Value="value"/>
```
For example:  
```xml
<Options option="skipValidation" Value="true"/>
```
Valid values when entering directly in the migration definition file: **true/false.**

| **Financial Close Management - Import Mode** | Select an option:  
- **Replace**—Overwrites a selected artifact with an imported artifact  
- **Replace All**—Overwrites all the existing artifacts with the imported artifacts  
**Note:** To overwrite the value specified in the Migration Options dialog box, enter the following directly in the migration definition file:  
```xml
<Options option="replaceOption" Value="value"/>
```
For example:  
```xml
<Options option="replaceOption" Value="Replace"/>
```
Valid values when entering directly in the migration definition file: **Replace/Replace All.**

| **Reporting and Analysis - Exclude Job Output On Import** | If Yes, all job outputs will be skipped on import, even if they match the import filter. The default value is No.  
**Note:** To overwrite the value specified in the Migration Options dialog box, enter the following directly in the migration definition file:  
```xml
<Options option="excludeJobOutputOnImport" Value="value"/>
```
For example:  
```xml
<Options option="excludeJobOutputOnImport" Value="false"/>
```
Valid values when entering directly in the migration definition file: **true/false.**
<table>
<thead>
<tr>
<th>Import Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reporting</strong> and Analysis - Replace Newer Artifacts Only**</td>
<td>If Yes, only the artifacts that have a newer last modified timestamp in the file system compared to the one in the repository will be imported and replaced. The default value is No, which replaces any existing artifacts in the destination environment regardless of the last modified timestamp.</td>
</tr>
<tr>
<td><strong>Note:</strong></td>
<td>To overwrite the value specified in the Migration Options dialog box, enter the following directly in the migration definition file:</td>
</tr>
<tr>
<td>&lt;Options option=&quot;replaceNewerArtifactsOnlyImport&quot; Value=&quot;value&quot;/&gt;</td>
<td></td>
</tr>
<tr>
<td>For example:</td>
<td>&lt;Options option=&quot;replaceNewerArtifactsOnlyImport&quot; Value=&quot;true&quot;/&gt;</td>
</tr>
<tr>
<td>Valid values when entering directly in the migration definition file:</td>
<td>true/false.</td>
</tr>
<tr>
<td><strong>HFM - Dimension Import Mode</strong></td>
<td>Select an import operation:</td>
</tr>
<tr>
<td>• <strong>Replace</strong>—Overwrites the artifacts with the imported artifacts</td>
<td></td>
</tr>
<tr>
<td>• <strong>Merge</strong>—Merges the artifacts with the imported artifacts</td>
<td></td>
</tr>
<tr>
<td><strong>Note:</strong></td>
<td>This option is applicable to all dimensions defined in a migration.</td>
</tr>
<tr>
<td><strong>Note:</strong></td>
<td>To overwrite the value specified in the Migration Options dialog box, enter the following directly in the migration definition file:</td>
</tr>
<tr>
<td>&lt;Options option=&quot;ImportDimensionMode&quot; Value=&quot;value&quot;/&gt;</td>
<td></td>
</tr>
<tr>
<td>For example:</td>
<td>&lt;Options option=&quot;ImportDimensionMode&quot; Value=&quot;Merge&quot;/&gt;</td>
</tr>
<tr>
<td>Valid values when entering directly in the migration definition file:</td>
<td>Replace/Merge.</td>
</tr>
<tr>
<td><strong>HFM - Phased Submission Assignment Import Mode</strong></td>
<td>Select an import operation:</td>
</tr>
<tr>
<td>• <strong>Replace</strong>—Overwrites the artifacts with the imported artifacts</td>
<td></td>
</tr>
<tr>
<td>• <strong>Merge</strong>—Merges the artifacts with the imported artifacts</td>
<td></td>
</tr>
<tr>
<td><strong>Note:</strong></td>
<td>To overwrite the value specified in the Migration Options dialog box, enter the following directly in the migration definition file:</td>
</tr>
<tr>
<td>&lt;Options option=&quot;ImportPhaseSubmissionAssignmentMode&quot; Value=&quot;value&quot;/&gt;</td>
<td></td>
</tr>
<tr>
<td>For example:</td>
<td>&lt;Options option=&quot;ImportPhaseSubmissionAssignmentMode&quot; Value=&quot;Replace&quot;/&gt;</td>
</tr>
<tr>
<td>Valid values when entering directly in the migration definition file:</td>
<td>Replace/Merge.</td>
</tr>
<tr>
<td><strong>Shared Services - Max Errors Threshold</strong></td>
<td>Number of errors allowed before the import process is stopped.</td>
</tr>
<tr>
<td><strong>Note:</strong></td>
<td>To overwrite the value specified in the Migration Options dialog box, enter the following directly in the migration definition file:</td>
</tr>
<tr>
<td>&lt;Options option=&quot;maxerrors&quot; Value=&quot;value&quot;/&gt;</td>
<td></td>
</tr>
<tr>
<td>For example:</td>
<td>&lt;Options option=&quot;maxerrors&quot; Value=&quot;100&quot;/&gt;</td>
</tr>
<tr>
<td>Valid values when entering directly in the migration definition file:</td>
<td>10/50/100/500/1000/5000/5000.</td>
</tr>
</tbody>
</table>
Import Option | Description
---|---
Shared Services - Import Mode | Select an import operation:
| • Create or Update
| • Create
| • Update
| • Delete

**Note:** To delete a deactivated Native Directory user, the user must be activated first before it can be deleted.

**Note:** To overwrite the value specified in the Migration Options dialog box, enter the following directly in the migration definition file:

```xml
<Options option="operation" Value="value"/>
```

For example:

```xml
<Options option="operation" Value="Delete"/>
```

Valid values when entering directly in the migration definition file: Create or Update/Create/Update/Delete.

### Migration Export Options

#### Table 4 Export Options

<table>
<thead>
<tr>
<th>Export Options</th>
<th>Description</th>
</tr>
</thead>
</table>
| Reporting and Analysis - Export With Job Output | If Yes, then jobs will be exported along with their outputs even in cases where the outputs do not match export filters. The default value is Yes.

**Note:** To overwrite the value specified in the Migration Options dialog box, enter the following directly in the migration definition file:

```xml
<Options option="exportJobOutput" Value="value"/>
```

For example:

```xml
<Options option="exportJobOutput" Value="true"/>
```

Valid values when entering directly in the migration definition file: true/false.

### Sample Migration Definition File With Migration Options

Following is a sample migration definition file with the migration Options row shown in bold.

```xml
<Package>
  <LOCALE>en_US</LOCALE>
  <User name="admin" password="" />
  <Task>
    <Source type="Application" product="HUB" project="Foundation" application="Shared Services" />
    <Target type="FileSystem" filePath="/exp1/HUB.Shared Services" />
    <Options option="operation" Value="delete" />
    <Artifact recursive="true" parentPath="/Native Directory" pattern="*" />
    <Artifact recursive="true" parentPath="/Taskflows" pattern="*" />
  </Task>
</Package>
```
Exporting and Importing Individual Artifacts for Editing

Subtopics

- Exporting Individual Artifacts for Editing
- Editing Individual Artifacts
- Importing Individual Artifacts After Editing

Shared Services Console enables you to export individual artifacts to the file system, edit them, and import them back again after editing. Artifacts must be imported back into the same application from which they were exported.

**Note:** Not all artifacts are editable on the file system. See “Editing Individual Artifacts” on page 53.

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 35.
2. **Expand the Application Groups node in the View pane 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 then 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 whether 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 35.
2. Expand the Application Groups node in the View pane 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 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 then click Finish.

Downloading and Uploading Application Artifacts

Subtopics

- Steps to Download and Upload Application Artifacts
- Important Points About ZIP Files and Archiving

You can move application artifacts from one environment to another by downloading the artifacts from the File System node in Shared Services Console. When you download Lifecycle Management artifacts, they are saved in a ZIP file. You can then upload the ZIP file containing the artifacts to another environment.

Steps to Download and Upload Application Artifacts

To download and upload application artifacts:

1. In your existing environment, launch Shared Services Console.
   See “Launching Shared Services Console” on page 35.
2. Expand the File System node in the View pane.
3 Right-click a File System folder and select Download.

The Download option is available only if the file system folder is a ZIP file on the server. The file system folder is zipped by Lifecycle Management during the export operation only if the folder size is less than or equal to 2 GB. For content greater than 2 GB, you must use a mechanism such as FTP to move the content from one environment to another.

4 In the File Download dialog box, click Save to save the application artifacts as a ZIP file.

The entire contents of the ZIP file is downloaded as one file.

5 In your new environment, launch Shared Services Console, and then expand the File System node.

6 Right-click the File System node, select Upload, and select the ZIP file to upload.

If the ZIP file already exists, the upload is aborted. You can rename the ZIP file before uploading if desired.
Important Points About ZIP Files and Archiving

- You must use a zipping software such as 7-Zip to unzip downloaded content or to upload a zipped LCM folder to the server.
- Uploading a ZIP file greater than 2 GB is not supported.
- When you archive a dataset, you must preserve the Unicode paths and file names.

To do this using 7-Zip:

1. Right click the File System folder and select 7-zip, and then Add to Archive.
2. In the Add to Archive dialog box, set the following information:
   - In the Archive Format field, select Zip.
   - In the Parameters field, enter cu=on.
3. Click OK.

Note: If the UTF encoding is not preserved, and if the data set contains characters that need these encodings, the migration results in errors.

Migrating Native Directory (Security)

You can migrate Native Directory artifacts (assigned roles, groups, roles, and users) in the same way that you migrate application artifacts.

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 Enterprise Performance Management System Backup and Recovery Guide.
2. Launch Shared Services Console. See “Launching Shared Services Console” on page 35.
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).
5. Expand Native Directory and select the following Native Directory artifacts:
   - Assigned Roles
     Expand Assigned Roles and select the artifacts to migrate. The artifacts are typically named after the application name.
   - Delegated Lists
   - Groups
   - Roles
   - Users
6. Expand Assigned Roles and select the assigned roles for the application that you are migrating.
7. Select Export.
8. In the Export dialog box, enter the File System Folder where the artifacts will be exported, and then click Export.
9. View the migration status on the Migration Status Report tab.

Editing Shared Services Registry Data

Subtopics

- Viewing Shared Services Registry Data
- Exporting Shared Services Registry Data
- Editing Shared Services Registry Data
- Importing 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.

Lifecycle Management 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 back in after editing.

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.”
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 35.
2. From the Application Groups node in the View pane, expand the Foundation application group.
3. Select 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 35.
2. From the Application Groups node in the View pane, expand the Foundation application group.
3. Select Deployment Metadata (or right-click Deployment Metadata and select Explore).
4. Expand Shared Services Registry.
5. Select the Shared Services Registry artifacts to export.
   To select an individual artifact, click the checkbox next to the artifact. To select all the artifacts, click Select All.
7. In the Export dialog box, enter the File System Folder where the artifacts will be exported and click Export.
8. View the migration status on the Migration Status Report tab.

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 35.

2. From the File System node in the View pane, right-click the File System folder specified during export, and then select Import.

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 35.

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.


Table 5  Migration Properties and Their Descriptions

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>double-encoding</td>
<td>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.</td>
</tr>
<tr>
<td></td>
<td><strong>Default value:</strong> true</td>
</tr>
<tr>
<td>Property</td>
<td>Description</td>
</tr>
<tr>
<td>----------</td>
<td>-------------</td>
</tr>
</tbody>
</table>
| filesystem.artifact.path | Location of the directory where the exported applications are to be stored. This is the shared disk location if Shared Services is configured for high availability. 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.  
**Note:** To enable data migration across distributed environments, filesystem.artifact.path must be a shared path; for example, //servername/shared. |
| fileSystem.friendlyNames | Whether to store the files for an artifact with extended names (a combination of artifact ID and name). **Default value:** true  
**Note:** fileSystem.friendlyNames is applicable only for Reporting and Analysis and deployment metadata. Artifacts of other products are always stored with artifact names. |
| groupcount | Number of artifacts that are migrated in a group.  
This option is available for products that support migration in groups (Planning, Financial Management, Oracle Hyperion Financial Close Management, Performance Management Architect, Reporting and Analysis, and FDMEE). Performance Management Architect and Financial Close Management artifacts are always migrated in one group irrespective of the size and count of the artifacts.  
The default group count is 30. This means that artifacts are migrated in groups of 30. Based on data regarding types of artifacts, size of artifacts, and number of artifacts, this value can be changed to improve migration performance.  
**Default value:** -1 |
| MSR.PURGE.EARLIERTO.DAYS | Administrative setting relating to Lifecycle Management migrations.  
Any migrations older than this value are periodically purged when the Foundation Services system is started, with the check running every 24 hours.  
**Default value:** 30 days |
| 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) |
| zip.threshold | Maximum ZIP file threshold size.  
If the size of export content exceeds this threshold, then the exported content is stored as a folder. This size should not exceed 1.8 GB. Any size bigger than this has browser and JDK limitations for ZIP and download.  
**Default value:** 1.8 GB |

**Purging Migration Data**

Purge activity is a background process that starts when the Shared Services web application starts. The purge happens at the time period specified in the migration property MSR.PURGE.EARLIERTO.DAYS. The default value is 30 days. See “Editing Migration Properties” on page 60.
Lifecycle Management Reports

Subtopics

- Migration Status Report
- Application Audit Report
- Artifact Change Report

Note: In addition to the reports discussed in this section, Shared Services also generates provisioning reports, security reports, and configuration reports. These reports are described in the Oracle Hyperion Enterprise Performance Management System User and Role Security Guide.

Migration Status Report

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 want 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:

1. Launch Shared Services Console.
   See “Launching Shared Services Console” on page 35.
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.

Application Audit Report

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

Auditing must be enabled before you can generate audit reports. To enable auditing, launch Shared Services Console and select Administration, then Configure Auditing, and then select the Enable Auditing check box. 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 Application Audit report, which tracks what artifacts were migrated, when they were migrated, and by whom. This report is exportable to an external file.

To generate the Application Audit report:

1 Launch Shared Services Console.
   See “Launching Shared Services Console” on page 35.

2 From Administration, select Audit Reports, and then select Application Audit 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.

Artifact Change Report
The Artifact Change report identifies changes made to artifacts in EPM System. The report shows the application group, application, artifact name, artifact type, modified user, modified date, and artifact path. When creating the Artifact Change report, you can filter the results based on artifact name, artifact type, modified user, or start and end date attributes.

To generate the Artifact Change report:
1 Launch Shared Services Console.
   See “Launching Shared Services Console” on page 35.
2 From Administration, select Artifact Change Report.
3 Enter report parameters:
   - Artifact Name—Name of the artifact. You can enter a specific artifact name, or you can enter part of the name. For example, you could enter Cost* to search for all data forms starting with Cost. This is an optional parameter. If you do not enter an artifact name, all artifacts will be included.
   - Artifact Type—Type of artifact. This is an optional parameter. If you do not enter an artifact type, all artifact types will be included.
   - Modified By—The user ID of the person who modified the artifact. This is an optional parameter. If you do not enter a user ID, all users who modified artifact will be included.
   - Start Date—Start date for the report. The default date is yesterday's date.
   - End Date—End date for the report. The default date is today's date.

   Tip: You can specify different date ranges by modifying the start date and the end date. For example, you could search for artifacts that were changed in the previous two years, by setting the start date two years earlier.

4 Select the application or applications to include in the report.
   To select all the applications, select the check box next to All.
To search for a specific application, enter the name of the application in the Search Application text box. For example, if you have several applications and only want to see the Essbase applications, you could enter Essbase to narrow the applications that are displayed to Essbase applications only.

5 Click Create Report.

6 After the report is generated, select one of the following options:
   - **Back**—Return to the Artifact Change Report input screen and enter different report parameters.
   - **Print Preview**—Preview the report before you print it. After you have previewed the report, you can click Print to print the report.
   - **Export to CSV**—Export the report to a comma-separated value file.
   - **Close**—Exit from the Artifact Change Report.

Note: For information on using Lifecycle Management Utility to track artifact changes, see “Activity Change Report” on page 78.
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 alternative way to migrate entire applications, or individual artifacts, from source to destination.

Figure 4 depicts the communication flow between services and Lifecycle Management Utility:
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 Java web application over HTTP.

7. **Publish status report**: Lifecycle Management Utility contacts the Shared Services Java web application over HTTP to publish the migration status report.

**Lifecycle Management Utility 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

Note: For Lifecycle Management Utility requirements, see “Lifecycle Management Requirements” on page 21.

Installing Lifecycle Management Utility

Lifecycle Management Utility is installed with Shared Services. See the Oracle 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/11.1.2.0. Note that although the components are installed here, you must run the utility from MIDDLEWARE_HOME/user_projects/epmsystem1/bin.

Working with Migration Definitions

Subtopics
- Creating Migration Definitions
- Migration Definition File XML Schema
- Migration Definition File Elements
- Sample Migration Definition File

Creating Migration Definitions

Artifacts to migrate must be defined in a migration definition. Note the following about migration definitions:
- A migration definition is created in Shared Services Console when you perform an export or import operation.
- When you export artifacts, Lifecycle Management creates two XML files, one for export and one for import. These XML files can be used for the migration definition file in Lifecycle Management Utility.
- When you perform an export operation, the MDF file for that export and for the corresponding import is automatically created in the File System folder under the root folder.
Migration Definition File XML Schema

Figure 5 depicts an XML schema outline of the migration definition.

Figure 5  XML Schema Outline of the Migration Definition File

Migration Definition File Elements

Subtopics

- Locale
- User and Password
- Task

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

Locale

Defines the server locale at the time the migration definition file is created. All error messages and console messages are included in this locale.

User and Password

Defines the user name and encrypted password of the user who will be executing the migration definition file.

Task

Defines the tasks to complete during the migration. A task that is defined in the migration definition file depends on the source, the destination, and the artifacts to migrate. At a minimum, each task contains source, destination, and artifact tags.

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.

Note: By default, after a failed task, Lifecycle Management Utility continues with the next task. Validation of a task’s source and target connections are performed only when the task is executed and not before starting the task execution.
Task contains these elements:

- **Source**
- **Target**
- **Artifact**
- **Options**

### Source

Defines the source for the migration. You must define one source and one destination per task.

**Table 6  Source Attributes**

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description</th>
</tr>
</thead>
</table>
| application | Name with which the application is registered. The application name is visible in Shared Services Console.  
**Example:** HAVAAPP1 |
| filePath | 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, use the -b command-line argument to use the base path relative to where the file system path is set. |
| product | Product code for the application that is registered with Shared Services.  
**Examples:**  
- HUB (Shared Services)  
- CALC (Calculation Manager)  
- ESBAPP (Essbase)  
- BPM (Essbase Studio)  
- AIF (FDMEE)  
- HFM (Financial Management)  
- FCC (Financial Close Management)  
- BPMA (Performance Management Architect)  
- HP (Planning)  
- HPM (Profitability and Cost Management)  
- HAVA (Reporting and Analysis) |
| project | Name of the Shared Services Application Group to which the application belongs. The project name is visible in Shared Services Console.  
**Example:** DevBIPlus_Proj |
| type | Connection types:  
- FileSystem for the file system connection  
- Application for the application connection registered with Shared Services |
**Target**
Defines the destination for the migration. You must define one destination per task.

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description</th>
</tr>
</thead>
</table>
| application | Name with which the application is registered. The application name is visible in Shared Services Console.  
*Example:* HAVAAPP1 |
| filePath | 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, use the `-b` command-line argument to use the base path relative to where the file system path is set. |
| product | Product code for the application that is registered with Shared Services.  
*Examples:*  
- HUB (Shared Services)  
- HAVA (Reporting and Analysis)  
- ESBAPP (Essbase)  
- HPM (Financial Management)  
- HP (Planning)  
- BPMA (Performance Management Architect)  
- CALC (Calculation Manager)  
- HPM (Profitability and Cost Management) |
| project | Name of the Shared Services Application Group to which the application belongs. The project name is visible in Shared Services Console.  
*Example:* DevBIPlus_Proj |

**Artifact**
Filter used for the current migration.

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description</th>
</tr>
</thead>
</table>
| parentPath | Top-level directory where artifact or data for the migration is stored. See the appendixes at the end of this guide for information on product directory structures.  
*Example:* `/Data Analysis & Report Creation`  
*Caution!* If the parent path directory contains an ampersand (&) character, replace it with "&amp;" in the migration definition file (see example below).  
*Note:* If `recursive="true"`, all artifacts contained in the subdirectories within this directory are imported.  
*Note:* The `pattern` attribute is required for all products. |
<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description</th>
</tr>
</thead>
</table>
| pattern   | Artifact-selection criteria. Specify the name of an artifact to import or use an * (asterisk) to import all artifacts that match filter conditions. **Example:** *  
  **Note:** The pattern attribute is required for all products. |
| recursive | Whether the migration should be performed on artifacts stored in subdirectories. **Example:** true  
  **Note:** The recursive attribute is optional. |

**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 options set in Shared Services Registry are used.

**Table 9** Options Attributes

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>option</td>
<td>Name used to override the option name defined in Shared Services Registry. <strong>Example:</strong> ExportJobOutput</td>
</tr>
<tr>
<td>value</td>
<td>Value used to override the option value defined in Shared Services Registry. <strong>Example:</strong> true</td>
</tr>
</tbody>
</table>

**Sample Migration Definition File**

Following is a sample migration definition file. Any change in the structure or syntax result in errors during migration.

```xml
<?xml version="1.0" encoding="UTF-8"?>
<Package>
  <LOCALE>en_US</LOCALE>
  <User name="admin" password=""/>
  <Task>
    <Source type="Application" product="HUB" project="Foundation" application="Shared Services"/>
    <Target type="FileSystem" filePath="/folder/Shared Services"/>
    <Options option="GroupFilter" Value="*"/>
    <Artifact recursive="true" parentPath="/Native Directory" pattern="*"/>
    <Artifact recursive="true" parentPath="/Taskflows" pattern="*"/>
  </Task>
  <Task>
    <Source type="FileSystem" filePath="/folder/Shared Services"/>
    <Target type="Application" product="HUB" project="Foundation" application="Shared Services"/>
  </Task>
</Package>
```

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Using Lifecycle Management Utility

Subtopics

- Overview
- Before Starting Migrations
- Running Lifecycle Management Utility
- Running Lifecycle Management Utility from a Non-Foundation Services Machine
- Command-line Arguments

Overview

Lifecycle Management Utility offers the following options:

- Migrates artifacts to or from a file system
- Lists the artifacts modified since the last exported time
- Lists the artifacts modified in the exported content
- Lists what has changed in an EPM System environment

Note: 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.

Before Starting Migrations

Before starting migration using Lifecycle Management Utility, do the following:

- Verify that Shared Services is running.
- Back up the destination environment.
- Create the migration definition.
- Optional: Modify the property file to use for the migration.

Running Lifecycle Management Utility

To run Lifecycle Management Utility:

1. If migrating, back up the destination environment.
See Oracle 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

Running Lifecycle Management Utility from a Non-Foundation Services Machine

In EPM System, apart from the machine where Oracle Hyperion Foundation Services is configured, Lifecycle Management Utility migrations can only be run from a machine where EPM System products are configured as part of a distributed EPM System configuration. Migrations using Lifecycle Management Utility cannot be run from standalone client machines that do not have any EPM System products installed.

To run Lifecycle Management Utility from a non-Foundation Services machine:

1 Copy Utility.bat (Windows) or Utility.sh (UNIX) from EPM_ORACLE_HOME/common/utilities/LCM/11.1.2.0/bin to MIDDLEWARE_HOME/user_projects/epmsystem1/bin.

2 Navigate to MIDDLEWARE_HOME/user_projects/epmsystem1/bin and execute Utility.bat or Utility.sh.

Command-line Arguments

Subtopics

- [-b]: Specifies the Base Path
- [-ls]: Lists EPM System Contents
- [-ls -ms]: Lists Artifacts Modified Since the Last Exported Time
- [-ls -imu username]: Lists Artifacts Modified by a User in the Exported Content

[-b]: Specifies the Base Path

The [-b] 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
location of the MDF file (which is not necessarily the directory where Lifecycle Management Utility exists).

The following are some examples:

utility.bat c:\import_export\HPFullApplicationSuite\Import.xml
utility.bat c:\import.xml -b c:\Oracle\Middleware\user_projects\epmsystem1\import_export\HPFullApplicationSuite

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

Following are some examples that specify an MDF file residing inside exported zip content:

utility.bat c:\Oracle\Middleware\user_projects\epmsystem1\import_export\SS1.zip\Export.xml
utility.bat c:\Oracle\Middleware\user_projects\epmsystem1\import_export\SS1.zip\HSS-Shared Services\Import.xml

**[-ls]: Lists EPM System Contents**

The [-ls] argument lists the artifacts in a migration defined by a migration definition file. It lists the artifacts of both the source and the target system. In an export MDF, for example, the source is the EPM System application and the target is the file system.

Windows:

utility.bat importMDF.xml -ls
utility.bat exportMDF.xml -ls

UNIX:

utility.sh importMDF.xml -ls
utility.sh exportMDF.xml -ls

The resulting output is two files; one for the source and one for the destination:

- `<mdf name>_application name.txt`
- `<mdf name>_file system folder name.txt`

You can compare the output using a third-party, file-compare utility. This helps to determine the success of the migration.

Output file details:

- Artifact names
- Artifact types
- Path
- Summary of the content summary
  
  Sample content summary:
The output files are created in the same path as the MDF file and replace any existing files with the same names. You can specify a path for the output files as follows:

```shell
utility.sh c:\importMDF.xml -ls -p c:\compare\n```

For MDFs with multiple tasks, different sets of list structures are created for each task, and the files are prefixed with the task number:

- `<mdf name>_application name_<tasknumber>.txt`
- `<mdf name>_file system folder name_<tasknumber>.txt`

1. `-ls -ms`: To list the artifacts which are modified since the last exported time
2. `-ls -mu "username"`: To list all the artifacts modified by the user in the exported content.

**[-ls -ms]: Lists Artifacts Modified Since the Last Exported Time**

The `-ls -ms` argument lists artifacts that have been modified in the system since the last migration defined by a migration definition file. These artifacts are listed in Shared Services Console.

For an export MDF file (source = application, target = file system content), `-ls -ms` lists the artifacts whose last modified dates are different in the application from the dates of the artifacts in the file system content.

For an import MDF (source = file system content, target = application), `-ls -ms` lists the artifacts whose last modified dates are different in the file system from the dates of the artifacts in the application.

**Note:** If the modified date for an artifact is not available, the artifact is listed.

Windows:

```bat
utility.bat c:\exportMDF.xml -ls -ms
```
UNIX:
utility.sh /importMDF.xml -ls -ms

Output Format in Console:
Artifact Type Artifact Last Modified Date

[-ls -lmu username]: Lists Artifacts Modified by a User in the Exported Content

The [-ls -lmu] argument lists the artifacts modified by a specific user.

For an export MDF file (source = application , target = file system content), Lifecycle Management Utility matches the modified by name with the artifacts in the file system listing.

For an import MDF (source = file system content, target = application), Lifecycle Management Utility matches the modified by name with the artifacts in the product listing.

Windows:
utility.bat c:\exportMDF.xml -ls -lmu "user"

UNIX:
utility.sh /importMDF.xml -ls -lmu "user"

Output Format in Console:
Artifact Type Artifact Modified By

Note: If you do not specify a user name, an error is displayed. The user name must be enclosed in quotation marks.

Additional Command-Line Utilities

Subtopics

- Activity Change Report
- EPMExportAll
- EPMImportAll

Activity Change Report

The Activity Change Report Utility generates a report that tracks what artifacts have changed functionally in a EPM System environment for a specific time period or a specific application.

Windows:
acr.bat input.properties -<number of days> -app<application name>

UNIX:
acr.sh input.properties file -d<number of days> -app<application name>

Parameters:

- input.properties: A properties file with the user name and password. The content of input.properties is:
  
  User=admin
  Password=password

- -d: Number of days. Values are:
  - -X = Fewer than x number of days
    For example, -1 generates the report for artifacts changed in the last day.
  - +X = More than x number of days
    For example, +3 generates the report for artifacts changed more than 3 days ago.

- -app: Application name
  - Application Display Name = Only this application
  - * or ALL = All applications.

The output from the [-acr] command is generated in the Lifecycle Management default file system location in a folder named Reports. The name of the report is in the format of acr_mm_dd_yyyy_hh_mm_ss.html.

Note: For information on using Shared Services Console to track changes to artifacts in an EPM System environment, see “Artifact Change Report” on page 64.

**EPMExportAll**

The EPMExportAll Utility clones all the applications in an environment.

When using EPMExportAll, keep in mind the following:

- All applications are exported under a single folder.
- Only applications that are LCM-enabled are exported.
- You can automate this task to be used as a backup or a snapshot of the environment.

EPMExportAll takes a properties file (input.properties) as input. The input.properties file contains the user name and password.

For example:

user=admin
password=password

Windows:

epm_cloneexport.bat input.properties

UNIX:
epm_cloneexport.sh input.properties

The output from the epm_cloneexport.bat/sh command is generated in the Lifecycle Management default File System location. An EPM_CloneExport folder is created along with the export MDF files.

**EPMImportAll**

The EPMImportAll Utility imports all the applications cloned in EPMExportAll into another environment.

When using EPMImportAll, consider the following:

- You can only execute EPMImportAll in an environment where there are no applications for Planning, Financial Management, and Profitability and Cost Management.
- You must copy the cloned export content in the EPMExportAll folder from the source environment to the target environment in the same File System folder location.
- By default EPMImportAll uses the import.xml from the EPMExportAll folder to execute the import.

EPMImportAll takes a properties file (input.properties) as input. The input.properties file contains the user name and password.

For example:

```
user=admin
password=password
```

Windows:

epm_cloneimport.bat input.properties

UNIX:

epm_cloneimport.sh input.properties

The output from the epm_cloneimport.bat/sh command is generated in the Lifecycle Management default File System location. An EPM_CloneExport folder is created along with the import MDF files.
Deployment Metadata and Lifecycle Management

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—Oracle Hyperion 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 82.
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

- Install and configure Shared Services and EPM System products and verify that they are running. See the Oracle 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.

Deployment Metadata Artifact Listing

Subtopics

- About the Registration Artifacts Artifact Listing
- Registration Artifacts
- Shared Services Registry Artifacts

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 10 Registration Artifacts

<table>
<thead>
<tr>
<th>Artifact</th>
<th>Description</th>
<th>Last Modified Time</th>
<th>Last Modified User</th>
<th>Editable on the File System?</th>
<th>Dependencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Products</td>
<td>In EPM System, an application type, such as Planning or Essbase</td>
<td>Yes</td>
<td>No</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
<tr>
<td>Applications</td>
<td>Instances of EPM System products that are registered with Shared Services</td>
<td>Yes</td>
<td>No</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
</tbody>
</table>

### 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
  ```

- LCM Administrators and LCM Designers cannot export or import deployment metadata information.

### Deployment Metadata Export and Import Options

There are no export or import options for Shared Services Registry artifacts. All deployment metadata artifacts must be exported to and imported from the file system. By default, deployment metadata artifacts are updated or merged.
Lifecycle Management Log Files

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

- About Calculation Manager Artifacts ................................................................. 85
- Calculation Manager Roles Requirement .............................................................. 85
- Calculation Manager Migration Prerequisites ...................................................... 86
- Calculation Manager Artifact Listing ................................................................. 86
- Calculation Manager Application Migrations and Cross-Product Artifact Dependencies ............. 88
- Migration Export and Import Options ................................................................... 88
- Sample Migration Definition Files ....................................................................... 89
- Lifecycle Management Log Files .......................................................................... 89

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 86.

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
Calculation Manager Migration Prerequisites

- Install and configure Shared Services and Calculation Manager and verify that they are running. See the Oracle 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.

- 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 L, “Shared Services and Lifecycle Management.”

- Migrate the Financial Management Performance Management Architect or Planning Performance Management Architect application views (and plan types) and ensure that they have the same application name as the application name in the source. For more information about Performance Management Architect artifacts, see Appendix H, “Performance Management Architect and Lifecycle Management.”

- Planning, Financial Management, and Essbase applications must be created with the same name as the name in the source before importing their artifacts into Calculation Manager.

Calculation Manager Artifact Listing

Subtopics

- About the Artifact Listing
- Rules Artifacts
- Rule Sets Artifacts
- Formulas Artifacts
- Scripts Artifacts
- Templates Artifacts

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

Table 11  
**Rules Artifacts**

<table>
<thead>
<tr>
<th>Artifact</th>
<th>Description</th>
<th>Last Modified Time</th>
<th>Last Modified User</th>
<th>Editable on the File System?</th>
<th>Dependencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rules</td>
<td>Objects that can contain templates and calculations that are grouped in components</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
</tbody>
</table>

### Rule Sets Artifacts

Table 12  
**Rule Sets Artifacts**

<table>
<thead>
<tr>
<th>Artifact</th>
<th>Description</th>
<th>Last Modified Time</th>
<th>Last Modified User</th>
<th>Editable on the File System?</th>
<th>Dependencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rule Sets</td>
<td>Objects that contain rules and other rulesets that can be calculated simultaneously or sequentially</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
</tbody>
</table>

### Formulas Artifacts

Table 13  
**Formulas Artifacts**

<table>
<thead>
<tr>
<th>Artifact</th>
<th>Description</th>
<th>Last Modified Time</th>
<th>Last Modified User</th>
<th>Editable on the File System?</th>
<th>Dependencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formulas</td>
<td>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</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
</tbody>
</table>
Scripts Artifacts

Table 14  Scripts Artifacts

<table>
<thead>
<tr>
<th>Artifact</th>
<th>Description</th>
<th>Last Modified Time</th>
<th>Last Modified User</th>
<th>Editable on the File System?</th>
<th>Dependencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scripts</td>
<td>Component that can be used in business rules and templates and contains only Visual Basic (for Financial Management) or Essbase (for Planning and Essbase) calc script statements</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
</tbody>
</table>

Templates Artifacts

Table 15  Templates Artifacts

<table>
<thead>
<tr>
<th>Artifact</th>
<th>Description</th>
<th>Last Modified Time</th>
<th>Last Modified User</th>
<th>Editable on the File System?</th>
<th>Dependencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Templates</td>
<td>User created components that perform a calculation or calculations</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
</tbody>
</table>

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 the following 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)
- Essbase
- Classic Planning
- Classic Financial Management

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.

**Note:** If the correct syntax is not used in the migration definition file, an ‘Incorrect format of MDF file’ error is displayed.

**Exporting to the File System**

```xml
<?xml version="1.0" encoding="UTF-8" ?>
<Package>
  <LOCALE>en_US</LOCALE>
  <User name="" password="" /> 
  <Task>
    <Source type="Application" product="CALC" project="Foundation" application="Calculation Manager" />
    <Target type="FileSystem" filePath="/CALC-Calculation Manager" />
    <Artifact recursive="true" parentPath="/Consolidation" pattern="*" />
    <Artifact recursive="true" parentPath="/Essbase" pattern="*" />
    <Artifact recursive="true" parentPath="/Planning" pattern="*" />
  </Task>
</Package>
```

**Importing From the File System**

```xml
<?xml version="1.0" encoding="UTF-8" ?>
<Package>
  <LOCALE>en_US</LOCALE>
  <User name="" password="" /> 
  <Task>
    <Source type="FileSystem" filePath="/CALC-Calculation Manager" />
    <Target type="Application" product="CALC" project="Foundation" application="Calculation Manager" />
    <Artifact recursive="true" parentPath="/Consolidation" pattern="*" />
    <Artifact recursive="true" parentPath="/Essbase" pattern="*" />
    <Artifact recursive="true" parentPath="/Planning" pattern="*" />
  </Task>
</Package>
```

**Lifecycle Management Log Files**

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

Use Lifecycle Management to migrate these types of Essbase artifacts:

- Calculation Scripts
- Custom-Defined Macros and Functions
- Data
- Database Properties
- Database Outlines
- Disk Volumes
- Drill-Through Definitions
- Excel Files
- Location Aliases
- Report Scripts
- Rule Files
- Security Filters
- Substitution Variables
- Tablespaces
- Text Files
For a listing and description of Essbase artifacts, see “Essbase Artifact Listing” on page 93.

**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 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*.
- 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 L, “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.

- 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, ensure that you load data into the database; otherwise, the data migration will fail, because the artifacts will not have any value.
Essbase Artifact Listing

Subtopics

- About the Artifact Listing
- Essbase Server Artifacts
- Essbase Application Artifacts
- Essbase Database Artifacts

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>
<thead>
<tr>
<th>Artifact</th>
<th>Description</th>
<th>Last Modified Time</th>
<th>Last Modified User</th>
<th>Editable on the File System?</th>
<th>Dependencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Custom-Defined Macros and Functions</td>
<td>Calculation functions</td>
<td>No</td>
<td>No</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
<tr>
<td>Substitution Variables</td>
<td>Global placeholders for regularly changing information</td>
<td>No</td>
<td>No</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
</tbody>
</table>
**Essbase Application Artifacts**

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

<table>
<thead>
<tr>
<th>Artifact</th>
<th>Description</th>
<th>Last Modified Time</th>
<th>Last Modified User</th>
<th>Editable on the File System?</th>
<th>Dependencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Custom-Defined Macros and Functions</td>
<td>Calculation functions</td>
<td>No</td>
<td>No</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
<tr>
<td>Substitution Variables</td>
<td>Global placeholders for regularly changing information</td>
<td>No</td>
<td>No</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
<tr>
<td>Tablespace</td>
<td>Data storage optimizations</td>
<td>No</td>
<td>No</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
</tbody>
</table>

**Tablespace Notes**

*Applicable only to ASO applications

**Export and import is supported only within the same operating environment. For example, if you export from a Windows environment, you must also import into a Windows environment. If you export from a UNIX environment, you must also import into a UNIX environment.

**Essbase Database Artifacts**

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

<table>
<thead>
<tr>
<th>Artifact</th>
<th>Description</th>
<th>Last Modified Time</th>
<th>Last Modified User</th>
<th>Editable on the File System?</th>
<th>Dependencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calculation Scripts (or Calc Scripts)</td>
<td>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.</td>
<td>Yes</td>
<td>No</td>
<td>Yes—TXT</td>
<td>None</td>
</tr>
<tr>
<td>Data</td>
<td>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.</td>
<td>No</td>
<td>No</td>
<td>Yes—TXT</td>
<td>Database Outline</td>
</tr>
<tr>
<td>Artifact</td>
<td>Description</td>
<td>Last Modified Time</td>
<td>Last Modified User</td>
<td>Editable on the File System?</td>
<td>Dependencies</td>
</tr>
<tr>
<td>------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>--------------------</td>
<td>--------------------</td>
<td>-----------------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>Database Properties</td>
<td>Properties such as bufferSize, dataCacheSetting, dataFileCacheSetting, indexCacheSetting, sortBufferSize, and so on.</td>
<td>No</td>
<td>No</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
<tr>
<td>Database Outline</td>
<td>Cube Outline file</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>None</td>
</tr>
<tr>
<td>Disk Volumes</td>
<td>Data storage allocation</td>
<td>No</td>
<td>No</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>*Applicable only to BSO applications</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>** Export and import is supported only within the same operating environment. For example, if you export from a Windows environment, you must also import into a Windows environment. If you export from a UNIX environment, you must also import into a UNIX environment.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drill-Through Definitions</td>
<td>Oracle Hyperion Financial Data Quality Management and FDMEE information</td>
<td>No</td>
<td>No</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
<tr>
<td>Excel Files</td>
<td>External spreadsheet files that you can associate with data cells in Essbase</td>
<td>Yes</td>
<td>No</td>
<td>Yes—TXT, XML</td>
<td>None</td>
</tr>
<tr>
<td>Location Aliases</td>
<td>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.</td>
<td>No</td>
<td>No</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
<tr>
<td>Report Scripts</td>
<td>Text files containing Essbase Report Writer commands that generate production reports</td>
<td>Yes</td>
<td>No</td>
<td>Yes—TXT, XML</td>
<td>None</td>
</tr>
<tr>
<td>Rule Files</td>
<td>Sets of operations that Essbase performs on data values or on dimensions and members when it processes a data source</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>None</td>
</tr>
<tr>
<td>Security Filters</td>
<td>Restrictions that control security access to data values or cells</td>
<td>No</td>
<td>No</td>
<td>Yes—CSV</td>
<td>Shared Services security artifacts</td>
</tr>
<tr>
<td>Artifact</td>
<td>Description</td>
<td>Last Modified Time</td>
<td>Last Modified User</td>
<td>Editable on the File System?</td>
<td>Dependencies</td>
</tr>
<tr>
<td>---------------------</td>
<td>--------------------------------------------------</td>
<td>--------------------</td>
<td>--------------------</td>
<td>-------------------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>Substitution Variables</td>
<td>Global placeholders for regularly changing information</td>
<td>No</td>
<td>No</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
<tr>
<td>Text Files</td>
<td>Text files used for loading data into Essbase cubes</td>
<td>Yes</td>
<td>No</td>
<td>Yes—TXT</td>
<td>None</td>
</tr>
</tbody>
</table>

**Essbase Migration Considerations**

- 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:

- The application can be predefined in Administration Services, or you can specify the application name in the `import.xml` file and execute the migration from CLU.
- The database is 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 is not displayed in the artifact listing under the Calc Scripts directory.
- If Essbase does not exist in the target environment, Lifecycle Management creates an application shell.
Essbase Application Migrations and Cross-Product Artifact Dependencies

When migrating Essbase applications from one environment to another (development to test or test to production), cross-product artifact dependencies exist. 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
- Migration Import Options

**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.

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
Note: To access export and import options, launch Shared Services Console and select Administration, and then Migration Options.

Sample Migration Definition Files

The product code used in the migration definition files for Essbase is ESBAPP.

Note: If the correct syntax is not used in the migration definition file, an ‘Incorrect format of MDF file’ error is displayed.

Exporting to the File System

```xml
<xml version="1.0" encoding="UTF-8" ?>
  <Package>
    <LOCALE>en_US</LOCALE>
    <User name="" password="" />
    <Task>
      <Source type="Application" product="ESBAPP" project="EssbaseCluster-1"
application="Sample" />
      <Target type="FileSystem" filePath="/ESB-Sample" />
      <Artifact recursive="true" parentPath="/Configuration" pattern="*" />
      <Artifact recursive="true" parentPath="/Databases" pattern="*" />
      <Artifact recursive="true" parentPath="/Substitution Variables" pattern="*" />
    </Task>
  </Package>
```

Importing from the File System

```xml
<xml version="1.0" encoding="UTF-8" ?>
  <Package>
    <LOCALE>en_US</LOCALE>
    <User name="" password="" />
    <Task>
      <Source type="FileSystem" filePath="/ESB-Sample" />
      <Target type="Application" product="ESBAPP" project="EssbaseCluster-1"
application="Sample" />
      <Artifact recursive="true" parentPath="/Configuration" pattern="*" />
      <Artifact recursive="true" parentPath="/Databases" pattern="*" />
      <Artifact recursive="true" parentPath="/Substitution Variables" pattern="*" />
    </Task>
  </Package>
```

Lifecycle Management Log Files

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

Use Lifecycle Management to migrate the Essbase Studio Catalog artifact. The Catalog artifact contains the dimensionality, hierarchies, data sources, folders, and all the artifacts within Essbase Studio. The Catalog artifact is listed under the Repository folder in Shared Services Console. See “Essbase Studio Artifacts” on page 100.

Essbase Studio Roles Requirement

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

- LCM Administrator
- Essbase Studio Administrator

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

Essbase Studio Migration Prerequisites

- Install and configure Shared Services and Essbase Studio and verify that they are running.
See the Oracle Enterprise Performance Management System Installation and Configuration Guide.
Ensure that users performing Lifecycle Management operations are assigned the LCM Administrator and Essbase Studio Administrator roles. See the Oracle Hyperion Enterprise Performance Management System User and Role Security Guide.

Before migrating the Essbase Studio 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 L, “Shared Services and Lifecycle Management.”

### Essbase Studio Artifact Listing

#### 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.

#### Essbase Studio Artifacts

Essbase Studio artifacts are packaged into one artifact called **Catalog** under the **Repository** folder in Shared Services Console.

<table>
<thead>
<tr>
<th>Artifact</th>
<th>Description</th>
<th>Last Modified Time</th>
<th>Last Modified User</th>
<th>Editable on the File System?</th>
<th>Dependencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catalog</td>
<td>Contains the dimensionality, hierarchies, data sources, folders, and all the artifacts within Essbase Studio.</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>None</td>
</tr>
</tbody>
</table>
Essbase Studio Migration Considerations

There are no specific migration considerations for Essbase Studio.

Essbase Studio Application Migrations and Cross-Product Artifact Dependencies

Essbase Studio requires Shared Services security (users, groups, and provisioning) to be migrated along with the Essbase Studio artifacts.

Migration Export and Import Options

Subtopics

- Migration Export Options
- Migration Import Options

Migration Export Options

Essbase Studio has no product-specific export options.

Migration Import Options

Essbase Studio has the following import option:

Import Mode

- Replace—If the element already exists in the catalog database, it is overwritten with the new element from the catalog file.
- Merge—If the element already exists in the catalog database, it is retained, and the duplicate element in the XML file is not used. A catalog database is created using the XML file. The import process is terminated if at least one of the imported object exists in the catalog.
- Abort if element exists—A catalog database is created using the XML file. The import process is terminated if at least one of the imported object exists in the catalog.

**Note:** To access export and import options, launch Shared Services Console and select Administration, and then Migration Options.

Sample Migration Definition Files

The product code used in the migration definition files for Essbase Studio is BPM.
**Note:** If the correct syntax is not used in the migration definition file, an ‘Incorrect format of MDF file’ error is displayed.

**Exporting to the File System**
```xml
<?xml version="1.0" encoding="UTF-8"?>
<Package>
    <LOCALE>en_US</LOCALE>
    <User name="" password=""/>
    <Task>
        <Source type="Application" product="BPM" project="Essbase Studio Server 11.1.2 Servers" application="Essbase Studio Server1"/>
        <Target type="FileSystem" filePath="/BPM-Essbase Studio Server1"/>
        <Artifact recursive="true" parentPath="/Repository" pattern="*"/>
    </Task>
</Package>
```

**Importing from the File System**
```xml
<?xml version="1.0" encoding="UTF-8"?>
<Package>
    <LOCALE>en_US</LOCALE>
    <User name="" password=""/>
    <Task>
        <Source type="FileSystem" filePath="/BPM-Essbase Studio Server1"/>
        <Target type="Application" product="BPM" project="Essbase Studio Server 11.1.2 Servers" application="Essbase Studio Server1"/>
        <Artifact recursive="true" parentPath="/Repository" pattern="*"/>
    </Task>
</Package>
```

**Lifecycle Management Log Files**

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

In This Appendix

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FDMEE Roles Requirement .............................................................................. 104
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About FDMEE Artifacts

Use Lifecycle Management to migrate these types of FDMEE artifacts:

Application Data Artifacts

- Application Category Mapping
- Application Definition
- Application Period Mapping
- Batch Definition
- Check Entity Groups
- Check Rule Groups
- Custom Script
- Custom Script Registration
- Data Load Mapping
- Data Load Rule
- Event Script
- Explicit Source Period Mapping
- HR Data Load Rule
- Import Format
FDMEE Roles Requirement

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

- FDMEE Administrator
- LCM Administrator

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

FDMEE Migration Prerequisites

- Install and configure Shared Services and FDMEE and verify that they are running. See the Oracle Enterprise Performance Management System Installation and Configuration Guide.
- Ensure that users performing Lifecycle Management operations are assigned the LCM Administrator and FDMEE Application Administrator roles. See the Oracle Hyperion Enterprise Performance Management System User and Role Security Guide.

- Before migrating the FDMEE 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 L, “Shared Services and Lifecycle Management.”

- Before migrating FDMEE product specific artifacts, manually create all the source system registrations in the target environment and initialize them.

**FDMEE Artifact Listing**

**Subtopics**

- About the Artifact Listing
- Application Data Artifacts
- Global Setup Artifacts

FDMEE artifacts are listed under the FDMEE node in the FDM 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 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.

**Application Data Artifacts**

The Application Data directory contains artifacts for Consolidation applications and Planning applications.
<table>
<thead>
<tr>
<th>Artifact</th>
<th>Description</th>
<th>Last Modified Time</th>
<th>Last Modified User</th>
<th>Editable on the File System?</th>
<th>Dependencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Category Mapping</td>
<td>Categorizes and maps source system data to a specific target Scenario dimension by application. This mapping overrides any global category mappings.</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Application Definition, Category Mapping</td>
</tr>
<tr>
<td>Application Definition</td>
<td>Definition of the target application</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>None</td>
</tr>
<tr>
<td>Application Period Mapping</td>
<td>Period mapping between the source FDMEE system periods and the target EPM System application periods. This mapping overrides any global period mappings.</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Application Definition, Period Mapping</td>
</tr>
<tr>
<td>Batch Definition</td>
<td>Definition and parameters for FDMEE Batch processing</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Data Load Rule, HR Data Load Rule, Metadata Rule</td>
</tr>
<tr>
<td>Check Entity Groups</td>
<td>Categorizes target system entities that are displayed in the validation report by location</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Application Definition</td>
</tr>
<tr>
<td>Check Rule Groups</td>
<td>Define the detailed validation logic that is part of the validation reporting process</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Application Definition</td>
</tr>
<tr>
<td>Custom Script Registration</td>
<td>Script registration that establishes association for a script file with a custom script group and a target application</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Application Data, Custom Script Group, Application Definition, Custom Script</td>
</tr>
<tr>
<td>Data Load Mapping</td>
<td>Relationships between source dimension members and target dimension members within a single dimension</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Location</td>
</tr>
<tr>
<td>Data Load Rule</td>
<td>Rules to extract data from the FDMEE source system</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Location</td>
</tr>
<tr>
<td>Event Script</td>
<td>Scripts executed in response to FDMEE events</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Application Data, Application Definition</td>
</tr>
<tr>
<td>Artifact</td>
<td>Description</td>
<td>Last Modified Time</td>
<td>Last Modified User</td>
<td>Editable on the File System?</td>
<td>Dependencies</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>--------------------</td>
<td>--------------------</td>
<td>-------------------------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>Explicit Source Period Mapping</td>
<td>Period mapping between the source FDMEE system periods and the target EPM System application periods that allows support of additional GL data sources where periods are not defined by start and end dates.</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Application Data, Application Definition, Period Mapping</td>
</tr>
<tr>
<td>HR Data Load Rule</td>
<td>Rules to populate data and metadata in Oracle Hyperion Public Sector Planning and Budgeting applications</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Location</td>
</tr>
<tr>
<td>Import Format</td>
<td>Mappings of source segments or chart fields to target application dimensions or fields from a flat file</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Application Definition, Source Adaptor, Source Accounting Entity</td>
</tr>
<tr>
<td>Import Script</td>
<td>Imports scripts that are executed as source files</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Application Data, Application Definition</td>
</tr>
<tr>
<td>Location</td>
<td>Mappings of source accounting entities and target applications</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Import Format</td>
</tr>
<tr>
<td>Logic Groups</td>
<td>Categorize logic accounts</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Application Definition</td>
</tr>
<tr>
<td>Metadata Rule</td>
<td>Rules to load source system dimension members into target EPM System applications</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Location</td>
</tr>
</tbody>
</table>

**Global Setup Artifacts**

The Global Setup directory contains source accounting entities, source period mappings, category mappings, period mappings, and source adaptor artifacts.

**Table 21  Global Setup Artifacts**

<table>
<thead>
<tr>
<th>Artifact</th>
<th>Description</th>
<th>Last Modified Time</th>
<th>Last Modified User</th>
<th>Editable on the File System?</th>
<th>Dependencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Settings</td>
<td>Configuration Settings that are set at the EPM Application level</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Application Definition</td>
</tr>
<tr>
<td>Batch Group</td>
<td>Assigns security eligibility when executing batches by grouping batches based on the batch group assigned</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>None</td>
</tr>
<tr>
<td>Artifact</td>
<td>Description</td>
<td>Last Modified Time</td>
<td>Last Modified User</td>
<td>Editable on the File System?</td>
<td>Dependencies</td>
</tr>
<tr>
<td>---------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>--------------------</td>
<td>--------------------</td>
<td>------------------------------</td>
<td>--------------------------------------------</td>
</tr>
<tr>
<td>Category Mapping</td>
<td>Globally categorizes and maps source system data to a specific target EPM System Scenario dimension member</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>None</td>
</tr>
<tr>
<td>Custom Script Group</td>
<td>Assigns similar types of custom scripts under a group for ease of use and help in assigning security</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>None</td>
</tr>
<tr>
<td>Drill Through Script</td>
<td>JavaScript based drill through script that enables drill through to a graphical user interface instead of a URL</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>None</td>
</tr>
<tr>
<td>Period Mapping</td>
<td>Global period mapping between the source FDMEE system periods and the target EPM System application periods</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>None</td>
</tr>
<tr>
<td>Query Definitions</td>
<td>Query definition for FDMEE reports These query definition entries are used by the BI Publisher templates provided with FDMEE</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>None</td>
</tr>
<tr>
<td>Report Definitions</td>
<td>FDMEE report templates. These templates use a query that is defined in the query definition section.</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Query Definition, Report Groups</td>
</tr>
<tr>
<td>Report Groups</td>
<td>Categorize reports and filter the list of reports in the user interface</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>None</td>
</tr>
<tr>
<td>Security Settings</td>
<td>Define security by system feature or location</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>None</td>
</tr>
<tr>
<td>Source Accounting Entity</td>
<td>Source ledgers or business units used in the integration</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>None</td>
</tr>
<tr>
<td>Source Adapter</td>
<td>Adapters to pull data from external systems.</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>None</td>
</tr>
</tbody>
</table>
### FDMEE Migration Considerations

- The source system must be initialized in both the source system and FDMEE.
- The target application must be present in all the respective target products.

**Note:** Migration from Release 11.1.2.3 to Release 11.1.2.4 using Lifecycle Management is supported.

### FDMEE Application Migrations and Cross-Product Artifact Dependencies

When migrating FDMEE artifacts from one environment to another (development to test or test to production), FDMEE requires artifacts from other products to be migrated along with the FDMEE-specific artifacts.

FDMEE Classic cross-product artifacts include Shared Services Native Directory (users, groups, and provisioning).

### Migration Export and Import Options

During import, FDMEE artifacts validate any existing artifacts on the destination environment.

FDME import option:

**Skip Validation**—Skips the validation of target dimension members in the destination location during import.
To access export and import options, launch Shared Services Console and select Administration, and then Migration Options.

Sample Migration Definition Files

The sample migration definition files provided are for FDMEE application migrations. The product code used in the migration definition files for FDMEE is AIF.

Note: If the correct syntax is not used in the migration definition file, an ‘Incorrect format of MDF file’ error is displayed.

Exporting to the File System

```xml
<?xml version="1.0" encoding="UTF-8" ?>
<Package>
  <LOCALE>en</LOCALE>
  <User name="" password="" />
  <Task>
    <Source type="Application" product="AIF" project="FDM" application="FDMEE" />
    <Target type="FileSystem" filePath="/FDMEE" />
    <Artifact recursive="true" parentPath="/Global Setup Artifacts" pattern="*" />
  </Task>
</Package>
```

Importing to the File System

```xml
<?xml version="1.0" encoding="UTF-8" ?>
<Package>
  <LOCALE>en</LOCALE>
  <User name="" password="" />
  <Task>
    <Source type="FileSystem" filePath="/FDMEE" />
    <Target type="Application" product="AIF" project="FDM" application="FDMEE" />
    <Artifact recursive="true" parentPath="/Global Setup Artifacts" pattern="*" />
  </Task>
</Package>
```

Lifecycle Management Log Files

Lifecycle Management log files for FDMEE are listed in the Oracle Enterprise Performance Management System Installation and Configuration Troubleshooting Guide.
About Financial Close Management Artifacts

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

Close Manager Artifacts

- Alert Types
- Custom Attributes
- Filters
- Global Integration Tokens
- Integration Applications
- Integration Types
- Periods
- Task Types
- Templates
- User Preferences
- Years
Account Reconciliation Manager Artifacts

- Account Types
- Aging Profiles
- Currencies
- Custom Attributes
- Custom Currencies
- Dashboard Definitions
- Filters
- Formats
- Frequencies
- Global Integration Tokens
- Global Settings
- Periods
- Power User Security
- Processes
- Profile Segments
- Profiles
- Rate Types
- Risk Ratings
- Teams
- User Preferences

Supplemental Data Manager Artifacts

- Connections
- Currencies
- Data Collection Periods
- Datasets
- Dimensions
- Filters
- Form Templates
- Frequencies
- Integration Profiles
- Periods
- Preferences
For a description of these artifacts, see “Financial Close Management Artifact Listing” on page 114.

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 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.

- 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 L, “Shared Services and Lifecycle Management.”

- For Close Manager, 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

- For Account Reconciliation Manager, Oracle Hyperion Financial Data Quality Management, Enterprise Edition must be running and populated with data.

- For Account Reconciliation Manager, Shared Services data such as Users and Roles must be imported before importing Account Reconciliation Manager data.
Financial Close Management Artifact Listing

Subtopics

- About the Artifact Listing
- Close Manager Artifacts
- Account Reconciliation Manager Artifacts
- Supplemental Data Manager Artifacts

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.

**Close Manager Artifacts**

<p>| Artifact   | Description                                                                                                                                  | Last Modified Time | Last Modified User | Editable on the File System? | Dependencies |
|------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| Alert Types| Categorize alerts into types such as hardware failure, software issues, and system failures                                                | Yes                | No                 | Yes—XML                     | None         |</p>
<table>
<thead>
<tr>
<th>Artifact</th>
<th>Description</th>
<th>Last Modified Time</th>
<th>Last Modified User</th>
<th>Editable on the File System?</th>
<th>Dependencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Custom Attributes</td>
<td>Categorize templates, schedules, task types, and tasks</td>
<td>Yes</td>
<td>No</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
<tr>
<td>Filters</td>
<td>Control which records are displayed in list views, dashboards, and report binders.</td>
<td>Yes</td>
<td>No</td>
<td>Yes—XML</td>
<td>Template</td>
</tr>
<tr>
<td>Global Integration Tokens</td>
<td>Enable the creation of parameterized URLs</td>
<td>Yes</td>
<td>No</td>
<td>Yes—XML</td>
<td>Custom Attributes</td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> Global Integration Tokens may be dependent on Custom Attributes, but that is not always the case.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Integration Applications</td>
<td>Denote an external application with which Financial Close Management is integrated</td>
<td>Yes</td>
<td>No</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
<tr>
<td>Integration Types</td>
<td>A definition of a service provided by an application that is integrated with Financial Close Management</td>
<td>Yes</td>
<td>No</td>
<td>Yes—XML</td>
<td>Integration Applications</td>
</tr>
<tr>
<td>Periods</td>
<td>A hierarchical dimension that designates the time period to which the close activities apply; for example, a month or a quarter</td>
<td>Yes</td>
<td>No</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
<tr>
<td>Task Types</td>
<td>Identify and categorize tasks commonly performed during a close period; for example, Data Entry, or G/L Extract</td>
<td>Yes</td>
<td>No</td>
<td>Yes—Zip</td>
<td>Period, Year, Alert Types, Custom Attributes, Integration Applications, Integration Types</td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> Editing is not recommended because the artifact must be extracted and the format of the zipped contents should be retained.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Account Reconciliation Manager Artifacts

<table>
<thead>
<tr>
<th>Artifact</th>
<th>Description</th>
<th>Last Modified Time</th>
<th>Last Modified User</th>
<th>Editable on the File System?</th>
<th>Dependencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Templates</td>
<td>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.</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes—Zip&lt;br&gt;Note: Editing is not recommended because the artifact must be extracted and the format of the zipped contents should be retained.</td>
</tr>
<tr>
<td>User Preferences</td>
<td>Preferences specific to the time zone used for a Financial Close Management application.</td>
<td>Yes</td>
<td>No</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
<tr>
<td>Years</td>
<td>A flat list that designates the year to which the close activities apply; for example, 2009, 2010, FY09, or FY10.</td>
<td>Yes</td>
<td>No</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
<tr>
<td>Artifact</td>
<td>Description</td>
<td>Last Modified Time</td>
<td>Last Modified User</td>
<td>Editable on the File System?</td>
<td>Dependencies</td>
</tr>
<tr>
<td>------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>--------------------</td>
<td>--------------------</td>
<td>------------------------------</td>
<td>--------------------------------</td>
</tr>
<tr>
<td>Currencies</td>
<td>A generally accepted medium of exchange. Financial Close Management seeds currency details such as currency code and symbol which are ISO compliant</td>
<td>Yes</td>
<td>No</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
<tr>
<td>Custom Attributes</td>
<td>Categorize information for easier filtering and searching. Custom attributes are assigned to templates, schedules, task types, and tasks. For example, you can filter a task list to include only tasks with a specific custom attribute.</td>
<td>Yes</td>
<td>No</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
<tr>
<td>Custom Currencies</td>
<td>Currencies that are not ISO compliant</td>
<td>Yes</td>
<td>No</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
<tr>
<td>Dashboard Definitions</td>
<td>Views into schedules and task lists, and high-level summaries into which you can drill down for greater detail</td>
<td>Yes</td>
<td>No</td>
<td>Yes—XML</td>
<td>Filters, CSS Users, Aging Profiles</td>
</tr>
<tr>
<td>Filters</td>
<td>Control which records are displayed in list views, dashboards, and report binders.</td>
<td>Yes</td>
<td>No</td>
<td>Yes—XML</td>
<td>Custom Attributes</td>
</tr>
<tr>
<td>Formats</td>
<td>Determine the method of reconciliation and the information that must be provided before the reconciliation can be sent on for review</td>
<td>Yes</td>
<td>No</td>
<td>Yes—Zip</td>
<td>Custom Attributes</td>
</tr>
</tbody>
</table>

Note: Editing is not recommended because the artifact must be extracted and the format of the zipped contents should be retained.
<table>
<thead>
<tr>
<th>Artifact</th>
<th>Description</th>
<th>Last Modified Time</th>
<th>Last Modified User</th>
<th>Editable on the File System?</th>
<th>Dependencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>How often reconciliations are prepared and renewed. Frequencies are defined in system settings and are associated with profiles and periods.</td>
<td>Yes</td>
<td>No</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
<tr>
<td>Global Integration Tokens</td>
<td>Enable the creation of parameterized URLs</td>
<td>Yes</td>
<td>No</td>
<td>Yes—XML</td>
<td>Custom Attributes</td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> Global Integration Tokens may be dependent on Custom Attributes, but that is not always the case.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Global Settings</td>
<td>Contains the Max File Upload, Dataload Context and &quot;Days Before Due Date&quot; system settings. These settings are established by the Administrator and apply to the entire Financial Close Management user base.</td>
<td>Yes</td>
<td>No</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
<tr>
<td>Periods</td>
<td>Unit of time for which an Account Reconciliation is completed; for example, January 2013, February 2013</td>
<td>Yes</td>
<td>No</td>
<td>Yes—XML</td>
<td>Frequencies</td>
</tr>
<tr>
<td>Power User Security</td>
<td>Security filters on account segments accessed by power users</td>
<td>Yes</td>
<td>No</td>
<td>Yes—XML</td>
<td>Profile Segments, CSS Roles</td>
</tr>
<tr>
<td>Artifact</td>
<td>Description</td>
<td>Last Modified Time</td>
<td>Last Modified User</td>
<td>Editable on the File System?</td>
<td>Dependencies</td>
</tr>
<tr>
<td>---------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>--------------------</td>
<td>--------------------</td>
<td>-------------------------------</td>
<td>--------------------------------</td>
</tr>
<tr>
<td>Processes</td>
<td>Associate profiles with a specific reconciliation process; for example, the balance sheet reconciliation process or the local GAAP reconciliation process</td>
<td>Yes</td>
<td>No</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
<tr>
<td>Profile Segments</td>
<td>Profile account IDs stored in segments to facilitate filtering and reporting on the values</td>
<td>Yes</td>
<td>No</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
<tr>
<td>Profiles</td>
<td>Contain the configuration settings that determine how and when reconciliations occur</td>
<td>Yes</td>
<td>No</td>
<td>Yes—Zip</td>
<td>Custom Attributes, Formats, Periods, Account Types, Rate Types, Profile Segments</td>
</tr>
<tr>
<td>Rate Types</td>
<td>Associated with foreign exchange rates for use with profiles or reconciliations</td>
<td>Yes</td>
<td>No</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
<tr>
<td>Risk Ratings</td>
<td>Enable classification of profiles and reconciliations according to risk level. Risk ratings can be used to select accounts for reporting, or to facilitate assignment of preparers, frequencies, or other attributes.</td>
<td>Yes</td>
<td>No</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
</tbody>
</table>
Teams
Defined and provisioned with Preparer, Reviewer, Viewer, and Commentator roles. Then, rather than assigning named users these roles on a profile or reconciliation, the role is assigned to the Team.

Yes
No
Yes—XML
None

User Preferences
Preferences specific to the time zone used for a Financial Close Management application

Yes
No
Yes—XML
None

## Supplemental Data Manager Artifacts

Table 24  Financial Close Management Supplemental Data Manager Artifacts

<table>
<thead>
<tr>
<th>Artifact</th>
<th>Description</th>
<th>Last Modified Time</th>
<th>Last Modified User</th>
<th>Editable on the File System?</th>
<th>Dependencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Currencies</td>
<td>A generally accepted medium of exchange. Financial Close Management seeds currency details such as currency code and symbol which are ISO compliant.</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>None</td>
</tr>
<tr>
<td>Connections</td>
<td>Details to connect to another application for online integration such as importing metadata or posting data.</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Non</td>
</tr>
<tr>
<td>Data Collection Periods</td>
<td>Combination of Period, Year and Frequency in which form can be deployed for data collection.</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Period</td>
</tr>
<tr>
<td>Datasets</td>
<td>A set of attributes used in a supplemental schedule.</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Dimension</td>
</tr>
<tr>
<td>Artifact</td>
<td>Description</td>
<td>Last Modified Time</td>
<td>Last Modified User</td>
<td>Editable on the File System?</td>
<td>Dependencies</td>
</tr>
<tr>
<td>------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>--------------------</td>
<td>--------------------</td>
<td>------------------------------</td>
<td>------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Dimensions</td>
<td>A flat list of records containing metadata that could be referenced in data entry schedules.</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>None</td>
</tr>
<tr>
<td>Filters</td>
<td>Control which records are displayed in list views, dashboards, and report binders.</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Integration Profile , Form Templates , Data Sets, Dimension , Scenario Dimension</td>
</tr>
<tr>
<td>Form Templates</td>
<td>Definitions of supplemental data schedules that can be deployed to open periods for collecting and reviewing information among stakeholders.</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>DataSets</td>
</tr>
<tr>
<td>Frequencies</td>
<td>How often supplemental data is prepared and reviewed. Frequencies are defined in the system and are associated with periods.</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>None</td>
</tr>
<tr>
<td>Integration Profiles</td>
<td>Definitions of what metadata to be pulled from other applications that have online integration.</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Connection</td>
</tr>
<tr>
<td>Periods</td>
<td>Unit of time for which a supplemental schedule is prepared; for example, January 2015, Quarter1 2014</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Frequency</td>
</tr>
<tr>
<td>Preferences</td>
<td>Formatting options for a schedule</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>None</td>
</tr>
</tbody>
</table>

**Financial Close Management Migration Considerations**

- All Financial Close Management users will be migrated as part of Shared Services.
- In Close Manager, the following artifacts cannot be migrated:
  - Filters
User Preferences
  Schedules
  Alerts

In Account Reconciliation Manager, the following artifacts cannot be migrated:
  Reconciliations
  Transactions
  Currency Rates

In Supplemental Data Manager, the following artifacts cannot be migrated:
  Form Instances
  Report Definitions

**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
  - Migration Import Options

**Migration Export Options**

Financial Close Management has no product-specific export options.

**Migration Import Options**

Financial Close Management import option:

**Import Mode**

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

**Note:** To access export and import options, launch Shared Services Console and select Administration, and then Migration Options.
Sample Migration Definition Files

The product code used in the migration definition files for Financial Close Management is FCC.

**Note:** If the correct syntax is not used in the migration definition file, an ‘Incorrect format of MDF file’ error is displayed.

### Exporting to the File System

```xml
<?xml version="1.0" encoding="UTF-8" ?>
<Package>
  <LOCALE>en</LOCALE>
  <User name="" password="" />
  <Task>
    <Source type="Application" product="FCC" project="Financial Close" application="Financial Close Management" />
    <Target type="FileSystem" filePath="/FCM-Financial Close Management" />
    <Artifact recursive="true" parentPath="/Alert Types" pattern="*" />
    <Artifact recursive="true" parentPath="/Custom Attributes" pattern="*" />
    <Artifact recursive="true" parentPath="/Integration Applications" pattern="*" />
    <Artifact recursive="true" parentPath="/Integration Types" pattern="*" />
    <Artifact recursive="true" parentPath="/Periods" pattern="*" />
    <Artifact recursive="true" parentPath="/Task Types" pattern="*" />
    <Artifact recursive="true" parentPath="/Templates" pattern="*" />
    <Artifact recursive="true" parentPath="/Years" pattern="*" />
  </Task>
</Package>
```

### Importing from the File System

```xml
<?xml version="1.0" encoding="UTF-8" ?>
<Package>
  <LOCALE>en</LOCALE>
  <User name="" password="" />
  <Task>
    <Source type="FileSystem" filePath="/FCM-Financial Close Management" />
    <Target type="Application" product="FCC" project="Financial Close" application="Financial Close Management" />
    <Artifact recursive="true" parentPath="/Alert Types" pattern="*" />
    <Artifact recursive="true" parentPath="/Custom Attributes" pattern="*" />
    <Artifact recursive="true" parentPath="/Integration Applications" pattern="*" />
    <Artifact recursive="true" parentPath="/Integration Types" pattern="*" />
    <Artifact recursive="true" parentPath="/Periods" pattern="*" />
    <Artifact recursive="true" parentPath="/Task Types" pattern="*" />
    <Artifact recursive="true" parentPath="/Templates" pattern="*" />
    <Artifact recursive="true" parentPath="/Years" pattern="*" />
  </Task>
</Package>
```
Lifecycle Management Log Files

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

- About Financial Management Artifacts ................................................................. 125
- Financial Management Roles Requirement ............................................................ 126
- Financial Management Migration Prerequisites ....................................................... 126
- Financial Management Artifact Listing ................................................................. 127
- Financial Management Migration Considerations ..................................................... 134
- Financial Management Application Migrations and Cross-Product Artifact Dependencies ........ 134
- Migration Export and Import Options ................................................................... 134
- Sample Migration Definition Files ...................................................................... 135
- Lifecycle Management Log Files ........................................................................ 136

About Financial Management Artifacts

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

- Application Base Level Data
- Application Snapshot
- Configuration
- Documents
- Dimensions
- Forms
- InterCompany
- Journals
- Member Lists
- Phased Submission
- Rules
- Security

For a listing of Financial Management artifacts, see “Financial Management Artifact Listing” on page 127.
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 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*.

- 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 L, “Shared Services and Lifecycle Management.”

- Review the Financial Management artifact migration information in the following sections:
  - “Financial Management Classic Application Migrations” on page 126
  - “Financial Management Performance Management Architect Application Migrations” on page 126

Financial Management Classic Application Migrations

- Before migrating, applications must be created in native 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 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

- About the Artifact Listing
- Application Base Level Data Artifact
- Application Snapshot Artifact
- Configuration Artifacts
- Documents Artifacts
- Dimensions Artifacts
- Forms Artifacts
- InterCompany Artifacts
- Journals Artifacts
- Member Lists Artifacts
- Phased Submission Artifact
- Rules Artifact
- Security Artifacts

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 that 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.

Application Base Level Data Artifact

Table 25  Base Level Data Artifact

<table>
<thead>
<tr>
<th>Artifact</th>
<th>Description</th>
<th>Last Modified Time</th>
<th>Last Modified User</th>
<th>Editable on the File System?</th>
<th>Dependencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data</td>
<td>Base level data including ownership information, exchange rate, and so on.</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Security Class, Dimensions</td>
</tr>
</tbody>
</table>

Note: In order to export or import Financial Management Data artifacts in a distributed EPM installation, Lifecycle Management must have a shared file system path. The domain account that has access to this shared/disk folder should be used to start services. Configure hfmLcmServiceAppPool(IIS) with this domain account.

Application Snapshot Artifact

Table 26  Application Snapshot Artifact

<table>
<thead>
<tr>
<th>Artifact</th>
<th>Description</th>
<th>Last Modified Time</th>
<th>Last Modified User</th>
<th>Editable on the File System?</th>
<th>Dependencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Snapshot</td>
<td>Complete application backup (can be restored later)</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>None</td>
</tr>
</tbody>
</table>

Note: Application Snapshot migration requires all users to be logged out of the application. The system logs out all users and shuts down the application if there are no active tasks present for the application. The Application Snapshot is exported at the end of the migration after processing other artifacts. When importing, the Application Snapshot can not be selected with other artifacts; however, if the application does not already exist in the target, you must include the application definition artifact to create the application shell.
## Configuration Artifacts

### Table 27  Configuration Artifact

<table>
<thead>
<tr>
<th>Artifact</th>
<th>Description</th>
<th>Last Modified Time</th>
<th>Last Modified User</th>
<th>Editable on the File System?</th>
<th>Dependencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Definition</td>
<td>Used to create application shells for Classic applications</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>None</td>
</tr>
<tr>
<td>Application Module Configuration</td>
<td>Allows system administrators to disable Financial Management modules for all users of an application</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>None</td>
</tr>
</tbody>
</table>

## Documents Artifacts

### Table 28  Documents Artifacts

<table>
<thead>
<tr>
<th>Artifact</th>
<th>Description</th>
<th>Last Modified Time</th>
<th>Last Modified User</th>
<th>Editable on the File System?</th>
<th>Dependencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Custom Documents</td>
<td>User-defined documents such as Microsoft Word or Excel documents</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Security Class</td>
</tr>
<tr>
<td>Data Explorer Reports</td>
<td>Displays information from data grids</td>
<td>Yes</td>
<td>No</td>
<td>Yes—TXT, XML</td>
<td>Security Class, Dimensions, Member Lists</td>
</tr>
<tr>
<td>Folders</td>
<td>A file containing other files for the purpose of structuring a hierarchy</td>
<td>Yes</td>
<td>No</td>
<td>Yes—TXT, XML</td>
<td>Security Class</td>
</tr>
<tr>
<td>Links</td>
<td>A reference to a repository object. Links can reference folders, files, shortcuts, and other links.</td>
<td>Yes</td>
<td>No</td>
<td>Yes—TXT, XML</td>
<td>Security Class</td>
</tr>
<tr>
<td>Related Content</td>
<td>A link to content in another Oracle product, such as a report</td>
<td>Yes</td>
<td>No</td>
<td>Yes—TXT, XML</td>
<td>Security Class</td>
</tr>
<tr>
<td>Tasklists</td>
<td>A detailed status list of tasks for a particular user</td>
<td>Yes</td>
<td>No</td>
<td>Yes—TXT, XML</td>
<td>Security Class</td>
</tr>
</tbody>
</table>
## Dimensions Artifacts

Table 29  Dimensions Artifacts

<table>
<thead>
<tr>
<th>Artifact</th>
<th>Description</th>
<th>Last Modified Time</th>
<th>Last Modified User</th>
<th>Editable on the File System?</th>
<th>Dependencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Account</td>
<td>A dimension type that makes accounting intelligence available. Only one dimension can be defined as Accounts.</td>
<td>Yes</td>
<td>No</td>
<td>Yes—XML</td>
<td>Security Class</td>
</tr>
<tr>
<td>Appsettings</td>
<td>A metadata attribute</td>
<td>Yes</td>
<td>No</td>
<td>Yes—XML</td>
<td>Security Class</td>
</tr>
<tr>
<td>ConsolMethod</td>
<td>A metadata attribute</td>
<td>Yes</td>
<td>No</td>
<td>Yes—XML</td>
<td>Security Class</td>
</tr>
<tr>
<td>Currency</td>
<td>A metadata attribute</td>
<td>Yes</td>
<td>No</td>
<td>Yes—XML</td>
<td>Security Class</td>
</tr>
<tr>
<td>Custom (1–4)</td>
<td>A dimension created and defined by users. Channel, product, department, project, or region could be custom dimensions.</td>
<td>Yes</td>
<td>No</td>
<td>Yes—XML</td>
<td>Security Class</td>
</tr>
<tr>
<td>Entity</td>
<td>A dimension representing organizational units. Examples: divisions, subsidiaries, plants, regions, products, or other financial reporting units.</td>
<td>Yes</td>
<td>No</td>
<td>Yes—XML</td>
<td>Security Class</td>
</tr>
<tr>
<td>ICP</td>
<td>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.</td>
<td>Yes</td>
<td>No</td>
<td>Yes—XML</td>
<td>Security Class</td>
</tr>
<tr>
<td>Period</td>
<td>A dimension representing time periods, such as quarters and months</td>
<td>Yes</td>
<td>No</td>
<td>Yes—XML</td>
<td>Security Class</td>
</tr>
<tr>
<td>Scenario</td>
<td>A dimension for classifying data (for example, Actuals, Budget, Forecast1, and Forecast2)</td>
<td>Yes</td>
<td>No</td>
<td>Yes—XML</td>
<td>Security Class</td>
</tr>
<tr>
<td>Value</td>
<td>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</td>
<td>Yes</td>
<td>No</td>
<td>Yes—XML</td>
<td>Security Class</td>
</tr>
</tbody>
</table>
### Forms Artifacts

Table 30  Forms Artifacts

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

### InterCompany Artifacts

Table 31  InterCompany Artifacts

<table>
<thead>
<tr>
<th>Artifact</th>
<th>Description</th>
<th>Last Modified Time</th>
<th>Last Modified User</th>
<th>Editable on the File System?</th>
<th>Dependencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICT Matching Template</td>
<td>Set of predefined components for intercompany matching processes</td>
<td>Yes</td>
<td>No</td>
<td>Yes—TXT, XML</td>
<td>Security Class, Dimensions, Member Lists</td>
</tr>
<tr>
<td>ICT Reason Codes</td>
<td>An explanation of an intercompany transaction’s status</td>
<td>Yes</td>
<td>No</td>
<td>Yes—TXT, XML</td>
<td>None</td>
</tr>
<tr>
<td>Intercompany System Report</td>
<td>Information from intercompany matching processes</td>
<td>Yes</td>
<td>No</td>
<td>Yes—TXT, XML</td>
<td>Security Class, Dimensions, Member Lists</td>
</tr>
<tr>
<td>ICT System Reports</td>
<td>Information from intercompany transactions</td>
<td>Yes</td>
<td>No</td>
<td>Yes—TXT, XML</td>
<td>Security Class, Dimensions, Member Lists</td>
</tr>
<tr>
<td>Artifact</td>
<td>Description</td>
<td>Last Modified Time</td>
<td>Last Modified User</td>
<td>Editable on the File System?</td>
<td>Dependencies</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>--------------------</td>
<td>--------------------</td>
<td>------------------------------</td>
<td>---------------------------------------</td>
</tr>
<tr>
<td>IC Matching By Account</td>
<td>InterCompany matching reports based on accounts selected</td>
<td>Yes</td>
<td>No</td>
<td>Yes—TXT, XML</td>
<td>Security Class, Dimensions, Member Lists</td>
</tr>
<tr>
<td>IC Matching By Trans ID</td>
<td>InterCompany matching reports based on transaction ID</td>
<td>Yes</td>
<td>No</td>
<td>Yes—TXT, XML</td>
<td>Security Class, Dimensions, Member Lists</td>
</tr>
</tbody>
</table>

### Journals Artifacts

Table 32  Journals Artifacts

<table>
<thead>
<tr>
<th>Artifact</th>
<th>Description</th>
<th>Last Modified Time</th>
<th>Last Modified User</th>
<th>Editable on the File System?</th>
<th>Dependencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Journal Groups</td>
<td>A user-defined element</td>
<td>No</td>
<td>No</td>
<td>Yes—TXT, XML</td>
<td>None</td>
</tr>
<tr>
<td>Journal System Reports</td>
<td>Displays information from journals</td>
<td>Yes</td>
<td>No</td>
<td>Yes—TXT, XML</td>
<td>Security Class, Dimensions, Member Lists</td>
</tr>
<tr>
<td>Journal Templates</td>
<td>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, and then use the template as the basis for many regular journals.</td>
<td>Yes</td>
<td>No</td>
<td>Yes—TXT, XML</td>
<td>Security Class, Dimensions, Member Lists, Journal Groups</td>
</tr>
</tbody>
</table>
Member Lists Artifacts

Table 33  Member Lists Artifacts

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

Phased Submission Artifact

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

Table 34  Phased Submission Artifact

<table>
<thead>
<tr>
<th>Artifact</th>
<th>Description</th>
<th>Last Modified Time</th>
<th>Last Modified User</th>
<th>Editable on the File System?</th>
<th>Dependencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phased Submission</td>
<td>A stage of a process management unit</td>
<td>Yes</td>
<td>No</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
</tbody>
</table>

Rules Artifact

Table 35  Rules Artifacts

<table>
<thead>
<tr>
<th>Artifact</th>
<th>Description</th>
<th>Last Modified Time</th>
<th>Last Modified User</th>
<th>Editable on the File System?</th>
<th>Dependencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rules</td>
<td>Automates the calculation of data within an application</td>
<td>Yes</td>
<td>No</td>
<td>Yes—XML</td>
<td>Dimensions</td>
</tr>
</tbody>
</table>

Security Artifacts

Table 36  Security Artifacts

<table>
<thead>
<tr>
<th>Artifact</th>
<th>Description</th>
<th>Last Modified Time</th>
<th>Last Modified User</th>
<th>Editable on the File System?</th>
<th>Dependencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Security Class</td>
<td>An attribute for dimension members that specifies user permissions</td>
<td>Yes</td>
<td>No</td>
<td>Yes—TXT, XML</td>
<td>None</td>
</tr>
</tbody>
</table>
Financial Management Migration Considerations

- You must manually select any necessary dependencies.
- If Financial Management does not exist in the target environment, Lifecycle Management creates an application shell. You must select the Application Definition artifact to create the application shell.
- In a distributed Financial Management environment, configure the import/export folder with the UNC path with Read/Write access for all the Financial Management Application Servers in the environment.

Financial Management Application Migrations and Cross-Product Artifact Dependencies

Financial Management has no cross-product artifact dependencies.

Migration Export and Import Options

Subtopics

- Migration Export Options
- Migration Import Options

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:

- **Dimension Import Mode**
  - **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.

- **Phased Submission Assignment Import Mode**
  - **Replace**—Overwrites the artifacts with the imported artifacts
  - **Merge**—Merges the artifacts with the imported artifacts

  **Note:** To access export and import options, launch Shared Services Console and select
  Administration, and then Migration Options.

**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.

**Note:** If the correct syntax is not used in the migration definition file, an ‘Incorrect
format of MDF file’ error is displayed.

**Exporting to the File System**

```
<Package>
  <LOCALE>en</LOCALE>
  <User name="" password="" />
  <Task>
    <Target type="FileSystem" filePath="/HFM-LINSCRIPT" />
    <Source type="Application" product="HFM" project="Default Application Group"
application="LINSCRIPT" />
    <Artifact recursive="true" parentPath="/Forms" pattern="*" />
    <Artifact recursive="true" parentPath="/Configuration" pattern="*" />
    <Artifact recursive="true" parentPath="/Rules" pattern="*" />
    <Artifact recursive="true" parentPath="/Documents" pattern="*" />
    <Artifact recursive="true" parentPath="/Dimensions" pattern="*" />
    <Artifact recursive="true" parentPath="/InterCompany" pattern="*" />
    <Artifact recursive="true" parentPath="/Member Lists" pattern="*" />
    <Artifact recursive="true" parentPath="/Journals" pattern="*" />
    <Artifact recursive="true" parentPath="/Security" pattern="*" />
    <Artifact recursive="true" parentPath="/Phased Submission" pattern="*" />
  </Task>
</Package>
```
Importing from the File System

<Package>
   <LOCALE>en</LOCALE>
   <User name="" password="" />
   <Task>
      <Target type="Application" product="HFM" project="Default Application Group"
application="LINSCRIPT" />
      <Source type="FileSystem" filePath="/HFM-LINSCRIPT" />
      <Artifact recursive="true" parentPath="/Security" pattern="*" />
      <Artifact recursive="true" parentPath="/Configuration" pattern="*" />
      <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="/InterCompany" pattern="*" />
      <Artifact recursive="true" parentPath="/Member Lists" pattern="*" />
      <Artifact recursive="true" parentPath="/Journals" pattern="*" />
      <Artifact recursive="true" parentPath="/Phased Submission" pattern="*" />
   </Task>
</Package>

Lifecycle Management Log Files

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

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- Performance Management Architect Roles Requirement ............................................ 137
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- Performance Management Architect Migration Considerations ................................... 143
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About Performance Management Architect Artifacts

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

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

For a listing of Performance Management Architect artifacts, see “Performance Management Architect Artifact Listing” on page 138.

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 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.

- 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 L, “Shared Services and Lifecycle Management.”

Performance Management Architect Artifact Listing

Subtopics

- About the Artifact Listing
- Application Metadata Artifacts
- Shared Library Dimensions Artifacts
- Dimension Access Artifacts
- Data Synchronization Artifacts

Note the following:

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

- The artifacts displayed in Shared Services Console vary by implementation.

- The Interface Data Source artifact is not a supported artifact to export or import.

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.
### Application Metadata Artifacts

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

<table>
<thead>
<tr>
<th>Artifact</th>
<th>Description</th>
<th>Last Modified Time</th>
<th>Last Modified User</th>
<th>Editable on the File System?</th>
<th>Dependencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consolidation Applications—Local Dimensions—Entity</td>
<td>A dimension representing organizational units; for example: divisions, subsidiaries, plants, regions, products, or other financial reporting units</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
<tr>
<td>Consolidation Applications—Local Dimensions—Account</td>
<td>A dimension type that makes accounting intelligence available; only one dimension can be defined as Account.</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
<tr>
<td>Consolidation Applications—Application Properties</td>
<td>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.</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
<tr>
<td>Consolidation Applications—Import Profiles</td>
<td>Includes important information about the dimensions to import such as new dimensions, whether to merge or replace existing dimensions, and dimension properties.</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
<tr>
<td>Planning Applications—Local Dimensions—Entity</td>
<td>A dimension representing organizational units; for example, divisions, subsidiaries, plants, regions, products, or other financial reporting units</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
<tr>
<td>Planning Applications—Local Dimensions—Account</td>
<td>A dimension type that makes accounting intelligence available; only one dimension can be defined as Account.</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
<tr>
<td>Artifact</td>
<td>Description</td>
<td>Last Modified Time</td>
<td>Last Modified User</td>
<td>Editable on the File System?</td>
<td>Dependencies</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>--------------------</td>
<td>--------------------</td>
<td>------------------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>Planning Applications—Application Properties</td>
<td>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</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
<tr>
<td>Planning Applications—Import Profiles</td>
<td>Important information about the dimensions to import such as new dimensions, whether to merge or replace existing dimensions, and dimension properties</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
<tr>
<td>Essbase Applications—Local Dimensions—Entity</td>
<td>A dimension representing organizational units; for example, divisions, subsidiaries, plants, regions, products, or other financial reporting units</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
<tr>
<td>Essbase Applications—Local Dimensions—Account</td>
<td>A dimension type that makes accounting intelligence available; only one dimension can be defined as Account</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
<tr>
<td>Essbase Applications—Application Properties</td>
<td>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</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
<tr>
<td>Essbase Applications—Import Profiles</td>
<td>Important information about the dimensions to import such as new dimensions, whether to merge or replace existing dimensions, and dimension properties</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
<tr>
<td>Profitability Applications—Import Profiles</td>
<td>Important information about the dimensions to import such as new dimensions, whether to merge or replace existing dimensions, and dimension properties</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
<tr>
<td>Artifact</td>
<td>Description</td>
<td>Last Modified Time</td>
<td>Last Modified User</td>
<td>Editable on the File System?</td>
<td>Dependencies</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>--------------------</td>
<td>--------------------</td>
<td>------------------------------</td>
<td>---------------------------------------------------</td>
</tr>
<tr>
<td>Profitability Applications—Local Dimensions</td>
<td>All dimension members that are local to an application</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Shared Library Dimensions, application settings</td>
</tr>
<tr>
<td>Profitability Applications—Profitability Settings</td>
<td>Application settings includes: Application level properties, Shared dimensions, Filters, and property overrides</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes—XML</td>
<td>Shared Library Dimensions</td>
</tr>
<tr>
<td>Generic Applications—Local Dimensions—Entity</td>
<td>A dimension representing organizational units; for example, divisions, subsidiaries, plants, regions, products, or other financial reporting units</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
<tr>
<td>Generic Applications—Local Dimensions—Account</td>
<td>A dimension type that makes accounting intelligence available; only one dimension can be defined as Account.</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
<tr>
<td>Generic Applications—Application Properties</td>
<td>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.</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
<tr>
<td>Generic Applications—Import Profiles</td>
<td>Important information about the dimensions to import such as new dimensions, whether to merge or replace existing dimensions, and dimension properties</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
</tbody>
</table>

**Shared Library Dimensions Artifacts**

The Shared Library Dimensions directory contains shared library dimensions artifacts; for example, entity, account, and product.
### Table 38  Shared Library Dimensions Artifacts

<table>
<thead>
<tr>
<th>Artifact</th>
<th>Description</th>
<th>Last Modified Time</th>
<th>Last Modified User</th>
<th>Editable on the File System?</th>
<th>Dependencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entity</td>
<td>A dimension representing organizational units; for example, divisions, subsidiaries, plants, regions, products, or other financial reporting units</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
<tr>
<td>Account</td>
<td>A dimension type that makes accounting intelligence available; only one dimension can be defined as Account.</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
<tr>
<td>Product</td>
<td>A dimension representing the products or services a company produces. Product is generally represented as a dimension of type “generic.”</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
</tbody>
</table>

### Dimension Access Artifacts

The Dimension Access directory contains import profiles related to shared library dimensions.

### Table 39  Dimension Access Artifacts

<table>
<thead>
<tr>
<th>Artifact</th>
<th>Description</th>
<th>Last Modified Time</th>
<th>Last Modified User</th>
<th>Editable on the File System?</th>
<th>Dependencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Import Profiles</td>
<td>Important information about the dimensions to be imported such as new dimensions, whether to merge or replace existing dimensions, and dimension properties. Import profiles may be related to Flat File, Interface Tables, and Data Relationship Management based on how import profiles are created in the source.</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
</tbody>
</table>

### Data Synchronization Artifacts

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

### Table 40  Data Synchronization Artifacts

<table>
<thead>
<tr>
<th>Artifact</th>
<th>Description</th>
<th>Last Modified Time</th>
<th>Last Modified User</th>
<th>Editable on the File System?</th>
<th>Dependencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>External File Definitions</td>
<td>External files that are used as sources in data synchronizations</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
<tr>
<td>Artifact</td>
<td>Description</td>
<td>Last Modified Time</td>
<td>Last Modified User</td>
<td>Editable on the File System?</td>
<td>Dependencies</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>--------------------</td>
<td>--------------------</td>
<td>------------------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>Filter Definitions</td>
<td>Required to restrict the set of members available from the source application. The filter is applied at synchronization execution against the source members.</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes—XML</td>
<td>Applications</td>
</tr>
<tr>
<td>Mapping Tables</td>
<td>Mappings that you can reuse in data synchronizations. If you have created mapping tables, you can insert them into a synchronization.</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
<tr>
<td>Interface Table</td>
<td>Database tables used to import data and metadata from external systems into Performance Management Architect</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes—XML</td>
<td>Interface Data Source</td>
</tr>
<tr>
<td>Synchronizations</td>
<td>Enables you to synchronize and map data between EPM System applications, interface tables, and external files</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes—XML</td>
<td>Applications</td>
</tr>
</tbody>
</table>

**Performance Management Architect Migration Considerations**

The destination import result of the Shared or Local dimension state depends on the artifact that is selected in the source. For considerations, review the following table:
### Table 41  Shared and Local Dimension Migration Considerations

<table>
<thead>
<tr>
<th>Source Selection</th>
<th>Source Application Dimension State</th>
<th>Destination Action</th>
<th>If Application Properties is Selected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Metadata Only</td>
<td>Local</td>
<td>The dimension is imported as LOCAL into the destination application. The dimension is created, merged, or replaced. The Shared Dimensions Library is not affected.</td>
<td>Only Application-level properties are updated</td>
</tr>
</tbody>
</table>
| 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 that 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

- Migration Export Options
- Migration Import Options

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 option:

Dimension Import Mode—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 work only 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 overwrites the property according to the source.

Note: To access export and import options, launch Shared Services Console and select Administration, and then Migration Options.

Sample Migration Definition Files

The product code used in the migration definition files for Performance Management Architect is BPMA.

Note: If the correct syntax is not used in the migration definition file, an ‘Incorrect format of MDF file’ error is displayed.

Exporting to the File System

<?xml version="1.0" encoding="UTF-8"?>
<Package>
Lifecycle Management Log Files

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

Use Lifecycle Management to migrate these types of Planning artifacts:

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

For a listing of Planning artifacts, see “Planning Artifact Listing” on page 149.

Planning Roles Requirement

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

- LCM Administrator
- Planning Administrator
- Application Creator
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 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 that 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.
- 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 “Migrating Native Directory (Security)” on page 56.

To use Lifecycle Management for Planning or Essbase, Essbase must use Shared Services Native Directory and not a legacy security mode.

- 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.

The Application Type (General, Project Financial Planning, Public Sector Planning and Budgeting) must match in both the source and the destination applications.

For Oracle Hyperion Public Sector Planning and Budgeting, the configuration options must match between the source and the destination applications. For example, if the source application has a type of “Position and Employee”, then the destination application should also have a type of “Position and Employee”.

If the decision package option is enabled for the source application, then it must also be enabled for destination application.

To migrate sandbox data using Lifecycle Management, you must refresh the cube before exporting the Planning application.

Planning Artifact Listing

Subtopics

- About the Artifact Listing
- Configuration Artifacts
- Essbase Data Artifacts
- Global Artifacts
- Plan Type Artifacts
- Relational Data Artifacts
- Security Artifacts

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

### Table 42  Configuration Artifacts

<table>
<thead>
<tr>
<th>Artifact</th>
<th>Description</th>
<th>Last Modified Time</th>
<th>Last Modified User</th>
<th>Editable on the File System?</th>
<th>Dependencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adhoc Options</td>
<td>Suppress options, precision options, replacement options, and other miscellaneous options that affect data in web grid</td>
<td>No</td>
<td>No</td>
<td>Yes—XML</td>
<td>Ad Hoc Forms</td>
</tr>
<tr>
<td>Data Load settings</td>
<td>Parameters that users can set to enable data to be loaded directly into an Essbase database</td>
<td>No</td>
<td>No</td>
<td>Yes—XML</td>
<td>Associated Dimensions</td>
</tr>
<tr>
<td>Properties—Application Definition and Application Settings</td>
<td>Functionality that enables users to set preferences for such aspects as email notification, alias tables, and display options</td>
<td>No</td>
<td>No</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
<tr>
<td>User Preferences</td>
<td>Preferences that users can set for applications, display, printing, and user variables</td>
<td>No</td>
<td>No</td>
<td>Yes—XML</td>
<td>User Variables</td>
</tr>
<tr>
<td>User Variables</td>
<td>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.</td>
<td>No</td>
<td>No</td>
<td>Yes—XML</td>
<td>Associated Dimensions</td>
</tr>
</tbody>
</table>
## Essbase Data Artifacts

<table>
<thead>
<tr>
<th>Artifact</th>
<th>Description</th>
<th>Last Modified Time</th>
<th>Last Modified User</th>
<th>Editable on the File System?</th>
<th>Dependencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Essbase Data</td>
<td>Planning Essbase data</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>None</td>
</tr>
</tbody>
</table>

## Global Artifacts

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

<table>
<thead>
<tr>
<th>Artifact</th>
<th>Description</th>
<th>Last Modified Time</th>
<th>Last Modified User</th>
<th>Editable on the File System?</th>
<th>Dependencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calculation Manager Rulesets</td>
<td>Objects that contain rules and other rulesets that can be calculated simultaneously or sequentially</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
<tr>
<td>Common Dimensions—Attribute</td>
<td>A type of dimension that enables analysis based on the attributes or qualities of dimension members. Associated with common standard dimensions.</td>
<td>Yes</td>
<td>No</td>
<td>Yes—CSV</td>
<td>None</td>
</tr>
<tr>
<td>Common Dimensions (Standard—Account)</td>
<td>A dimension type that makes accounting intelligence available. Only one dimension can be defined as Accounts</td>
<td>Yes</td>
<td>No</td>
<td>Yes—CSV</td>
<td>None</td>
</tr>
<tr>
<td>Common Dimensions (Standard—Currency)</td>
<td>A dimension representing currency</td>
<td>Yes</td>
<td>No</td>
<td>Yes—CSV</td>
<td>None</td>
</tr>
<tr>
<td>Common Dimensions (Standard—Entity)</td>
<td>A dimension representing organizational units; for example: divisions, subsidiaries, plants, regions, products, or other financial reporting units</td>
<td>Yes</td>
<td>No</td>
<td>Yes—CSV</td>
<td>Currency dimension gets loaded first</td>
</tr>
<tr>
<td>Artifact</td>
<td>Description</td>
<td>Last Modified Time</td>
<td>Last Modified User</td>
<td>Editable on the File System?</td>
<td>Dependencies</td>
</tr>
<tr>
<td>----------</td>
<td>-------------</td>
<td>--------------------</td>
<td>--------------------</td>
<td>-----------------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>Common Dimensions (Standard—Period)</td>
<td>A dimension representing time periods, such as quarters and months</td>
<td>Yes</td>
<td>No</td>
<td>Yes—CSV</td>
<td>Year</td>
</tr>
<tr>
<td>Common Dimensions (Standard—Request)</td>
<td>A dimension representing Budget Requests</td>
<td>Yes</td>
<td>No</td>
<td>Yes—CSV</td>
<td>None</td>
</tr>
<tr>
<td>Common Dimensions (Standard—Scenario)</td>
<td>A dimension for classifying data; for example, Actuals, Budget, Forecast1, and Forecast2</td>
<td>Yes</td>
<td>No</td>
<td>Yes—CSV</td>
<td>Period and Year dimensions, Exchange Rates</td>
</tr>
<tr>
<td>Common Dimensions (Standard—Version)</td>
<td>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</td>
<td>Yes</td>
<td>No</td>
<td>Yes—CSV</td>
<td>None</td>
</tr>
<tr>
<td>Common Dimensions (Standard—Year)</td>
<td>A dimension representing the fiscal or calendar year for data</td>
<td>Yes</td>
<td>No</td>
<td>Yes—CSV</td>
<td>None</td>
</tr>
<tr>
<td>Composite Forms</td>
<td>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</td>
<td>Yes</td>
<td>No</td>
<td>Yes—XML</td>
<td>Associated Data Forms</td>
</tr>
<tr>
<td>Custom Menus</td>
<td>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, or workflow.</td>
<td>Yes</td>
<td>No</td>
<td>Yes—XML</td>
<td>If menu is of type Workflow, then Planning Units</td>
</tr>
<tr>
<td>Dashboards</td>
<td>At-a-glance views of key information organized and presented in a way meaningful to a business need.</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes—XML</td>
<td>Associated Data Forms</td>
</tr>
<tr>
<td>Artifact</td>
<td>Description</td>
<td>Last Modified Time</td>
<td>Last Modified User</td>
<td>Editable on the File System?</td>
<td>Dependencies</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>--------------------</td>
<td>--------------------</td>
<td>------------------------------</td>
<td>----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Decision Package</td>
<td>Proposals for new services, programs, business objectives, or outcomes in results based management or outcome based budgeting. Decision packages contain budget requests that identify and justify the costs involved in implementing the decision package.</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes—XML</td>
<td>Decision Package Type</td>
</tr>
<tr>
<td>Decision Package Attributes</td>
<td>Custom attributes used to group, filter, or sort decision packages</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes—XML</td>
<td>Smart Lists</td>
</tr>
<tr>
<td>Decision Package Type</td>
<td>Templates that specify the fundamental data and behavior that define the kind of decision packages and budget requests that budget preparers can create</td>
<td>No</td>
<td>No</td>
<td>Yes—XML</td>
<td>Associated forms, mappings, dimensions</td>
</tr>
<tr>
<td>Exchange Rates</td>
<td>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.</td>
<td>Yes</td>
<td>No</td>
<td>Yes—CSV</td>
<td>Currency, Period, and Year</td>
</tr>
<tr>
<td>Jobs</td>
<td>Customized actions</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes—XML</td>
<td>Associated Dimensions</td>
</tr>
<tr>
<td>Planning Unit Hierarchies</td>
<td>Specifies which application planning units and members are part of the budget process</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes—XML</td>
<td>Entity, Scenario, Version and other associated dimensions</td>
</tr>
<tr>
<td>Artifact</td>
<td>Description</td>
<td>Last Modified Time</td>
<td>Last Modified User</td>
<td>Editable on the File System?</td>
<td>Dependencies</td>
</tr>
<tr>
<td>---------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------------------</td>
<td>-------------------</td>
<td>-----------------------------</td>
<td>----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Report Mappings</td>
<td>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</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes—XML</td>
<td>Associated dimensions and Smart Lists</td>
</tr>
<tr>
<td>Schedules</td>
<td>Scheduling information of actions that are set to run at intervals.</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes—XML</td>
<td>Associated Business Rules, Report Mappings, Jobs</td>
</tr>
<tr>
<td>Smart Lists</td>
<td>This artifact is not displayed under the Planning application for EPM Architect-based applications. Custom drop-down lists that users access from data form cells (instead of entering data)</td>
<td>No</td>
<td>No</td>
<td>Yes—CSV</td>
<td>None</td>
</tr>
<tr>
<td>Spread Patterns</td>
<td>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.</td>
<td>No</td>
<td>No</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
<tr>
<td>Substitution Variables</td>
<td>Global placeholders for information that changes regularly</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>None</td>
</tr>
<tr>
<td>Task Lists</td>
<td>A detailed status list of tasks for a particular user</td>
<td>Yes</td>
<td>No</td>
<td>Yes—XML</td>
<td>If task is of type Data Form, then associated Data Form. If task is of type Workflow, then Planning Units.</td>
</tr>
<tr>
<td>Valid Combination Rule</td>
<td>*Rules that define valid dimensional intersections for data entry in Planning forms.</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes—XML</td>
<td>Associated Dimensions</td>
</tr>
</tbody>
</table>
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.

Table 45 Plan Type Artifacts

<table>
<thead>
<tr>
<th>Artifact</th>
<th>Description</th>
<th>Last Modified Time</th>
<th>Last Modified User</th>
<th>Editable on the File System?</th>
<th>Dependencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attribute Dimensions</td>
<td>A list of dimensions whose type enables analysis based on the attributes or qualities of dimension members</td>
<td>Yes</td>
<td>No</td>
<td>Yes—CSV</td>
<td>None</td>
</tr>
<tr>
<td>Calc Scripts</td>
<td>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.</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>None</td>
</tr>
<tr>
<td>Calculation Manager Rules</td>
<td>Objects that can contain templates and calculations that are grouped in components</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
<tr>
<td>Data Forms</td>
<td>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.</td>
<td>Yes</td>
<td>No</td>
<td>Yes—XML</td>
<td>Associated menus, user variables, and dimensions</td>
</tr>
<tr>
<td>Report Scripts</td>
<td>Text files containing Planning Report Writer commands that generate production reports</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>None</td>
</tr>
<tr>
<td>Rules files</td>
<td>Logical expressions or formulas that are created within an application to produce a preferred set of resulting values</td>
<td>Yes</td>
<td>No</td>
<td>No (Yes—Oracle Essbase Administration Services)</td>
<td>None</td>
</tr>
<tr>
<td>Standard Dimensions</td>
<td>A list of dimensions associated with a single plan type</td>
<td>Yes</td>
<td>No</td>
<td>Yes—CSV</td>
<td>Attribute Dimensions, if any</td>
</tr>
<tr>
<td>Substitution Variables</td>
<td>Global placeholders for information that changes regularly</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>None</td>
</tr>
</tbody>
</table>
## Relational Data Artifacts

### Table 46  Relational Data Artifacts

<table>
<thead>
<tr>
<th>Artifact</th>
<th>Description</th>
<th>Last Modified Time</th>
<th>Last Modified User</th>
<th>Editable on the File System?</th>
<th>Dependencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Account Annotations</td>
<td>Comments associated with accounts that can be plain text or URL links</td>
<td>No</td>
<td>No</td>
<td>Yes—XML</td>
<td>Account, Entity, Scenario, and Version Dimensions</td>
</tr>
<tr>
<td>Announcements</td>
<td>Information displayed on the Home page when logging in to the system</td>
<td>No</td>
<td>No</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
<tr>
<td>Cell text</td>
<td>Text annotations associated with cells</td>
<td>No</td>
<td>No</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
<tr>
<td>Planning Units</td>
<td>A data slice at the intersection of a scenario, version, and entity; the basic unit for preparing, reviewing, annotating, and approving plan data</td>
<td>No</td>
<td>No</td>
<td>Yes—XML</td>
<td>Entity, Scenario, and Version Dimensions</td>
</tr>
<tr>
<td>Sandbox Changes</td>
<td>Details of the forms in which data modifications are made for every sandbox. Used for Lifecycle Management cloning.</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Forms, Essbase Data, and Version dimension</td>
</tr>
<tr>
<td>Support Detail</td>
<td>Calculations and assumptions from which the values of cells are derived</td>
<td>No</td>
<td>No</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
<tr>
<td>Tablet Access</td>
<td>Artifacts (forms, tasks, rules and rulesets) made available on a tablet user interface.</td>
<td>No</td>
<td>No</td>
<td>Yes—XML</td>
<td>Forms, Tasks, Rules and Rulesets</td>
</tr>
<tr>
<td>Text Values</td>
<td>Text that is stored as data in cells whose data type is text</td>
<td>No</td>
<td>No</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
</tbody>
</table>

### Security Artifacts

**Note:** Access permissions are a set of operations that a user can perform on a resource.
### Planning Migration Considerations

- Lifecycle Management migration to and from Planning is a long-running operation.
- 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. You must manually select any necessary dependencies. See “Migrating Artifacts” on page 45.
- The source and destination applications must have exactly the same settings for Plan Type, Calendar, and Single- or Multi-currency.
- If Planning does not exist in the target environment, Lifecycle Management creates an application shell.
- Essbase must be in Shared Services mode to use Lifecycle Management.
- Essbase artifacts are displayed under the Planning application node, and the data artifact is displayed under the Essbase Data category.
- For a first-time test to production migration, Oracle recommends migrating all the Planning-related artifacts under the Planning node.
- Oracle recommends migrating Essbase data only for a first-time test to production migration, and not for any incremental migrations.
- To export or import Planning data artifacts, Lifecycle Management must have a shared file system path.
- To enable data migration across distributed environments, `filesystem.artifact.path` must be a shared path. The Lifecycle Management file system location must be accessible from all environments in the distributed setup.

### Planning Application Migrations and Cross-Product Artifact Dependencies

When migrating Planning applications from one environment to another (development to test or test to production), cross-product artifact dependencies exist. Planning requires artifacts from other products to be migrated along with the Planning-specific artifacts.
Planning 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)
- Oracle Hyperion Calculation Manager
- Reporting and Analysis (Financial Reporting and Web Analysis)

**Note:** Essbase artifacts are displayed with Planning artifacts.

### Migration Export and Import Options

During import, Planning artifacts will replace any existing artifacts on the destination environment. You cannot merge or delete artifacts during an import.

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 no longer exists. Instead, you must manually select any necessary dependencies.

### Sample Migration Definition Files

The sample migration definition files provided are for Planning application migrations. The product code used in the migration definition files for Planning is `HP` and the sample application is `SampApp`.

**Note:** If the correct syntax is not used in the migration definition file, an ‘Incorrect format of MDF file’ error is displayed.

### Exporting to the File System

```xml
<?xml version="1.0" encoding="UTF-8" ?>
.Package
  <LOCALE>en_US</LOCALE>
  <User name="" password="" />
  <Task>
    // XML content here
  </Task>
```
Importing from the File System

<?xml version="1.0" encoding="UTF-8" ?>
<Package>
  <LOCALE>en_US</LOCALE>
  <User name="" password="" />
  <Task>
    <Source type="FileSystem" filePath="/HP-HPAuto1" />
    <Target type="Application" product="HP" project="Default Application Group" application="HPAuto1" />
    <Artifact recursive="true" parentPath="/Configuration" pattern="*" />
    <Artifact recursive="true" parentPath="/Global Artifacts" pattern="*" />
    <Artifact recursive="true" parentPath="/Plan Type" pattern="*" />
    <Artifact recursive="true" parentPath="/Relational Data" pattern="*" />
    <Artifact recursive="true" parentPath="/Security" pattern="*" />
  </Task>
</Package>

Lifecycle Management Log Files

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

There are three types of Profitability and Cost Management applications: Standard Profitability and Cost Management, Detailed Profitability and Cost Management, and Management Ledger Profitability and Cost Management. You use Lifecycle Management to migrate repository content for the model artifacts in both of these applications.

Standard Profitability and Cost Management Model Artifacts

AssignmentRules
Drivers
Model
  AssignmentRuleSelections
  DriverExceptions
  DriverRules
RegularAssignments

POV

Preferences

SmartViewQueries

Stages

**Detailed Profitability and Cost Management Model Artifacts**

AssignmentRules

CalculationConfig

Drivers

Model

**POV1**

Stage 1
- CalculationRules
- AssignmentRuleSelections
- DriverExceptions
- DriverRules

**POV2**

Stage 1
- CalculationRules
- AssignmentRuleSelections
- DriverExceptions
- DriverRules

POV

Preferences

Processes

Scripts

SQLTemplates

Stages

TableRegistration

Tables

TableJoins

Tasks

**Management Ledger Profitability and Cost Management Model Artifacts**

Model

**POV1**

Program
- Rule Set 1
  - CalculationRules
- Rule Set 2
For detailed information on Profitability and Cost Management model artifacts, see “Profitability and Cost Management Artifact Listing” on page 164.

**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 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 Enterprise Performance Management System User Security Administration Guide*.

- Deploy the application from Performance Management Architect to Profitability and Cost Management (ensure that 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. For a listing of Performance Management Architect
Profitability and Cost Management Artifact Listing

Subtopics

- About the Artifact Listing
- Standard Profitability and Cost Management Model Artifacts
- Detailed Profitability and Cost Management Model Artifacts
- Calculation Control Artifacts

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.
### Standard Profitability and Cost Management Model Artifacts

<table>
<thead>
<tr>
<th>Artifact</th>
<th>Description</th>
<th>Last Modified Time</th>
<th>Last Modified User</th>
<th>Editable on the File System?</th>
<th>Dependencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>AssignmentRules</td>
<td>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.</td>
<td>Yes</td>
<td>No</td>
<td>N/A</td>
<td>Stages</td>
</tr>
<tr>
<td>Drivers</td>
<td>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.</td>
<td>Yes</td>
<td>No</td>
<td>N/A</td>
<td>None</td>
</tr>
<tr>
<td>Model</td>
<td>Model elements for a specific Standard Profitability model based on a selected POV. Includes the following model components:</td>
<td>N/A</td>
<td>No</td>
<td>N/A</td>
<td>POV, Stages</td>
</tr>
<tr>
<td></td>
<td>- AssignmentRuleSelections—Define the flow of data from source to destination, where the destination is defined by mapping the source intersection to one or more destination assignment rules.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- DriverExceptions—Applied to drivers after a driver is created. Drivers must be associated with the single intersections to which they apply.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- DriverRules—Applied to drivers after a driver is created. Drivers must be associated with the driver dimension members to which they apply.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- RegularAssignments—Define the flow of data from source to destination, where the destination is defined by mapping the source intersection to a single destination intersection.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>POV</td>
<td>A version of a model for a selected snapshot, such as year, period, and status.</td>
<td>Yes</td>
<td>No</td>
<td>N/A</td>
<td>None</td>
</tr>
<tr>
<td>Preferences</td>
<td>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.</td>
<td>Yes</td>
<td>No</td>
<td>N/A</td>
<td>None</td>
</tr>
<tr>
<td>SmartViewQueries</td>
<td>Queries data from Essbase cubes (ASO and BSO)</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>None</td>
</tr>
<tr>
<td>Stages</td>
<td>In a Profitability and Cost Management model, the processes or activities within the model.</td>
<td>Yes</td>
<td>No</td>
<td>N/A</td>
<td>None</td>
</tr>
</tbody>
</table>
# Detailed Profitability and Cost Management Model Artifacts

Table 49  Detailed Profitability and Cost Management Model Artifacts

<table>
<thead>
<tr>
<th>Artifact</th>
<th>Description</th>
<th>Last Modified Time</th>
<th>Last Modified User</th>
<th>Editable on the File System?</th>
<th>Dependencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>AssignmentRules</td>
<td>A collection of member sets and optional filter sets for the destination stage or for identifying sets within the source stage.</td>
<td>Yes</td>
<td>No</td>
<td>N/A</td>
<td>Stages, TableRegistration</td>
</tr>
<tr>
<td>CalculationConfig</td>
<td>Available calculation operations, including bulk edit expansion and driver operation types.</td>
<td>Yes</td>
<td>No</td>
<td>N/A</td>
<td>Processes</td>
</tr>
<tr>
<td>Note:</td>
<td>Oracle does not recommend importing or exporting the CalculationConfig artifact. Check with your administrator to determine whether this type of artifact is required.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drivers</td>
<td>Available drivers in a Detailed Profitability model. The drivers calculate the value of the allocation, and provide the formulas for allocating source intersection values to destination intersections.</td>
<td>Yes</td>
<td>No</td>
<td>N/A</td>
<td>Preferences, CalculationConfig</td>
</tr>
<tr>
<td>Model</td>
<td>Model elements for a specific Detailed Profitability model based on a selected POV. Includes the following model components:</td>
<td>N/A</td>
<td>No</td>
<td>N/A</td>
<td>Stages, Assignment Rules, Drivers, POVs</td>
</tr>
<tr>
<td>CalculationRules</td>
<td>Highest-level model definition artifact used to define allocations and calculation flow. Types of CalculationRules: Calculated Measures, Single Source Assignment and Multi Source Assignment.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AssignmentRuleSelections</td>
<td>Define the flow of data from source to destination, where the destination is defined by mapping the source intersection to one or more of the destination assignment rules.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DriverExceptions</td>
<td>Applied to drivers after a driver is created. Drivers must be associated with the single intersections to which they apply.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DriverRules</td>
<td>Applied to drivers after a driver is created. Drivers must be associated with the driver dimension members to which they apply.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>POV</td>
<td>A specific version of a model for a selected snapshot, such as year, period, and status.</td>
<td>Yes</td>
<td>No</td>
<td>N/A</td>
<td>None</td>
</tr>
<tr>
<td>Preferences</td>
<td>Settings that apply to the entire model.</td>
<td>Yes</td>
<td>No</td>
<td>N/A</td>
<td>None</td>
</tr>
<tr>
<td>Note:</td>
<td>Oracle recommends that you set the model.data.schema preference to the correct value in the target system before importing an application. If the target system has a value set for this preference, it will not be overwritten on import.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Calculation Control Artifacts

Detailed Profitability and Cost Management applications use an advanced new construct called “calculation processes” to define how the model is calculated and to define certain other processing operations that are performed within the relational database. These "calculation control" artifacts are related to Driver Operation Types and Other Process Types. See “Advanced Calculation Options” in Chapter 14 of the Oracle Hyperion Profitability and Cost Management Administrator’s Guide.

The following Lifecycle Management calculation control artifacts are related to the calculation process definitions and administration:

- CalculationConfig
- Processes
- SQLTemplates
Tasks

Modification of these artifacts is an advanced, undocumented activity that can be performed only under the direction of Oracle Support. It is therefore appropriate to export or import the calculation control artifacts only when directed to do so by Oracle Support. Unless Oracle Support tells you otherwise, when you export or import application artifacts using Shared Services Console, ignore these calculation process artifacts.

It is especially important to exclude these artifacts from your exports and imports when migrating an application across environments that may use different database platforms (such as Oracle or SQL Server) or different product versions. Uncheck these artifacts before exporting to exclude them from your export files. If you are importing application artifacts from a previous export that contains any of these artifacts, be sure to uncheck them before you import.

Management Ledger Profitability and Cost Management Model Artifacts

Table 50  Management Ledger Profitability and Cost Management Model Artifacts

<table>
<thead>
<tr>
<th>Artifact</th>
<th>Description</th>
<th>Last Modified Time</th>
<th>Last Modified User</th>
<th>Editable on the File System?</th>
<th>Dependencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>Model elements for a specific Management Ledger Profitability and Cost Management model based on a selected POV. Includes the Program model component. The Program model component includes one or more Rule Sets, each composed of one or more Calculation Rules that together define the flow of data from source to destination. Note: Rule Sets and Rules are neither visible nor selectable within Lifecycle Management. When you import Program, the entire set of artifacts is imported. This set replaces existing Program artifacts in the target environment. Any Program artifacts in the target environment are deleted before the import occurs.</td>
<td>N/A</td>
<td>No</td>
<td>N/A</td>
<td>POV</td>
</tr>
<tr>
<td>ModelViews</td>
<td>User defined views of data in the application used with rule balancing and trace screens.</td>
<td>Yes</td>
<td>No</td>
<td>N/A</td>
<td>None</td>
</tr>
<tr>
<td>POV</td>
<td>A version of a model for a selected snapshot such as year, period, and status.</td>
<td>Yes</td>
<td>No</td>
<td>N/A</td>
<td>None</td>
</tr>
<tr>
<td>Preferences</td>
<td>Settings that apply to the entire model. Essbase connection information for a selected model is specified in the application preferences.</td>
<td>Yes</td>
<td>No</td>
<td>N/A</td>
<td>None</td>
</tr>
<tr>
<td>SmartViewQueries</td>
<td>Queries data from Essbase cubes (ASO).</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>None</td>
</tr>
</tbody>
</table>
Profitability and Cost Management 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), cross-product artifact dependencies exist. Profitability and Cost Management requires artifacts from the following other products to be migrated along with the Profitability and Cost Management-specific artifacts.

- Shared Services Native Directory (users, groups, and provisioning)
- Essbase (for Standard Profitability and Cost Management only)

Migration Export and Import Options

Subtopics

- Migration Export Options
- Migration Import Options

Migration Export Options

Program is the only product-specific Profitability and Cost Management export option.

Note: For Standard and Management Ledger Profitability and Cost Management, Essbase artifacts are exported (outlines, data, calc scripts) under the Essbase application.

Migration Import Options

Program is the only Profitability and Cost Management product-specific import option.

Note: For Standard and Detailed Profitability and Cost Management, Lifecycle Management imports artifacts only if they are not present in the target model. Existing artifacts are not replaced or merged. For Management Ledger Profitability and Cost Management, pre-existing program artifacts are deleted and replaced.

Sample Migration Definition Files

The product code used in the migration definition files for Profitability and Cost Management is HPM.

Note: If the correct syntax is not used in the migration definition file, an ‘Incorrect format of MDF file’ error is displayed.
Exporting to the File System

```xml
<?xml version="1.0" encoding="UTF-8" ?>
<Package>
    <LOCALE>en_US</LOCALE>
    <User name="" password="" />
    <Task>
        <Source type="Application" product="HPM" project="Default Application Group" application="Bikes72" />
        <Target type="FileSystem" filePath="/HPCM-Bikes72" />
        <Artifact recursive="true" parentPath="/AssignmentRules" pattern="*" />
        <Artifact recursive="true" parentPath="/Drivers" pattern="*" />
        <Artifact recursive="true" parentPath="/Model" pattern="*" />
        <Artifact recursive="true" parentPath="/Preferences" pattern="*" />
        <Artifact recursive="true" parentPath="/Stages" pattern="*" />
    </Task>
</Package>
```

Importing from the File System

```xml
<?xml version="1.0" encoding="UTF-8" ?>
<Package>
    <LOCALE>en_US</LOCALE>
    <User name="" password="" />
    <Task>
        <Source type="FileSystem" filePath="/HPCM-Bikes72" />
        <Target type="Application" product="HPM" project="Default Application Group" application="Bikes72" />
        <Artifact recursive="true" parentPath="/AssignmentRules" pattern="*" />
        <Artifact recursive="true" parentPath="/Drivers" pattern="*" />
        <Artifact recursive="true" parentPath="/Model" pattern="*" />
        <Artifact recursive="true" parentPath="/Preferences" pattern="*" />
        <Artifact recursive="true" parentPath="/Stages" pattern="*" />
    </Task>
</Package>
```

Lifecycle Management Log Files

Lifecycle Management log files for Profitability and Cost Management are listed in the Oracle Enterprise Performance Management System Installation and Configuration Troubleshooting Guide.

Note: Details are documented in the logging section of S9 Logging.
### About Reporting and Analysis Artifacts

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

- Financial Reporting
- Interactive Reporting
- Production Reporting
- Oracle Hyperion Web Analysis

For a listing of Reporting and Analysis artifacts, see “Reporting and Analysis Artifact Listing” on page 173.

### 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

- Install and configure Shared Services and Reporting and Analysis and verify that they are running. See the Oracle 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.

- Migrate the Shared Services Native Directory artifacts (users, groups, roles, and assigned roles). See “Migrating Native Directory (Security)” on page 56.

Configuring 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 Oracle Hyperion SQR 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, and then select Create New PR Engine.

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

Creating 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 Oracle Hyperion Enterprise Performance Management 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 Oracle Hyperion Interactive Reporting connection file (.oce), which remains unchanged during migration.

**Reporting and Analysis Artifact Listing**

**Subtopics**
- About the Artifact Listing
- Physical Resources Artifacts
- Security Artifacts
- Schedule Objects Artifacts
- Product Preferences Artifacts
- Repository Objects Artifacts
- Admin Options Artifacts

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 179.
- **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>
<thead>
<tr>
<th>Artifact</th>
<th>Description</th>
<th>Last Modified Time</th>
<th>Last Modified User</th>
<th>Editable on the File System?</th>
<th>Dependencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Printers Defined</td>
<td>Printers available to the print server when jobs are running</td>
<td>No</td>
<td>No</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
<tr>
<td>Output Directories</td>
<td>Directories for saving export files or Interactive Reporting documents</td>
<td>No</td>
<td>No</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
</tbody>
</table>

**Security Artifacts**

The Security directory contains user preferences artifacts.

<table>
<thead>
<tr>
<th>Artifact</th>
<th>Description</th>
<th>Last Modified Time</th>
<th>Last Modified User</th>
<th>Editable on the File System?</th>
<th>Dependencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>User Preferences</td>
<td>Default startup options</td>
<td>No</td>
<td>No</td>
<td>Yes—XML</td>
<td>Any related Repository Objects</td>
</tr>
</tbody>
</table>

**Schedule Objects Artifacts**

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

<table>
<thead>
<tr>
<th>Artifact</th>
<th>Description</th>
<th>Last Modified Time</th>
<th>Last Modified User</th>
<th>Editable on the File System?</th>
<th>Dependencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Externally Triggered Events</td>
<td>Triggers for execution of jobs</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
<tr>
<td>Recurring Time Events</td>
<td>Triggers for execution of jobs</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes—XML</td>
<td>Custom Calendars, Externally Triggered Events</td>
</tr>
<tr>
<td>Calendars</td>
<td>User-defined time periods and their relationship to each other. A calendar fiscal year is composed of Q1, Q2, Q3, and Q4.</td>
<td>No</td>
<td>No</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
<tr>
<td>Artifact</td>
<td>Description</td>
<td>Last Modified Time</td>
<td>Last Modified User</td>
<td>Editable on the File System?</td>
<td>Dependencies</td>
</tr>
<tr>
<td>------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>--------------------</td>
<td>--------------------</td>
<td>------------------------------</td>
<td>-------------------------------------------------</td>
</tr>
<tr>
<td>Job Schedules</td>
<td>Specifies the job that you want to run and the time and job parameter list for running the job</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes—XML</td>
<td>Events, Job Parameters, Jobs</td>
</tr>
<tr>
<td>Job Parameters</td>
<td>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.</td>
<td>No</td>
<td>Yes</td>
<td>Yes—XML</td>
<td>Jobs, Physical Resources</td>
</tr>
</tbody>
</table>

**Product Preferences Artifacts**

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

**Table 54 **Product Preferences Artifacts

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

**Table 55  Repository Objects Artifacts**

<table>
<thead>
<tr>
<th>Artifact</th>
<th>Description</th>
<th>Last Modified Time</th>
<th>Last Modified User</th>
<th>Editable on the File System?</th>
<th>Dependencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Folders</td>
<td>A file containing other files for the purpose of structuring a hierarchy</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes—XML (metadata only)</td>
<td>None</td>
</tr>
<tr>
<td>Third Party Content</td>
<td>Content that has been imported from an auxiliary product, such as Microsoft Word or Excel</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
<tr>
<td>Shortcuts</td>
<td>Shortcuts to existing repository objects</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes—XML (metadata only)</td>
<td>Corresponding existing repository objects</td>
</tr>
<tr>
<td>URLs</td>
<td>Web links published as separate objects</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes—XML (metadata only)</td>
<td>None</td>
</tr>
</tbody>
</table>
| Financial Reporting Annotations | Collaborative information that can be shared on particular report objects and data | Yes                 | Yes                | No                           | Financial Reporting objects of the following types:  
  - Data Source  
  - Grid: Data Source (No Dimension POV)  
  - Text, Chart, Grid, or Image  
  - Cell or partial POV (for example, rows or columns in a report |
<p>| 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)      | Reports, 3rd Party Documents                                                 |
| Financial Reporting Batches | An accumulation of files that are organized into a single group for transmitting or printing | Yes                 | Yes                | Yes—XML (metadata only)      | Reports, Books, any related Financial Reporting Repository Objects         |</p>
<table>
<thead>
<tr>
<th>Artifact</th>
<th>Description</th>
<th>Last Modified Time</th>
<th>Last Modified User</th>
<th>Editable on the File System?</th>
<th>Dependencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Reporting Charts</td>
<td>A report object that displays data graphically using bar, line, combo, or pie charts.</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes—XML (metadata only)</td>
<td>None</td>
</tr>
<tr>
<td>Financial Reporting Grids</td>
<td>A report object in which you retrieve data in the rows, columns, and page axes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes—XML (metadata only)</td>
<td>None</td>
</tr>
<tr>
<td>Financial Reporting Images</td>
<td>A report object that contains a graphic or an image file</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes—XML (metadata only)</td>
<td>None</td>
</tr>
<tr>
<td>Financial Reporting Reports</td>
<td>A Financial Reporting document with predefined behavior or appearance such as text boxes, images, grids, and charts</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes—XML (metadata only)</td>
<td>Images, Grids, Text Boxes, Charts</td>
</tr>
<tr>
<td>Financial Reporting Row and Column Templates</td>
<td>A template based on rows and columns in a grid</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes—XML (metadata only)</td>
<td>None</td>
</tr>
<tr>
<td>Financial Reporting Scheduled Batch Jobs</td>
<td>The batch jobs to run and the time and job parameter list for running the job</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Financial Reports, Financial Reporting Books</td>
</tr>
<tr>
<td>Financial Reporting Snapshot Books</td>
<td>A container that holds a group of similar Financial Reporting documents. All Financial Reporting documents are converted to snapshots containing static data for that time period.</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes—XML (metadata only)</td>
<td>None</td>
</tr>
<tr>
<td>Artifact</td>
<td>Description</td>
<td>Last Modified Time</td>
<td>Last Modified User</td>
<td>Editable on the File System? ¹</td>
<td>Dependencies</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>--------------------</td>
<td>--------------------</td>
<td>---------------------------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>Financial Reporting Snapshot Reports</td>
<td>A Financial Reporting document that contains static data in the document, disconnected from the data source and not updated when data changes.</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes—XML (metadata only)</td>
<td>None</td>
</tr>
<tr>
<td>Financial Reporting Texts</td>
<td>Text objects that can be associated with a Financial Reporting report</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes—XML (metadata only)</td>
<td>None</td>
</tr>
<tr>
<td>Financial Reporting User POV</td>
<td>User-specific point of view for data sources</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Financial Reports</td>
</tr>
<tr>
<td>Generic Jobs</td>
<td>Jobs running against Generic Job Factory</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes—XML (metadata only)</td>
<td>Generic Jobs, required files, custom forms</td>
</tr>
<tr>
<td>Generic Job Outputs</td>
<td>Outputs from Generic jobs</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes—XML (metadata only)</td>
<td>Generic Jobs</td>
</tr>
</tbody>
</table>

¹For most 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 179.

²Third-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 to its original name).

## Admin Options Artifacts

**Note:** Computer-specific artifacts cannot be migrated. They must be manually defined on the destination environment before a migration can occur.
Table 56  Product Preferences Artifacts

<table>
<thead>
<tr>
<th>Artifact</th>
<th>Description</th>
<th>Last Modified Time</th>
<th>Last Modified User</th>
<th>Editable on the File System?</th>
<th>Dependencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generic job configuration(^1)</td>
<td>A definition of a generic application to be used to run generic Reporting and Analysis jobs; for example, any third-party application</td>
<td>No</td>
<td>No</td>
<td>Yes—XML</td>
<td>None</td>
</tr>
</tbody>
</table>

\(^1\)A common definition can be migrated but an executable cannot. Executables must be manually defined after migration of generic jobs for each generic job configuration.

**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:

- 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 53.
  2. Unzip the content.
  3. Edit the artifacts.
  4. Rename the binary files back to the original names noted in step 3.
  5. Add the edited file to the archive using the replace option.
  6. Import the archive back into the application. See “Importing Individual Artifacts After Editing” on page 54.

- Financial Reporting objects

  Financial Reporting objects are exported in 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, because binary representation is not editable.

**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 functional only for Lifecycle Management Utility.

<table>
<thead>
<tr>
<th>Artifact</th>
<th>Artifact Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Custom calendar</td>
<td>Calendar</td>
</tr>
<tr>
<td>Externally Triggered Event</td>
<td>ExternallyTriggeredEvent</td>
</tr>
<tr>
<td>Folder</td>
<td>Folder</td>
</tr>
<tr>
<td>Generic product configuration</td>
<td>GenericProduct</td>
</tr>
<tr>
<td>Job Parameter</td>
<td>JobParameter</td>
</tr>
<tr>
<td>Job Schedule</td>
<td>JobSchedule</td>
</tr>
<tr>
<td>List of favorites for user</td>
<td>Favorites</td>
</tr>
<tr>
<td>OCE File</td>
<td>OCEFile</td>
</tr>
<tr>
<td>Output directory definition</td>
<td>OutputDirectory</td>
</tr>
<tr>
<td>Personal Page</td>
<td>PersonalPageContent</td>
</tr>
<tr>
<td>Printer definition</td>
<td>Printer</td>
</tr>
<tr>
<td>Recurring Time Event</td>
<td>RecurringTimeEvent</td>
</tr>
<tr>
<td>Subscription</td>
<td>Subscription</td>
</tr>
<tr>
<td>User Preferences</td>
<td>UserPreferences</td>
</tr>
<tr>
<td>Generic jobs</td>
<td>ProgramCollection</td>
</tr>
<tr>
<td>Generic job outputs</td>
<td>OutputCollection</td>
</tr>
<tr>
<td>Shortcut</td>
<td>Shortcut</td>
</tr>
<tr>
<td>Third-party content</td>
<td>application/pdf, image/gif, image/jpeg (and so on)</td>
</tr>
<tr>
<td>URL</td>
<td>URL</td>
</tr>
<tr>
<td>Financial Reporting Annotations</td>
<td>application/hyperion-annotation</td>
</tr>
<tr>
<td>Financial Reporting Batch</td>
<td>application/hyperion-reports-batch</td>
</tr>
<tr>
<td>Financial Reporting Book</td>
<td>application/hyperion-reports-book</td>
</tr>
<tr>
<td>Financial Reporting Chart object</td>
<td>application/hyperion-reports-chart</td>
</tr>
<tr>
<td>Financial Reporting Database Connection</td>
<td>application/hyperion-reports-data_source</td>
</tr>
<tr>
<td>Financial Reporting Grid object</td>
<td>application/hyperion-reports-grid</td>
</tr>
</tbody>
</table>
### Reporting and Analysis Migration Considerations

Financial Reporting data sources are migrated along with Oracle Hyperion Financial Reporting Report definitions; however, they are created in the target only when a corresponding report is opened for the first time. The data sources can be seen in the Database Connection Manager only after they are created when the reports are invoked.

### Reporting and Analysis Application Migrations and Cross-Product Artifact Dependencies

### Migration Export and Import Options

#### Subtopics
- **Migration Export Options**
- **Migration Import Options**

To access export and import options, launch Shared Services Console and select **Administration**, and then **Migration Options**.

**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 that were not imported during previous migrations).
Migration Export Options

Reporting and Analysis export option:

Export With Job Output—If Yes, then jobs are exported along with their outputs even in cases where the outputs do not match export filters. The default value is Yes.

Migration Import Options

Reporting and Analysis import options:

- Exclude Job Output on Import—If Yes, all job outputs are skipped on import, even if they match the import filter. The default value is No.
- Replace Newer Artifacts Only—If Yes, only the artifacts that have a newer last modified timestamp in the file system compared to the one in the repository are imported and replaced. The default value is No, which replaces any existing artifacts in the destination environment, regardless of the last modified timestamp.

Lifecycle Management Log Files

Lifecycle Management log files for Reporting and Analysis are listed in the Oracle 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.
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, Oracle Hyperion Planning access permissions and Oracle 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 184.

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

- Install and configure Shared Services and EPM System products and verify that they are running. See the Oracle Enterprise Performance Management System Installation and Configuration Guide.

- Ensure that users performing Lifecycle Management operations are assigned the LCM Administrator role. See the Oracle Enterprise Performance Management System User Security Administration Guide.

- 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. Export the source application provisioning artifacts and download them to your system.
  2. In the source application CSV file (for example, sourceapp.csv), replace the source application group name with the destination application group name, and 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. Upload the updated LCM File system folder, and then import it back to the destination application.

- When migrating Shared Services native users across environments, if users in the source environment should not be migrated to the target environment, you must edit the exported content to remove these users before importing. In the File System, open the artifact Users.csv and remove the rows that should not be migrated. (Each row corresponds to one user.) Once edited, you can import the Users.csv artifact into the target environment, and the excluded users will not get created.

Shared Services Artifact Listing

Subtopics

- About the Artifact Listing
- Native Directory (Security) Artifacts
- Taskflow Artifacts

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 Oracle Hyperion 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

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

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

Table 59  Taskflow Artifacts

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

Shared Services Application Migrations and Cross-Product Artifact Dependencies

Shared Services has no cross-product artifact dependencies.

Shared Services Native Directory Migration Options

Subtopics

- Native Directory Migration Import Options
- Native Directory CSV Files

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.
- Backslashes are not special characters and do not escape anything.
- Quotes inside quoted strings are escaped with double quotation marks rather than backslashes.

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 information
- 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 188
- “CSV File for Groups” on page 189
- “CSV File for Roles” on page 190
- “CSV File for Provisioning” on page 190
- “CSV File for Delegated Lists” on page 191

**CSV File for Users**

### Sample CSV File for User

```
#user
id,provider,login_name,first_name,last_name,description,email,internal_id,password,active
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*,{SHA}W6ph5Mm5Pz8GgiULbPgzG37mj9g=", and active true:

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

### Table 60  User Entity Attributes

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description and Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>id</td>
<td>User's ID</td>
</tr>
<tr>
<td></td>
<td>Example: admin</td>
</tr>
<tr>
<td>provider</td>
<td>Optional: Name of the source user directory</td>
</tr>
<tr>
<td></td>
<td>Example: Native Directory</td>
</tr>
<tr>
<td>Attribute</td>
<td>Description and Example</td>
</tr>
<tr>
<td>--------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>login_name</td>
<td>User's login name</td>
</tr>
<tr>
<td>Example:</td>
<td>admin</td>
</tr>
<tr>
<td>first_name</td>
<td>Optional: User's first name</td>
</tr>
<tr>
<td>Example:</td>
<td>administrator</td>
</tr>
<tr>
<td>last_name</td>
<td>Optional: User's last name</td>
</tr>
<tr>
<td>Example:</td>
<td>user</td>
</tr>
<tr>
<td>description</td>
<td>Optional: User description</td>
</tr>
<tr>
<td>Example:</td>
<td>hss admin user</td>
</tr>
<tr>
<td>email</td>
<td>Optional: User's email address</td>
</tr>
<tr>
<td>Example:</td>
<td><a href="mailto:admin@hyperion.com">admin@hyperion.com</a></td>
</tr>
<tr>
<td>internal_id</td>
<td>The autogenerated internal identity of the Native Directory user</td>
</tr>
<tr>
<td>Example:</td>
<td>&quot;native://DN=cn=911,ou=People,dc=css,dc=hyperion,dc=com?USER&quot;</td>
</tr>
<tr>
<td>password</td>
<td>User's password</td>
</tr>
<tr>
<td>Example:</td>
<td>(SHA)W6ph5Mn5Pz8GqiULbPgG37mj9g=</td>
</tr>
<tr>
<td>active</td>
<td>Indicates whether user is active (true) or not active (false)</td>
</tr>
<tr>
<td>Example:</td>
<td>true</td>
</tr>
</tbody>
</table>

**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>
<thead>
<tr>
<th>Attribute</th>
<th>Description and Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>id</td>
<td>Group identifier</td>
</tr>
<tr>
<td>Example:</td>
<td>WORLD</td>
</tr>
<tr>
<td>provider</td>
<td>Optional: Source user directory for the group</td>
</tr>
<tr>
<td>Example:</td>
<td>Native Directory</td>
</tr>
<tr>
<td>name</td>
<td>Group name</td>
</tr>
<tr>
<td>Example:</td>
<td>WORLD</td>
</tr>
</tbody>
</table>
### Table 62  Role Entity Attributes

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description and Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>id</td>
<td>Role identifier</td>
</tr>
<tr>
<td></td>
<td><strong>Example:</strong> Designer_rep</td>
</tr>
<tr>
<td>product_type</td>
<td>Product type (specified as product code-product version) to which the role belongs</td>
</tr>
<tr>
<td></td>
<td><strong>Example:</strong> hava-11.1.1</td>
</tr>
<tr>
<td>name</td>
<td>Role name</td>
</tr>
<tr>
<td></td>
<td><strong>Example:</strong> Designer_rep</td>
</tr>
<tr>
<td>description</td>
<td>Optional: Role description</td>
</tr>
<tr>
<td></td>
<td><strong>Example:</strong> Report Designer</td>
</tr>
</tbody>
</table>

### CSV File for Provisioning

#### Sample CSV File for Provisioning

```csv
#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 63  Provisioning Entity Attributes

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description and Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>app_id</td>
<td>The application to which the role belongs</td>
</tr>
<tr>
<td></td>
<td><strong>Example</strong>: WebAnalysis</td>
</tr>
<tr>
<td>product_type</td>
<td>Product type (specified as <code>product code-product version</code>) to which the role belongs</td>
</tr>
<tr>
<td></td>
<td><strong>Example</strong>: <code>hava-11.1.1</code></td>
</tr>
<tr>
<td>role_id</td>
<td>Unique role identifier</td>
</tr>
<tr>
<td></td>
<td><strong>Example</strong>: <code>native://DN=cn=HUB:2,ou=HUB,ou=Roles,dc=css,dc=hyperion,dc=com?ROLE</code></td>
</tr>
<tr>
<td>user_id</td>
<td>Unique identifier of a user who is provisioned to the role</td>
</tr>
<tr>
<td></td>
<td><strong>Example</strong>: <code>pturner</code></td>
</tr>
<tr>
<td>group_id</td>
<td>Unique identifier of a group that is provisioned to the role</td>
</tr>
<tr>
<td></td>
<td><strong>Example</strong>: <code>testgroup</code></td>
</tr>
</tbody>
</table>

CSV File for Delegated Lists

Sample CSV File for Delegated List

```plaintext
#delegated list
id,name,description,manager_id,manager_provider,user_id,user_provider,group_id,group_provider
```
```plaintext
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 in Native Directory.

Table 64  Delegated List Entity Attributes

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description and Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>id</td>
<td>The list identifier, typically the same as the list name</td>
</tr>
<tr>
<td></td>
<td><strong>Example</strong>: <code>testlist</code></td>
</tr>
<tr>
<td>name</td>
<td>Delegated list name</td>
</tr>
<tr>
<td></td>
<td><strong>Example</strong>: <code>testlist</code></td>
</tr>
<tr>
<td>description</td>
<td>Delegated list description</td>
</tr>
<tr>
<td></td>
<td><strong>Example</strong>: <code>my_list</code></td>
</tr>
<tr>
<td>manager_id</td>
<td>Unique identifier of a user or group who manages the list. Each manager must be identified in a separate definition.</td>
</tr>
<tr>
<td></td>
<td><strong>Example</strong>: <code>admin</code></td>
</tr>
<tr>
<td>Attribute</td>
<td>Description and Example</td>
</tr>
<tr>
<td>--------------------</td>
<td>-----------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>manager_provider</td>
<td>The user directory that stores the manager's account</td>
</tr>
<tr>
<td></td>
<td>Example: Native Directory</td>
</tr>
<tr>
<td>user_id</td>
<td>Unique identifier of a user member of the list. Each member must be identified in a separate definition.</td>
</tr>
<tr>
<td></td>
<td>Example: admin</td>
</tr>
<tr>
<td>user_provider</td>
<td>The user directory that stores the user member's account</td>
</tr>
<tr>
<td></td>
<td>Example: Native Directory</td>
</tr>
<tr>
<td>group_id</td>
<td>Unique identifier of a group that is a member of the list. Each member must be identified in a separate definition.</td>
</tr>
<tr>
<td></td>
<td>Example: myGroup</td>
</tr>
<tr>
<td>group_provider</td>
<td>The user directory that stores the group's account</td>
</tr>
<tr>
<td></td>
<td>Example: Native Directory</td>
</tr>
</tbody>
</table>

**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 Oracle Enterprise Performance Management 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.

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

**Sample Migration Definition Files**

The product code used in the migration definition files for Shared Services is HUB.

**Note:** If the correct syntax is not used in the migration definition file, an 'Incorrect format of MDF file' error is displayed.

**Exporting to the File System**

```xml
<?xml version="1.0" encoding="UTF-8" ?>
<Package>
  <LOCALE>en_US</LOCALE>
  <User name="" password="" />
  <Task>
    <Source type="Application" product="HUB" project="Foundation" application="Shared"/>  
```
Lifecycle Management Log Files

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