

Oracle® Enterprise Performance Management System

Installation and Configuration Guide



Release 11.2.0
F13312-01
November 2019

The Oracle logo, consisting of a solid red square with the word "ORACLE" in white, uppercase, sans-serif font centered within it.

ORACLE®

Oracle Enterprise Performance Management System Installation and Configuration Guide, Release 11.2.0

F13312-01

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1

About EPM System Product Installations

Related Topics

- [About EPM System Products](#)
- [Assumed Knowledge](#)
- [About Middleware Home, EPM Oracle Home, and EPM Oracle Instance](#)
- [About the Shared Services Registry](#)
- [Characters Supported for Installation and Configuration](#)
- [EPM System Deployment Documentation](#)

About EPM System Products

Check the [Oracle Help Center](#) to see whether an updated version of this guide is available.

Oracle Enterprise Performance Management System products form a comprehensive Enterprise Performance Management system that integrates modular suites of financial management applications with the most comprehensive business intelligence capabilities for reporting and analysis. Major components of EPM System products:

- Oracle Hyperion Foundation Services
 - Foundation Services (includes Oracle Hyperion Shared Services and Oracle Hyperion Enterprise Performance Management Workspace)
 - Optionally, Oracle HTTP Server
 - Oracle WebLogic Server
 - Oracle Hyperion Calculation Manager
 - Oracle Smart View for Office
- Oracle Essbase
 - Essbase
 - Oracle Essbase Administration Services
 - Oracle Hyperion Provider Services
 - Oracle Essbase Studio
- Oracle Hyperion Financial Reporting
- Oracle's Hyperion Financial Performance Management Applications
 - Oracle Hyperion Planning
 - Oracle Hyperion Financial Management
 - Oracle Hyperion Profitability and Cost Management
 - Oracle Hyperion Financial Close Management

- Oracle Hyperion Tax Governance
- Oracle Hyperion Tax Provision
- Oracle's Data Management
 - Oracle Hyperion Financial Data Quality Management, Enterprise Edition
 - Oracle Data Relationship Management

Assumed Knowledge

This guide is for administrators who install, configure, and manage Oracle Enterprise Performance Management System products. It assumes the following knowledge:

- Security and server administration skills
- Operating system administration skills
- Java web application server administration skills.
- A strong understanding of your organization's security infrastructure, including authentication providers such as Oracle Internet Directory, LDAP, or Microsoft Active Directory, and use of SSL
- A strong understanding of your organization's database and server environments
- A strong understanding of your organization's network environment and port usage

About Middleware Home, EPM Oracle Home, and EPM Oracle Instance

Middleware Home

A Middleware home consists of the Oracle WebLogic Server home, and, optionally, one or more Oracle homes, including EPM Oracle home. A Middleware home can reside on a local file system or on a remote shared disk that is accessible through Network File System (NFS).

The Middleware home location is defined during the first product installation on the computer. Subsequent installations on the computer use the previously defined location. The default installation directory is `Oracle/Middleware`. The Middleware home location is referred to as `MIDDLEWARE_HOME` throughout this document.

EPM Oracle Home

An Oracle home contains installed files necessary to host a specific product, and resides within the directory structure of the Middleware home. The EPM Oracle home contains files for Oracle Enterprise Performance Management System products.

Components of EPM System products are installed in the EPM Oracle home directory under the Middleware home. The default EPM Oracle home location is `MIDDLEWARE_HOME/EPMSys11R1`. In addition, common internal components used by the products are installed in EPM Oracle home. Choose the location carefully to ensure that the location has enough disk space for all products that you are installing on the machine. You cannot change the location.

The EPM Oracle home location is defined in the system environment variable called `EPM_ORACLE_HOME`. The EPM Oracle home location is referred to as `EPM_ORACLE_HOME` throughout this document.

In a distributed environment, the EPM Oracle home directory structure must be the same on each machine.

EPM Oracle Instance

An EPM Oracle instance contains one or more system components such as Oracle HTTP Server, Oracle Essbase Server, as well as one or more Java web applications in one or more domains. The directory structure of an Oracle instance is separate from the directory structure of the Oracle home. It can reside anywhere; it need not be within the Middleware home directory.

The default location for the EPM Oracle instance is `MIDDLEWARE_HOME/user_projects/epmsystem1`. The EPM Oracle instance location is referred to as `EPM_ORACLE_INSTANCE` throughout this document.

Java web applications are deployed to `MIDDLEWARE_HOME/user_projects/domains/domainName`.

Typically, if you are installing all products on a single machine, for the first product you configure, you create a new EPM Oracle instance. For each product after that, you modify the existing EPM Oracle instance. If you are installing in a distributed environment, create a new EPM Oracle instance on each machine.

About the Shared Services Registry

The Oracle Hyperion Shared Services Registry is part of the database that you configure for Oracle Hyperion Foundation Services. Created the first time that you configure Oracle Enterprise Performance Management System products, the 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 database settings and deployment settings
- The computer names, ports, servers, and URLs you use to implement multiple, integrated, EPM System products and components
- Oracle Essbase failover content

Configuration changes that you make for one product are automatically applied to other products used in the deployment.

You can view and manage the contents of the Shared Services Registry using Lifecycle Management in the Oracle Hyperion Shared Services Console. See the *Oracle Enterprise Performance Management System Lifecycle Management Guide*.

Characters Supported for Installation and Configuration

The following characters are supported during installation and configuration with EPM System Installer and EPM System Configurator.

Table 1-1 Characters Supported for Installation and Configuration

Fields	Supported Characters	Blocked Characters
PATH	Alphanumeric, dash (-), underscores (_), periods (.), and tildes (~). Tildes are supported only on Microsoft Windows.	All others
Host name	Alphanumeric, dash (-), and dot(.). Oracle Enterprise Performance Management System supports IPv6 addresses. However, during installation and configuration, you must enter the host name, not the IPv6 address.	All others
User name	Alphanumeric characters including non-English (extended and double-byte) characters, except for the blocked characters	+ * / # [] { } () ; : , @ ! " -
Clusters, database names, and other general fields such as DSN names	Alphanumeric characters including non-English (extended and double-byte) characters, except for the blocked characters	+ . - * \ / # [] { } () ; : , @ ! "
<i>MIDDLEWARE_HOME</i> , <i>EPM_ORACLE_HOME</i> and <i>EPM_ORACLE_INSTANCE</i>	For <i>MIDDLEWARE_HOME</i> : Alphanumeric characters, "_", "-" and "~" on Windows. For <i>EPM_ORACLE_INSTANCE</i> : Alphanumeric characters, "_", "-". The first character in every folder in the <i>EPM_ORACLE_INSTANCE</i> path must be a-z, A-Z, or 0-9.	Do not use any of the following symbols or symbol combinations in the directory that you specify for <i>EPM_ORACLE_HOME</i> or <i>MIDDLEWARE_HOME</i> during installation or <i>EPM_ORACLE_INSTANCE</i> during configuration: /t \t \b .

EPM System Deployment Documentation

Related Topics

- [Deployment Paths](#)
- [Accessing Documentation](#)

Deployment Paths

Use this section to determine which deployment path to use and which installation documentation to use, depending on your needs.

Table 1-2 Available Deployment Paths

Base Deployment: Pick One	When to Choose This Option	Use This Guide
New deployment	Use for a new deployment.	Installing EPM System Products in a New Deployment in <i>Oracle Enterprise Performance Management System Installation and Configuration Guide</i>
Upgrade	Use to upgrade from Release 11.1.2.4.xxx. Upgrade is installing to a new environment and migrating data and other artifacts.	

Perform Additional Configuration Options

Table 1-3 Perform Additional Configuration Options

Task	Related Documentation
Perform additional deployment configuration options after completing a standard or custom deployment, such as scaling out or rehosting services	<i>Oracle Enterprise Performance Management System Deployment Options Guide</i>
Perform additional security configuration options after completing a standard or custom deployment, such as configuring user directories or reconfiguring to use SSL	<i>Oracle Enterprise Performance Management System Security Configuration Guide</i>

Perform Ongoing Administration

Table 1-4 Perform Ongoing Administration

Task	Related Documentation
Perform security administration tasks, such as provisioning users and groups with the appropriate roles	<i>Oracle Enterprise Performance Management System User Security Administration Guide</i>
Migrate applications from one environment to another, such as from test to production	<i>Oracle Enterprise Performance Management System Lifecycle Management Guide</i>
Troubleshoot problems with your deployment	<i>Oracle Enterprise Performance Management System Installation and Configuration Troubleshooting Guide</i>

Table 1-4 (Cont.) Perform Ongoing Administration

Task	Related Documentation
Create a backup of product and application data	<i>Oracle Enterprise Performance Management System Backup and Recovery Guide</i>

Accessing Documentation

Find the latest Oracle Enterprise Performance Management System installation and product guides in the Oracle Help Center (<https://docs.oracle.com/en/>). To access documents to view or download, click the Applications icon. In the Applications Documentation window, select the Enterprise Performance Management tab, and then look for your release in the Enterprise Performance Management list.

You can also find deployment-related documentation on the Oracle Technology Network (<http://www.oracle.com/technetwork/index.html>) and on the Oracle Software Delivery Cloud website (http://edelivery.oracle.com/EPD/WelcomePage/get_form).

2

EPM System Architecture

Related Topics

- [About EPM System Architecture](#)
- [Essbase Components](#)
- [FDMEE Components](#)
- [Financial Close Management Components](#)
- [Financial Management Components](#)
- [Planning Components](#)
- [Profitability and Cost Management Components](#)
- [Financial Reporting Components](#)
- [Tax Governance Components](#)
- [Tax Provision Components](#)

About EPM System Architecture

Oracle Enterprise Performance Management System is a multi-tier application environment that mainly utilizes thin-client architecture for end-user access, requiring only a supported browser on the client machine. Network traffic between the client and middle-tier server(s) generally does not exceed more than normal web traffic.

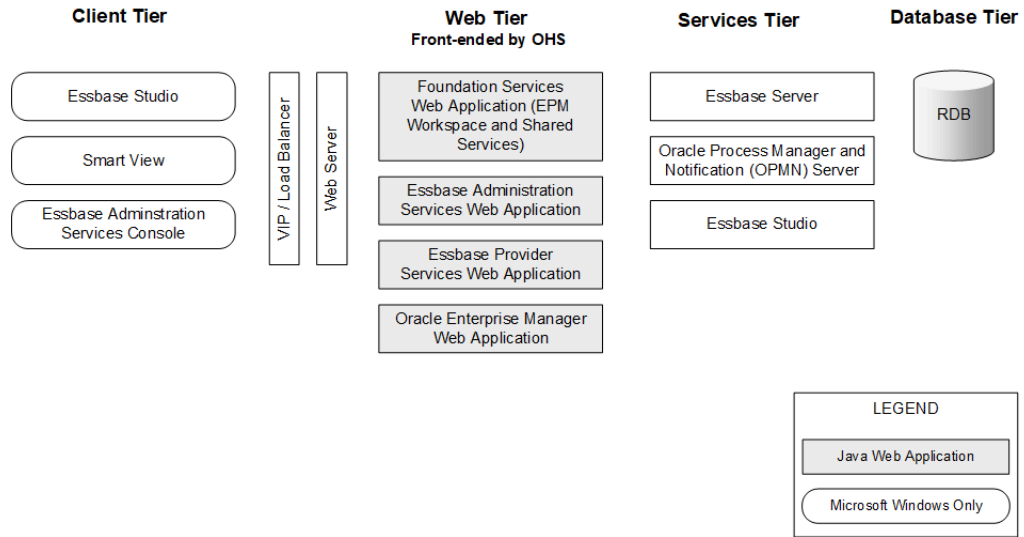
A middle-tier application server is required. Oracle WebLogic Server is provided with a default installation.

The data tier is comprised of two components that store data differently. In Oracle Essbase environments, the data is stored and calculated in the database on the server file system. In Oracle Hyperion Financial Management environments, the application framework, metadata, and textual data are stored in a relational repository.

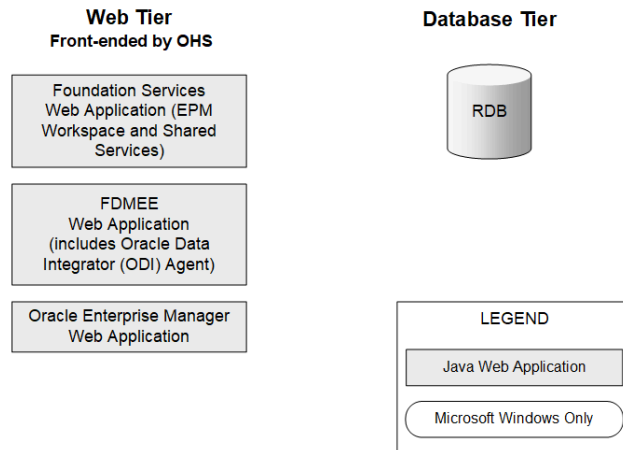
Tip:

For optimum viewing of the component architecture diagrams in PDF format, try increasing the view magnification to 120%.

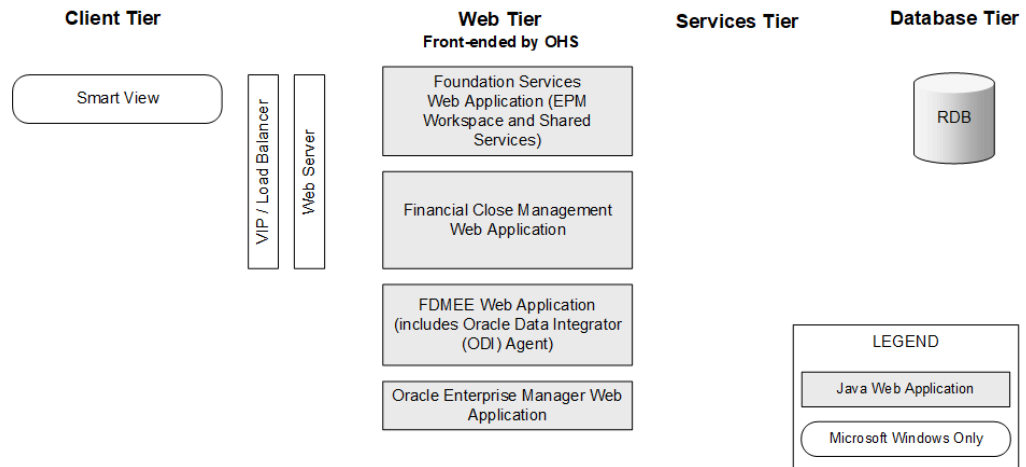
Essbase Components



FDMEE Components



Financial Close Management Components



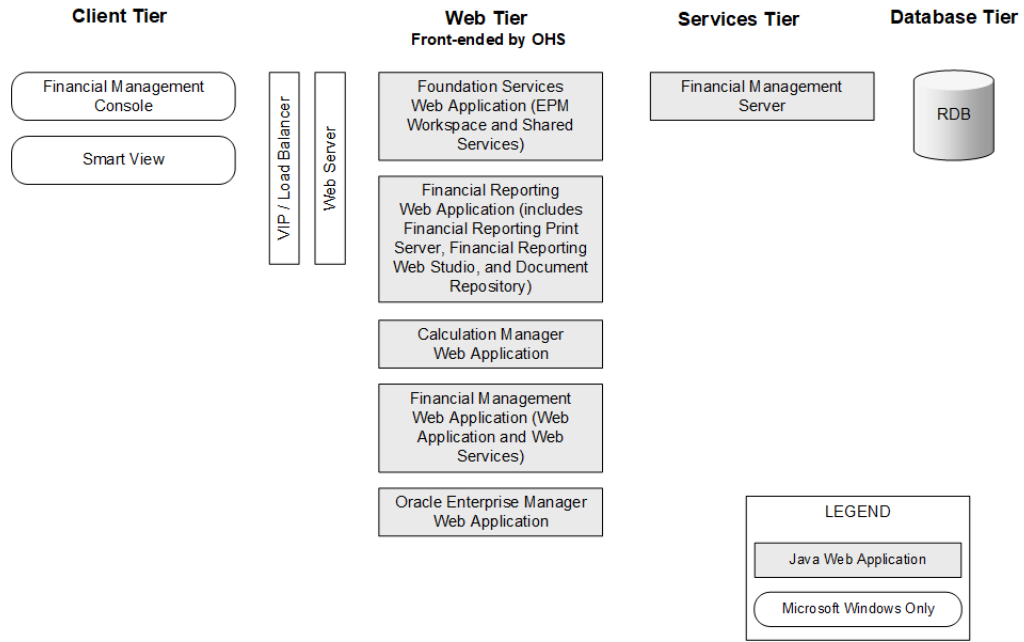
Stand-Alone Financial Close Management Deployment Requirements for Test and Production

A stand-alone version of Oracle Hyperion Financial Close Management can be deployed independently of other Oracle Enterprise Performance Management System products in a two-server deployment as specified below. The following specification supports 500 users (175 active).

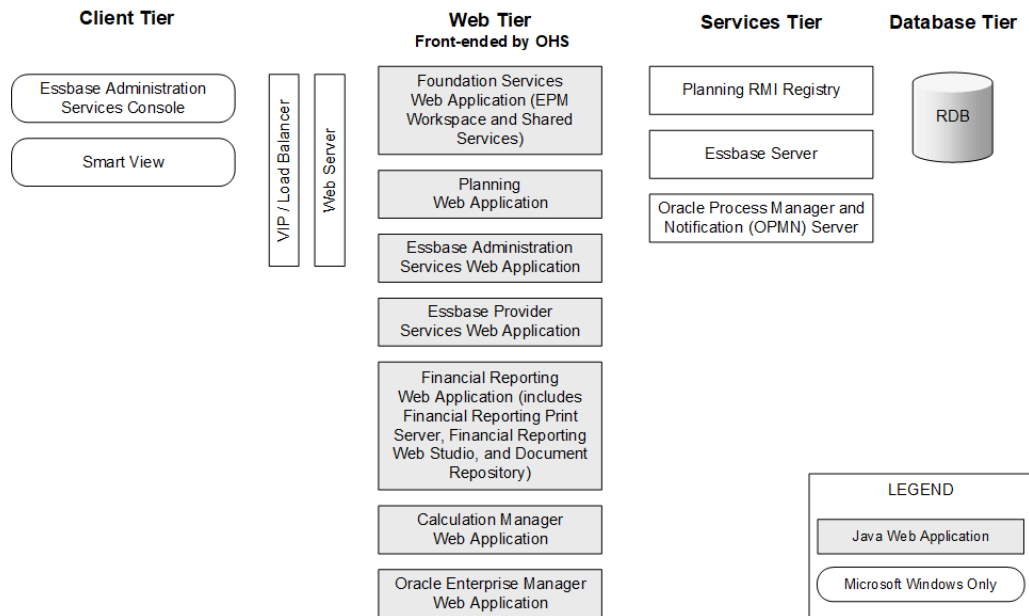
Table 2-1 Financial Close Management Deployment Specifications

Machine	Products	Processor/Memory
Server 1	<ul style="list-style-type: none"> WebLogic Admin Server Oracle Hyperion Foundation Services Java Web application (Oracle Hyperion Enterprise Performance Management Workspace and Oracle Hyperion Shared Services) Oracle HTTP Server 	4 Core 2 CPU – 16GB
Server 2	<ul style="list-style-type: none"> Financial Close Management Java Web application Oracle Hyperion Financial Data Quality Management, Enterprise Edition Java Web application 	4 Core 2 CPU – 16GB

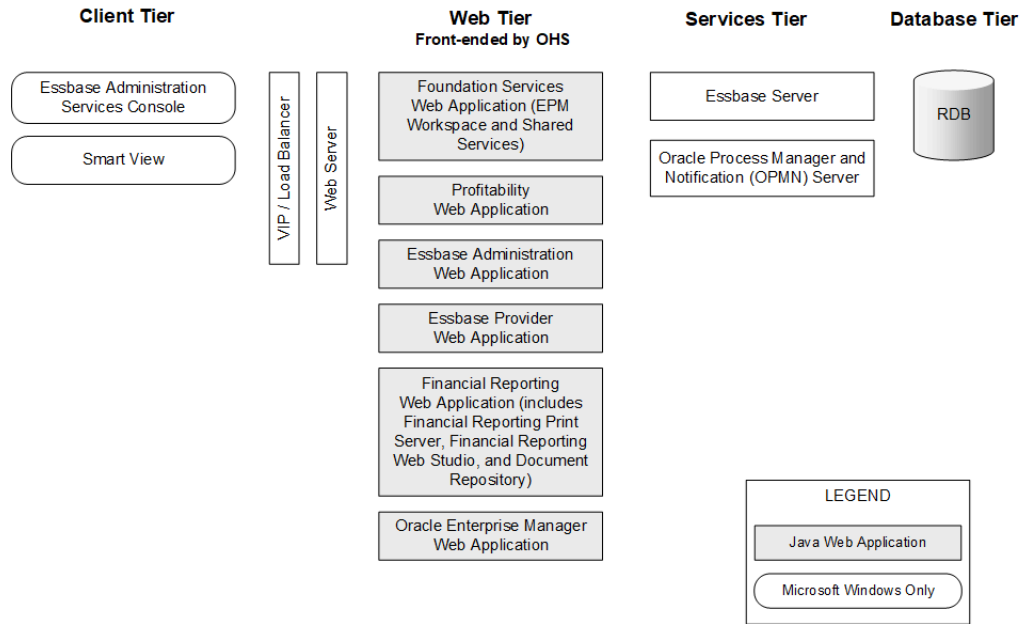
Financial Management Components



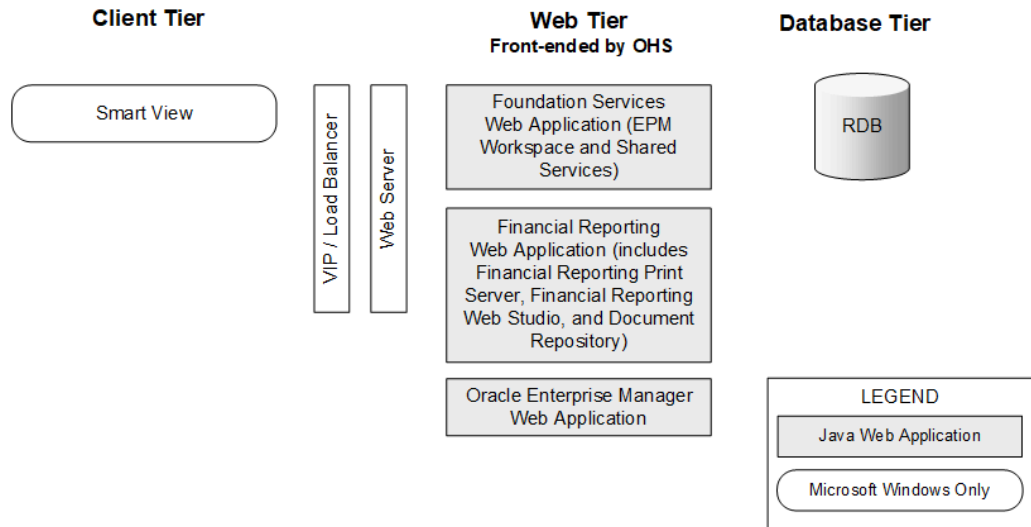
Planning Components



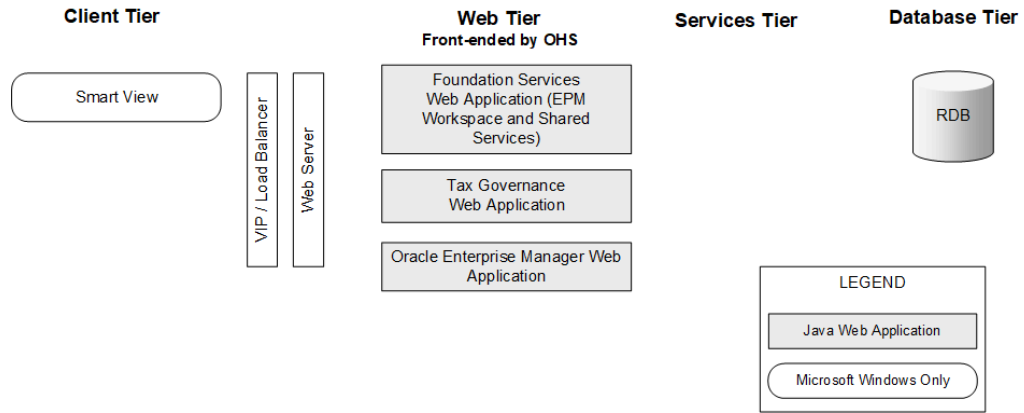
Profitability and Cost Management Components



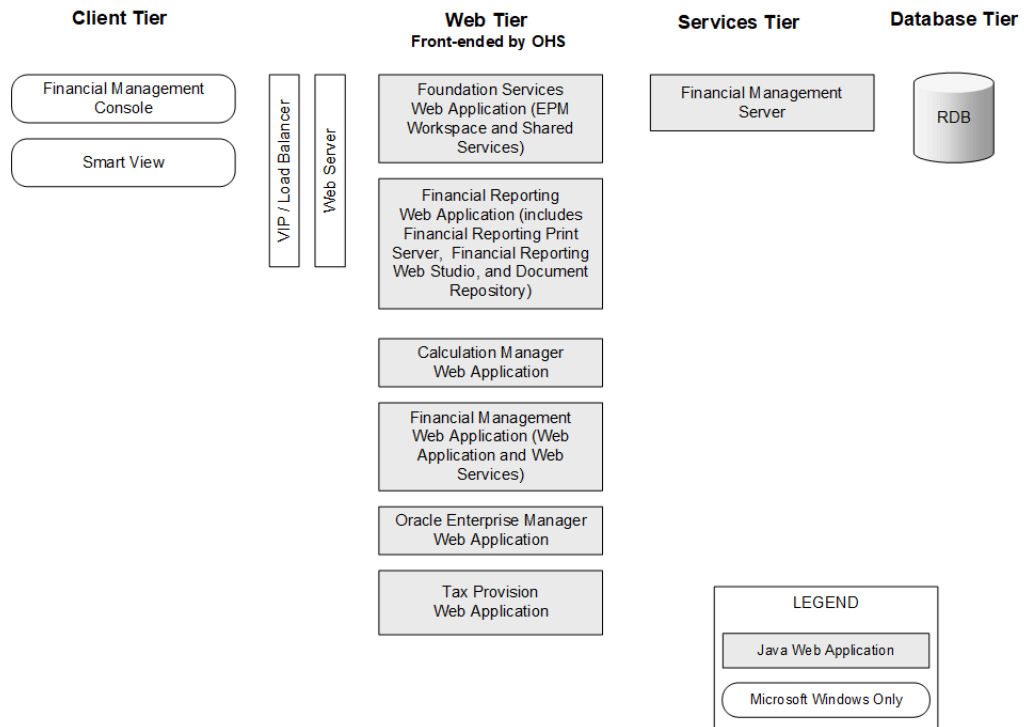
Financial Reporting Components



Tax Governance Components



Tax Provision Components



3

Preparing Your Environment

Related Topics

- [Preparing Servers](#)
- [Preparing User Accounts](#)
- [Disk Space and RAM](#)
- [Preparing a Database](#)
- [Preparing Java Web Application Servers](#)
- [Preparing Web Servers](#)
- [Preparing Web Browsers](#)
- [Support Matrix for High Availability and Load Balancing](#)

Preparing Servers

Related Topics

- [Applying Windows Updates](#)
- [Resolving Port Conflicts](#)
- [Disabling User Access Control](#)
- [Synchronizing Clocks](#)
- [Resolving Host Names](#)
- [Disabling Anti-virus Software](#)
- [Shared File System](#)

Applying Windows Updates

For each server in the deployment, apply Windows updates and reboot before installing and configuring.

Resolving Port Conflicts

For information about default port numbers for Oracle Enterprise Performance Management System products, including where the port can be configured, see [Ports](#).

Disabling User Access Control

Disable User Access Control (UAC) on each Windows server in the deployment. This can be done through User Accounts in the Control Panel by clicking on Change User Account Control Settings, and then dragging the slider to Never notify.

UAC must remain disabled in order for Oracle Enterprise Performance Management System server components to function properly. UAC can be enabled on end-user client desktops.

Synchronizing Clocks

The clock on each server must be synchronized to within one second difference. To accomplish this, point each server to the same network time server. Refer to your operating system documentation for more information.

Resolving Host Names

The canonical host name of each server must be the same when accessed from within the server and from other servers in the deployment. You may want to create a local hosts file on each server to resolve host name issues.

Oracle Enterprise Performance Management System uses Java's canonical host name resolution for resolving host names. To validate host names as resolved by Java, EPM System provides a utility (`epmsys_hostname.bat|sh`). An archive of the utility (`epmsys_hostname.zip`) is available in `EPM_ORACLE_HOME/common/config/11.1.2.0`. Run the utility after installation and before configuration.

Disabling Anti-virus Software

Antivirus software can cause performance issues with EPM System products if, each time you access any resource on the server, the antivirus software tries to open and scan the object. To prevent these issues, exclude the EPM Oracle home directory from automatic antivirus scans and scan this directory only at scheduled times.

Shared File System

If you are configuring for high availability, you must set up a shared file system using UNC syntax that is accessible from all the servers in the deployment for Oracle Hyperion Enterprise Performance Management System Lifecycle Management artifacts.

Optionally, you can also use the shared file system for the following:

- Installation files downloaded from Oracle Software Delivery Cloud
- Oracle HTTP Server configuration files to simplify configuration in a distributed environment
- Oracle Hyperion Financial Data Quality Management, Enterprise Edition application data
- Oracle Essbase Studio sample and customer data source text files

Preparing User Accounts

Windows:

- Do not use the Administrator user to install and configure. Run EPM System Installer and EPM System Configurator as a user with administrator rights. Install

and configure as an administrator and as the same user for all Oracle Enterprise Performance Management System products.

- Assign local policies if required by your product. For Windows, the user ID typically requires “Act as part of the OS, Bypass Traverse Checking, Log on as a batch job, and Log-on as a service.”
- The user installing EPM System must have full access to *Drive:/Temp* and *Drive:/Windows/Temp*.
- When you patch this server, use the same user account that was used to install and configure the earlier release.

The password for the account used to install and configure must conform to the following guidelines:

- Contain at least one uppercase letter
- Contain at least one numeral
- Be at least eight characters long

Disk Space and RAM

This section describes client and server disk space and RAM requirements for Oracle Enterprise Performance Management System products.

Client Disk Space and RAM

Disk space and RAM requirements are approximate. The installation program checks for twice the required disk space, based on your product installation choices.

The recommended RAM requirement for all clients is 1 GB.

Note:

Web browser clients have no disk space requirements beyond those of the web browser.

Product Family	Component	Disk Space (Minimum) ¹	Notes
EPM System Installer	EPM System Installer and all Oracle Enterprise Performance Management System product assemblies	16 GB	After installation, the installation files and assemblies can be removed.
Foundation Services	Common client components	400 MB	
	Oracle Smart View for Office for Office	100 MB	
Oracle Essbase	Essbase Runtime Client	150 MB	
	Oracle Essbase Administration Services Console	300 MB	
	Oracle Essbase Studio Console	80 MB	

Product Family	Component	Disk Space (Minimum) ¹	Notes
Financial Performance Management Applications	Oracle Hyperion Financial Management Client	100 MB	

¹ Disk space does not include the common client components installed on the machine with Oracle Hyperion Foundation Services.

Server Disk Space and RAM

Disk space and RAM requirements are approximate and do not include additional possible requirements on the machine. The installation program checks for twice the required disk space, based on your product installation choices. Disk space estimates include documentation help files (if applicable) and Oracle Enterprise Performance Management System components.

Component	Disk Space (Minimum)	RAM (Minimum)
Oracle WebLogic Server (includes WebLogic, JDK, utils, JRockit, and Modules)	1.4 GB	500 MB
Oracle HTTP Server (optional component)	1.2 GB	1 GB
Common Oracle libraries	900 MB	NA
Oracle Hyperion Shared Services	800 MB ¹	1.5 GB
Oracle Hyperion Calculation Manager	45 MB	256 MB
Oracle Essbase Server	2 GB	1 GB
Application Programming Interface	40 MB	256 MB
Oracle Essbase Administration Services	1 GB ²	32 MB multiplied by the number of concurrent Administration Services users For example, 32 MB * 10 users = 320 MB
Oracle Hyperion Provider Services	680 MB	340 MB
Oracle Essbase Studio Server	120 MB	256 MB
Oracle Hyperion Financial Reporting	400 MB	1 GB
Oracle Hyperion Financial Management Server	64 GB (10 GB available)	4 GB
Database Server for Financial Management	24 GB	4 GB

Component	Disk Space (Minimum)	RAM (Minimum)
Oracle Hyperion Financial Close Management	8 GB	4GB. A user base of 200 concurrent active users can be supported with a JVM memory allocation of 4GB. A small user base of 10 to 15 concurrent active users can be supported with a JVM memory allocation of only 650MB. For additional details, see the <i>Oracle Hyperion Financial Close Management Performance Tuning Guide</i> , which can be found on Oracle Support by searching for document ID 1575381.1
Oracle Hyperion Tax Governance	8 GB	4GB. A user base of 200 concurrent active users can be supported with a JVM memory allocation of 4GB. A small user base of 10 to 15 concurrent active users can be supported with a JVM memory allocation of only 650MB. For additional details, see the <i>Oracle Hyperion Financial Close Management Performance Tuning Guide</i> , which can be found on Oracle Support by searching for document ID 1575381.1
Oracle Hyperion Tax Provision	64 GB (10 GB available)	4 GB
Oracle Hyperion Planning	8 GB (10 GB available)	2 GB
Oracle Hyperion Profitability and Cost Management	8 GB	2 GB
Oracle Hyperion Financial Data Quality Management, Enterprise Edition	300 MB	2 GB
Oracle Data Relationship Management Database Server	15 GB	2 GB
Data Relationship Management Application Server	500 MB	2 GB

- ¹ This number is for the base Shared Services installation. If using Lifecycle Management functionality, Oracle recommends that you significantly increase disk space because application artifacts are exported and stored in the Shared Services file system.
- ² Allow extra disk space for data files and outline files that are copied to Administration Services during data loading and outline editing, respectively.

 **Note:**

For data storage and binary installation, Essbase supports the use of a disk array device.

Preparing a Database

Before you install and configure most Oracle Enterprise Performance Management System products, create a database using a supported RDBMS.

In general, the database should be in the same data center as the EPM System deployment. To prevent timeout issues when configuring with EPM System Configurator, you cannot locate a database in a remote location where there is latency.

For simplicity and ease of deployment, you can use one database repository for all products (with the exceptions noted below). In some cases you might want to configure separate databases for products. Consider performance, rollback procedures for a single application or product, and disaster recovery plans.

Each Oracle Essbase Studio Server instance must have its own catalog database.

The following products and product components require unique databases:

- Oracle Hyperion Planning – Each Planning application should have its own repository.
- Oracle Data Relationship Management. See the *Oracle Hyperion Data Relationship Management Installation Guide*.

The following products must use the same database schema:

- Oracle Hyperion Financial Close Management
- Oracle Hyperion Tax Governance
- Account Reconciliation Manager
- Supplemental Data Manager
- Tax Supplemental Schedules

Using an Oracle Database

This section includes information about Oracle database installation, database creation, required roles and privileges, sizing guidelines, and configuration.



Note:

EPM System Installer installs the Oracle Database client automatically if it is required on a machine (Windows only). To use an existing Oracle Database client, see [Using an Existing Oracle Database Client](#).

Oracle Database Creation Considerations

The database **must** be created using Unicode Transformation Format UTF-8 encoding (character set). Oracle supports the following character sets with UTF-8 encoding:

- AL32UTF8 (UTF-8 encoding for ASCII platforms)
- UTF8 (backward-compatible encoding for Oracle)

- UTFE (UTF-8 encoding for EBCDIC platforms)

Oracle recommends that you add a prefix to the user name that will correspond to the RCU schema prefix used during configuration.

 **Note:**

For Oracle Data Relationship Management, the database needs to use these database parameters:

- NLS_NCHAR_CHARACTERSET AL16UTF16
- NLS_CHARACTERSET AL32UTF8

For optimal performance, when cloning schemas in a Data Relationship Management environment, Oracle recommends the use of `datapump` over copying schemas using the Data Relationship Management Console repository wizard.

Oracle Database Privileges

The following privileges must be granted to the owners of the database schemas:

- CREATE ANY SYNONYM
- CREATE CLUSTER
- CREATE INDEXTYPE
- CREATE PROCEDURE
- CREATE SEQUENCE
- CREATE SESSION
- CREATE TABLE
- CREATE TRIGGER
- CREATE TYPE
- CREATE VIEW
- DROP ANY SYNONYM



 **Tip:**

Optionally, you can specify unlimited quota for EPM schemas.


Oracle Database Sizing Guidelines

Oracle recommends that you set tablespaces with Auto Extend ON.

The following table describes the Oracle Database sizing guidelines.

Product	Sizing Guideline
Oracle Hyperion Shared Services & Oracle Hyperion Enterprise Performance Management Workspace	Start with 100 MB, and add more as the number of migrations with Lifecycle Management and the number of audit records increases.
Oracle Essbase Administration Services	The amount of space needed depends on the metadata created; Oracle recommends starting with at least 32 MB.
Oracle Essbase Studio	The amount of space needed depends on the metadata created; Oracle recommends starting with at least 32 MB.
Oracle Hyperion Planning and Oracle Hyperion Calculation Manager	<ul style="list-style-type: none"> • 100 MB for applications with 5,000 or fewer total members • 200 MB for applications with 15,000 or fewer total members
Oracle Hyperion Financial Management and Calculation Manager	<div style="border: 1px solid #0070C0; padding: 5px; background-color: #E6F2FF;"> <p> Note:</p> <p>You can adjust the size of the system table database to match the size of the application.</p> </div>
	<ul style="list-style-type: none"> • 100 MB for applications with 5,000 or fewer total members • 200 MB for applications with 15,000 or fewer total members
Oracle Hyperion Financial Close Management	<div style="border: 1px solid #0070C0; padding: 5px; background-color: #E6F2FF;"> <p> Note:</p> <p>You can adjust the size of the system table database to match the size of the application.</p> </div>
	See the <i>Oracle Hyperion Financial Close Management Performance Tuning Guide</i> , which can be found on Oracle Support by searching for document ID 1575381.1
Oracle Hyperion Tax Governance	See the <i>Oracle Hyperion Financial Close Management Performance Tuning Guide</i> , which can be found on Oracle Support by searching for document ID 1575381.1

Product	Sizing Guideline
Oracle Hyperion Tax Provision	<ul style="list-style-type: none"> • 100 MB for applications with 5,000 or fewer total members • 200 MB for applications with 15,000 or fewer total members
Oracle Hyperion Profitability and Cost Management	Oracle recommends starting with at least 250 MB.

 **Note:**

You can adjust the size of the system table database to match the size of the application.

Oracle Database Configuration Considerations

Related Topics

- [Tablespace Considerations](#)
- [Other Parameters](#)

Tablespace Considerations

The following table describes the Oracle Database tablespace considerations.

Product	Tablespace Considerations
General—All products	<ul style="list-style-type: none"> • Consider a global view of tablespaces and allocate one or more tablespaces in order to spread out tables created by Oracle Enterprise Performance Management System products. • Tablespaces can be shared with other applications. • Create a separate tablespace for indexes to improve performance. This action requires CREATE TABLESPACE system privileges. • Ensure that the SEGMENT SPACE MANAGEMENT parameter is set to AUTO when you create tablespace, to improve performance.
Oracle Hyperion Financial Management	Set up a temporary tablespace greater than 1GB.
Oracle Hyperion Financial Close Management	See the <i>Oracle Hyperion Financial Close Management Performance Tuning Guide</i> , which can be found on Oracle Support by searching for document ID 1575381.1

Product	Tablespace Considerations
Oracle Data Relationship Management	<ul style="list-style-type: none"> Set the initial tablespace size to 1 GB Extents to 500 MB Turn Auto Extend ON See the <i>Oracle Hyperion Data Relationship Management Installation Guide</i>

Other Parameters

The following table describes other Oracle Database parameters.

Product	Other Parameters
General/AllProducts	Set ALTER SYSTEM SET as follows: ALTER SYSTEM SET processes=1000 SCOPE=SPFILE;
Oracle Hyperion Financial Management	Set Oracle OPEN_CURSORS to 5000.

Using an Existing Oracle Database Client

For a new installation, if you want to use your existing Oracle Database Client instead of the one installed with EPM System, during EPM System installation clear the selection from Oracle Database Client 32-bit and Oracle Database Client 64-bit under Foundation Services. Then, after installing and configuring Oracle EPM System, perform the following steps:

1. On the machine hosting Foundation Services, update the `TNS_ADMIN` environment variable to point to the location of the existing Oracle Database Client's `tnsnames.ora` file location. If you are using a separate database for Oracle Hyperion Financial Management, make this change on the server hosting the `xfm` process.
2. Move TNS entries from `EPM_ORACLE_INSTANCE/user_projects/config/dbclient/tnsnames.ora` (which is populated during database configuration) to the existing `tnsnames.ora` file. Copy the entire file contents and append to the existing contents of the `tnsnames.ora` file.

Replacing the EPM System-Installed Oracle Database Client with A Different Oracle Database Client

If you want to use your existing Oracle Database Client instead of the one installed with EPM System, and you already installed the Oracle Database Client during installation of EPM System, then, after installing and configuring Oracle EPM System, perform the following steps. This procedure applies to new installations or maintenance installations.

1. On the machine hosting Foundation Services, update the `TNS_ADMIN` environment variable to point to the location of the existing Oracle Database Client's `tnsnames.ora` file location.
2. Move TNS entries from `EPM_ORACLE_INSTANCE/user_projects/config/dbclient/tnsnames.ora` to the existing `tnsnames.ora` file. Copy the entire file contents and append to the existing contents of your `tnsnames.ora` file.

3. Remove the following EPM System embedded Oracle Database Client BIN paths from the PATH environment variable in order to avoid conflicts:

```
<MIDDLEWARE_HOME>\dbclient32\BIN;  
<MIDDLEWARE_HOME>\dbclient64\BIN;
```

Using a Microsoft SQL Server Database

This section includes information about SQL Server database creation, required roles and privileges, and sizing guidelines.

Microsoft SQL Server Database Creation Requirements

When creating a Microsoft SQL Server database for use as a repository, ensure that you set these options:

- ALTER DATABASE DATABASE_NAME COLLATE SQL_Latin1_General_CP1_CI_AS
- Set READ_COMMITTED_SNAPSHOT = ON (not required for Oracle Hyperion Financial Management).
- Set ALLOW_SNAPSHOT_ISOLATION = ON (not required for Financial Management).
- Select the SQL Server and Windows authentication option when you set the security properties for the database.

Oracle recommends that you add a prefix to the user name that will correspond to the RCU schema prefix used during configuration.

You must also create a database to be used with the Repository Creation Utility (RCU).

For the RCU database, run these queries:

- ALTER DATABASE DATABASE_NAME SET READ_COMMITTED_SNAPSHOT ON
- ALTER DATABASE DATABASE_NAME COLLATE LATIN1_GENERAL_CS_AS



Microsoft SQL Server Roles and Privileges

Database users must be assigned ownership of the database, which provides DB_OWNER privileges, and BULK_INSERT.

Microsoft SQL Server Sizing Guidelines

The following table describes the Microsoft SQL Server sizing guidelines.

Product	Sizing Guideline
Oracle Hyperion Shared Services	Start with 100 MB, and add more as the number of migrations with Lifecycle Management and the number of audit records increases.

Product	Sizing Guideline
Oracle Hyperion Enterprise Performance Management Workspace	The space needed depends on the aggregate size of the objects that you plan to store in the repository. Oracle recommends starting with at least 250 MB, which provides space to expand the EPM Workspace repository without having to increase the data file or tablespace. A shared pool size of 60 MB is used during configuration with EPM System Configurator.
Oracle Essbase Administration Services	The space needed depends on the metadata created; Oracle recommends starting with at least 32 MB.
Oracle Essbase Studio	The space needed depends on the metadata created; Oracle recommends starting with at least 32 MB.
Oracle Hyperion Planning and Oracle Hyperion Calculation Manager	<ul style="list-style-type: none"> • 100 MB for applications with 5,000 or fewer total members • 200 MB for applications with 15,000 or fewer total members
Oracle Hyperion Financial Management and Calculation Manager	<div style="border: 1px solid #0070C0; padding: 5px; background-color: #E6F2FF;"> <p> Note:</p> <p>You can adjust the size of the system table database to match the size of the application.</p> </div>
	<ul style="list-style-type: none"> • 100 MB for applications with 5,000 or fewer total members • 200 MB for applications with 15,000 or fewer total members
Oracle Hyperion Financial Close Management	<div style="border: 1px solid #0070C0; padding: 5px; background-color: #E6F2FF;"> <p> Note:</p> <p>You can adjust the size of the system table database to match the size of the application.</p> </div>
	See the <i>Oracle Hyperion Financial Close Management Performance Tuning Guide</i> , which can be found on Oracle Support by searching for document ID 1575381.1
Oracle Hyperion Tax Governance	See the <i>Oracle Hyperion Financial Close Management Performance Tuning Guide</i> , which can be found on Oracle Support by searching for document ID 1575381.1

Product	Sizing Guideline
Oracle Hyperion Tax Provision	<ul style="list-style-type: none"> • 100 MB for applications with 5,000 or fewer total members • 200 MB for applications with 15,000 or fewer total members
Oracle Hyperion Profitability and Cost Management	Oracle recommends starting with at least 250 MB.
Oracle Data Relationship Management	<ul style="list-style-type: none"> • Set the initial file size to 1 GB • Turn on Auto Growth and set to 10%

 **Note:**

You can adjust the size of the system table database to match the size of the application.

Preparing Java Web Application Servers

Many Oracle Enterprise Performance Management System products require a Java web application server.

WebLogic Server

- Oracle provides a limited-use license of Oracle WebLogic Server for use with Oracle Enterprise Performance Management System products. Typically, EPM System Installer installs WebLogic Server for you.
- However, if you have an existing WebLogic Server installation and want to use it instead of the WebLogic Server installed by EPM System Installer, note the Middleware home location for the WebLogic Server installation. During installation, you must install EPM System products to this same Middleware home. If EPM System Installer detects an existing WebLogic Server installation in the installation location, it does not install WebLogic Server.

For additional information about using WebLogic Server in a distributed environment, see [Installing EPM System Products in a Distributed Environment](#).

Preparing Web Servers

Related Topics

- [Oracle HTTP Server](#)
- [Microsoft Internet Information Services \(IIS\)](#)

Oracle HTTP Server

You can choose to install Oracle HTTP Server during the installation of Foundation Services, using the Oracle HTTP Server silent installer. You can also configure Oracle

HTTP Server to a shared drive location to simplify configuration in a distributed environment.

▲ Caution:

Before you install Oracle Enterprise Performance Management System products, ensure you meet the installation prerequisites for Oracle HTTP Server and review the Oracle HTTP Server installation documentation and Release Notes for details. For additional information, see [Web Server Installation Prerequisites](#).

To limit the information the web server presents, make the following changes in `httpd.conf`:

Table 3-1 `httpd.conf` Entries

<code>httpd.conf</code> Entry	Description
<code>ServerTokens Prod</code>	Configures the web server to not send any version numbers in the HTTP header.
<code>ServerSignature Off</code>	Configures the web server to hide the server version in the footer of server generated pages.
<code>Header always unset "X-Powered-By"</code>	Hides "X-Powered-By" and Server headers sent by downstream application servers.
<pre><IfModule headers_module> Header edit Set-Cookie ^(.*)\$ \$1;HttpOnly;Secure </IfModule></pre>	Secures the cookie.

Microsoft Internet Information Services (IIS)

Oracle Data Relationship Management requires that you install IIS with ASP.NET support enabled before installing Data Relationship Management.

Notes about IIS:

- In Windows Server Manager, for **Server Roles** for Web Server (IIS), select **IIS Management Console** under **Management Tools**.
- If .NET is not detected, EPM System Installer downloads the web-based installer required for your version of Windows.
- If IIS is chosen as the web server during configuration, you must allow all unknown ISAPI extensions through the Internet Information Services Manager.

Verifying the IIS Installation

To verify the IIS installation, ensure that the IIS services are running:

- **IIS Admin Service**
- **World Wide Web Publishing Service**

If you do not see the services for IIS, ensure that IIS is installed.

Using IIS in a Localized Environment

In a localized environment, the following conditions are required to successfully configure Oracle Enterprise Performance Management System on IIS:

For IIS 8:

- The IIS site name should not be localized; it should be "Default Web Site" in English on any machine, localized or not
- IIS should have an application pool called "DefaultAppPool"
- The "DefaultAppPool" and "Default Web Site" must have `ID = 1`
- The physical path for the default web site should be: `%SystemDrive%\inetpub\wwwroot`
- Oracle Data Relationship Management installer creates the required Application Pool, called `drm_pool`.

Preparing Web Browsers

Related Topics

- [Browser Settings](#)

Browser Settings

Ensure that browser preferences and options are enabled:

- For Internet Explorer and Firefox:
 - Enable JavaScript.
 - Enable cookies. The preferred setting is to allow cookies to be stored on your computer. The minimum requirement is to allow per-session level cookies.
 - Allow pop-up windows.
- Add the URL for Oracle Hyperion Enterprise Performance Management Workspace to the trusted zone:
 1. Select **Tools**, then **Internet Options**, and click the **Security** tab.
 2. Select **Trusted Sites**, and then click **Sites**.
 3. Add the EPM Workspace URL to the list.
- For Internet Explorer, customize security settings:
 1. In Internet Explorer, select **Tools**, then **Internet Options**, then the **Security** tab.

2. Select the zone containing Oracle servers and click the **Custom level** button.
 3. In the **Miscellaneous** section, enable **Access data sources across domains** and **Allow script-initiated windows without size or position constraints**.
- If you are using Internet Explorer with EPM Workspace in Norwegian, you need to change the Language Preferences settings as follows:
 1. In Internet Explorer, select **Tools**, then **Internet Options**, and click the **Languages** button.
 2. In the **Language Preferences** dialog box, select each of the Norwegian settings, and then click **Remove**.
 3. Click **Add**, and then add a user-defined value called **no** and click **OK**.
 4. In the Language field, select the new **User Defined [no]** entry, and then click **Move up** to move this entry to the top of the list.
 5. Click **OK**.

You can now view Oracle Enterprise Performance Management System products in Norwegian using Internet Explorer.

 **Note:**

After you click **OK**, the custom language setting in Language Preferences dialog box changes to **Norwegian (Bokmal) [no]**, which is different from the default **Norwegian (Bokmal) [ne-NO]** setting.

Support Matrix for High Availability and Load Balancing

The tables in this section list the supported clustering methodologies for Oracle Enterprise Performance Management System components by product group and indicate whether high availability and load balancing are supported for each component. The tables also include notes and references to additional information. Use this table to help plan your environment.

Session failover is not supported for EPM System Java web applications.

EPM System components support vertical scaling as follows:

- Windows-based Java web applications except for those noted below
- Oracle Essbase Server

The following components do not support vertical scaling:

- Oracle HTTP Server
- Oracle Essbase Studio
- All Oracle Hyperion Financial Management components
- Oracle Hyperion Tax Provision
- Oracle Hyperion Financial Close Management
- Oracle Hyperion Tax Governance

Documentation resources:

- If you automatically deployed web applications, for information about clustering using EPM System Configurator, see "Clustering Java Web Applications Using EPM System Configurator" in the *Oracle Enterprise Performance Management System Deployment Options Guide*.
- For Essbase:
 - Active-passive clustering (Windows): "Configuring Active-Passive Essbase Clusters (Windows)" in the *Oracle Enterprise Performance Management System Deployment Options Guide*
 - Active-active clustering: "Configuring Active-Active Essbase Clusters" in the *Oracle Enterprise Performance Management System Deployment Options Guide*
- For Financial Management Server: "Clustering Financial Management Servers" in the *Oracle Enterprise Performance Management System Deployment Options Guide*
- For Oracle Data Relationship Management:
 - "Data Relationship Management Clusters" in the *Oracle Enterprise Performance Management System Deployment Options Guide*
 - "Configuring Load Balancing for Data Relationship Management Web Applications" in the *Oracle Data Relationship Management Installation Guide*
 - "Configuring Host Machines" in the *Oracle Data Relationship Management Installation Guide*

Table 3-2 Foundation Services Clustering

Product/ Component	Supported Methodology	High Availability	Load Balancing	Notes
Oracle Hyperion Foundation Services Managed Server (includes Oracle Hyperion Shared Services and Oracle Hyperion Enterprise Performance Management Workspace Java Web applications)	WebLogic clustering with EPM System Configurator	Yes	Yes	To configure Oracle Hyperion Enterprise Performance Management System Lifecycle Management for high availability when Shared Services is set up for high availability, you must set up a shared disk.
Oracle Hyperion Calculation Manager Java Web Application	WebLogic clustering with EPM System Configurator	Yes	Yes	None

Table 3-3 Essbase Clustering

Product/Component	Supported Methodology	High Availability	Load Balancing	Notes
Essbase Server	<ul style="list-style-type: none"> Active-passive clustering with Microsoft Clustering Services (Windows) Active-active clustering with Oracle Hyperion Provider Services 	Yes	Active-active clusters configured with Provider Services support load-balancing.	<ul style="list-style-type: none"> Active-passive clusters support failover with write-back. Active-active clusters are read-only. <p>The following EPM System products support Essbase active-passive failover:</p> <ul style="list-style-type: none"> Oracle Hyperion Financial Data Quality Management, Enterprise Edition Oracle Hyperion Planning Oracle Essbase Administration Services Essbase Studio
Administration Services Java Web Application	WebLogic clustering with EPM System Configurator	Yes	Yes	
Provider Services Java Web Application	WebLogic clustering with EPM System Configurator	Yes	Yes	None
Essbase Studio	None	No	No	None

Table 3-4 Financial Reporting

Product/Component	Supported Methodology	High Availability	Load Balancing
Oracle Hyperion Financial Reporting Java Web Application	WebLogic clustering with EPM System Configurator	Yes	Yes

Table 3-5 Financial Performance Management Applications Clustering

Product/Component	Supported Methodology	High Availability	Load Balancing
Planning Java Web Application	WebLogic clustering with EPM System Configurator	Yes	Yes
Planning RMI Registry	None	No	No
Financial Management Server	Clustering with EPM System Configurator	Yes	Yes

Table 3-5 (Cont.) Financial Performance Management Applications Clustering

Product/Component	Supported Methodology	High Availability	Load Balancing
Financial Management Java Web Application	WebLogic clustering with EPM System Configurator	Yes	Yes
Oracle Hyperion Profitability and Cost Management Java Web Application	WebLogic clustering with EPM System Configurator	Yes	Yes
Financial Close Management	WebLogic clustering with EPM System Configurator	Yes	Yes
Tax Governance	WebLogic clustering with EPM System Configurator	Yes	Yes
Tax Provision	WebLogic clustering with EPM System Configurator	Yes	Yes

Table 3-6 Data Management Products Clustering

Product/Component	Supported Methodology	High Availability	Load Balancing	Notes
FDMEE	WebLogic clustering with EPM System Configurator	Yes	Yes	None
Data Relationship Management IIS Web Application	Clustering with a web server or third-party load balancer	No	Yes	Multiple Microsoft IIS instances are deployed in an active-active configuration.
Data Relationship Management Application Server	Clustering with Data Relationship Management proprietary load balancing	No	Yes	Multiple application servers are deployed in a primary-secondary configuration.

4

Downloading Files for Installation

Related Topics

- [Downloading the Installation Files](#)

Downloading the Installation Files

To download the installation files:

1. Create a directory to store the Oracle Enterprise Performance Management System files.

You can download files to a shared drive, or to each machine in your deployment. If you are installing from a network drive, map this drive. This directory is referred to as `/download_location` in this procedure.

Tip:

Oracle recommends that you download files to a shared drive.

2. From the [Oracle Software Delivery Cloud \(http://edelivery.oracle.com/\)](http://edelivery.oracle.com/), select the products that you licensed and add them to the cart. All required zip files are included. Select your platform, and download the files into `/download_location`.

For more details, review the “Oracle Enterprise Performance Management System” media pack.

ZIP files include EPM System Installer and installation *assemblies* (product plug-in installation files for EPM System Installer).

3. Unzip the files into `/download_location`.
 - Use a zip file extraction program that can handle long path names, such as 7-Zip.
 - If you are prompted that any files or common components already exist, click **Yes** to overwrite the files.
 - Unzip to a directory with no spaces in the name.

The assemblies are automatically unzipped into an `/assemblies` directory.

If you downloaded files to a central location, ensure that you unzip the following common files. If you downloaded files to multiple machines in your deployment, on each machine in the deployment, unzip the following common files. Unzip files for each operating system in a separate folder.

- EPM System Release 11.2.0.0.0 for *platformName* (Part 1)
(Foundation-11200<*platformName*>-Part1.zip)
- EPM System Release 11.2.0.0.0 for *platformName* (Part 2)
(Foundation-11200<*platformName*>-Part2.zip)

- EPM System Release 11.2.0.0.0 (Part 3) (Foundation-11200-Part3.zip)
- EPM System Release 11.2.0.0.0 for *platformName* (Part 4) (Foundation-11200<*platformName*>-Part4.zip)

Note the following information about preparing files for a distributed environment:

- Even though you need these four ZIP files on each machine in the environment, install Oracle Hyperion Foundation Services Java web applications on only one machine (unless multiple Java web applications are required for clustering).
 - On the machine on which you plan to administer the Oracle WebLogic Server, you must install all Java web applications for all applications you plan to deploy on any machine in the environment. For more information, see [Installing EPM System Products in a Distributed Environment](#).
4. Unzip the installation assemblies into the same directory (*/download_location*).
 5. The */assemblies* directory should include a subdirectory for each product that you want to install on this machine. Ensure that the */assemblies* directory looks as follows:

```
assemblies/  
    product/  
        version/  
            assembly.dat
```

 **Note:**

ProductRef.inf might be in the */assemblies* directory. It can remain without causing problems.

EPM System Installer can install a product only if the installation assembly files for the product are downloaded and unzipped to the correct location.

5


Installing EPM System Products in a New Deployment

EPM System Installer installs web and services components. Additionally, when you configure Oracle Enterprise Performance Management System products, you configure databases.

Clients are installed with standalone installers.

Installation Checklist for a New Installation

Oracle Enterprise Performance Management System deployment follows this workflow. Each part of the workflow is described in the sections as noted in the table below:

Task	Reference
1. Meet the system requirements.	https://www.oracle.com/middleware/technologies/bi-foundation/hyperion-supported-platforms.html
2. Plan the installation and perform prerequisite tasks.	Preparing Your Environment
3. Prepare the installation files.	Downloading Files for Installation
4. Install EPM System products.	Installing EPM System Products in a New Deployment Ensure that you meet any installation prerequisites that apply to your environment. Installation Prerequisites and Requirements.
	<div data-bbox="1161 1329 1458 1593"> Tip: Before you begin, determine the type of installation you plan to perform:</div>

Task	Reference
7. Configure EPM System products using EPM System Configurator.	Configuring EPM System Products in a New Deployment Ensure that you meet any configuration prerequisites that apply to your environment. See Configuration Prerequisites .

 **Note:**

<https://www.oracle.com/middleware/technologies/bi-foundation/hyperion-supported-platforms.html>


In a distributed environment, configure Oracle Hyperion Foundation Services first. Foundation Services must be installed and configured in order for other products to configure successfully.

Configure other EPM System products, and then configure the web server last: (Select the Foundation Services


Configure Web Server task.)

Then, restart the web server and refresh Oracle Hyperion Enterprise Performance Management Workspace. If you configured Oracle HTTP Server to a shared drive, you can simply restart the web

Task	Reference
------	-----------

 server and refresh EPM Workspace; you do not have to reconfigure the web server. See [Refreshing EPM Workspace](#).

For more information about required configuration sequence, see [Configuration Sequence](#).

 **Note:**
If you are enabling SSL in your deployment, see the *Oracle Enterprise Performance Management System Security Configuration Guide* before you configure. Different SSL configurations have implications for the choices you make during configuration using EPM System Configurator. Also, there are additional post-configuration tasks when deploying an SSL configuration.

8. Any time you deploy additional products, reconfigure the web Server and then restart it (or simply restart it if you configured Oracle HTTP Server to a shared drive) on each machine hosting Foundation Services.
Then, refresh EPM Workspace on each Foundation Services host machine in your deployment.

[Refreshing EPM Workspace](#).

Task	Reference
9. Perform any required manual configuration tasks for your products.	Performing Manual Configuration Tasks in a New Deployment
10. Start EPM System services.	Starting and Stopping EPM System Products
11. Validate the installation using Oracle Hyperion Enterprise Performance Management System Diagnostics and verify deployment.	Validating the Installation and Verifying Deployment
12. Enable external authentication and provision users.	<i>Oracle Enterprise Performance Management System Security Configuration Guide</i>

 **Tip:**

During installation, configuration, and validation, keep a list of all user names and passwords that you use to create or modify the system, including the applications with which they are associated and their purpose.

Installation Prerequisites and Requirements

Note the following installation prerequisites.

- Review the system requirements in the (<http://www.oracle.com/technetwork/middleware/ias/downloads/fusion-certification-100350.html>).
- See [Preparing Your Environment](#) for installation prerequisites.
- Download files required for installation. See [Downloading Files for Installation](#). Review the Media Pack Readme on the [Oracle Software Delivery Cloud](#) to see which products are required or optional for use with your products.
- For Oracle Hyperion Tax Provision, you must also install all Oracle Hyperion Financial Management components, although they do not need to be installed on the same machine as Tax Provision.
- If you plan to deploy Oracle Enterprise Performance Management System products in an SSL-enabled environment, review the before you install and configure. The SSL implementation you choose affects the options you choose during configuration. Optionally, you can deploy non SSL and reconfigure to use SSL. See the *Oracle Enterprise Performance Management System Security Configuration Guide*.
- Ensure that there is 1 GB of temp space available. You can specify an alternate `/tmp` directory if needed.
- If you are installing on the same machine on which Oracle Business Intelligence Enterprise Edition or Oracle Business Intelligence Publisher are installed, install into two different Middleware homes. Future patch sets for EPM System and Oracle BI EE will be released at different times, which would create constraints for the upgrades of a merged Fusion Middleware Home.

For information about Fusion Middleware, see <http://www.oracle.com/technetwork/documentation/index.html#middleware>.

- If you are installing and configuring Oracle Hyperion Financial Data Quality Management, Enterprise Edition, Oracle Data Integrator is automatically installed and configured for you. The database for Oracle Data Integrator is in same database as FDMEE and the Oracle Data Integrator agent application is deployed in same JVM as FDMEE. Optionally, you can install ODI Studio using `ODI_STUDIO-11200.zip`.
- FDMEE is required for Account Reconciliation Manager in Oracle Hyperion Financial Close Management.
- Typically, EPM System Installer installs Oracle WebLogic Server for you. If you have an existing WebLogic Server installation and want to use it instead of the WebLogic Server installed by EPM System Installer, it must be the version supported by EPM System. Note the Middleware home location for the WebLogic Server installation. During installation, you must install EPM System products to this same Middleware home. If EPM System Installer detects an existing WebLogic Server installation in the installation location, it does not install WebLogic Server.

If the existing WebLogic Server version is not the correct version for EPM System, you must either uninstall the current version, install the correct version, or upgrade to the correct version before running EPM System Installer.

Web Server Installation Prerequisites

Optionally, EPM System Installer installs Oracle HTTP Server during the installation of Oracle Hyperion Foundation Services, using the Oracle HTTP Server silent installer. If you choose not to install Oracle HTTP Server, for example in a development environment, EPM System Installer installs an embedded WebLogic HTTP Server as part of Foundation Services that acts as a proxy server. In a production environment, Oracle recommends that you install Oracle HTTP Server for use with WebLogic.

- For Oracle HTTP Server certification information, go to: http://www.oracle.com/technology/software/products/ias/files/fusion_certification.html.
- For Oracle HTTP Server installation information, see the Oracle HTTP Server installation documentation: http://download.oracle.com/docs/cd/E15523_01/webtier.htm and Release Notes (http://download.oracle.com/docs/cd/E15523_01/relnotes.htm).
- For Oracle HTTP Server installation issues and workarounds, see the readme for your platform: http://download.oracle.com/docs/cd/E15523_01/relnotes.htm.

On Windows, ensure that you have a paging file size of at least 512 MB. Do not select the option to automatically manage paging file size.

During installation with EPM System Installer, check the Installation status for information about Oracle HTTP Server installation status. If Oracle HTTP Server installation fails, check the logs for details. The logs report information from the Oracle HTTP Server silent installer. You can find the logs in:

Windows: `/diagnostics/logs/ohs`

You can also review the Oracle HTTP Server product logs.

Installation Sequence

EPM System Installer enables you to install, configure, and deploy multiple products on a machine at one time. EPM System Installer installs components in the correct order, so you can select as many products as you want to install on a machine at one time.

Note that EPM System Installer installs Oracle WebLogic Server on each machine where you install a web tier or Service tier component, including Oracle Essbase Server. The `.jar` files that are installed as part of WebLogic Server and Oracle common directory are used by EPM System Configurator as well as common services. Note that WebLogic Server does not need to run on the Essbase Server.

OPMN is installed with Oracle Hyperion Foundation Services on all machines where EPM System Configurator is used because OPMN is used to create the EPM Oracle instance structure.

Installing EPM System Products in a Distributed Environment

You typically install Oracle Enterprise Performance Management System products in a distributed environment. The number of computers you need depends on several factors, including:

- The size of the applications
- The number of users
- The frequency of concurrent use by multiple users
- Any requirements your organization has for high availability
- Your organization's security requirements

EPM System Installer simplifies the task of installing components in a distributed computing environment. You can install, configure, and validate any components you want on any computer. Once you have installed, configured, and validated the components on that machine, you can repeat the process on another machine.

Note the following information about installing and configuring in a distributed environment.

Installation considerations in a distributed environment:

- In a distributed environment, EPM Oracle home must be the same on each machine. For example, if the path for EPM Oracle home is `/Oracle/Middleware` on the first machine you configure, it must be `/Oracle/Middleware` on all the machines in the deployment.
- Oracle Hyperion Foundation Services is required on only one machine in the deployment, unless multiple Java web application instances are required for clustering.
- Optionally, Oracle HTTP Server is installed with Foundation Services.
- On the machine on which you plan to administer the Oracle WebLogic Server, you must install all Java web applications for all applications you plan to deploy on any

machine in the environment. (The WebLogic Administration Server is installed and deployed on the Foundation Services machine.)

- On each remote machine in a distributed environment, install the Java web applications you plan to run on that machine and then use EPM System Configurator to deploy the Java web applications automatically, or manually deploy the Java web applications.

Note that EPM System Installer installs WebLogic Server on each machine (for web tier and Service tier components) in a distributed environment.

- If you are using IIS as the web server, install each IIS application so that it is co-located with an IIS Web server.
- If you are installing in multiple environments (for example, Development, Test, and Production), install Foundation Services products in each environment.

Installing EPM System Products

You can install Oracle Enterprise Performance Management System products using the graphical user interface, using the console mode interface, or using a silent mode installation response file.

When you install EPM System products, choose which type of installation to perform:

- New installation. (Also used for upgrades.)
- Re-install this release.
- Apply maintenance release. (Not available for Release 11.2.0.0.)

Note the following about installation:

- On Windows machines, do not use the `Administrator` user to install and configure. Run EPM System Installer and EPM System Configurator as a user with administrator rights. Install, configure and run Oracle Hyperion Enterprise Performance Management System Diagnostics as the same user for all EPM System products.
- You cannot run EPM System Installer at the same time that you are running another instance of an Oracle Universal Installer (such as the installer for Oracle Database).
- Run EPM System Installer from a mapped drive, not from a UNC address.

To install EPM System products:

1. Choose a method:
 - (Windows) Double-click `installTool.cmd` in the root directory to which you extracted the EPM System Installer files.
 - (Windows) From a Windows console, change to the root directory to which you extracted the EPM System Installer files and enter `installTool.cmd -console`.
 - Create a silent installation response file. See [Performing Silent Installations](#).

You can specify an alternate `tmp` directory by using the `-tmp` parameter. For example: `./installTool.cmd -tmp /templocation`.

EPM System Installer performs some initial checks while launching.

EPM System Installer launches.

 **Tip:**

The first page of EPM System Installer might open hidden behind other windows if you navigate away from the EPM System Installer window or try to reposition the initial window. Press Alt+Tab to switch to the first page of the wizard.

2. Select a language.

Throughout EPM System Installer, if a component is not available for installation in the language you selected, it is shaded in color and marked with an asterisk (*).

3. Review and complete each page of EPM System Installer, clicking or selecting **Next** to move to the next page.

In console mode, enter the number beside the selection you want.

 **Tip:**

EPM System Installer starts to display the progress indicator after it has prepared the list of assemblies to install. This might take several minutes, depending on how many products you selected. EPM System Installer displays progress incrementally as each assembly's installation is complete.

The following table provides links where you can find more details about each page of EPM System Installer.

Table 5-1 EPM System Installer Pages

Page	Reference
Welcome	Welcome
Destination/MiddleWare Home	Destination/Middleware Home
Installation Type	Installation Type
Product Selection	Product Selection
Confirmation	Confirmation

4. When installation is complete, click or select **Configure** to configure the products using EPM System Configurator, or click or select **Finish** to close EPM System Installer.

Welcome

Review the prerequisites carefully before you continue the installation. When you have confirmed that your system meets the prerequisites to run EPM System Installer, click or select **Next** to continue the installation.

EPM System Installer checks for the following:

- Whether the computer host name resolves to an IP address. If the machine host name resolves to an IP address, EPM System Installer provides a warning. Oracle recommends that you resolve this issue and provide a host name instead of an IP address before proceeding.
- Whether your system has a supported operating system.
- Whether your system meets minimum memory requirements to run the installation.
- Whether your system meets environment variable prerequisites.
- Whether the inventory is writable.
- Whether the user installing has administrator privileges (Windows only).
- Whether there is 1 GB of temp space available.
- Basic pre-installation checks for Oracle WebLogic Server.

A check mark indicates that your system meets EPM System Installer prerequisites. If any of the prerequisite items do not display a check mark, and you choose to continue, the installation might not succeed.

 **Tip:**

If you are using a `hosts` file to resolve your host name, the host name resolves to the first entry in your `hosts` file. To prevent potential communication problems in a distributed environment, ensure that the first entry in your `hosts` file is the machine's fully qualified domain name so that the fully qualified name is stored in the Oracle Hyperion Shared Services Registry.

Destination/Middleware Home

Specify the destination for the installation location, or browse to a location and select it, and then click or select **Next**. The default location is `Oracle/Middleware`.

The destination you specify becomes the Middleware home. By default EPM System Installer creates a default EPM Oracle home under the Middleware home. The default location is `Oracle/Middleware/EPMSys11R1`.

See [About Middleware Home, EPM Oracle Home, and EPM Oracle Instance](#).

Do not use any of the following symbol combinations in the directory that you specify for `EPM_ORACLE_HOME` during installation:

`/t`

`\t`

`\b`

Note the following information about the Middleware home:

- Ensure that this destination has enough disk space to install all the products that you want to install on this machine.
See [Disk Space and RAM](#) for disk space requirements.
- You select a Middleware home for each machine in your environment.
In a distributed environment, EPM Oracle home must be the same on each machine. For example, if the path for EPM Oracle home is `/Oracle/Middleware` on the first machine you configure, it must be `/Oracle/Middleware` on all the machines in the deployment.
- If you are reinstalling Oracle Enterprise Performance Management System products on this machine or adding products to your installation, the existing location for the Middleware home is listed as the default installation destination, and you cannot change it.
- The destination path cannot contain spaces; for example, `c:\Program Files` is not acceptable (unless you use short path notation).
- The first character must be an alphanumeric character.



Note:

If you previously used EPM System Installer, and you saved the installation selections to a file, you can load the selections to prepopulate the installation destination and the products to install. Doing so is useful if you are installing the same products on multiple machines. Click **Load**, browse to the saved selections file, and click **Open**.

Installation Type

Select an installation type, and then click or select **Next**. If an installation type is not applicable on this machine, the option is unavailable.

You cannot combine installation types in one session. For example, you cannot perform a new installation of one product at the same time you perform a reinstallation of another product.

Choose from the following installation types:

- **New installation**
 - Choose this option if you are installing an Oracle Enterprise Performance Management System product for the first time on this computer.
 - Choose this option if you want to install additional components that you did not initially install.
- **Re-install this release**

Choose this option if you already installed this version of this EPM System product and want to reinstall it, for example if you need to repair an existing installation.

If you are reinstalling EPM System products, you must first stop all EPM System services.
- **Apply maintenance release**

This option is not available for Release 11.2.0.0.

Product Selection

Select the products and product components to install, and then click or select **Next**.

The following table describes the options for product selection.

Table 5-2 Product Selection Options

Action	Details
Select the products components to install.	You can expand and collapse the entries to select or clear specific options for each product and component.
Uncheck all / Check all	Select Check all to select all the products, or Uncheck all to clear all the products.
Hide/Show unavailable products.	To see only products for which installation assemblies are available, select Hide Unavailable Product Components . To see all products, select Show Unavailable Product Components .

Generally, you can install any combination of components on any computer. Note the following about product selection:

- Products are available for installation only if the assemblies are downloaded to the correct location and the selected component is supported on the platform on which you are installing. If a product is unavailable on the Product Selection page, ensure that the assemblies are in the correct location.
- Select a product component to see information and status about it in the lower portion of the screen. If Microsoft Internet Information Server (IIS) is required for your installation, and it is not installed, a warning is noted in the lower portion of the screen, and you cannot proceed until you install IIS. If you are installing on an unsupported platform, a warning is displayed.
- The Oracle Hyperion Shared Services and Oracle Hyperion Enterprise Performance Management Workspace Java web applications are installed when you install the Oracle Hyperion Foundation Services Java web applications.
- If you selected **New Installation** and you have already installed this release of a product, the product is unavailable in the Product Selection page.
- In some cases, a component is selected, but is unavailable (you can't clear it), because it is required for another selected component.

Confirmation

Review the summary of products to be installed. If necessary, click or select **Back** and make corrections. Click or select **Next** to begin the installation.

EPM System Installer warns you if there is insufficient disk space.

The **Install Type** column notes one of the following:

- **Install** if this is a new installation.

- **Re-install** if this is a reinstallation of the same release of this Oracle Enterprise Performance Management System product.
- **Maintenance** if this is a maintenance installation. (Not available for Release 11.2.0.0.)

To save your installation selections to perform the same installation on another computer, or to use as the basis for a response file for silent installation, see [Saving Installation Selections](#).

Saving Installation Selections

If you plan to install this same set of components on another computer, you can save the installation selections in a file. You can then load the selections on another computer during installation to prepopulate EPM System Installer pages for **Destination** and **Product Selection**.

To save the installation selections, click or select **Save**, browse to a location, specify a file name, and click or select **Save**.

This procedure creates an editable file that can be used as the basis for a response file for silent installation. For information about using a response file, see [Loading Saved Selections](#).

Progress

To cancel the installation, click or select **Cancel**.

EPM System Installer starts to display the progress indicator after it has prepared the list of assemblies to install. This might take several minutes, depending on how many products you selected. EPM System Installer displays progress incrementally as each assembly's installation is complete.

When you click or select **Cancel**, EPM System Installer waits until the current assembly completes installing and then stops. It does not undo installations for assemblies that were already installed. Use EPM System Uninstaller to remove assemblies that were installed. See the *Oracle Enterprise Performance Management System Deployment Options Guide* for information about uninstalling.



Note:

“Creating Oracle Inventory” sets up infrastructure for future service fixes.

Summary

Review the installation summary, and then click or select **Configure** to launch EPM System Configurator or click or select **Finish** to close EPM System Installer.

EPM System Installer indicates the success or failure of the installation. If any part of the installation failed, EPM System Installer notes which assembly failed to install. Check the log files for more information about the errors. You can find the log files in / diagnostics/logs/install. There is a log file for each assembly, named *product-install.log*; for example, *hss-install.log*, and a log file for installation, *installTool-install-DateTime.log*.

Performing Silent Installations

Silent installations automate the installation process so that you can install Oracle Enterprise Performance Management System products on multiple computers without manually specifying installation settings on each machine.

To enable silent installation, record your installation settings in a response file. You can then run a silent installation from the command line, using the installation options that were saved in the response file.

To record installation settings and run a silent installation:

1. Navigate to the directory that contains EPM System Installer.
2. From a command line, run a command:

Windows:

```
installTool.cmd -record filename
```

where *filename* includes an absolute path or file name for the response file.

The file is saved in XML format, but you do not have to save the file with a `.xml` extension.

EPM System Installer launches.

3. Proceed through EPM System Installer, specifying the options that you want to record.

Installation options are recorded in the response file. You can modify the response file later to change installation options.

You are now ready to run the installation in silent mode.

4. Copy the response file to the machine on which you want to run the installation. You can also copy the file to a network drive that is accessible from the machines on which you want to install.
5. From the command line, enter a command:

Windows:

```
installtool.cmd -silent filename
```

The installation runs in the background.

Silent response files are not compatible between earlier releases of EPM System and Release 11.2. If you created silent response files for use with any earlier release of EPM System products, you must re-create them for use with EPM System Release 11.2.

Loading Saved Selections

You can also record installation settings from within EPM System Installer.

To record installation settings, during installation, on the Installation Confirmation page, click or select **Save**, browse to a location, specify a file name, and click or select **Save**. The file is saved in the same format as for silent installations.

To play back the installation using the same installation destination and product component selections, start EPM System Installer, and on the Destination page, click or select **Load**, browse to the saved selections file, and click or select **Open**.

Modifying Response Files

After you create a response file, you can modify it to customize the installation options for certain machines. For example, you might create a master silent file for all products, and then for each machine, change the location of the Middleware home and keep only the product components that you want to install on this machine.

To modify a response file:

1. Open the response file in any text editor. The file is in XML format.
2. Edit the file using the following options.
 - `<HyperionHome>`—Location of the Middleware home.
 - `<SelectedProducts>`—Product components to install to specific tiers. Make changes in `<Product name>`, `<ProductComponent name>`, `<InstallTier>`, and `<Component>`.
 - `<Product name>`—The name of the product. Enclose product names in quotes, as they are XML attributes.
 - `<ProductComponent name>`—The component of the product. Enclose component names in quotes, because they are XML attributes.
 - `<InstallTier>`—The installation tier for the component installation (Client, Service, WebApplication).
 - `<Component>` — The services to install.
3. Save the file in XML format.

Installing EPM System Clients

Related Topics

- [Client Installation Prerequisites](#)
- [Downloading and Extracting Client Installers](#)
- [Installing EPM System Clients](#)
- [Installing EPM System Clients from EPM Workspace](#)
- [Installing EPM System Clients From the Command Line](#)
- [Installing and Updating Smart View Extensions](#)

Client Installation Prerequisites

Review these prerequisites before installing Oracle Enterprise Performance Management System clients:

- Install Microsoft Excel and Oracle Smart View for Office on the same machine, with access to Oracle Hyperion Planning.
- **Smart View:** Smart View must be installed on a machine that already has Microsoft Office 32-bit or Office 64-bit and .NET Framework 4.5 installed. Install Microsoft Excel with the Visual Basic option.

Downloading and Extracting Client Installers

You use client installers when [Installing EPM System Clients](#) and when [Installing EPM System Clients from EPM Workspace](#).

Make sure you've downloaded files needed for your product. See [Downloading Files for Installation](#).

To extract the Oracle Enterprise Performance Management System client installers:

1. On your local computer, create *client installer folder*; for example, `EPM_Clients_unzipped`.
2. Extract files from `ClientInstallers-11200.zip` into the folder you created.

Extracting the contents of the downloaded file creates subfolders in *client installer folder* that contain the installer files, as follows:

- `EssbaseAdministrationServicesConsole/EASConsole.exe`
- `EssbaseClient/EssbaseClient.exe`
- `EssbaseStudio/EssbaseStudioConsole.exe`
- `FinancialReportingStudio/FinancialReportingUtils.zip`
- `Planning/PlanningSVExtension.msi`
- `PredictivePlanning/predictiveplanning.exe` and `predictiveplanning-x64.exe`
- `SmartView`
- `CloseMgrSupplementalDataSVExt.exe`
- `TaxOpsTaxSupplementalSVExt.exe`

Installing EPM System Clients

The following Oracle Enterprise Performance Management System clients have their own Windows installers:

- Essbase Oracle Essbase Administration Services Console
- Oracle Essbase Client
The Essbase Client installer is Windows only.
- Oracle Essbase Studio Console
- Planning Admin Extension for Oracle Smart View for Office
- Predictive Planning (module of Oracle Hyperion Planning)
- Smart View. To ensure that users install the latest version of Smart View, the Smart View installer is available only on Oracle Technology Network.
- Smart View Extension for Close and Supplemental Data Management

- Smart View Extension for Tax Operations and Tax Supplemental Schedules
-

If you have installed a client in a previous release using a Windows installer, you do not need to uninstall the earlier release of the client.



Note:

If you are using terminal services to install clients, switch your session to installation mode (`change user /install`) before running any EPM System client installer.

To install EPM System clients using the Installer:

1. From *client installer folder*, open the subfolder for the client installer and then double-click the client installer file name.
See [Downloading and Extracting Client Installers](#) for the subfolders and installer names.
2. Proceed through the installation wizard, and click **Finish** when the installation is complete.

You can also install some clients from Oracle Hyperion Enterprise Performance Management Workspace. See [Installing EPM System Clients from EPM Workspace](#).

Installing EPM System Clients from EPM Workspace

If you have installed and configured Oracle Hyperion Enterprise Performance Management Workspace, you can download and launch installers for the following clients from EPM Workspace:

- Oracle Smart View for Office. By default, when you install Smart View from EPM Workspace, the **Install** link launches Oracle Technology Network (OTN), where you download and install the latest version of Smart View. This ensures that users have the most recent version of Smart View for installation.
- Predictive Planning
- Oracle Hyperion Financial Reporting Utilities
- Oracle Hyperion Tax Provision Metadata Accelerator
- Planning Admin Extension

To install Oracle Enterprise Performance Management System clients from EPM Workspace:

1. Copy the client installer from *client installer folder* and place it in a folder on the EPM Workspace server.
See [Downloading and Extracting Client Installers](#) for information on *client installer folder*.
See [Table 1](#) for information on where to place client installers in EPM Workspace.
This step is not necessary for Smart View.

Table 5-3 Where to Place Client Installers in EPM Workspace

EPM System Client	Client Installer	Location in EPM Workspace
Smart View		N/A. Downloadable from Oracle Technology Network.
Predictive Planning	PredictivePlanning/ predictiveplanning.exe	<i>EPM_ORACLE_HOME</i> /common/ epmstatic/wspace/ predictive_planning/ predictiveplanning.exe
Financial Reporting Utilities	FinancialReportingStudio/ FinancialReportingUtils.zip	
Tax Provision Metadata Accelerator	HTPAcceleratorInstaller.svext	<i>EPM_ORACLE_HOME</i> /common/ epmstatic/wspace/taxprov/ HTPAcceleratorInstaller.svext
Planning Admin Extension	Planning/ PlanningSVEExtensions.msi	<i>EPM_ORACLE_HOME</i> /common/ epmstatic/wspace/ PlanningSmartviewExtension/ PlanningSVEExtension.msi

2. Launch EPM Workspace and log in:

`http://epm.mycompany.com:19000/workspace/index.jsp`

3. Select **Tools**, then **Install**, and then select the product to install. Follow the onscreen prompts.

For Smart View, unless you changed the location for installation, the Oracle Technology Network page for Smart View launches:

- a. From Oracle Technology Network, select **Oracle Smart View for Office**, click **Download latest Version**, accept the license agreement, click **Download Now**, and then click **Save** to save the file locally.
- b. Unzip the file, launch **SmartView.exe**, and then follow the onscreen prompts.


Installing EPM System Clients From the Command Line

You can run an Oracle Enterprise Performance Management System client installer from the command line using the following parameters:

Table 5-4 Command Line Options for Client Installations

Option	Usage
<code>/v"command line options"</code>	Specifies command line options to be passed to the client installer.
<code>/s</code>	Runs the client installer as a silent installer.
<code>/qn</code>	Makes the installation non-interactive.

Table 5-4 (Cont.) Command Line Options for Client Installations

Option	Usage
INSTALLDIR=	Specifies the installation directory.
	<div data-bbox="1104 436 1347 850" style="border: 1px solid #0070C0; padding: 10px; background-color: #E6F2FF;"> <p> Note:</p> <p>If the EPM_ORACLE_HOME environment variable is defined, the client installation ignores the INSTALLDIR= value and install the clients in EPM_ORACLE_HOME:</p> </div>
!*v <i>log file path and name</i>	Logs installation information in the specified file.

Performing Silent Client Installations

Administrators can enable silent installations. When silent installations are enabled, you can include the silent installation command in scripts to automate the process, so that you do not need to specify settings each time you perform an installation.

To perform a silent installation of any Oracle Enterprise Performance Management System client, use this command:

```
installer file name /s /v"/qn INSTALLDIR=installation directory /!*v log file path and name"
```

 **Note:**

For installer file names, see [Downloading and Extracting Client Installers](#).

Installing and Updating Smart View Extensions

Oracle Smart View for Office supports provider extensions for the following Oracle Enterprise Performance Management System products:

- Oracle Hyperion Financial Reporting
- The Predictive Planning extension for Oracle Hyperion Planning
- The Planning Admin extension for Planning
- Smart View Extension for Close and Supplemental Data Management

- Smart View Extension for Tax Operations and Tax Supplemental Schedules
- Tax Provision Metadata Accelerator Smart View Extension

If you are an administrator, see "Administering Extension Installations and Updates" in the *Oracle Smart View for Office Installation and Configuration Guide* for information about administering extension installations and updates.

6

Configuring EPM System Products in a New Deployment

Related Topics

- [About EPM System Configurator](#)
- [Configuration Prerequisites](#)
- [Configuration Sequence](#)
- [Configuring Products in a Distributed Environment](#)
- [Configuring Products in an SSL-Enabled Environment](#)
- [Product Configuration Task Summary](#)
- [Configuring EPM System Products](#)
- [EPM System Configurator Task Reference](#)
- [Performing Silent Configurations](#)
- [What Happens During Configuration](#)
- [Troubleshooting Configuration](#)
- [Manually Configuring Oracle HTTP Server](#)

About EPM System Configurator

EPM System Configurator is installed with the first Oracle Enterprise Performance Management System product installed on a computer and is used to configure all products installed on the computer. Use EPM System Configurator on each computer on which EPM System products are installed. (EPM System clients do not require configuration.)

Use the configuration worksheets throughout this chapter to plan your configuration and to document the configuration steps for your company if required for disaster recovery.

Configuration Prerequisites

Configuration prerequisite notes:

- Ensure that host names resolve properly for each machine in the deployment. See [Ensuring that Host Names Resolve](#).
- Use the Repository Creation Utility (RCU) to create schemas to support Oracle Enterprise Performance Management System Java web applications, and then modify RCU schema properties. See [Creating Infrastructure Schemas Using Repository Creation Utility](#) and [Updating RCU Schema Properties](#).
- When you are deploying on a machine other than the machine hosting Oracle Hyperion Foundation Services, ensure that Oracle WebLogic Server

Administration Server is running on the Foundation Services host machine (*FNDHOST1*): On the Foundation Services host machine, start WebLogic Server Administration Server by selecting **Start**, then **All Programs**, then **Oracle WebLogic**, then **User Projects**, then **EPMSysSystem**, and then **Start Admin Server for WebLogic Server**.)

- If you want to deploy Java web applications to a single managed server, you must be using WebLogic Server and have a 64-bit operating system.
- For database configuration tasks, ensure that the database is running.
- If you plan to deploy EPM System products in an SSL-enabled environment, the SSL implementation that you choose affects the options that you select during configuration. Optionally, you can deploy non SSL and reconfigure to use SSL. See the *Oracle Enterprise Performance Management System Security Configuration Guide*.

Ensuring that Host Names Resolve

Before configuring, ensure that the host name resolves properly for each machine in the deployment. Oracle Enterprise Performance Management System uses Java's canonical host name resolution for resolving host names. To validate host names as resolved by Java, EPM System provides a utility (*epmsys_hostname.bat*).

To ensure that host names resolve:

1. Set the *JAVA_HOME* variable. From a command prompt, enter `set JAVA_HOME=pathToJAVA`. For example, for the default location that EPM System Installer uses for Java, enter the following command: `set JAVA_HOME=c:\oracle\middleware\jdk160_35`.
2. Unzip *epmsys_hostname.zip*, in *EPM_ORACLE_HOME/common/config/11.1.2.0*.
3. From a command prompt, change to the directory to which you unzipped the utility, and then enter the following command:

```
epmsys_hostname.bat hostName
```

4. Review the results in the command line.

For example:

```
InetAddress details of host hostNameAddress is xx.xxx.xxx.xxxName is  
hostNameCanonical Name is hostName.mycompany.com
```

5. If you see the error "Unable to determine the host details", to resolve the host name, create a local hosts file and add an entry for this server.

Creating Infrastructure Schemas Using Repository Creation Utility

The Repository Creation Utility (RCU) is used to create schemas to support Oracle Enterprise Performance Management System Java web applications. This process requires sys DBA credentials.

Run RCU on any machine in your environment.

Make sure you've set up database schemas for your database. See [Preparing a Database](#).

If you are using SQL Server, you must create an additional database for use with RCU. See [Using a Microsoft SQL Server Database](#).

To create schemas using the Repository Creation Utility:

1. Navigate to `Middleware home/oracle_common/bin/`.
2. Launch `rcu.bat`.
3. On the **Welcome** page, click **Next**.
4. Click **Create Repository** and **System Load and Product Load**, and then click **Next**.

If you have previously created a repository and configured EPM System, and you want to perform a fresh configuration, drop the repository, and then create a new repository.

5. On the **Database Connection Details** page, specify a user with DBA or SYSDBA privileges, such as `sys`, provide the fully qualified service name, and then click **Next**.
6. On the **Select Components** page, perform these tasks, and then click **Next**:
 - Select **Create new prefix** and provide a prefix. Oracle recommends that you use the same prefix for the EPM System database user and for the RCU database.
 - Expand **AS Common Schemas** and select all the options.
 - Clear the selection for **Oracle Data Integrator**.
 - Make a note of the **Schema Owner** names for all the components because you need them to configure Oracle Web Services Manager.
7. On the **Schema Passwords** page, Oracle recommends that you select **Use same passwords for all schemas**. Enter a password, make a note of it, and then click **Next**.
8. On the **Map Tablespaces** page, click **Next**, and then click **OK** to create tablespaces.
9. On the **Summary** page, review the selections, and then click **Create**.
10. On the **Completion Summary** page, click **Close**.

For additional information on the Repository Creation Utility, see the *Oracle® Fusion Middleware Repository Creation Utility User's Guide 11g Release 1 (11.1.1)*.

Updating RCU Schema Properties

Update RCU schema properties.

1. Navigate to `EPM_ORACLE_HOME/common/config/11.1.2.0/RCUSchema.properties`.
2. Provide the required database details. If you are using Microsoft SQL Server, provide the database details for the RCU database you created.

These properties are used during configuration.

- `sysDBAUser`—The `sysdba` user for RCU
- `sysDBAPassword`—The `sysdba` password for RCU

- rcuSchemaPassword—RCU schema password created while running RCU
- schemaPrefix—The schema prefix used to create RCU. (Make sure it is the same as the Oracle Hyperion Shared Services Registry database user)
- dbURL—For example: `jdbc:oracle:thin:@hostname:port:sid`

Notes for dbURL:

- Format for Oracle Database with SID:
`dbURL=jdbc:oracle:thin:hostname:port:SID`
- Format for Oracle Database with service name:
`dbURL=jdbc:oracle:thin:@hostname:port/serviceName`
- Format for Microsoft SQL Server, with SID, using the name for database you already created:
`dbURL=jdbc:weblogic:sqlserver://
hostname:port;databaseName=databaseName`



Note:

After configuration, EPM System Configurator deletes `RCUSchema.properties`.

Configuration Sequence

Oracle Hyperion Foundation Services must be installed and configured for other products to configure successfully. In general, for a new deployment, Oracle recommends that for each machine, you configure all Oracle Enterprise Performance Management System products at the same time for the products installed on the machine. By default, EPM System Configurator preselects all products for you.

Configuration sequence notes:

- Configure Foundation Services first. Foundation Services must be installed and configured for other products to configure successfully. Then, for each machine in the deployment, configure all EPM System products at one time for the products installed on the machine.
- Configure the web server last. (Select the Foundation Services **Configure Web Server** task.) Then, restart the web server and refresh Oracle Hyperion Enterprise Performance Management Workspace. If you configured Oracle HTTP Server to a shared drive, you can simply restart the web server and refresh EPM Workspace; you do not have to reconfigure the web server. See [Refreshing EPM Workspace](#).
- Complete the configuration on each machine and close EPM System Configurator before launching EPM System Configurator on another machine.
- When you configure in a distributed environment, you configure the Oracle Hyperion Shared Services database on every machine. On the first machine, you are setting up the Oracle Hyperion Shared Services Registry. For configurations on subsequent machines, choose **Connect to a previously configured Shared Services database**, which lets the machine know the location of the Shared Services Registry.

- If you deploy any additional products, reconfigure the web server and then restart it (or simply restart it if you configured Oracle HTTP Server to a shared drive) on each machine hosting Foundation Services.

Then, refresh EPM Workspace on each Foundation Services host machine in your deployment.

See [Refreshing EPM Workspace](#).

- You must perform the **Configure Database** task at the same time as or before you perform the **Deploy to Application Server** task.
- Automatic web server configuration with EPM System Configurator is supported only for the web server installed by EPM System Installer (Oracle HTTP Server or the proxy web Server) or IIS.
- After you have completed configuration, perform any required manual configuration tasks required for your product.

For information about clustering or scaling EPM System, see the *Oracle Enterprise Performance Management System Deployment Options Guide*.

Configure Oracle Data Relationship Management after you have completed all the configuration tasks using EPM System Configurator: See the *Oracle Data Relationship Management Installation Guide*.

Configuring Products in a Distributed Environment

Ensure that you meet installation requirements in a distributed environment. See [Installing EPM System Products in a Distributed Environment](#). For information about clustering and high availability, see the *Oracle Enterprise Performance Management System Deployment Options Guide*.

Configuration considerations in a distributed environment:

- You must configure Oracle Hyperion Foundation Services first. Foundation Services must be installed and configured for other products to configure successfully. Configure the web server last.
- Create a new EPM Oracle instance on each machine.
- If you are deploying Java web applications on a machine other than the WebLogic Administration Server machine, WebLogic Administration Server must be running.
- Deploy all Oracle Enterprise Performance Management System products to a single WebLogic domain.
- During configuration with EPM System Configurator, the web server machine needs connectivity to the machine hosting the Oracle Hyperion Shared Services Registry.
- If you are using more than one web server in a deployment for load balancing and failover, configure the web server on every machine on which you want to run the web server. If you have more than one web server, you must use a load balancer (hardware or software) to route traffic to the servers, and the logical web address for the Java web application cluster should be the load balancer. If you have only one web server, the logical web address for the Java web application cluster can be the web server.
- When configuring EPM System for high availability where multiple instances of services are running, and for using Oracle Hyperion Enterprise Performance

Management System Lifecycle Management in a distributed environment, in EPM System Configurator, on the **Configure Common Settings** page, for **LCM Export Import Location**, specify a shared file system path defined using UNC syntax that is accessible from all the servers in the deployment. This enables data migration across distributed environments.

If you are using Oracle Hyperion Financial Management in a distributed environment, configure the LCM Export Import folder with Read/Write access for all the Financial Management Application Servers in the environment.

- Optionally, you can configure Oracle HTTP Server to a shared drive to simplify the configuration process.
- For Oracle Hyperion Financial Reporting linked reports to work, configure Financial Reporting so that the logical address of the Financial Reporting component is same as web server port (for example, 19000).

Configuring Products in an SSL-Enabled Environment

If you are configuring Oracle Enterprise Performance Management System products for SSL, the configuration sequence and selections that you make during configuration depend on the type of SSL implementation you choose. Optionally, you can deploy non SSL and reconfigure to use SSL. See the *Oracle Enterprise Performance Management System Security Configuration Guide*.

Note:

Oracle Essbase supports only one-way SSL using self-signed certificates by default. Using default certificates is recommended for use only in a test environment. Oracle recommends that you use certificates from well-known third party CAs in a production environment. See the *Oracle Enterprise Performance Management System Security Configuration Guide* for details.

Product Configuration Task Summary

Configuration notes:

- EPM System Configurator performs pre-configuration tasks and registers products with Oracle Hyperion Shared Services during configuration. You need not select these tasks; they are automatically performed when needed.
- Oracle Hyperion Shared Services Registry database configuration appears once on each machine that you configure.
- Clients do not require configuration and are not included in these tables.

The following table summarizes the configuration options available for Oracle Hyperion Foundation Services products.

Table 6-1 Foundation Services Configuration Task Summary

Component	Configure Database	Deploy to Application Server	Product-specific Configuration Tasks
Foundation Services	X	X This selection deploys Shared Services and the Oracle Hyperion Enterprise Performance Management Workspace Java web applications.	<ul style="list-style-type: none"> • Configure Common Settings • Configure Web Server • Configure Logical Address for Web Applications (Optional) • Scale out single managed server on this machine
Oracle Hyperion Calculation Manager	X	X	N/A

The following table summarizes the configuration options available for Oracle Essbase products.

Table 6-2 Essbase Configuration Task Summary

Component	Configure Database	Deploy to Application Server	Product-specific Configuration Tasks
Oracle Hyperion Provider Services	N/A	X	N/A
Oracle Essbase Studio	X (Required for Essbase Studio catalog)	N/A	N/A
Oracle Essbase Administration Services	X	X	N/A
Essbase	N/A	N/A	Configure Essbase Server

The following table summarizes the configuration options available for Oracle Hyperion Financial Reporting.

Table 6-3 Financial Reporting Configuration Task Summary

Component	Configure Database	Deploy to Application Server	Product-specific Configuration Tasks
Financial Reporting	X	X	Configure Financial Reporting RMI Ports

The following table summarizes the configuration options available for Financial Performance Management Applications products.

Table 6-4 Financial Performance Management Applications Product Configuration Task Summary

Component	Configure Database	Deploy to Application Server	Product-specific Configuration Tasks
Oracle Hyperion Financial Close Management	X	X	
Tax Management	X	X	N/A
Oracle Hyperion Financial Management	X	X	<ul style="list-style-type: none"> Configure Application Server Configure Application Cluster
Oracle Hyperion Planning	X	X	Configure RMI Server
Oracle Hyperion Profitability and Cost Management	X	X	N/A

The following table summarizes the configuration options available for Data Management products.

Table 6-5 Data Management Product Configuration Task Summary

Component	Configure Database	Deploy to Application Server	Product-specific Configuration Tasks
Oracle Hyperion Financial Data Quality Management, Enterprise Edition	X	X	N/A

Configuring EPM System Products

Run EPM System Configurator on each machine hosting the products to configure or reconfigure.

For a list of characters supported during configuration with EPM System Configurator, see [Characters Supported for Installation and Configuration](#).

Note:

On Windows machines, do not use the Administrator user to install and configure. Run EPM System Installer and EPM System Configurator as a user with administrator rights. Install, configure and run Oracle Hyperion Enterprise Performance Management System Diagnostics as the same user for all Oracle Enterprise Performance Management System products.

To configure EPM System products:

1. Choose a method to launch EPM System Configurator:
 - On the last page of EPM System Installer, click or select **Configure**.

- From the **Start** menu, select **Oracle EPM System**, and then **EPM System Configurator (all instances)**.
- Change to `EPM_ORACLE_HOME/common/config/version_number` and then launch `configtool.bat`.
- To run EPM System Configurator in console mode, launch it from the command line using the `-console` parameter. For example `/common/config/version_number/startconfigtool.bat -console`.
- For silent configurations, see [Performing Silent Configurations](#).

 **Tip:**

If you launch EPM System Configurator from `EPM_ORACLE_INSTANCE`, EPM System Configurator configures the existing EPM Oracle instance and does not display the "Configure Oracle Instance" page.

EPM System Configurator performs initial checks, checking for the following:

- Environment variables are set
 - `.oracle.products` is present
 - All required `.jars` are present
 - Windows system32 is in the `PATH`
 - There is a valid EPM Oracle home
 - When Oracle Essbase is installed, that OPMN is also installed on the machine
2. Review and complete each page of EPM System Configurator, clicking or selecting **Next** to move to the next page.

In console mode, enter the number beside the selection you want.

The following table provides links where you can find more details about each page of EPM System Configurator.

Page	Reference
EPM Oracle Instance	Configure EPM Oracle Instance
Task selection	Task Selection
Set Up Oracle Hyperion Shared Services and Registry Database Connection	Ensure that the database is started and that you have created a database. If you have not already created the database, see Preparing a Database . Enter the information as described in Set Up Shared Services and Registry Database Connection .
Configure database	Ensure that the database is started and that you have created a database. If you have not already created the database, see Preparing a Database . Enter the information as described in Configure Database .

Page	Reference
Application server deployment	Enter the information as described in Deploy to Application Server: Oracle WebLogic .
Product-specific configuration tasks	For detailed procedures to configure each product, see the sections: <ul style="list-style-type: none"> • Foundation Configuration Tasks • Essbase Configuration Tasks • Financial Reporting Configuration Tasks • Planning Configuration Tasks • Financial Management Configuration Tasks • Financial Close Management Configuration Tasks

3. (Optional) To save the configuration selections in a response file for silent configuration, click or select **Save**, browse to a location, specify a file name, and click or select **Save**.

This procedure creates an editable file that can be used as a response file for silent configuration. See [Performing Silent Configurations](#).

4. Confirm the configuration tasks to complete, and then click or select **Next**.

EPM System Configurator displays the status of the configuration process.

Configuration time depends on the products and tasks that you selected. Progress is recorded in `/diagnostics/logs/config/configtool.log`.

When configuration finishes, the status of each task is displayed. Configuration results are noted in `/diagnostics/logs/config/configtool_summary.log`.

5. Click or select **Task Panel** to return to the Task Selection page to complete additional configuration tasks.

6. Configure the web server last.

7. Click or select **Finish**.

If configuration is successful, perform any required manual configuration tasks, start services, and validate service startup.

See [Performing Manual Configuration Tasks in a New Deployment, Starting and Stopping EPM System Products](#) and [Validating the Installation and Verifying Deployment](#).

Terminating configuration for a particular product does not terminate the entire process. Configuration continues for the other products. EPM System Configurator displays error messages on a summary page after the configuration process completes.

If errors are displayed, perform these tasks:

- Review the log files.
- See the *Oracle Enterprise Performance Management System Installation and Configuration Troubleshooting Guide* for information about resolving configuration issues.
- If you see errors related to the Oracle HTTP Server installation, ensure that you have met the Oracle HTTP Server installation prerequisites. See [Web Server Installation Prerequisites](#).

8. Refresh Oracle Hyperion Enterprise Performance Management Workspace.

Refreshing EPM Workspace

If you deploy any additional products, reconfigure the web server and then restart it (or simply restart it if you configured Oracle HTTP Server to a shared drive) on each machine hosting Oracle Hyperion Foundation Services.

Then, refresh Oracle Hyperion Enterprise Performance Management Workspace on each Foundation Services host machine in your deployment.

To refresh EPM Workspace:

1. Start a browser session.
2. Access EPM Workspace by accessing the following URL:

```
http://FNDHOST1:9000/workspace/refresh
```

In this URL, use port 9000, which is the managed server port where EPM Workspace is available, not the Oracle HTTP Server port.

3. At the Login screen, enter **admin** and the deployment password.
You should get a success message.
4. Repeat these steps on each Foundation Services host machine in your deployment.

EPM System Configurator Task Reference

Related Topics

- [Configure EPM Oracle Instance](#)
- [Task Selection](#)
- [Set Up Shared Services and Registry Database Connection](#)
- [Deploy to Application Server — Specify WebLogic Domain Information](#)
- [Deploy to Application Server: Oracle WebLogic](#)
- [Configure Database](#)
- [Foundation Configuration Tasks](#)
- [Essbase Configuration Tasks](#)
- [Financial Reporting Configuration Tasks](#)
- [Planning Configuration Tasks](#)
- [Financial Management Configuration Tasks](#)
- [Financial Close Management Configuration Tasks](#)
- [Configuration Summary](#)

Configure EPM Oracle Instance

Specify a new or an existing EPM Oracle instance for the deployment.

EPM System Configurator deploys dynamic components of Oracle Enterprise Performance Management System products (components that can change during runtime) in the EPM Oracle instance directory. The default EPM Oracle instance location is `MIDDLEWARE_HOME/user_projects/epmsystem1`.

Typically, if you are installing all products on a single machine, for the first product you configure, create a new EPM Oracle instance. For each product after that, modify the existing EPM Oracle instance.

If you are installing in a distributed environment, create a new EPM Oracle instance on each machine.

You can scale up or scale out by installing and configuring additional instances. See the *Oracle Enterprise Performance Management System Deployment Options Guide*.

The following table describes options for EPM Oracle Instance configuration.

EPM System Configurator	Description	Your Information
Home directory for EPM Oracle instances	Specify the directory in which to create the EPM Oracle instance. The default EPM Oracle instance location is <code>MIDDLEWARE_HOME/user_projects</code> . To modify an existing EPM Oracle instance, browse to the EPM Oracle instance location.	
EPM Oracle Instance name	Specify a name for the EPM Oracle instance. The default EPM Oracle instance name is <code>epmsystem1</code> . To modify an existing EPM Oracle instance, specify the EPM Oracle instance name.	

Task Selection

Select the products and tasks to configure for this machine, or click or select **Next** to select all the required tasks.

Task selection notes:

- In a new installation, all required tasks are selected by default.
- You can clear tasks that you want to perform later.
- Select **Check All** or **Uncheck All** to select or clear all tasks.
- You cannot clear mandatory tasks, which are selected by default. If the task is unavailable (grey) and selected (checked), the task is performed and you cannot clear it.
- EPM System Configurator automatically performs common tasks the first time you configure any component of a product, such as registering the component with Oracle Hyperion Shared Services. EPM System Configurator uses the Oracle Hyperion Shared Services Registry to locate Shared Services.
- The Oracle Hyperion Enterprise Performance Management Workspace Java web application and the Shared Services Java web application are deployed when you select the Hyperion Foundation **Deploy to Application Server** task.

Set Up Shared Services and Registry Database Connection

Specify the settings for the Oracle Hyperion Shared Services and Registry database.

When you initially configure Oracle Enterprise Performance Management System products, you configure a database for use by Oracle Hyperion Foundation Services, which includes the Oracle Hyperion Shared Services Registry.

When you configure the Shared Services and Registry database, EPM System Configurator ensures that the database is connected and is a supported database type. If a database is detected, you might be prompted to choose whether to use the detected database or create a database.

If you are configuring an Oracle database, EPM System Configurator checks that the database was created with the correct character set. If not, you are prompted to correct it.

For a list of supported databases, see the (<http://www.oracle.com/technetwork/middleware/ias/downloads/fusion-certification-100350.html>).

For database prerequisites for this release, see [Preparing a Database](#).

You can use Windows Authentication for SQL Server connections if you use Microsoft SQL Server database. See [Setting Up Microsoft SQL Server Windows Authentication](#).

For more information about the Shared Services Registry, see [About the Shared Services Registry](#).

 **Note:**

This task assumes that you have created the database. If you have not created a database, see [Preparing a Database](#).

If you uninstall EPM System products and then reinstall into the same location, you cannot reuse the Shared Services and Registry database.

The following table describes options for Shared Services and Registry Database configuration.

EPM System Configurator Fields	Description	Your Information
Connect to a previously configured Shared Services database/Perform first-time configuration of Shared Services database	<p>When you first configure the Shared Services and Registry database, choose Perform first-time configuration of Shared Services database. This database includes the Shared Services Registry, which is used to store common information for all products.</p> <p>When you configure in a distributed environment, you must configure the Shared Services database on every machine. On the first machine, you are setting up the Shared Services Registry. For configurations on subsequent machines, choose Connect to a previously configured Shared Services database. In this case, you are letting the machine know the location of the Shared Services Registry.</p> <p>For some products, you can use this same database to store product information. In this case, each product has its own table in this database.</p>	
Database Type	Select the database type.	
Server	<p>Specify the name of the database server where the Shared Services database should be created.</p> <p>For Oracle RAC, specify the VIP name or one of the node names as the server name.</p>	
Port	Select the default or specify a custom Shared Services server port number on which the database listens.	
Service Name or SID, or Database Name	<p>Specify the name of the Shared Services database.</p> <p>If you are using an Oracle RAC database, specify the RAC service name.</p>	
User Name	Enter the name of the database user.	
Password	Enter the password of the database user.	
Advanced options (Optional)	<p>Click or select to specify additional information.</p> <p>For more information on these options, see Advanced Options for Database Configuration (Optional).</p> <p>You can use this option to configure Oracle RAC or an LDAP-based JDBC URL.</p>	

Deploy to Application Server — Specify WebLogic Domain Information

Specify information about the WebLogic domain to which to deploy the Java web applications.

Deploy all Oracle Enterprise Performance Management System products to one domain.




Note:

The following table describes options to define the Oracle WebLogic Server domain.

EPM System Configurator Fields	Description	Your Information
Deploy web applications to an existing domain/Deploy web applications to a new domain. The Administration Server for this domain will be created on this machine.	Specify whether to deploy Java web applications to an existing domain or to a new domain. If you create a new domain, the WebLogic Administration Server for this domain is created on this machine.	
Domain Name	To define a new domain, enter a domain name. The default domain name is EPMSystem. To deploy to an existing domain, specify the domain to use for deployment.	
Administration Server Host	For an existing domain, specify the Administration Server Host.	
Administration Server Port	Accept the default port; or, to change the default, enter a port number that does not conflict with other applications installed on your machine.	
Administrator User	Enter the Administrator user name for the domain. By default, EPM System Configurator uses <code>epm_admin</code> .	

EPM System Configurator Fields	Description	Your Information
Administrator Password	Enter the Administrator password or enter a new password for a new domain.	
Confirm Administrator Password	If you are defining a new domain, confirm the Administrator password.	

 **Tip:**
Make a note of this password.

Deploy to Application Server: Oracle WebLogic

Specify the application server options, or click or select **Next** to accept the default entries.

Deploy all Oracle Enterprise Performance Management System products to one domain.

The following table describes options for WebLogic application server deployment configuration.

EPM System Configurator Fields	Description	Your Information
Deploy the web applications to a single managed server	<p>Select this option for a deployment to a single managed server.</p> <p>If you select this option, all selected Java web applications are deployed to a single managed server in WebLogic.</p> <p>This option is available only:</p> <ul style="list-style-type: none"> • When you are creating a new domain or extending an existing domain created in EPM System Configurator Release on the machine hosting WebLogic Administration Server. • When you are vertically scaling to the same machine and the same domain and there is an existing single managed server. <p>To add products to a single managed server on a machine other than the machine hosting Oracle Hyperion Foundation Services, select Scale out single managed server on this machine.</p> <p>Deploying Java web applications to a single managed server reduces memory requirements and reduces startup time. You can have only one single managed server in an EPM System deployment. You can scale out the single managed server.</p> <p>When you select this option, all managed server names are changed to <code>EPMServer0</code>, and all ports are changed to 9000 or 9443 (SSL). If you change a port, it is reflected in all the rows.</p> <p>If you deselect this option after it is selected, the port values revert to the default individual ports; and if already configured to a different port, the values revert to the user-provided ports.</p>	
Ear/War	Select the components to deploy.	
Managed Server Name	Displays the WebLogic Managed Server name.	
Port	<p>Accept the default port; or, to change the default, enter a port number that does not conflict with other applications installed on your machine.</p> <p>See Ports.</p>	

EPM System Configurator Fields	Description	Your Information
SSL Port	<p>Accept the default port or specify the SSL port to use for deployment. Specifying this port sets up SSL using the Java application server's default certificates. See the <i>Oracle Enterprise Performance Management System Security Configuration Guide</i> for recommendations on updating the Java application server with a valid certificate.</p> <p>If you are using SSL, you must disable the non-SSL port (or redirect it to the SSL port) in your Java application server after configuration to ensure secure communication.</p>	
Status	Indicates the deployment status	

Deployment notes:

- To specify the logical address the products use to connect to the Java web application server, use the "Update Logical Address for Web Applications" task. Select this task when the Java web applications do not communicate with the Java web application server directly, as in the following scenarios:
 - You have set up a cluster with a load balancer.
 - You are using an SSL offloader.

See [Configure Logical Address for Web Applications](#).
- The Oracle Hyperion Enterprise Performance Management Workspace Java web application and the Oracle Hyperion Shared Services Java web application are deployed when you select the Hyperion Foundation **Deploy to Application Server** task.
- If you are implementing a custom authentication module, you must include its Java archive (.jar) in the EPM Product classpath. See the *Oracle Enterprise Performance Management System Security Configuration Guide* for detailed procedures to implement a custom authentication module.

What Happens During Deployment: WebLogic Server

Deployment notes:

- EPM System Configurator deploys each application to the Oracle WebLogic Server domain you specified. For a new domain, the domain is created when the first application is deployed. Each application runs in a separate JVM, except for Oracle Hyperion Shared Services and Oracle Hyperion Enterprise Performance Management Workspace, which run together and are deployed to the same managed server, or if you deploy multiple Java web applications to a single managed server.
- EPM System Configurator deploys the applications to `MIDDLEWARE_HOME/user_projects/domains/domainName`.

- EPM System Configurator deploys Oracle Enterprise Manager automatically when it deploys the first Java web application.
- Start and stop scripts are created in `/bin/`.
- For each application, in `/bin/deploymentScripts` there is a `setCustomParamsProduct.bat` file, where you can change `JAVA_OPTIONS` when using start scripts.
- EPM System Configurator creates a cluster for each managed server.

Configure Database

Specify the database settings to use for the products that you selected on the Task Selection page. You can specify database connection information for each product separately, or use the same settings for multiple selected products.

For ease of deployment and simplicity, for a new installation, you can use one database for all products. In some cases, you might want to configure separate databases for products. Consider performance, roll-back procedures for a single application or product, and disaster recovery plans.

Database configuration notes:

- Ensure that the database is set up.
If you have not already created the database, see [Preparing a Database](#).
- A database type might not be available if one of the selected products doesn't support it. In this case, configure this product separately. See the (<http://www.oracle.com/technetwork/middleware/ias/downloads/fusion-certification-100350.html>) for a list of supported databases for each product.
- If you are configuring an additional instance of Oracle Hyperion Financial Data Quality Management, Enterprise Edition for scaleout purposes, during database configuration, when you are prompted whether to drop and re-create the tables or reuse the existing database, select **Reuse the existing database**.
- Each Oracle Essbase Studio Server instance must have its own catalog database.
- If you are configuring an Oracle database, EPM System Configurator checks that the database was created with the correct character set. If not, you are prompted to correct it.

Setting Up Microsoft SQL Server Windows Authentication

To set up Windows authentication for a SQL Server connection:

1. Configure SQL Server to use Windows authentication.
2. Grant your Windows account appropriate access to your database.
3. From the configuration task list, select **Configure Database**.
4. From the database list, select **SQL Server**.
5. Specify all database information except for **Username** and **Password**.

You must also specify a domain user for Windows services on the **Common Settings** page of EPM System Configurator, in **Run Windows Services as non-local system account**. See [Configure Common Settings](#).

Advanced Options for Database Configuration (Optional)

The following table describes advanced options for database configuration.

EPM System Configurator Fields	Description	Your Information
Edit and use modified JDBC URL	Select to specify a JDBC URL for the database connection.	
JDBC URL	Enter additional attributes for the database connection. If you enter a JDBC URL, it overrides the values that you entered in the Configure Database page. For an Oracle database, you can enter an LDAP-based JDBC URL. See JDBC URL Attributes for more information.	
Use secure connection to the database (SSL)	Select to enable secure communication to the database. To use an SSL-enabled JDBC connection, you must also enter specific parameters. See JDBC URL Attributes for more information. See the <i>Oracle Enterprise Performance Management System Security Configuration Guide</i> to see whether selecting this option is appropriate for your SSL implementation.	
Trusted Keystore	Enter or browse to the location of the keystore.	
Trusted Keystore Password	Enter the password for the keystore.	
For Oracle Data Tablespace	Enter the name of an existing tablespace used to store table data. The data tablespace is the logical portion of the database used to allocate storage for table data.	
Index Tablespace	To specify the database tablespaces in which the indexes are created, select the index location.	

Foundation Configuration Tasks

Related Topics

- [Configure Common Settings](#)
- [Configure Logical Address for Web Applications](#)
- [Set Shared Services Admin User and Password](#)
- [Scale Out Single Managed Server on This Machine](#)

- [Configure Web Server](#)

Configure Common Settings

Specify settings for all products on all machines that have been identified in the Oracle Hyperion Shared Services Registry so far, or click or select **Next** to accept the default values.

The **Configure Common Settings** page appears once per Oracle Enterprise Performance Management System deployment.

If you configure on another machine and change any of these options, your new selections apply for all products and machines that you have not configured. If you reconfigure on a machine, the new settings apply to any products that you reconfigure and to future configurations.

The following table describes options for common settings configuration.

EPM System Configurator Fields	Description	Your Information
Create Windows Services for configured components (Windows only)	Select to configure each service as a Windows service that starts automatically when you start Windows.	
Run Windows Services as non-local system account	Select to specify a non-local system account to configure Windows services, and then specify a user name and password. This user should be a member of the Administrators group. If you do not select this option, EPM System Configurator creates Windows services using the local system account. Before you start the services, change them to use the appropriate domain account	
User name	Enter the user name for the user to launch the Windows services. If you leave this field blank, EPM System Configurator creates the services using the local system account.	
Password	Enter the password for the user used to launch Windows services.	

EPM System Configurator Fields	Description	Your Information
Use SSL for Web application server communications (requires manual configuration)	Depending on your SSL implementation, select to use SSL communication for all Java web applications. If this option is selected, URLs are in the form <code>https</code> .	
Mail Server Host	<p>Optionally, you can deploy non SSL and reconfigure to use SSL. See the <i>Oracle Enterprise Performance Management System Security Configuration Guide</i>.</p> <p>For products that integrate an e-mail feature, which uses standard Simple Mail Transfer Protocol (SMTP) protocol, specify the outgoing mail (SMTP) server. To enable e-mail alerts, you must specify the SMTP server name.</p>	

 **Note:**


Selecting this option does not enable secure communication for the Java web application server and does not create and load certificates into JREs and JDKs. See for more information.

EPM System Configurator Fields	Description	Your Information
Outgoing Port	Specify the mail server port number or accept the default value. If you are using SSL to communicate with the mail server, enter an SSL port.	
Incoming Port	Specify the mail server port number or accept the default value. If you are using SSL to communicate with the mail server, enter an SSL port.	
Administrator's Email Address	Specify the administrator's e-mail address to use for notifications.	
Use SSL to communicate with mail server	Select to use SSL communication for all e-mail communication.	
Use authentication to send email	Specify whether the mail server requires authentication, and then specify a user name and password.	
User Name	Specify the user name for the SMTP server.	
Password	Specify the password for the SMTP server.	

EPM System Configurator Fields	Description	Your Information
LCM Export Import Location	<p>Enter the location from which to export and import Oracle Hyperion Enterprise Performance Management System Lifecycle Management artifacts.</p> <p>If you have a clustered environment and plan to use Lifecycle Management to migrate artifacts, specify a shared drive location. The shared location must be accessible to all Oracle Hyperion Shared Services instances. When artifacts are exported using Lifecycle Management, the content is exported to a path on a shared disk; when imported, the content is read from the exported location on the shared disk.</p> <p>To enable data migration across distributed environments, specify a shared file system path defined using UNC syntax that is accessible from all the servers in the deployment.</p> <p>For example, to specify a shared drive location on Windows, enter <code>\sharedHost\sharedLocation</code>.</p>	

 **Note:**

If you are using Oracle Hyperion Financial Management in a distributed environment, configure the folder with Read/Write access for all the Financi

EPM System Configurator Fields	Description	Your Information
	 <p>al Manag ement Applica tion Servers in the environ ment.</p>	
	<p>After configuration, restart all instances of Shared Services. For each instance, start Shared Services as a service using the login of a domain user who has access to the shared disk/folder.</p>	
Enable SSL Offloading	<p>Select this option if you are using an SSL Offloader. See for more information.</p>	
External URL Host	<p>Specify the host name for the external URL.</p>	
External URL Port	<p>Port number for the external URL.</p>	

Configure Logical Address for Web Applications

Specify the logical address details to use for Java web applications, or click or select **Next** to accept the defaults:

Use this option to change the logical address for a deployed Java web application, for example if you are using a load balancer. This task lets you change the logical address without redeploying the Java web application. You can select this task during initial Java web application deployment.

For Oracle Hyperion Financial Reporting linked reports to work, configure Financial Reporting so that the logical address of the Financial Reporting component is same as web server port (for example, 19000).

 **Note:**

You need to perform this task on only one machine in the deployment.

The following table describes options for configuring the logical addresses to use for Java web applications.

EPM System Configurator Fields	Description	Your Information
Set the logical web address for all the applications to / Set the logical address for each application individually to	Select whether to apply the same address to all Java web applications or to apply a different address to each Java web application	
Product Component	Shows the components for which a Java web application is deployed	
Host	For each enabled module, review the host name to which this web server proxies requests.	
Port	Review or update the port numbers for the application server listen ports for the applications. The port here must match the listen port of the deployed application.	
SSL Port	Review or update the SSL port of the logical web address. If you are using SSL, you should disable the non-SSL port (or redirect it to the SSL port) in your Java application server after configuration to ensure secure communication.	
Context	Review the context path. The context path is the part of the URL that accesses the deployed Java web application. For example, in the following URL, <code>workspace</code> is the context path: <code>http:// webserverhost.example.com: 19000/workspace</code>	



Note:

Use fully qualified host names for all entries. For example, `webserverhost.example.com`.

Set Shared Services Admin User and Password

For hardened security, reset the password for the Oracle Hyperion Shared Services admin user. Optionally, specify an admin name other than the default, `admin`.

EPM System Configurator creates a preprovisioned user (called `admin` by default), which enables you to log on to Shared Services after configuration to create and provision users. EPM System Configurator requires you to specify a new admin password during configuration. After configuration, make subsequent changes to the admin user password in the Oracle Hyperion Shared Services Console. See the *Oracle Enterprise Performance Management System Security Configuration Guide*.

The following table describes options for resetting the Shared Services admin user password.

EPM System Configurator Fields	Description	Your Information
Admin Name	Optionally, specify a name other than the default name <code>admin</code> for the Shared Services administrator user.	
Password	Enter a new password for the Shared Services admin user.	



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Re-type Password

To confirm the new password, re-enter the password for the Shared Services admin user.

Scale Out Single Managed Server on This Machine

If you have deployed Oracle Enterprise Performance Management System Java web applications to a single managed server, use this option to scale out the server.

The **Scale out single managed server on this machine** option is only available when the following are true:

- The WebLogic Administration Server is not installed on the current machine.
- The single managed server is deployed on the WebLogic Administration Server.
- The single managed server is not already scaled out on the machine.

See "Scaling Out a Single Managed Server" in the *Oracle Enterprise Performance Management System Deployment Options Guide*.

Configure Web Server

Specify web server information, or click or select **Next** to accept the defaults.

Information in this page comes from applications already deployed and recorded in the Oracle Hyperion Shared Services Registry and applications you are deploying in this configuration sequence.

If you deploy any additional products, reconfigure the web server and then restart it (or simply restart it if you configured Oracle HTTP Server to a shared drive) on each machine hosting Oracle Hyperion Foundation Services.

Then, refresh Oracle Hyperion Enterprise Performance Management Workspace on each Foundation Services host machine in your deployment.

See [Refreshing EPM Workspace](#).



Note:

Enabling SSL for the web server requires manual configuration. See the *Oracle Enterprise Performance Management System Security Configuration Guide*.

The following table describes options for the web server configuration.

EPM System Configurator Fields	Description	Your Information
Web Server Type	<p>Select the web server.</p> <p>To manually configure a web server, select Setup Registry for manual web server configuration.</p> <p>See Manually Configuring Oracle HTTP Server for details on manually configuring a web server.</p> <p>If you are using Oracle HTTP Server, you can configure to a shared drive location to simplify configuration in a distributed environment. Click Advanced Options and then specify the shared drive location. This shared location must be accessible from all web servers in the deployment and must a UNC path, not a mapped drive.</p>	

EPM System Configurator Fields	Description	Your Information
Web Server Port	Specify the web server port. If you use SSL, ensure that the port number that you enter is a secure port.	
Set the logical web address for the web applications to this web server	<p>Select this option if you want EPM System Configurator to set the logical web address for all Java web applications to the web server. Use this option if you want to use the web server as the load balancer.</p> <p>If you do not select this option, EPM System Configurator uses the address of the physical Java web application as the logical address.</p>	
Component	Review the components for which the web server is being configured.	

Essbase Configuration Tasks

Related Topics

- [Configure Essbase Server](#)
- [Essbase Studio Default Data Files Location](#)

Configure Essbase Server

Specify the configuration information for Oracle Essbase Server, or click or select **Next** to accept the default settings. In general, Oracle recommends that you keep the default settings.

During configuration, EPM System Configurator automatically registers Essbase with Oracle Hyperion Shared Services and writes the Shared Services connection information to `essbase.cfg` (in `ARBORPATH/bin`). In addition, it specifies environment variables in a file used to launch Essbase Server.

The following table describes the configuration options for Essbase Server.

Table 6-6 Essbase Server Configuration

EPM System Configurator Fields	Description	Your Information
Essbase Cluster Name	<p>Specify a cluster name to create a cluster to provide active-passive Essbase failover support with write-back capabilities. You can include only two Essbase instances in a cluster.</p> <p>When you configure the first instance of Essbase on the first machine, you define the cluster. When you configure the second instance of Essbase on the second machine, select Assign to Existing Cluster, select the cluster, and then click OK to add this Essbase Server to the cluster you created on the first machine.</p> <p>The Essbase cluster name must be unique in a deployment environment. It cannot contain special characters or spaces.</p> <p>See "Configuring Active-Passive Essbase Clusters (Windows)" in the <i>Oracle Enterprise Performance Management System Deployment Options Guide</i>.</p>	
Agent Port Number	<p>Accept the default port number on which the Essbase listens for client requests. If you change the default value, enter a port number that is not used by other programs.</p> <p>Select Active to enable the agent to listen on this port.</p>	
SSL Agent Port Number	<p>Specify the SSL port on which Essbase listens for client requests.</p> <p>Select Active to enable the agent to listen on this port.</p>	
Start Port	<p>Accept the default number or enter the first port number on which the Essbase Server listens for client requests.</p> <p>The port value is stored in <code>essbase.cfg</code> (in <code>ARBORPATH/bin</code>).</p>	
End Port	<p>Enter the greatest port number that Essbase Server can use to connect.</p> <p>Essbase uses at least two ports for each application. For a large number of applications, you need a larger port range.</p>	

Table 6-6 (Cont.) Essbase Server Configuration

EPM System Configurator Fields	Description	Your Information
Full path to application location (ARBORPATH)	The location for applications. You can specify the path using universal naming convention (UNC) format.	



Note:

Previous versions of Essbase used *ARBORPATH* to refer to the installation location.

Table 6-6 (Cont.) Essbase Server Configuration

EPM System Configurator Fields	Description	Your Information
Set the language to be used by Essbase (ESSLANG)	<p>The <i>ESSLANG</i> variable is a locale definition. For example, to support American English, set <i>ESSLANG</i> to <code>English_UnitedStates.Latin1@Binary</code>.</p> <p>Based on the value you specify, EPM System Configurator updates <code>setEssbaseEnv.bat</code> (in <code>/EssbaseServer/essbaseserver1/bin</code>) with the <i>ESSLANG</i> value and Essbase uses this value.</p> <p>Verify the operating system locale setting on your computer and select the matching <i>ESSLANG</i> value. The <i>ESSLANG</i> setting for a computer must agree with the locale setting of the computer's operating system.</p> <p>In addition, on a Windows machine, the <i>ESSLANG</i> value and the system locale must match the language of the Oracle Hyperion Planning application that you plan to take offline.</p> <p>You must choose the correct <i>ESSLANG</i> setting for Essbase products to start successfully. The <i>ESSLANG</i> setting can affect the function of applications and databases.</p> <p>On Windows, if <i>ESSLANG</i> is already set on the computer (for example, if you have already installed Essbase), the current value is selected by default.</p> <p>For more details about <i>ESSLANG</i>, see ESSLANG Variable.</p> <p>For the full list of supported <i>ESSLANG</i> values, see .</p>	
Binding Host Name	<p>Specify a Binding Host Name to have Essbase bind only to the IP address for the specified Binding Host Name. Otherwise, at startup, Essbase binds on all available IP addresses.</p>	

ESSLANG Variable

Each Oracle Essbase Server installation requires that you set an *ESSLANG* value. See the topic on managing file encoding in the *Oracle Essbase Database Administrator's Guide*.

The default value for *ESSLANG* is `English (Latin1)`. For examples of *ESSLANG* values for non-English languages, see the list of supported locales in the Unicode-mode applications topic in the *Oracle Essbase Database Administrator's Guide*.

During configuration, EPM System Configurator writes the *ESSLANG* value that you specify to the Oracle Hyperion Shared Services Registry and to the launch file used to start Essbase.

For Oracle Essbase Administration Services and Oracle Hyperion Provider Services, there is no prompt to specify the *ESSLANG* value; it is set to the default value "English_UnitedStates.Latin1@Binary."

Managing ESSLANG Settings

The *ESSLANG* environment variable on the Oracle Essbase Server computer must retain the locale value of an application for as long as that application is in use.

Note:

If the *ESSLANG* variable is changed after applications are created on an Essbase Server computer, those applications cannot be started.

To avoid possible database corruption, the *ESSLANG* locale specification must be the same on client and Essbase Server in the following situations:

- The client is not Unicode-enabled.
- A Unicode-enabled client saves an outline over an existing outline on a version of the Essbase Server that is not Unicode-enabled.
- A Unicode-enabled client saves an outline to a non-Unicode application on a Unicode-enabled Essbase Server.

The *ESSLANG* locale specifications on clients and Essbase Server computers can be different when a Unicode-enabled client views and updates an outline belonging to a Unicode-mode application.

For products that use Essbase RTC in a non-English environment, you must set *ESSLANG* manually on the client.

Essbase Studio Default Data Files Location

Specify the default location to be used for data files, or click or select **Next** to accept the default.

The following table describes options for Oracle Essbase Studio default data files location.

EPM System Configurator Fields	Description	Your Information
Default Data Files Location	Specify the default location for data files. By default the location is C: \Oracle\Middleware \user_projects \epmsystem1\BPMS\datafiles.	

Financial Reporting Configuration Tasks

Related Topics

- [Configure Financial Reporting RMI Ports](#)

Configure Financial Reporting RMI Ports

Specify the following options to configure the Oracle Hyperion Financial Reporting RMI port range, or click or select **Next** to accept the defaults.

The following table describes options for Financial Reporting RMI port configuration.

EPM System Configurator Fields	Description	Your Information
Port Range	Specify the range of ports to use, or click or select Next to keep the default port ranges.	

Planning Configuration Tasks

Related Topics

- [Configure Planning RMI Server](#)

Configure Planning RMI Server

Specify the following options to configure the Oracle Hyperion Planning RMI Server port, or click or select **Next** to accept the defaults.

The following table describes options for Planning RMI Server port configuration.

EPM System Configurator Fields	Description	Your Information
RMI Port	Specify the port to use, or click or select Next to keep the default port.	

Financial Management Configuration Tasks

You must run EPM System Configurator as an administrator to configure Oracle Hyperion Financial Management.

Financial Management — Configure Server

Specify the server information, or click or select **Next** to accept the defaults.

EPM System Configurator Fields	Description	Your Information
Port	Review or change the default port number on which Oracle Hyperion Financial Management listens for client requests. If you change the default value, enter a port number that is not used by other programs. Select Active to enable the server to listen on this port.	
SSL Port	Review or change the SSL port on which Financial Management listens for client requests. If you change the default value, enter a port number that is not used by other programs. Select Active to enable the server to listen on this port.	
Max App Server Delay	Accept the default value or enter the time interval in seconds between when a change is made to an application and when the change is visible to users accessing the application through another application server.	
Max Data Sync Delay	Accept the default value or enter the time interval in seconds between when a change is made to data and when the change is visible to users accessing the data through another application server.	
Database Connection Pool Size	Specify the number of maximum pooled relational database connections for the application. Financial Management requires approximately 25 relational database connections per application.	
Start Port	Accept the default number or enter the first port number in the range for the datasource connection.	
End Port	Accept the default number or enter the last port number in the range for the datasource connection.	

Financial Management — Configure Cluster

Specify the names of the application servers that participate in the cluster.

An application server cluster is a set of application servers running the same application. Clustered application servers provide load balancing and failover capability and enable the servers to be transparently maintained while applications remain available for users.

The following table describes options for Oracle Hyperion Financial Management cluster configuration.

EPM System Configurator Fields	Description	Your Information
Defined Clusters	<p>Select the cluster for which you want to specify servers.</p> <p>This list displays all clusters you have specified on any machine in the installation.</p> <p>You can also add, edit, or remove a cluster.</p> <p>When you add a cluster, specify the cluster name, and select Use Sticky Server if you want to direct all requests for a specific session to the same server.</p>	
Available Servers	<p>Select the server that you want to include in the cluster, and click or select Add.</p> <p>The list displays all available servers. If there is only one server, it is listed here. Servers already in a cluster are not available and are not listed.</p>	
Servers in the Cluster	<p>The list displays all servers in the currently selected cluster. To remove a server from the list, select it and click or select Remove.</p>	

If you use multiple application servers connected to one database server, you must ensure that the system clocks on the application servers are synchronized. If the clocks are not synchronized, the data being viewed might not be current.



Note:

The synchronization between Financial Management application servers is based on system time. Changing the clock can affect this synchronization. For the time change to and from Daylight Savings Time, Oracle recommends that you stop the servers before the time change and restart them afterward.

Financial Close Management Configuration Tasks

Related Topics

- [Financial Close Custom Settings](#)

Financial Close Custom Settings

If you have an existing content management system, you can configure Oracle Hyperion Financial Close Management to link to the documents stored in it.

Specify the location of a Document Management System to use.

The following table describes options for Financial Close Management custom settings configuration.

EPM System Configurator Fields	Description	Your Information
URL	<p>Enter the URL of the system hosting the Document Management system.</p> <p>For example for Release 10g, enter:</p> <p><code>http://host:port/</code></p> <p>For example for Release 11g, enter:</p> <p><code>http://host:port/cs/</code></p> <p>See the (http://www.oracle.com/technetwork/middleware/ias/downloads/fusion-certification-100350.html) for information about supported document management systems.</p>	

Configuration Summary

Confirm the configuration tasks to complete, and then click or select **Next**. Or, click or select **Back** to make changes.

EPM System Configurator displays the progress and status of each configuration task.

Configuration time depends on the products and tasks that you selected. Progress is recorded in `/diagnostics/logs/config/configtool.log`.

When configuration is complete, EPM System Configurator shows the summary of the configuration, indicating which tasks completed and whether any tasks failed.

Click or select **Task Panel** to select additional configuration tasks, click or select **Finish** to close EPM System Configurator.

Performing Silent Configurations

Silent configurations automate the configuration process so that you can configure Oracle Enterprise Performance Management System products on multiple computers without manually specifying configuration settings on each machine.

To enable silent configurations, record your configuration settings in a response file. You can then run a silent configuration from the command line, using the configuration options that were saved in the response file.

Note:

If you are performing a silent configuration using Remote Desktop, run it using an admin console session. (Launch Remote Desktop using `mstsc /admin`).

To record configuration settings and run a silent configuration:

1. Navigate to the directory that contains EPM System Configurator. By default, the directory is `/common/config/version_number`.
2. From a command line prompt, enter `configtool.bat -record filename` or `./configtool.sh -record filename`, where `filename` includes an absolute path or file name.

The file is saved in XML format, but you need not save the file with a `.xml` extension.

EPM System Configurator launches.

If you do not specify a file name, EPM System Configurator creates the file for you: `/common/config/version_number/configResponse.xml`.

3. Proceed through the EPM System Configurator, specifying the options that you want to record.

 **Note:**

When you are recording silent configurations, you can proceed through EPM System Configurator only one time. (You cannot select go back to the Product Selection page to continue with more configuration tasks.) If you return to the Task Selection page, the response file is rerecorded.

Configuration options are recorded in the response file, which is in XML format. Passwords are saved in encrypted format in the response file.

You are now ready to configure products in silent mode.

4. Copy the response file to the machine on which you configure products. You can also copy the file to a network drive that is accessible from the machines you want to configure.
5. From the command line, enter a command:

```
configtool.bat -silent filename OR ./configtool.sh -silent filename.
```

The configuration runs in the background.

You can also record configuration settings from within EPM System Configurator. To record configuration settings, during configuration, on the Configuration Confirmation page, click or select Save, browse to a location, specify a file name, and click or select Save. The file is saved in the same format as for silent configurations.

Silent response files are not compatible between earlier releases and Release 11.2. If you created silent response files for use with any earlier release of EPM System, you must re-create them for use with EPM System Release 11.2.

You can modify the response file later to change configuration options.

If you are configuring a vertically scaled environment, you do not need separate silent response files with unique ports if you add the following entry to the response file:

```
<auto_port_tick>true</auto_port_tick>
```

You can use the same silent response file in different environments even when each environment has a different set of passwords for the database, WebLogic, and the Oracle Hyperion Shared Services Admin user. For security reasons, in the generated silent file, password values are stored in encrypted format but EPM System Configurator also supports unencrypted format. Oracle recommends that you change the password properties for Database, WebLogic, and Shared Services in the silent file to the following format:

```
Database Password
<property name="password" encrypt="true">clearTextPasword</property>

Weblogic Admin Password in applicationServerDeployment section
<property name="adminUser">epm_admin</property>
<property name="adminPassword" encrypt="true">clearTextPasword</property>

Shared Services Admin Password in bean name="customConfiguration" for
Foundation
<property name="adminUserName">admin</property>
<property name="adminPassword" encrypt="true">clearTextPasword</property>
```

Copy a version of the file for each environment and replace *clearTextPasword* with the appropriate password for that environment. After executing the silent file for each environment, for security reasons, if the file is writable by EPM System Configurator, the password is stored in the file in an encrypted format.

What Happens During Configuration

During product configuration, EPM System Configurator completes these actions:

- Performs the configuration tasks that you selected
- Configures each product to start as a Windows service, if you select this option on the "Configure Common Settings" page during configuration
- Creates a default Oracle Hyperion Shared Services Administrator role in Native Directory when you configure Oracle Hyperion Foundation Services. This is the only preprovisioned user created. Subsequently, when you use EPM System Configurator to register products with Shared Services, the Shared Services Administrator role is provisioned with the product administrator role.

Troubleshooting Configuration

Configuration results are noted in `/diagnostics/logs/config/configtool_summary.log`.

If you encounter errors, perform these tasks:

- Configure products individually.
- See the *Oracle Enterprise Performance Management System Installation and Configuration Troubleshooting Guide* for information about configuration checks, debugging using logs, troubleshooting methodology, and solutions to common configuration issues.



Tip:

EPM System Configurator provides a script, `ziplogs`, in `EPM_ORACLE_INSTANCE/bin`. You can run this script to provide files to Support for troubleshooting installation and configuration issues. This tool collects all log files, including logs for installation, configuration, and validation and registry reports if you have used those tools, and saves them in ZIP file in `/diagnostics/ziplogs`.

Manually Configuring Oracle HTTP Server

You can choose to manually configure the Oracle HTTP Server installed by EPM System Installer instead of configuring it with EPM System Configurator.

If you are using a supported web server other than the Oracle HTTP Server that is installed by EPM System Installer, you must manually configure the web server.

Manual web server configuration notes:

Manual configuration of IIS is not supported.

To manually configure a web server:

This section assumes you have already used EPM System Configurator to configure Oracle Enterprise Performance Management System components and deployed Java web applications manually or by using EPM System Configurator.

To manually configure Oracle HTTP Server:

1. Launch EPM System Configurator: Change to `EPM_ORACLE_INSTANCE\BIN` and then launch `configtool.bat | sh`.
2. In EPM System Configurator, on the Task Selection panel, select **Uncheck All**, expand **Hyperion Foundation**, select **Configure Web Server**, and then click **Next**.
3. In **Configure Web Server**, from **Web Server Type**, select **Setup Registry for manual web server configuration**, and then click **Next**.
4. Complete the steps in EPM System Configurator and, when configuration is complete, click **Finish**.
EPM System Configurator creates autogenerated files in `EPM_ORACLE_INSTANCE/httpConfig/autogenerated/ohs` to simplify manual web server configuration.
5. Copy the autogenerated files to a location of your choice related to your installation of Oracle HTTP Server.
6. If you configured Oracle HTTP Server and EPM System components to use SSL, update files as follows:
 - Update the port in `ssl.conf` in the "Listen" directive and in the `<VirtualHost>` tree-directive.
 - Update the port in `httpd.conf` in the "Listen" directive to any port other than the SSL port.

- Update the port in `HYSL-WebLogic-autogenerated.conf` in the `<VirtualHost>` tree-directive to any port other than the SSL port.
7. Update `HYSL-WebLogic-autogenerated.conf` as follows:
- If necessary, update all "LoadModule" directives so that the `{ORACLE_HOME}` environment variable is correct.
 - Update the `OHS_LISTEN_PORT` alias and replace it with the actual value, for example `<VirtualHost *:OHS_LISTEN_PORT>` would be `<VirtualHost *:19000>`.
 - Update the following lines with the actual file location:

```
Include "conf/epm_online_help.conf"
```

```
Include "conf/epm_rewrite_rules.conf"
```

```
Include "conf/epm.conf"
```

For example:

```
Include "path_to_conf_files/epm_online_help.conf"
```

```
Include "path_to_conf_files/epm_rewrite_rules.conf"
```

```
Include "path_to_conf_files/epm.conf"
```

8. In the Oracle HTTP Server installation folder, browse to `httpd.conf`, open it in a text editor, and make the following changes:
- a. Comment all the lines that contain `ssl.conf` and `mod_wl_ohs.conf`.
 - b. Add the following lines to the end of the file:
 - Include `path_to_modified_conf_files/HYSL-WebLogic-autogenerated.conf`
 - Include `path_to_modified_conf_files/ssl.conf`

where `ssl.conf` is the autogenerated file

You can use UNC-style paths on Windows only if the Oracle HTTP Server Windows Service is running as a user account that has network access and has "Logon as a service" rights.
 - c. Update the "Listen" directive with the actual web server's port.
9. Update the `WEB_SERVER` component in the Oracle Hyperion Shared Services Registry so that the `port` property is the actual value of the port on which Oracle HTTP Server is running. For example, to change the actual port to 19000:
- a. Generate a registry report by launching `EPM_ORACLE_INSTANCE/bin/epmsys_registry.bat`. Enter the Oracle Hyperion Shared Services database password when prompted.

- b. Look for the `WEB_SERVER` component with properties `"type" = MANUAL`, `"port" = -1`, and `"instance_home"` with the `EPM_ORACLE_INSTANCE` that is configured.
- c. Look for the object id for the `WEB_SERVER` component, and copy it into following command:

```
EPM_ORACLE_INSTANCE/bin/epmsys_registry.bat updateproperty  
#object_id/@property_name property_value
```

For example:

```
EPM_ORACLE_INSTANCE/bin/epmsys_registry.bat updateproperty  
#df17801dfc1dca40S24e400aa13a736f8a46S7921/@port 19000
```

10. Restart Oracle HTTP Server and EPM System servers.

7

Performing Manual Configuration Tasks in a New Deployment

After configuration, you must configure user directories, provision the functional administrator, and deactivate the default administrator (admin) account. See *Oracle Enterprise Performance Management System User Security Administration Guide*.

To set up Oracle Enterprise Performance Management System components to work with Oracle Web Services Manager, see the *Oracle Enterprise Performance Management System Deployment Options Guide*.

See the *Oracle Enterprise Performance Management System Deployment Options Guide* for additional optional tasks you can perform to customize your deployment.

See your product's Administration Guide for additional tasks to perform.

Financial Close Management and Tax Governance Manual Configuration Tasks

This section describes additional tasks required to configure Oracle Hyperion Financial Close Management and Oracle Hyperion Tax Governance. Perform these tasks after you install and configure Financial Close Management or Tax Governance.

Caution:

You **must** perform these tasks before you can start and run Financial Close Management or Tax Governance. Perform the tasks in the order in which they are listed.

The following table describes Financial Close Management and Tax Governance manual configuration tasks.

Note:

For the procedures that follow, note that if you selected Production Mode when you created the WebLogic domain, to make changes in the WebLogic Administration Console you must first click **Lock & Edit** in the Change Center. After you make the changes, click **Activate Changes** in the Change Center.

Table 7-1 Financial Close Management and Tax Governance Manual Configuration Tasks

Task	Reference
Set up the keystore for message protection.	Setting Up the Keystore for Message Protection
Configure the WebLogic Domain to connect to Oracle Internet Directory, Microsoft Active Directory (MSAD), or SunOne	Configuring the WebLogic Domain to OID, MSAD, SunOne
Start managed servers in order.	Start Managed Servers
If you are using Microsoft SQL Server, remove EDNLocalTxDataSource and EDNDataSource.	
Raise the maximum capacity of the connection pool.	Raising the Maximum Capacity in the Connection Pool
Increase the connection pool of the external LDAP provider.	Increasing the Connection Pool of the External LDAP Provider
Target shared libraries.	Targeting Shared Libraries

After performing these steps you can also configure Account Reconciliation Manager to work with Oracle Hyperion Financial Data Quality Management, Enterprise Edition and create and manage Integration Types. See the *Oracle Hyperion Financial Close Management Administrator's Guide*. You can download integration `xml` files from My Oracle Support.

Setting Up the Keystore for Message Protection

To set up the keystore for message protection:

1. First, create a keystore using the `keytool` command:

Go to `/Oracle/Middleware/user_projects/$DOMAIN_HOME/config/fmwconfig` in the server running the WebLogic Administration Server hosting your Oracle Enterprise Performance Management System domain and execute the following command:

```
keytool -genkeypair -keyalg RSA -alias aliasName -keypass password -
keystore keystoreName.jks -storepass password -validity 3600
```

Note:

If the `keytool` command is not recognized, the `Path` environmental variable might not include JDK. Add the JDK to the `Path` variable using the following command: `set PATH=%PATH%;C:\Oracle\Middleware\JDK1.8.0_181\bin\;. ;.`

For additional information, see “How to Create and Use a Java Keystore” in the “Setting up the Keystore for Message Protection” section of the *Oracle Fusion Middleware Security and Administrator's Guide for Web Services 11g Release 1*

(11.1.1). (http://download.oracle.com/docs/cd/E14571_01/web.1111/b32511/setup_config.htm#BABJHIBI).

2. Next, set up message protection for Web Services:
 - a. Log in to Enterprise Manager (<http://WebLogicAdminServerHost:7001/em>) using WebLogic administrator credentials.
 - b. Expand **WebLogic Domain** and then select **EPMSystem** (or the domain name used for the EPM System deployment).
 - c. Right-click **EPMSystem**, select **Security**, and then select **Security Provider Configuration**.
 - d. Scroll to the **Keystore** section, expand the section, and then click **Configure**.
 - e. For **Keystore Path**, enter the path and name for the keystore that you created, for example `./EPMKeystore.jks`.
 - f. Enter the keystore password that you used when creating the keystore and confirm it.
 - g. Enter an alias and password for both **Signature Key** and **Encryption Key**, using the alias and password that you used when creating the keystore. Confirm the passwords, and then click **OK**. The alias and password for the signature and encryption keys define the string alias and password used to store and retrieve the keys.
3. Log out and restart Oracle Enterprise Manager Fusion Middleware Control so the changes take effect, and then restart EPM System managed servers.

For details about setting up message protection, see http://docs.oracle.com/cd/E17904_01/web.1111/b32511/setup_config.htm#BABHIBHA in the *Oracle® Fusion Middleware Security and Administrator's Guide for Web Services 11g Release 1 (11.1.1)*.

Start Managed Servers

Start each managed server in the following order:

- WebLogic Administration Server
- Hyperion Foundation Services Managed Server
- Oracle HTTP Server - See [Starting Oracle HTTP Server](#)
- In any order:
 - Oracle Hyperion Financial Close Management Java web application, if you are using Financial Close Management
 - Oracle Hyperion Tax Governance Java web application, if you are using Tax Governance
 - Oracle Hyperion Financial Management Web Services Managed Server, if you are using Financial Management with Financial Close Management
 - Oracle Hyperion Financial Reporting Java web application, if you are using Financial Reporting with Financial Close Management
 - Oracle Hyperion Financial Data Quality Management, Enterprise Edition, if you are using Account Reconciliation Manager

Raising the Maximum Capacity in the Connection Pool

If necessary, fine tune the data source to size the connection pool.

To raise the maximum capacity in the connection pool:

1. In the WebLogic Administration Console (http://WebLogic_Admin_Host:WebLogic_Admin_Port/console), select **Services**, then **JDBC**, and then **Datasources**.
2. Select your data source, then **Connection Pool**, and then **Maximum Capacity**.
3. Edit settings to increase capacity as follows:
 - `financialclose_datasource`—150
 - `financialclosecommon_datasource`—150

If resource errors specific to these data sources are logged, increase their capacity:

- `EPMSystemRegistry`
- `supplementaldata_datasource`
- `taxoperations_datasource`
- `taxsupplementalschedules_datasource`



Note:

You can increase the capacity for each data source by a different amount, depending on the needs for your installation.

If the Oracle Hyperion Financial Close Management or Oracle Hyperion Tax Governance log includes this error message: `java.sql.SQLException: Could not retrieve datasource via JNDI url 'jdbc/data source'`
`weblogic.jdbc.extensions.PoolDisabledSQLException:`
`weblogic.common.resourcepool.ResourceDisabledException: Pool data source is Suspended, cannot allocate resources to applications..`], then you have exceeded the maximum connections allowed in the connection pool for the specified data source, and you need to increase the capacity of the connection pool.

Increasing the Connection Pool of the External LDAP Provider

To increase the connection pool of external LDAP provider:

1. Shut down all servers (Admin with all managed server) if they are running.
2. Go to `domain_home\config\fmwconfig\ovd\default`.
3. Make a backup of `adapters.os_xml`.
4. Open `adapters.os_xml` and find `<ldap id="XYZ" version="0">`, where `XYZ` is the name of the external LDAP provider configured from WebLogic Administration Console.

5. Change `<maxPoolSize>` from 10 to 100 or 150. For example:

```
<pageSize>1000</pageSize>
<referrals>>false</referrals>
<heartBeatInterval>60</heartBeatInterval>
<timeout>120000</timeout>
<maxPoolSize>100</maxPoolSize>
<maxPoolWait>1000</maxPoolWait>
<maxPoolChecks>10</maxPoolChecks>
<quickFail>>false</quickFail>
<escapeSlashes>>true</escapeSlashes>
<kerberos>>false</kerberos>
<useDNS>No</useDNS>
</ldap>
```

Configuring the WebLogic Domain to OID, MSAD, SunOne

This procedure is required to configure the WebLogic domain, or in the case of Oracle Hyperion Financial Close Management or Oracle Hyperion Tax Governance, to communicate with an external provider, such as OID, MSAD, or SunOne. Oracle Hyperion Shared Services must also be configured to work with this external provider. Follow the sections specific to your provider.

Note:

Financial Close Management and Tax Governance do not support Shared Services Native Directory. The Web Services features of Oracle Hyperion Profitability and Cost Management, Oracle Hyperion Provider Services, Oracle Hyperion Financial Data Quality Management, Enterprise Edition, and Oracle Hyperion Financial Management do not work with Shared Services Native Directory. See the *Oracle Hyperion Enterprise Performance Management System User and Role Security Guide* for more information.

To connect OID, MSAD, or SunOne to the WebLogic Server:

1. Log in to the WebLogic Administration Console if you are not already logged in.
2. Click **Security Realms** on the left, click **myrealm**, and then click the **Providers** tab.
3. Click **Add**, enter the following details, and then click **OK**.

For OID:

- Name - **OID**
- Type - **OracleIntenetDirectoryAuthenticator**

For MSAD:

- Name - **MSAD**
- Type - **ActiveDirectoryAuthenticator**

For SunOne:

Name - **SunOne**

You can ignore the prompt to restart the server; you will be restarting at the end of this procedure.

4. Click the provider you just added, click the **Provider Specific** tab, enter the following details for your provider, and then click **OK**.
 - Host
 - Port
 - Principal
 - Credential
 - User Base DB
 - Group Base DB
 - User from Name Filter (MSAD only)
 - User Name Attribute (MSAD only)

You can leave the rest of the default values unchanged.

5. Click **OID**, **MSAD**, or **SunOne**, and for **Control Flag**, select **SUFFICIENT**.
6. Restart WebLogic Server.

Targetting Shared Libraries

To target shared libraries to the FinancialClose cluster:

1. Log in to the WebLogic Administration Console.
2. Click **Deployments**.
3. Click **epm-misc-libraries** and add **FinancialClose** cluster as its target.
4. Click **epm-aif-odi-libraries** and add **FinancialClose** cluster as its target.

8

Starting and Stopping EPM System Products

This chapter describes how to start and stop Oracle Enterprise Performance Management System services and applications and provides default URLs for EPM System clients.

Startup order:

1. Start all databases used as repositories
2. Start WebLogic Administration Server. Launch `<middleware_home>/user_projects/domains/EPMSystem/bin/startWeblogic.cmd`
3. Start all EPM System services. You can start all services using a single start script. See [Using a Single Script to Start Services](#).
There is no required start order for EPM System services with the exception of Oracle Hyperion Financial Close Management.

If you are using Financial Close Management, see the required service startup order in [Financial Close Management Application Server](#).
4. Start Oracle HTTP Server. See [Starting Oracle HTTP Server](#).

Note:

If you selected **Run Windows Services as non-local system account** and specified a user name and password on the **Configure Common Settings** panel of EPM System Configurator, Windows services are started using the specified user name. If you do not specify a user name and password, EPM System Configurator creates Windows services using the local system account. Before you start the services, change them to use the appropriate domain account.

Using a Single Script to Start Services

EPM System Installer installs a single start script in `EPM_ORACLE_INSTANCE/bin`, called `start.bat`.

Running the single start script on a machine in your Oracle Enterprise Performance Management System deployment starts all EPM System services installed on that machine. The single start script works by calling the individual start scripts for every product.

The user running the start script should be a member of the Administrators group.

To start EPM System services:

1. From the **Start** menu, select **Oracle EPM System**, and then **Start EPM System**.

2. Run this start script on each machine in your environment.

After the single start script completes, you can run Oracle Hyperion Enterprise Performance Management System Diagnostics to determine which services on a machine are running. See [Validating the Installation and Verifying Deployment](#).

A single stop script is also installed in `EPM_ORACLE_INSTANCE/bin`, called `stop.bat`. Running the stop script on a machine in your EPM System deployment stops all EPM System products on that machine. To stop services, from the **Start** menu, select **Oracle EPM System**, and then **Stop EPM System**.

Starting Oracle HTTP Server

Oracle HTTP Server is managed and monitored with Node Manager. To start Oracle HTTP Server:

1. Start the Node Manager service from the Windows Service panel: **Oracle Weblogic ohs NodeManager (C:\Oracle\MIDDLE~1\ohs_server)**
2. Start Oracle HTTP Server from the command line. From `EPM_ORACLE_INSTANCE\httpConfig\ohs\bin`, enter:

```
startComponent ohs_component
```

3. Enter the WebLogic Admin Server password.

Note:

To stop Oracle HTTP Server, from `EPM_ORACLE_INSTANCE\httpConfig\ohs\bin`, enter:

```
stopComponent ohs_component
```

Launching Clients

This section describes how to launch Oracle Enterprise Performance Management System clients. It lists default URLs and script names as appropriate. Most clients can also be started using the Windows Start menu.

The following table describes the URLs and scripts for launching EPM System clients.

To connect from a server or client to a Java web application, you must use the web server port (`machine_name:web_server_port`) in the URL. For example, `machine_name:19000` is the default for Oracle HTTP Server and `machine_name:9000` is the default for the proxy server.

Table 8-1 Launching Clients


Client	URL	Script or Other Launch Method
Oracle Hyperion Shared Services Console	<code>http://WebServer:Port/interop/</code>	From the Start menu, select Oracle EPM System , and then Shared Services URL .
		 Note: The Start menu item is available only on the machine on which you installed the web server.
Oracle Hyperion Enterprise Performance Management Workspace	<code>http://WebServer:Port/workspace/</code>	From the Start menu, select Oracle EPM System , and then Workspace URL .
		 Note: The Start menu item is available only on the machine on which you installed the web server.
Oracle Data Relationship Management Web Client	<code>http://drm_web_server_name/drm-web-client</code>	Select Start , then Oracle EPM System , then Data Relationship Management , and then Web Client .

Table 8-1 (Cont.) Launching Clients

Client	URL	Script or Other Launch Method
Data Relationship Management Migration Utility	<code>http://drm_web_server_name/drm-migration-client</code>	Select Start , then Oracle EPM System , then Data Relationship Management , and then Migration Utility .
Data Relationship Management Batch Client	N/A	From a Windows command line prompt, run <code>EPM_ORACLE_HOME/products/DataRelationshipManagement/client/batch-client/drm-batch-client.exe</code>
Oracle Essbase Administration Services Console	<code>http://WebServer:port/easconsole/</code>	Select Start , then Oracle EPM System , then Essbase , then Essbase Administration Services , and then Start Administration Services Console .
Oracle Essbase Client	NA	Select Start , then Oracle EPM System , then Essbase , and then Essbase Client .
Oracle Essbase Studio Console	NA	Select Start , then Oracle EPM System , then Essbase , then Essbase Studio , and then Essbase Studio Console . Or <code>/products/Essbase/EssbaseStudio/Console/startStudio.bat</code>
Predictive Planning	N/A	From Oracle Smart View for Office, open a valid Oracle Hyperion Planning form, select the Planning ribbon, and then click Predict .
Smart View	NA	Use the Smart View menu or Smart View ribbon in Microsoft Excel, Microsoft Word, or Microsoft PowerPoint.

9

Validating the Installation and Verifying Deployment

Related Topics

- [Validating the Installation](#)
- [Generating a Deployment Report](#)
- [Verifying Deployment](#)
- [Validating a Financial Close Management Deployment](#)

Validating the Installation

Oracle Hyperion Enterprise Performance Management System Diagnostics tests the connectivity of installed and configured Oracle Enterprise Performance Management System components. Run EPM System Diagnostics on each machine in the deployment. The results of the tests are saved in HTML format.

You must install, configure, and run EPM System Diagnostics as the same user.

Prerequisites

Before using Oracle Hyperion Enterprise Performance Management System Diagnostics, complete these prerequisites:

- Install Oracle Enterprise Performance Management System products. See [Installing EPM System Products in a New Deployment](#).
- Use EPM System Configurator to perform all configuration tasks required for each product. See [Configuring EPM System Products in a New Deployment](#).
- Perform manual configuration tasks.
See [Performing Manual Configuration Tasks in a New Deployment](#).
- Start EPM System services.
See [Starting and Stopping EPM System Products](#).

Using EPM System Diagnostics

To run Oracle Hyperion Enterprise Performance Management System Diagnostics:

1. Choose a method:
 - (Windows) In `/bin`, double-click `validate.bat`.
 - From the Start Menu, choose **Programs**, then **Oracle EPM System**, then `instanceName`, then **Foundation Services**, and then **EPM System Diagnostics**.

Progress is shown in the command window.

2. To view results, navigate to `/diagnostics/reports` and open `instance_report_date_time.html`.
3. Look for failed tests, and diagnose and fix problems.
EPM System Diagnostics creates a ZIP file of all the logs in `/logsziips` for your convenience.
For more information about logs, see .
4. Run EPM System Diagnostics again and view the report to verify that problems are solved.

 **Note:**

Clicking Refresh in the browser does not refresh the report output.

5. In a distributed environment, run EPM System Diagnostics on each machine in the deployment.

The report captures the following information:

- Test date and time
- Test Status: Passed or Failed for each test
- Service: Type of test for each test
- Test Description: A detailed description of each test
- Duration: Duration of each test
- Test start time
- Test end time
- Total test duration

Diagnostics Performed

The following list highlights the Oracle Hyperion Enterprise Performance Management System Diagnostics tests performed for Oracle Enterprise Performance Management System products.

- CFG: Configuration - Checks whether all configuration tasks have been completed
- DB: Database - Checks connection to database `host:port;databaseName`
- EXT: External Authentication - Checks Native Directory external authentication provider configuration
- HTTP: http - Checks availability of HTTP context for all components configured for the web server.
- SSO:
 - Checks status of Oracle Hyperion Shared Services security (Native Directory as well as external directories)
 - Checks availability of login to Shared Services, Taskflows, Audit, Shared Services Java web application, and Oracle Hyperion Enterprise Performance Management System Lifecycle Management

- WEB: Web application - Checks availability of Java web application on *host:port*
- Additional product-specific tests

Generating a Deployment Report

After completing an Oracle Enterprise Performance Management System deployment, you can generate a deployment report that lists this information:

- EPM Deployment Topology Report
 - Logical Web Addresses — all logical Java web applications and all web servers that are configured
 - Application Tier Components — the components configured for each EPM Instance in this deployment, including the Java web application URL and domain name for each Java web application
 - Database Connections — all databases configured for EPM System products
 - User Directories — user directories used by EPM System products; configured security providers are listed in the same order as configured in Oracle Hyperion Shared Services
 - Data Directories — data directories used by EPM System products, indicating the directories that need to be on a shared file system
- EPM Deployment History Report — configuration history of activities on the specified date for each server in the deployment

This report can help you to resolve any issues that might arise in your deployment. For example, you can use the report to verify that there is only one WebLogic domain and that the deployment points to the correct number of database schemas. The deployment report is created from the Oracle Hyperion Shared Services Registry database. You can generate the report from any server in the deployment, and it does require EPM System services to be running.

The report has additional sections that show deployment history

To generate a deployment report:

1. Open a command line window and navigate to *EPM_ORACLE_INSTANCE/bin*.
2. Run the command `epmsys_registry.bat|.sh report deployment`.

By default, the report is saved as *EPM_ORACLE_INSTANCE/diagnostics/reports/deployment_report_YYYYMMDD_HHMMSS.html*.

You can add an optional file name argument to the command to save the HTML report with a different file name or location. For example, this command saves the report as `c:/epm_setup/epm_deployment.html`:

```
epmsys_registry.bat|.sh report deployment c:/epm_setup/epm_deployment
```

Verifying Deployment

Related Topics

- [Verifying Shared Services Deployment](#)
- [Verifying EPM Workspace Deployment and Products in EPM Workspace](#)

- [Verifying Administration Services Deployment](#)
- [Verifying Provider Services Deployment](#)

Verifying Shared Services Deployment

To verify deployment:

1. From the Start menu, select **Programs**, then **Oracle EPM System**, then instanceName, then **Foundation Services**, and then **Shared Services URL**. Or, using a web browser, open:

```
http://Hostname.Example.Com:WebServerListenPortinterop/
```

2. Log on to Oracle Hyperion Shared Services.
3. Review the output for the WebLogic managed server in `MIDDLEWARE_HOME/user_projects/domains/EPMSystem/servers/SERVER_NAME/logs`.
4. Review the product logs in `/diagnostics/logs`. You can also review the diagnostics reports in `/diagnostics/reports`.

Verifying EPM Workspace Deployment and Products in EPM Workspace

To verify deployment:

1. From the Start menu, select **Programs**, then **Oracle EPM System**, then instanceName, then **Workspace**, and then **Workspace URL**. Or, using a web browser, open

```
http://Hostname.Example.Com:WebServerListenPortworkspace/
```

2. Review the output for your WebLogic managed server in `MIDDLEWARE_HOME/user_projects/domains/EPMSystem/servers/SERVER_NAME/logs`.
3. Review the product logs in `/diagnostics/logs`. You can also review the diagnostics reports in `/diagnostics/reports`.
4. From the Oracle Hyperion Enterprise Performance Management Workspace Help menu, select **About** and in the **Details** section verify the list of installed products.
5. Launch each listed product from EPM Workspace. The following products can be launched from EPM Workspace:
 - Oracle Hyperion Financial Reporting
 - Oracle Hyperion Planning
 - Oracle Hyperion Financial Management
 - Oracle Hyperion Profitability and Cost Management

Before you can access Profitability and Cost Management in EPM Workspace and verify deployment, you must perform some initial tasks. See the *Oracle Hyperion Profitability and Cost Management Administrator's Guide*.

- Oracle Hyperion Calculation Manager
- Oracle Hyperion Financial Data Quality Management, Enterprise Edition

- Oracle Hyperion Financial Close Management.

Verifying Administration Services Deployment

To verify deployment:

1. Using a web browser, open:

```
WebServer:port/easconsole/console.html
```

2. Log on to Oracle Essbase Administration Services using the Java Web Start console.
3. Review the output for your WebLogic managed server in `MIDDLEWARE_HOME/user_projects/domains/EPMSysstem/servers/SERVER_NAME/logs`.
4. Review the product logs in `/diagnostics/logs`. You can also review the diagnostics reports in `/diagnostics/reports`.

Verifying Provider Services Deployment

To verify deployment:

1. Using a web browser, open:

```
http://Hostname.Example.Com:WebServerListenPortaps/APS
```

2. Review the output for your WebLogic managed server in `MIDDLEWARE_HOME/user_projects/domains/EPMSysstem/servers/SERVER_NAME/logs`.
3. Review the product logs in `/diagnostics/logs`. You can also review the diagnostics reports in `/diagnostics/reports`.

Validating a Financial Close Management Deployment

Oracle Hyperion Financial Close Management Validation Tool scans the system configuration settings needed for successful functioning of Financial Close Management. Oracle recommends that you run Financial Close Management Validation Tool after you complete the installation and configuration steps to test that the components for Financial Close Management are correctly deployed and configured.

To use Financial Close Management Validation Tool:

1. From a web browser, open the following URL:

```
FCMHOST:FCMPORT/fcc/faces/oracle/apps/epm/fcc/ui/page/FCCValidation.jspx
```

where `FCMHOST` is the machine where Financial Close Management is configured and `FCMPORT` is port 8700. You can find this information from WebLogic Administration Console. To view this information, log in to the Administration Console and navigate to **Environment**, and then **Servers**.

2. Log in to the Financial Close Management Validation Tool with a user from the external provider. If there are issues with the external provider configuration, log

on with any seeded user (seeded both on WebLogic Server and Oracle Hyperion Shared Services native directory) and run the tool to identify issues with the external provider configuration.

3. Review the status for each of the following:

Table 9-1 Validation tests for Financial Close Management

Validation Item	Results
Admin Server	Host Port Status (running/shutdown) DataSources
Foundation Server	Host Port Status DataSources
FCM Managed Server	Host Port Status DataSources
FinancialClose Web Application	Version State DB Type
FinancialCloseTaxOpCommon Web Application	Version State DB Type
EPM-FCM-LIBRARIES library	Version State DB Type
Authentication Providers	DefaultAuthenticator Control Flag EPMIdentityAsserter fcm_valid_users role is created correctly virtualize flag is true LibOVD is enabled
External Authenticators	Lists the external Identity store configuration. The tool lists the values used for the configuration. You must ensure that the entered values are correct.

4. Look for failed tests, diagnose, and fix problems.
5. Run Financial Close Management Validation Tool again until all tests pass.
6. Click **Validate Test Schedule**.

The **Validate Test Schedule** button is enabled only if all the required configuration tests in [Table 1](#) pass without errors.

7. Review the status of the following tasks:

- Business Event
- Composite Instance
- FCM Basic Task
- Human Workflow

In case of any errors, the test FCCTaskExecutionComposite instance is not deleted and you can see more details of the error from the Enterprise Manager console. If all the validation items are successful, then the test composite and instance are deleted.

To use Account Reconciliation Manager Validation Tool:

1. From a web browser, open the following URL to run the Account Reconciliation Manager Validation Tool.

```
FCMHOST:FCMPORT/arm/faces/oracle/apps/epm/arm/ui/page/common/
ARMValidation.jspx
```

where *FCMHOST* is the machine where Financial Close Management is configured and *FCMPORT* is the listening port of the FinancialClose0 managed Server in the WebLogic Administration Console. You can find this information from WebLogic Administration Console. To view this information, log in to the Administration Console and navigate to **Environment**, and then **Servers**.

2. Log in to the Account Reconciliation Manager Validation Tool with the Shared Services Admin user.
3. Click **Validate Account Reconciliation Manager Configuration**.
4. Review the status for each of the following:

Table 9-2 Validation tests for Account Reconciliation Manager

Validation Item	Results
Admin Server	Host Port Status (running/shutdown) DataSources
Foundation Server	Host Port Status DataSources
FCM Managed Server	Host Port Status DataSources
Account Reconciliation Web Application	Version State DB Type

Table 9-2 (Cont.) Validation tests for Account Reconciliation Manager

Validation Item	Results
FinancialCloseTaxOpCommon Web Application	Version State DB Type
EPM-FCM-LIBRARIES library	Version State DB Type
Authentication Providers	DefaultAuthenticator Control Flag EPMIdentityAsserter fcm_valid_users role is created correctly virtualize flag is true LibOVD is enabled
External Authenticators	Lists the authentication providers

5. Look for failed tests, diagnose, and fix problems.
6. Run Account Reconciliation Manager Validation Tool again until all tests pass.

A

Ports

This appendix contains information about default port numbers for Oracle Enterprise Performance Management System products including where the port can be configured.

Caution:

These ports are not meant to be used to access a product. For information on starting a product, see [Starting and Stopping EPM System Products](#).

Default Ports and Shared Services Registry

During the configuration process, default port numbers for most Oracle Enterprise Performance Management System products are automatically populated in Oracle Hyperion Shared Services Registry. During configuration using EPM System Configurator, you can change the default numbers. Each port number on the machine must be unique. (The same product on different machines can have the same port number.) If an error message similar to “port already in use” or “bind error” is displayed, a port number conflict may exist.

If the default port is already in use on the machine, or if there is a conflict, EPM System Configurator will not continue. If the default port number is not changed, the software is configured with the default values.

WebLogic Administration Server Port

Table A-1 WebLogic Administration Server Port

Default Port Number	Where Configurable
7001	The WebLogic Administration Server port is specified during configuration. To change the default port, use the WebLogic Administration Console.

Oracle Enterprise Manager Java Web Application Port

Table A-2 Oracle Enterprise Manager Java Web Application Port

Default Port Number	Where Configurable
7001	The Oracle Enterprise Manager Java Web Application port is configured when you create the domain in EPM System Configurator.

SSL Ports

For more information about configuring SSL ports, see *Oracle Enterprise Performance Management System Security Configuration Guide*.

Foundation Services Ports

See these sections for information about Oracle Hyperion Foundation Services ports:

- [Foundation Services Ports](#)
- [Calculation Manager Java Web Application Ports](#)

Foundation Services Ports

The following table describes the Oracle Hyperion Foundation Services Managed Server Java web application ports and where you can configure them. Foundation Services Managed Server includes Oracle Hyperion Shared Services, Oracle Hyperion Enterprise Performance Management Workspace, and Foundation Web Service.

Table A-3 Foundation Services Java Web Application Ports

Port Type	Default Port Number	Where Configurable
Listen port	28080	EPM System Configurator
SSL listen port	28443	EPM System Configurator

Table A-4 Web Server Ports

Server	Default Server Port	Where Configurable
Oracle HTTP Server	19000	<code>MIDDLEWARE_HOME/</code> <code>user_projects/</code> <code>epmsystem1/</code> <code>httpConfig/ohs/</code> <code>config/OHS/</code> <code>ohs_component/</code> <code>httpd.conf</code> configurable in the EPM System Configurator.

Table A-4 (Cont.) Web Server Ports

Server	Default Server Port	Where Configurable
IIS	80 443 (SSL)	Microsoft Internet Information Services (IIS) Manager Console. Change the TCP port value setting.

Calculation Manager Java Web Application Ports

Table A-5 Calculation Manager Java Web Application Ports

Port Type	Default Port Number	Where Configurable
Listen port	8500	EPM System Configurator
SSL listen port	8543	EPM System Configurator

Essbase Ports

See these sections for information about Oracle Essbase ports:

- [Essbase Ports](#)
- [Administration Services Ports](#)
- [Provider Services Ports](#)
- [Essbase Studio Ports](#)

Essbase Ports

Table A-6 Essbase Default Service Ports

Service	Default Port Number	Where Configurable
Oracle Essbase Agent	1423	EPM System Configurator
Essbase server applications (ESSVR)	32768–33768 (two ports per process)	EPM System Configurator
Essbase SSL Agent	6423	EPM System Configurator

 **Note:**

Starting in release 11.1.1, if you do not specify Essbase port numbers in EPM System Configurator, the default ports are used.

Table A-7 OPMN (Oracle Process Manager and Notification Server) Default Ports

Service	Default Port Number	Where Configurable
Oracle Notification Server Local Port	6711	Open the <code>opmn.xml</code> file and modify the "local" parameter. Then save the file.
Oracle Notification Server Remote Port	6712	Open the <code>opmn.xml</code> file and modify the "remote" parameter. Then save the file.

Administration Services Ports

Table A-8 Administration Services Java Web Application Ports

Port Type	Default Port Number	Where Configurable
Listen port	10080	EPM System Configurator
SSL listen port	10083	EPM System Configurator

Provider Services Ports

Table A-9 Provider Services Java Web Application Ports

Port Type	Default Port Number	Where Configurable
Listen port	13080	EPM System Configurator
SSL listen port	13083	EPM System Configurator

Essbase Studio Ports

Table A-10 Essbase Studio Server Ports

Port Type	Default Port Number	Where Configurable
Listen port	5300	<code>EPM_ORACLE_HOME/products/Essbase/EssbaseStudio/Server/server.properties</code> . Parameters: <code>transport.port=new port number</code>
HTTP listen port	12080	<code>EPM_ORACLE_HOME/products/Essbase/EssbaseStudio/Server/server.properties</code> . Parameters: <code>server.httpPort=new port number</code>

Financial Reporting Ports

Table A-11 Financial Reporting Java Web Application Ports

Port Type	Default Port Number	Where Configurable
Listen port	8200	EPM System Configurator
SSL listen port	8243	EPM System Configurator

Table A-12 Financial Reporting Default Service Ports

Service	Default Port Number	Where Configurable
RMI Services and Remote ADM Server	8205-8228 Each Financial Reporting Java Web Application uses two ports, one for RMI services and one for Remote ADM Server (e.g., first Financial Reporting Java Web Application uses ports 8205 and 8206).	EPM System Configurator

Financial Performance Management Applications Ports

See these sections for information about Oracle's Hyperion Financial Performance Management Applications ports:

- [Financial Management Ports](#)
- [Financial Close Management Ports](#)
- [Planning Ports](#)
- [Profitability and Cost Management Ports](#)

Financial Management Ports

Table A-13 Financial Management Java Web Application Port

Port Type	Default Port Number	Where Configurable
Listen port	7363	EPM System Configurator
SSL listen port	7365	EPM System Configurator

Table A-14 Financial Management Server Port

Port Type	Default Port Number	Where Configurable
Port	9091	EPM System Configurator
SSL Port	9092	EPM System Configurator
Datasource Start Port	10001	EPM System Configurator
Datasource End Port	10020	EPM System Configurator

Financial Close Management Ports

The following table describes the Oracle Hyperion Financial Close Management ports and where you can configure them.

Table A-15 Financial Close Management Java Web Application Ports

Type of Port	Default Port Number	Where Configurable
Listen port	8700	EPM System Configurator
SSL listen port	8743	EPM System Configurator

Tax Management Ports

Table A-16 Tax Management Java Web Application Port

Port Type	Default Port Number	Where Configurable
Oracle Hyperion Tax Governance Port	22200	EPM System Configurator
Tax Governance SSL Port	23243	EPM System Configurator
Oracle Hyperion Tax Provision Port	22200	EPM System Configurator
Tax Provision SSL Port	23243	EPM System Configurator

Planning Ports

Table A-17 Planning Java Web Application Ports

Port Type	Default Port Number	Where Configurable
Listen port	8300	EPM System Configurator
SSL listen port	8343	EPM System Configurator

Table A-18 Planning RMI Server Port

Service	Default Port Number	Where Configurable
Oracle Hyperion Planning RMI Server	11333	EPM System Configurator

Profitability and Cost Management Ports

Table A-19 Profitability and Cost Management Java Web Application Ports

Port Type	Default Port Number	Where Configurable
Listen port	6756	EPM System Configurator
SSL listen port	6743	EPM System Configurator

Data Management Ports

See these sections for information about Oracle's Data Management ports.

- [FDMEE Ports](#)
- [Data Relationship Management Ports](#)

FDMEE Ports

The following table describes the Oracle Hyperion Financial Data Quality Management, Enterprise Edition Java web application ports and where you can configure them.

Table A-20 FDMEE Java Web Application Ports

Port Type	Default Port Number	Where Configurable
Listen port	6550	EPM System Configurator
SSL listen port	6553	EPM System Configurator

Data Relationship Management Ports

The following table describes the Oracle Data Relationship Management default service ports and where you can configure them.

Table A-21 Data Relationship Management Default Service Port

Service	Default Port Number	Where Configurable
Data Relationship Management server applications	5200–5400	drm-config.xml using the Data Relationship Management Console.

The following table describes the Data Relationship Management Web server ports and where you can configure them.

Table A-22 Data Relationship Management Web Server Ports

Default Web Server Ports	Where Configurable
80 (HTTP) or 443 (when SSL is enabled)	Microsoft Internet Information Services (IIS) Manager Console. (Change the TCP port value setting.)

B

JDBC URL Attributes

Related Topics

- [JDBC Drivers](#)

JDBC Drivers

During configuration, on the Configure Database page, click Advanced to specify additional JDBC parameters, which are used by Oracle Enterprise Performance Management System JDBC drivers to connect to the database.

The following table describes the format to use to enter the parameters if you are using JDBC drivers.

Database	Format
Oracle Database	<code>jdbc:oracle:thin:@hostname:port:SID</code>
SQL Server	<code>jdbc:weblogic:sqlserver:// hostname:port;databaseName=databaseName</code>

The following table describes additional information about the parameters:

Property	SQL Server	DB2
LOADLIBRARYPATH	Yes	Yes
MAXPOOLEDSTATEMENTS	Yes	Yes
ALTERNATESERVERS	Yes	Yes
CONNECTIONRETRYCOUNT	Yes	Yes
CONNECTIONRETRYDELAY	Yes	Yes
LOADBALANCING	Yes	Yes
DYNAMICSECTIONS		Yes
CREATEDFAULTPACKAGE		Yes
REPLACEPACKAGE		Yes
DATABASENAME	Yes	Yes

For Oracle Database parameters, see the Oracle Thin JDBC Driver documentation.

For more information, see the *Oracle® Database JDBC Developer's Guide 11g Release 2 (11.2)*: http://docs.oracle.com/cd/E11882_01/java.112/e16548/urls.htm#BEIJFHBB.

URL for Oracle RAC

To provide client-side failover and load-balancing for Oracle RAC, enter the URL in the form of:

```
jdbc:oracle:thin:@(DESCRIPTION=
@ (LOAD_BALANCE=on)
@ (ADDRESS=(PROTOCOL=TCP)(HOST=host1) (PORT=1521))
@ (ADDRESS=(PROTOCOL=TCP)(HOST=host2)(PORT=1521))
@ (CONNECT_DATA=(SERVICE_NAME=service_name)))
```

LDAP-Based URL for Oracle Database

Oracle Database supports authentication using an LDAP server. To use LDAP-based database authentication, enter the URL in the following format:

```
jdbc:oracle:thin:@ldap://oid:5000/mydb1,cn=OracleContext,dc=myco,dc=com
```

URL for SSL

To enable SSL for the JDBC connections, during configuration, on the Configure Database page, click Advanced and select "Use secure connection to the database (SSL)."

Use the following additional parameters when JDBC SSL is selected and you are using Microsoft SQL Server.

- ENCRYPTIONMETHOD=SSL
- TRUSTSTORE=*Path to trust store*
- TRUSTSTOREPASSWORD=*trust store password*
- VALIDATESERVERCERTIFICATE="true"

Use the following URL format when JDBC SSL is selected and you are using Oracle Database.

```
jdbc:oracle:thin:@(DESCRIPTION=(ADDRESS=(PROTOCOL=tcps)
(HOST=host1)(PORT=1521))
(CONNECT_DATA=(SERVICE_NAME=servicename)
)
)
```

C

EPM System Services

This appendix provides details about start menus, service names, and start and stop scripts for each Oracle Enterprise Performance Management System component.

Note that Start menu items for Java web applications are available only on the machine on which the web server is installed.

If you deploy components to a single managed server, the managed server name is `EPMServerN`, where `N` is 0 for the managed server, and 1 or higher if you scale out the single managed server.

You can monitor the health and performance of the EPM System Java web applications using Oracle Enterprise Manager, which is automatically deployed with EPM System Configurator if you deploy Java web applications with Oracle WebLogic Server. You can see the status of the servers and the Java web applications running, the servers they are running on, and the ports they are listening on. See "Using Enterprise Manager to Monitor EPM System Java Web Applications" in the *Oracle Enterprise Performance Management System Deployment Options Guide*.

Web Server

The Oracle HTTP Server service is managed and monitored with Node Manager. See [Starting Oracle HTTP Server](#).

Foundation Services Application Server

The following table describes the services and processes for the Oracle Hyperion Foundation Services application server, which includes Oracle Hyperion Shared Services, and Oracle Hyperion Enterprise Performance Management Workspace Java web applications.

Table C-1 Foundation Services Application Server Services and Processes

Information Type	Details
Windows Start Menu Command	Select Start , then Oracle EPM System , then <code>EPM_ORACLE_INSTANCE_NAME</code> , and then Start FoundationServices (Oracle WebLogic 10)
Registered Service Name	<code>HyS9FoundationServices_instanceName</code>
Display Name in Windows Services Control Panel	Oracle Hyperion Foundation Services - Managed Server (<i>instanceName</i>)
Description	Hyperion Foundation Services support Hyperion applications, including authentication, user provisioning, task flow management, data and metadata synchronization

Table C-1 (Cont.) Foundation Services Application Server Services and Processes

Information Type	Details
Windows Startup Script	<i>EPM_ORACLE_INSTANCE</i> /bin/ startFoundationServices.bat
Windows Stop Script	<i>EPM_ORACLE_INSTANCE</i> /bin/ stopFoundationServices.bat

Calculation Manager Application Server

The following table describes the services and processes for Oracle Hyperion Calculation Manager.

Table C-2 Calculation Manager Services and Processes

Information Type	Details
Windows Start Menu Command	Select Start , then Oracle EPM System , and then Start CalcMgr (Oracle WebLogic 10)
Registered Service Name	HyS9CALC_ <i>instanceName</i>
Display Name in Windows Services Control Panel	Oracle Hyperion CALC Manager - Java Web Application (<i>instanceName</i>)
Description	Provide access service to CALC Manager Web Server
Windows Startup Script	<i>EPM_ORACLE_INSTANCE</i> /bin/ startCalcMgr.bat
Windows Stop Script	<i>EPM_ORACLE_INSTANCE</i> /bin/ stopCalcMgr.bat

Essbase Server

During installation, EPM System Installer installs OPMN and registers Oracle Essbase Server for OPMN. OPMN manages the Essbase Agent, which manages the Essbase Server.

Navigate to *EPM_ORACLE_INSTANCE*/bin and use the following commands to start and stop Essbase Server:

- `opmnctl startall`
- `opmnctl stopall`

If you are using Essbase in a clustered environment, there are additional steps required to set up Essbase failover on both nodes of the cluster. See "Editing OPMN.XML for Active-Passive Essbase Clusters" in the *Oracle Enterprise Performance Management System Deployment Options Guide*.

The following table describes additional methods for starting and stopping Essbase Server. Note that the Essbase Server start and stop scripts redirect to OPMN.

For information about OPMN, see the Oracle® Fusion Middleware Oracle Process Manager and Notification Server Administrator's Guide Release 11g (11.1.1.2.0) (http://download.oracle.com/docs/cd/E15523_01/doc.1111/e14007/toc.htm)

Table C-3 Starting and Stopping Essbase Server

Information Type	Details
Windows Start Menu Command	Select Start , then Oracle EPM System , then Start Essbase This command launches <code>startEssbase.bat</code> (and redirects to OPMN).
Registered Service Name	<code>OracleProcessManager_EPM_instanceName</code>
Display Name in Windows Services Control Panel	Oracle Process Manager_ <code>instanceName</code>
Description	OPMN service for Essbase
Windows Startup Script	<ul style="list-style-type: none"> Essbase Server — <code>EPM_ORACLE_INSTANCE/bin/startEssbase.bat</code> (redirects to OPMN) Each instance of Essbase Server has its own startup script. If you configured an additional instance of Essbase, <code>startEssbase.bat</code> is located in <code>additionalInstanceLocation/bin</code>. Launch the start script from this location to launch this instance of Essbase. ESSCMD — <code>EPM_ORACLE_INSTANCE/EssbaseServer/EssbaseServerInstanceName/bin/startEsscmd.bat</code> (also available in the <code>/EssbaseClient</code> directory) essmsh — <code>EPM_ORACLE_INSTANCE/EssbaseServer/EssbaseServerInstanceName/bin/startMax1.bat</code> (also available in the <code>/EssbaseClient</code> directory) <p>All the scripts call <code>setEssbaseEnv.bat</code> to set up <code>ESSBASEPATH</code>, <code>ARBORPATH</code>, and <code>PATH</code> before starting.</p>
Windows Stop Script	<p>Server:</p> <p>Essbase Server — <code>EPM_ORACLE_INSTANCE/bin/stopEssbase.bat</code> (redirects to OPMN)</p>

Stopping Essbase Server can take some time, depending on how many Essbase applications are running on the server. To stop Essbase Server, you need Administrator permissions.

See the *Oracle Essbase Database Administrator's Guide* for more information about shutting down Essbase Server.

For more information about stopping Essbase Server, see the *Oracle Essbase Database Administrator's Guide* and the *Oracle Essbase Technical Reference*.

Administration Services Server

The following table describes the services and processes for the Oracle Essbase Administration Services server.

Table C-4 Administration Services Application Server Service/Process

Information Type	Details
Windows Start Menu Command	Select Start , then Oracle EPM System , and then Start EssbaseAdminServices (Oracle WebLogic 10)
Registered Service Name	<i>Hys9eas_instanceName</i>
Display Name in Windows Services Control Panel	Oracle Hyperion Administration Services - Java Web Application (<i>instanceName</i>)
Description	Controls the running of an Applications Server
Windows Startup Script	<i>EPM_ORACLE_INSTANCE/bin/startEssbaseAdminServices.bat</i>
Windows Stop Script	<i>EPM_ORACLE_INSTANCE/bin/stopEssbaseAdminServices.bat</i>

Essbase Studio Server

The following table describes the services and processes for the Oracle Essbase Studio server.

Table C-5 Essbase Studio Server

Information Type	Details
Windows Start Menu Command	Select Start , then Oracle EPM System , then <i>EPM_ORACLE_INSTANCE_NAME</i> , and then Start Server
Registered Service Name	<i>HYS9EssbaseStudio_instanceName</i>
Display Name in Windows Services Control Panel	Oracle Hyperion Essbase Studio Server (<i>instanceName</i>)
Description	NA
Windows Startup Script	<i>EPM_ORACLE_INSTANCE/BPMS/bin/startServer.bat</i>
Windows Stop Script	<i>EPM_ORACLE_INSTANCE/BPMS/bin/stopServer.bat</i>

By default, Essbase Studio Server runs in the background on UNIX. This behavior is controlled by a combination of an Essbase Studio Server property (*server.runInBackground*), Oracle Enterprise Performance Management System environment variables, and *startServer.sh*.

To start Essbase Studio Server in the foreground on UNIX:

1. In the Essbase Studio *server.properties* file, set the *server.runInBackground* property to “false” or comment it out.

The `server.properties` file is located in `EPM_ORACLE_HOME/products/Essbase/EssbaseStudio/Server/server.properties`. See for information on this property. Note that the file might be empty, which is normal.

2. Set these variables in the environment where you plan to run `startServer.sh`:

```
EPM_ORACLE_INSTANCE=/installationPath/Oracle/Middleware/user_projects/epmsystem1
```

```
EPM_ORACLE_HOME=/installationPath/Oracle/Middleware/EPMSystem11R1
```

```
JAVA_HOME="${EPM_ORACLE_HOME}/../jdk160_35/jre"
```

```
JAVA_OPTIONS="-DESSBASE_STUDIO_INSTANCE=${EPM_ORACLE_INSTANCE}/BPMS/-DsuppressAPSPProductInfo=true"
```

3. Edit the Essbase Studio `startServer.sh` shell as follows:

`startServer.sh` is located in `EPM_ORACLE_INSTANCE/BPMS/bin/startServer.sh`.

- Locate the last line of the file:

```
nohup "${JAVA_HOME}/bin/java" -Xms128m -Xmx768m $JAVA_OPTIONS -jar  
"${EPM_ORACLE_HOME}/products/Essbase/EssbaseStudio/Server/  
server.jar" >/dev/null &
```

- Remove `nohup` from the beginning of the line, the `STDOUT` to null direction (`>/dev/null`), and the background processing command (`&`) from the line; for example:

```
"${JAVA_HOME}/bin/java" -Xms128m -Xmx768m $JAVA_OPTIONS -jar "$  
{EPM_ORACLE_HOME}/products/Essbase/EssbaseStudio/Server/server.jar"
```

4. Start Essbase Studio Server by running the following statement: `./startServer.sh`.

Provider Services Application Server

The following table describes the services and processes for the Oracle Hyperion Provider Services application server.

Table C-6 Provider Services Application Server Services and Processes

Information Type	Details
Windows Start Menu Command	Select Start , then Oracle EPM System , and then Start AnalyticProviderServices (Oracle WebLogic 10)
Registered Service Name	HyS9aps_instanceName
Display Name in Windows Services Control Panel	Oracle Hyperion Provider Services - Java Web Application (instanceName)

Table C-6 (Cont.) Provider Services Application Server Services and Processes

Information Type	Details
Description	Provide access service to Oracle Hyperion Provider Services
Windows Startup Script	<i>EPM_ORACLE_INSTANCE</i> /bin/startAnalyticProviderServices.bat
Windows Stop Script	<i>EPM_ORACLE_INSTANCE</i> /bin/stopAnalyticProviderServices.bat

Financial Reporting Application Server

The following table describes the services and processes for the Oracle Hyperion Financial Reporting application server, which includes the Financial Reporting Print Server, Financial Reporting Web Studio, and Document Repository.

Table C-7 Financial Reporting Application Server Services and Processes

Information Type	Details
Windows Start Menu Command	Select Start , then Oracle EPM System , and then Start FinancialReporting (Oracle WebLogic 10)
Registered Service Name	HyS9FRReports_ <i>instanceName</i>
Display Name in Windows Services Control Panel	Oracle Hyperion Financial Reporting - Java Web Application (<i>instanceName</i>)
Description	Provide access service to Hyperion Financial Reporting Web Server
Windows Startup Script	<i>EPM_ORACLE_INSTANCE</i> /bin/startFinancialReporting.bat
Windows Stop Script	<i>EPM_ORACLE_INSTANCE</i> /bin/stopFinancialReporting.bat

Planning Application Server

The following table describes the services and processes for the Oracle Hyperion Planning application server.

Table C-8 Planning Application Server Services and Processes

Information Type	Details
Windows Start Menu Command	Select Start , then Oracle EPM System , and then Start Planning (Oracle WebLogic 10)
Registered Service Name	HyS9Planning_ <i>instanceName</i>
Display Name in Windows Services Control Panel	Oracle Hyperion Planning - Java Web Application (<i>instanceName</i>)

Table C-8 (Cont.) Planning Application Server Services and Processes

Information Type	Details
Description	Provides access service to Planning Web server
Windows Startup Script	<i>EPM_ORACLE_INSTANCE</i> /bin/startPlanning.bat
Windows Stop Script	<i>EPM_ORACLE_INSTANCE</i> /bin/stopPlanning.bat

In addition, Planning uses the Hyperion RMI Registry.

Table C-9 Hyperion RMI Registry Application Server Services and Processes

Information Type	Details
Windows Start Menu Command	N/A
Registered Service Name	HyS9RMI Registry_ <i>instanceName</i>
Display Name in Windows Services Control Panel	Oracle Hyperion RMI Registry (<i>instanceName</i>)
Description	Provides access service to Oracle Hyperion RMI Registry
Windows Startup Script	<i>EPM_ORACLE_INSTANCE</i> /bin/startRMI.bat
Windows Stop Script	<i>EPM_ORACLE_INSTANCE</i> /bin/stopRMI.bat

Financial Management Server

The following table describes the services and processes for Oracle Hyperion Financial Management.

Table C-10 Financial Management Server

Information Type	Details
Windows Start Menu Command	N/A
Registered Service Name	HyS9FinancialManagementJavaServer_ <i>instanceName</i>
Display Name in Windows Services Control Panel	Oracle Hyperion Financial Management - Java Server (<i>instanceName</i>)
Description	Oracle Hyperion Financial Management - Java Server
Windows Startup Script	<i>EPM_ORACLE_INSTANCE</i> /bin/startHFMJavaServer.bat
Windows Stop Script	<i>EPM_ORACLE_INSTANCE</i> /bin/stopHFMJavaServer.bat



Note:

The synchronization between Financial Management application servers is based on system time. Changing the clock can affect this synchronization. For the time change to and from Daylight Savings Time, Oracle recommends that you stop the servers before the time change and restart them afterward.

Financial Management Application Server

The following table describes the services and processes for the Oracle Hyperion Financial Management Java web application server, which includes FM Web services and FM ADF Java web application.

Table C-11 Financial Management Java Web Application Services and Processes

Information Type	Details
Windows Start Menu Command	Select Start , then Oracle EPM System , and then Start HFMWeb (Oracle WebLogic 10)
Registered Service Name	HyS9FinancialManagementWeb_instanceName
Display Name in Windows Services Control Panel	Oracle Hyperion Financial Management - Web Tier (<i>instanceName</i>)
Description	Provides JEE support to Financial Management.
Windows Startup Script	<i>EPM_ORACLE_INSTANCE</i> /bin/startHFMWeb.bat
Windows Stop Script	<i>EPM_ORACLE_INSTANCE</i> /bin/stopHFMWeb.bat

Profitability and Cost Management Application Server

The following table describes the services and processes for Oracle Hyperion Profitability and Cost Management.

Table C-12 Profitability and Cost Management Services and Processes

Information Type	Details
Windows Start Menu Command	Select Start , then Oracle EPM System , and then Start Profitability (Oracle WebLogic 10)
Registered Service Name	HyS9HyS9PftWeb_instanceName
Display Name in Windows Services Control Panel	Oracle Hyperion Profitability - Java Web Application (<i>instanceName</i>)
Description	Provides a Workspace module for Profitability.
Windows Startup Script	<i>EPM_ORACLE_INSTANCE</i> /bin/startProfitability.bat

Table C-12 (Cont.) Profitability and Cost Management Services and Processes

Information Type	Details
Windows Stop Script	<i>EPM_ORACLE_INSTANCE/bin/stopProfitability.bat</i>

Financial Close Management Application Server

The following table describes the services and processes for the Oracle Hyperion Financial Close Management application server.

 **Note:**

Ensure that you complete the post-configuration tasks before you start Financial Close Management. See [Financial Close Management and Tax Governance Manual Configuration Tasks](#).

 **Note:**

Before you start Financial Close Management, note the following server startup order:

- WebLogic Administration Server
- Hyperion Foundation Services Managed Server
- Oracle HTTP Server - See [Starting Oracle HTTP Server](#)
- In any order:
 - Financial Close Management Java web application
 - Oracle Hyperion Financial Management Web Services Managed Server, if you're using Financial Management with Financial Close Management
 - Oracle Hyperion Financial Reporting Java web application, if you're using Financial Reporting with Financial Close Management
 - Oracle Hyperion Financial Data Quality Management, Enterprise Edition, if you are using Account Reconciliation Manager

Table C-13 Financial Close Management Services and Processes

Information Type	Details
Windows Start Menu Command	Select Start , then Oracle EPM System , and then Start FinancialClose (Oracle WebLogic 10)
Registered Service Name	<i>HyS9FinancialClose_instanceName</i>

Table C-13 (Cont.) Financial Close Management Services and Processes

Information Type	Details
Display Name in Windows Services Control Panel	Oracle Hyperion Financial Close Management - Java Web Application (<i>instanceName</i>)
Description	Provide access service to Financial Close Manager Java Web Application
Windows Startup Script	<i>EPM_ORACLE_INSTANCE</i> /bin/startFinancialClose.bat
Windows Stop Script	<i>EPM_ORACLE_INSTANCE</i> /bin/stopFinancialClose.bat

Tax Management Application Server

The following table describes the services and processes for Tax Management.

For Oracle Hyperion Tax Provision, Oracle Hyperion Financial Management must also be running.

If you are using Oracle Hyperion Tax Governance, start services in the order listed in [Financial Close Management Application Server](#).

Table C-14 Tax Management Services and Processes

Information Type	Details
Windows Start Menu Command	Select Start , then Oracle EPM System , and then Start TaxManagement (Oracle WebLogic 10)
Registered Service Name	HyS9TaxManagement_ <i>instanceName</i>
Display Name in Windows Services Control Panel	Oracle Hyperion Tax Management - Java Web Application (<i>instanceName</i>)
Description	Provides access service to Tax Management Java Web Application.
Windows Startup Command	<i>EPM_ORACLE_INSTANCE</i> /bin/startTaxManagement.bat
Windows Stop Command	<i>EPM_ORACLE_INSTANCE</i> /bin/stopTaxManagement.bat

Data Relationship Management

The following table describes the services and processes for Oracle Data Relationship Management.

Table C-15 Data Relationship Management Services and Processes

Information Type	Details
Windows Start Menu Command	Select Start , then Oracle EPM System , then Data Relationship Management, then Configuration Console or <code>EPM_ORACLE_HOME/products/DataRelationshipManagement/server/bin/drm-server-console.exe</code>
Registered Service Name	Oracle DRM Service
Display Name in Windows Services Control Panel	Oracle DRM Service
Description	Handles starting and stopping of required server applications in the Oracle DRM environment
Windows Startup Command	Net start "Oracle DRM Service"
Windows Stop Command	Net stop "Oracle DRM Service"

In addition, Data Relationship Management has a web tier component that runs in IIS.

Data Relationship Management Analytics

The following table describes the services and processes for Oracle Data Relationship Management Analytics.

Table C-16 Data Relationship Management Analytics Services and Processes

Information Type	Details
Windows Start Menu Command	N/A
Registered Service Name	Oracle DRM Managed Server (DRMServer)
Display Name in Windows Services Control Panel	Oracle DRM Managed Server (DRMServer)
Description	N/A
Windows Startup Command	net start "Oracle DRM Managed Server (DRMServer)"
Windows Stop Command	net stop "Oracle DRM Managed Server (DRMServer)"

FDMEE Application Server

The following table describes the services and processes for Oracle Hyperion Financial Data Quality Management, Enterprise Edition.

Table C-17 FDMEE Services and Processes

Information Type	Details
Windows Start Menu Command	Select Start , then Oracle EPM System , and then Start ErpIntegrator (Oracle WebLogic 10)

Table C-17 (Cont.) FDMEE Services and Processes

Information Type	Details
Registered Service Name	HyS9aifWeb_ <i>instanceName</i>
Display Name in Windows Services Control Panel	Oracle Hyperion FDM Enterprise Edition - Java Web Application (<i>instanceName</i>)
Description	Provides a Workspace module for FDM EE.
Windows Startup Script	<i>EPM_ORACLE_INSTANCE</i> /bin/ startERPIntegrator.bat
Windows Stop Script	<i>EPM_ORACLE_INSTANCE</i> /bin/ stopERPIntegrator.bat