

Oracle® Enterprise Performance Management System

Installation Start Here

Release 11.1.2.1

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ORACLE®

**ENTERPRISE PERFORMANCE
MANAGEMENT SYSTEM**

EPM System Installation Start Here, 11.1.2.1

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Authors: EPM Information Development Team

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Documentation Accessibility

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1

Installation Documentation Roadmap

You can find Oracle Enterprise Performance Management System installation documentation in the [Oracle Documentation Library \(http://www.oracle.com/technology/documentation/epm.html\)](http://www.oracle.com/technology/documentation/epm.html) on Oracle® Technology Network. For faster access to the documentation for a specific release, you can use the Enterprise Performance Management Documentation Portal (<http://www.oracle.com/us/solutions/ent-performance-bi/technical-information-147174.html>), which also contains links to EPM Supported Platform Matrices, My Oracle Support, and other information resources.

Use this guide to help plan your EPM System product installation and configuration. Check the Oracle Documentation Library on Oracle® Technology Network to see whether an updated version of this guide is available.

Table 1 lists the documents to consult for instructions on performing essential installation tasks.

Table 1 Documentation That You Need

Task	Related Documentation
Meeting system requirements and understanding release compatibility	<i>Oracle Hyperion Enterprise Performance Management System Certification Matrix</i> (http://www.oracle.com/technology/software/products/ias/files/fusion_certification.html) listed in the Oracle Business Intelligence product area.
Planning the installation	This guide, <i>Oracle Hyperion Enterprise Performance Management System Installation Start Here</i> .
<ul style="list-style-type: none">● Installing, configuring, and deploying EPM System products● Starting EPM System products● Validating the installation● Upgrading EPM System products	<i>Oracle Hyperion Enterprise Performance Management System Installation and Configuration Guide</i>
Securing EPM System	<i>Oracle Hyperion Enterprise Performance Management System Security Administration Guide</i>
Provisioning users	<i>Oracle Hyperion Enterprise Performance Management System User and Role Security Guide</i>

Table 2 lists the documents to consult for additional installation tasks that you might need to perform.

Table 2 Documentation That You Might Need

Task	Related Documentation
Troubleshooting installations	<i>Oracle Hyperion Enterprise Performance Management System Installation and Configuration Troubleshooting Guide</i>
Creating a backup of product and application data	<i>Oracle Hyperion Enterprise Performance Management System Backup and Recovery Guide</i>
Migrating from one environment to another	<i>Oracle Hyperion Enterprise Performance Management System Lifecycle Management Guide</i>
Clustering EPM System applications for high availability	<i>Oracle Hyperion Enterprise Performance Management System High Availability and Disaster Recovery Guide</i>

Additional content is available in the White Papers Library at [Oracle Enterprise Performance Management /Business Intelligence White Papers.](#))



EPM System Product Descriptions

In This Chapter

Foundation Services	11
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Reporting and Analysis	13
Financial Performance Management Applications	14
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Use this chapter to help plan your deployment architecture.

Note: To see which product components are required and optional for your products, review the Media Pack Readme on [Oracle® E-Delivery](http://edelivery.oracle.com/) (<http://edelivery.oracle.com/>).

Primary families of EPM System products:

- Oracle Hyperion Foundation Services
- Oracle Essbase
- Oracle Hyperion Reporting and Analysis
- Oracle's Hyperion Financial Performance Management Applications
- Oracle's Data Management

Note: For information about how EPM System products integrate with Oracle Business Intelligence Enterprise Edition and Oracle Business Intelligence Publisher, see the *Oracle Business Intelligence New Features Guide* and the *Oracle Business Intelligence Publisher Administrator's and Developer's Guide*, respectively.

Foundation Services

The following table describes Foundation Services products.

Product	Description
Oracle Hyperion Shared Services	Shared Services integrates EPM System products to provide identity management, user provisioning, lifecycle management, and task flow management. It also provides the Shared Services Registry, a central repository that simplifies product configuration by storing and reusing information for most EPM System products that you install.
Oracle Hyperion Enterprise Performance Management Workspace	<p>EPM Workspace provides a consistent and interactive thin-client environment for working with EPM content. EPM Workspace is the Web client for the following products:</p> <ul style="list-style-type: none"> ● Reporting and Analysis ● Oracle Hyperion Planning ● Oracle Hyperion Profitability and Cost Management ● Oracle Hyperion Financial Management ● Oracle Hyperion EPM Architect ● Oracle Hyperion Performance Scorecard ● Oracle Hyperion Calculation Manager ● Oracle Hyperion Financial Data Quality Management ERP Integration Adapter for Oracle Applications ● Oracle Hyperion Financial Close Management ● Oracle Hyperion Disclosure Management <p>In addition, Oracle Business Intelligence Publisher and Oracle BI EE can be configured to integrate with EPM Workspace.</p>
Performance Management Architect	<p>Performance Management Architect enables creation and deployment of financial applications from a central location. The visual environment provided by Performance Management Architect provides a simple and intuitive user experience for modeling the financial business process, including data, dimensions, and application logic.</p> <p>Performance Management Architect works with the following products:</p> <ul style="list-style-type: none"> ● Calculation Manager ● Planning ● Financial Management ● Oracle Essbase ● Profitability and Cost Management
Calculation Manager	Calculation Manager is a module with which Planning, Financial Management, and Essbase users can design, validate, and administer business rules in a graphical environment. Users of classic Planning and Financial Management applications may use either Calculation Manager or Oracle Hyperion Business Rules to design and administer their business rules; users of Performance Management Architect applications, however, may use only Calculation Manager to design and administer their business rules.
Oracle Hyperion Smart View for Office	Smart View provides a common Microsoft Office add-in for various EPM System products – Essbase, Financial Management, Planning, and Reporting and Analysis. It can also import content from the Reporting and Analysis repository and can perform adhoc analysis on data from Oracle BI EE. Using Smart View, you can view, import, manipulate, distribute, and share data in Microsoft Excel, Word, and PowerPoint interfaces.

Essbase

The following table describes Essbase products.

Product	Description
Essbase	Essbase is the business analysis server technology that provides an environment for rapid development of custom analytic and enterprise performance management applications. For example, Essbase enables line-of-business personnel to develop and manage analytic applications that model complex scenarios, forecast business trends, and perform “what-if” analyses. Essbase supports extremely fast query response times for vast numbers of users, for large data sets, and for complex business models. It is hot-pluggable across any data source.
Oracle Essbase Administration Services	Administration Services is the cross-platform administration tool for Essbase. It consists of Administration Server (a Java middle-tier server), and Essbase Administration Services Console.
Business Rules	Business Rules, which is installed and configured as part of Administration Services, guides users through the creation, execution, and management of business rules on the Essbase Server component of Essbase. Business Rules improves the response time to changing business application needs, shortens application development cycles, increases business user productivity, improves reuse of application components, and increases the overall return on analytic application investments. Classic Planning works with Business Rules.
Oracle Essbase Integration Services	Integration Services provides a suite of graphical tools that can be used to create OLAP models, OLAP metaoutlines, and Essbase databases.
Oracle Essbase Provider Services	Provider Services is a middle-tier data source provider to the following products: <ul style="list-style-type: none"> ● Essbase ● Planning ● Oracle Business Intelligence Enterprise Edition ● Smart View for Office, Java API (Essbase data only) ● XMLA clients (Essbase data only) <p>The software supports highly concurrent analytical scenarios and provides scalability and reliability in a distributed Web-enabled enterprise environment.</p>
Oracle Essbase Studio	Essbase Studio consolidates cube-construction activities into one interface, enabling consistent performance for data load and outline build.

Reporting and Analysis

The following table describes Reporting and Analysis products.

Product	Description
Oracle Hyperion Interactive Reporting	Interactive Reporting provides intuitive user-directed query and analysis capabilities. This business intelligence software delivers these capabilities through an interface that enables users to design dashboards, and then monitor and navigate to relevant information.
Oracle Hyperion Financial Reporting	Financial Reporting enables generation of formatted, book-quality financial and management reports that comply with regulations and external requirements. Financial Reporting can help you control and increase operational efficiencies.

Product	Description
Oracle Hyperion SQR Production Reporting	Production Reporting generates high-volume, presentation-quality formatted reports and provides unparalleled performance—even when the data comes from disparate sources. Production Reporting delivers the business context for key metrics by consolidating information from core business applications throughout the enterprise.
Oracle Hyperion Web Analysis	Web Analysis delivers online analytical processing (OLAP) analysis, presentation, and reporting for the extended enterprise.

Financial Performance Management Applications

The following table describes Financial Performance Management Applications products.

Product	Description
Planning	<p>Planning is a centralized planning, budgeting, and forecasting solution that integrates financial and operational planning processes. Planning provides an in-depth look at business operations and their impact on financials by tightly integrating financial and operational planning models. With Planning, you can meet your immediate financial planning needs and also enable future cross-functional expansion and automated process integration.</p> <p>Planning administrators can create two types of applications: Classic Planning applications, which use Business Rules, and Performance Management Architect Planning applications, which use Calculation Manager business rules.</p>
Financial Management	<p>Financial Management is a comprehensive financial systems software application that delivers global collection reporting and analysis in a single, highly scalable solution. Financial Management uses today's most advanced technology, yet it is built to be owned and maintained by the enterprise's finance team.</p> <p>Financial Management users can create applications by using Performance Management Architect or Financial Management Classic.</p>
Financial Close Management	Financial Close Management helps companies define, execute, and report on the interdependent activities of a financial close period. It provides centralized monitoring of all close process tasks and provides a visible, automated, repeatable system of record for running close processes.
Performance Scorecard	Performance Scorecard is a Balanced Scorecard Collaborative certified application that helps companies clearly articulate strategy and goals, communicate them across the enterprise, and monitor key performance indicators. The software offers you complete strategy- and accountability-mapping capabilities, as well as Web-based message boards, forums, and discussion threads.
Oracle Hyperion Strategic Finance	Strategic Finance is a financial modeling application that enables executives to identify and understand the full financial impact of alternative corporate strategies. Strategic Finance delivers pre-packaged modeling and forecasting so your finance experts have more time for testing alternative strategies, building contingency plans, and understanding the impact of those strategies and plans on your company's long-term performance.
Profitability and Cost Management	Profitability and Cost Management is an analytic application for managing the cost and revenue allocations that are necessary to compute profitability for a business segment, such as a product, customer, region, or branch. The application enables you to use cost decomposition, consumption-based costing, and scenario playing to measure profitability, and it provides a meaningful operational decision-support system.
Disclosure Management	Disclosure Management allows customers to assemble a reporting package for submission to a regulatory agency (for example, 10K or 10Q submitted to the SEC) with a complete XBRL creation and management solution that includes: XBRL Taxonomy extension and viewing; document-level mapping within MS Word and Excel, as well as reusable EPM metadata mapping; instance document validation, generation and viewing; centralized taxonomy concept mapping storage and management and the ability to combine multiple documents to generate one XBRL instance document.

Data Management

The following table describes Data Management products.

Product	Description
Oracle Hyperion Financial Data Quality Management	FDM is a packaged solution that, through its Web-based guided workflow, helps finance users develop standardized financial data management processes. Its data preparation server can ease integration and validation of financial data from any source system. To further reduce data integration costs and data mapping complexities, FDM includes EPM adapters for a variety of source and target systems.
ERP Integrator	ERP Integrator is a module of FDM that enables you to integrate metadata and data from an Enterprise Resource Planning (ERP) source system into an Oracle Hyperion EPM target application. You can drill through from Financial Management or Planning Web forms, Smart View or Financial Reporting and view details in the ERP source system.
Oracle Hyperion Data Relationship Management	Data Relationship Management enables enterprises to build consistency within master data assets despite endless changes within the underlying transactional and analytical systems. Data Relationship Management provides the industry's first data model-agnostic master data management solution built to enable financial and analytical master data management in dynamic, fast-changing business environments.

3

EPM System Architecture

In This Chapter

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EPM 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. Oracle WebLogic Server is provided for use as the middle-tier application server and because the middle tier is a true application tier, meaning that no data resides in that tier, scalability and availability is greatly enhanced. The data tier is comprised of two components that store data differently. In Essbase environments, the data is stored and calculated in the database on the server file system. In Financial Management environments, the application framework, metadata, and textual data are stored in a relational repository. This section provides an overview of the EPM System product architecture, organized by tier followed by diagrams of product components.

Tier Architecture

Foundation Services

The following table describes the architecture for Foundation Services products.

Product/Component	Client Tier	Web Server	Web Application Server (Java)	Web Application Server (Windows IIS)	Services Tier
Shared Services		X	X (part of Foundation Services Web applications)		
EPM Workspace		X	X (part of Foundation Services Web applications)		

Product/Component	Client Tier	Web Server	Web Application Server (Java)	Web Application Server (Windows IIS)	Services Tier
Performance Management Architect	X	X	X	X (for Dimension Server)	X
Calculation Manager		X	X		
Smart View for Office	X				

Essbase

The following table describes the architecture for Essbase products.

Product/Component	Client Tier	Web Server	Web Application Server (Java)	Services Tier
Essbase	X			X
Administration Services	X	X	X	
Provider Services	X	X	X	
Integration Services	X			X
Essbase Studio	X			X

Reporting and Analysis

The following table describes the architecture for Reporting and Analysis products.

Product/Component	Client Tier	Web Server	Web Application Server (Java)	Services Tier
Financial Reporting	X	X	X	X
Production Reporting	X			X
Interactive Reporting	X			X
Web Analysis	X	X	X	
Oracle Hyperion Reporting and Analysis Framework			X	X

Financial Performance Management Applications

The following table describes the architecture for Financial Performance Management Applications products.

Product/Component	Client Tier	Web Server	Web Application Server (Java)	Web Application Server (Windows IIS)	Services Tier
Planning	X	X	X		
Financial Management	X	X		X	X
Financial Close Management		X	X		
Performance Scorecard		X	X		
Strategic Finance	X	X		X	X
Profitability and Cost Management		X	X		
Disclosure Management	X	X	X		X

Data Management

The following table describes the architecture for Data Management products.

Product/Component	Client Tier	Web Server	Web Application Server (Java)	Web Application Server (Windows IIS)	Services Tier
FDM	X	X		X	X
ERP Integrator		X	X		
Data Relationship Management		X		X	X

Component Architecture

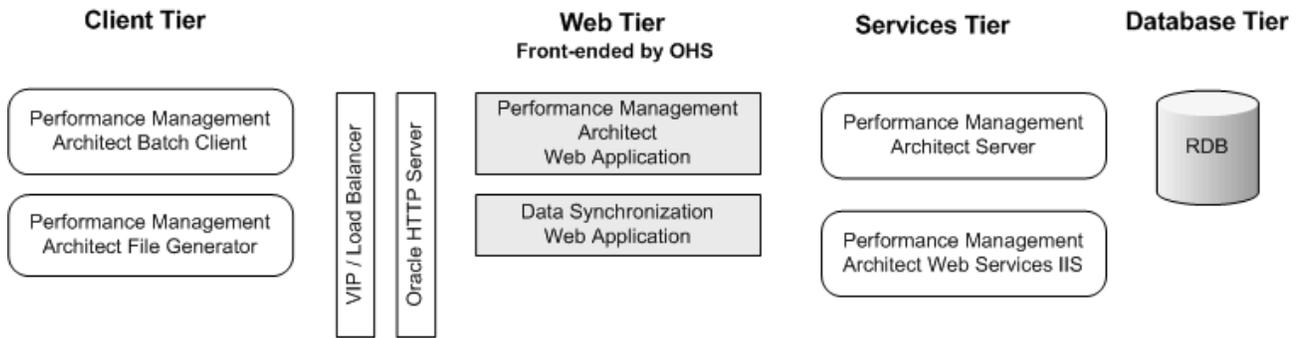
This section contains diagrams that illustrate the component architecture for the following EPM System products:

- [Performance Management Architect Components](#)
- [Essbase Components](#)
- [Reporting and Analysis Components](#)
- [Planning Components](#)
- [Financial Management Components](#)
- [Financial Close Management Components](#)
- [Disclosure Management Components](#)
- [Profitability and Cost Management Components](#)
- [FDM Components](#)

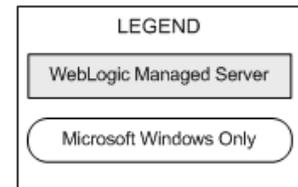
To obtain information about the communication between EPM System components, see *Communication Flows for 11.1.2.1 EPM System Components* on the White Papers Library page at [Oracle Enterprise Performance Management /Business Intelligence White Papers.](#))

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

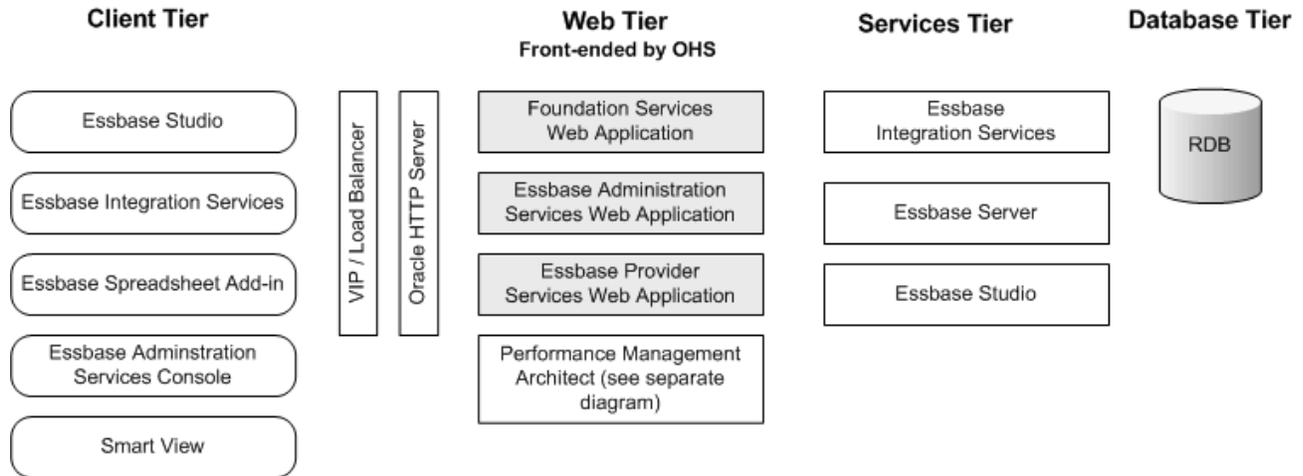
Performance Management Architect



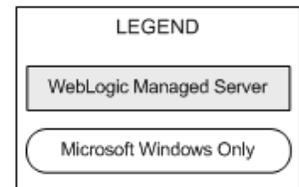
To obtain information about the communication between EPM System components, see "Communication Flows for 11.1.2.1 EPM System Components" on the White Papers Library page at <http://www.oracle.com/technetwork/middleware/bi-foundation/resource-library-090986.html>



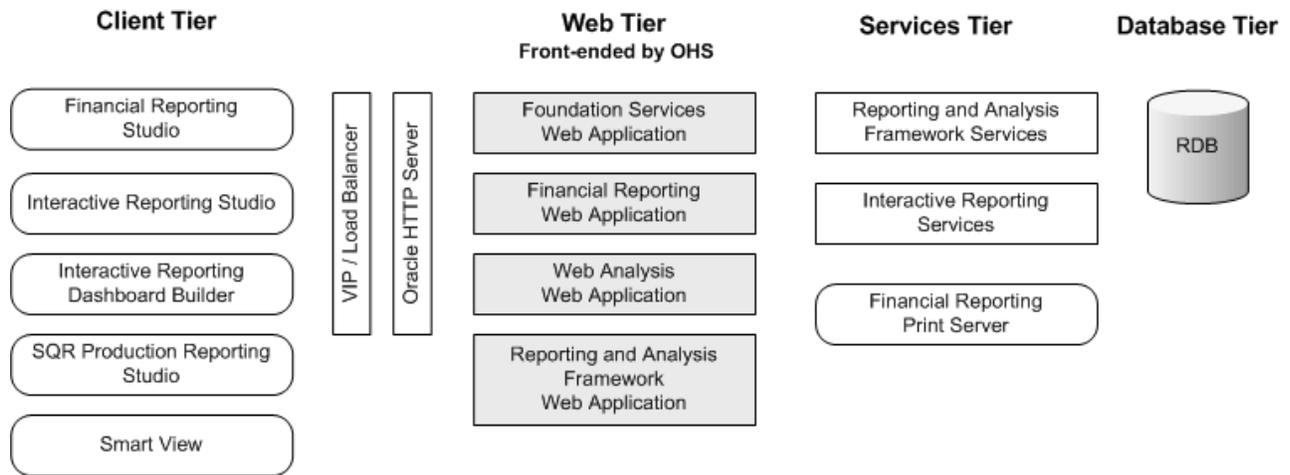
Essbase Components



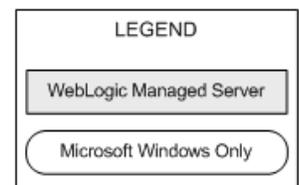
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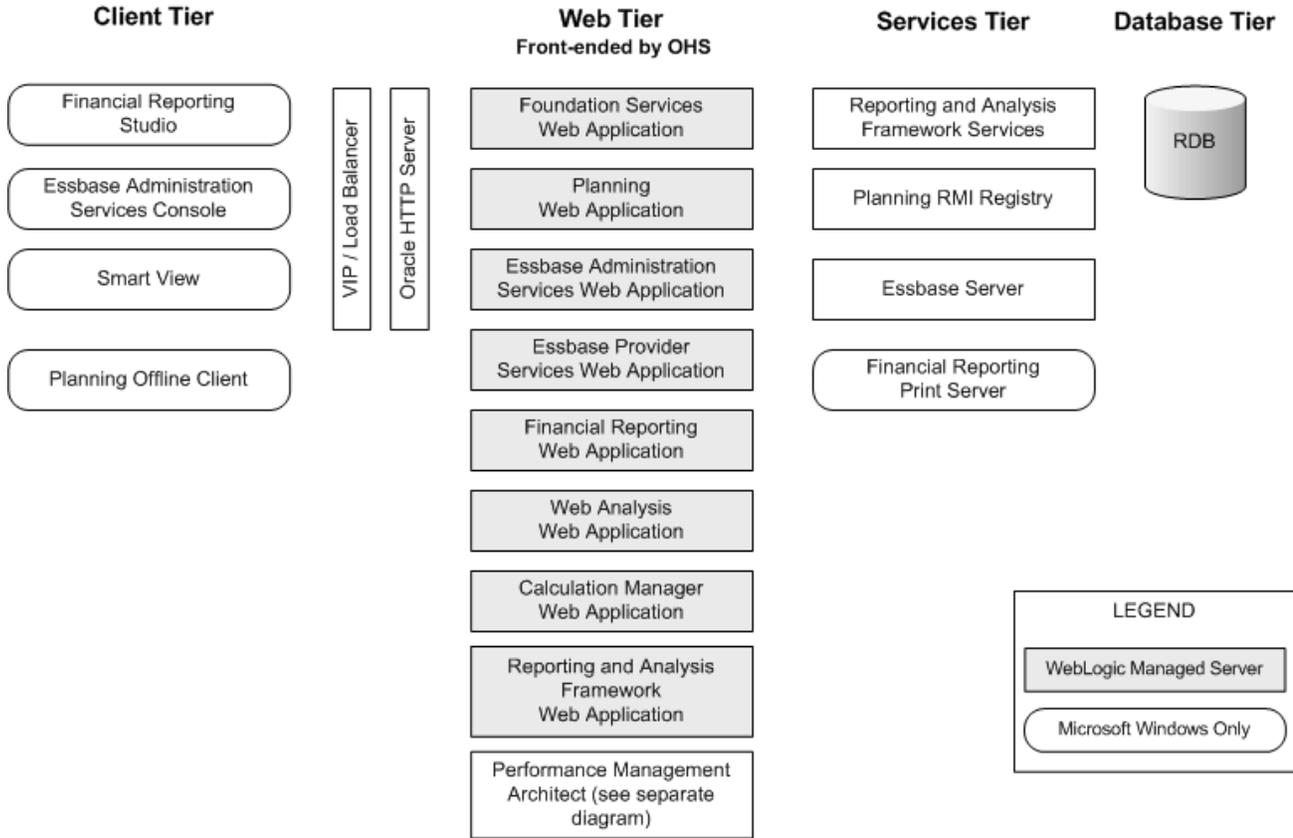
Reporting and Analysis Components



To obtain information about the communication between EPM System components, see "Communication Flows for 11.1.2.1 EPM System Components" on the White Papers Library page at <http://www.oracle.com/technetwork/middleware/bi-foundation/resource-library-090986.html>

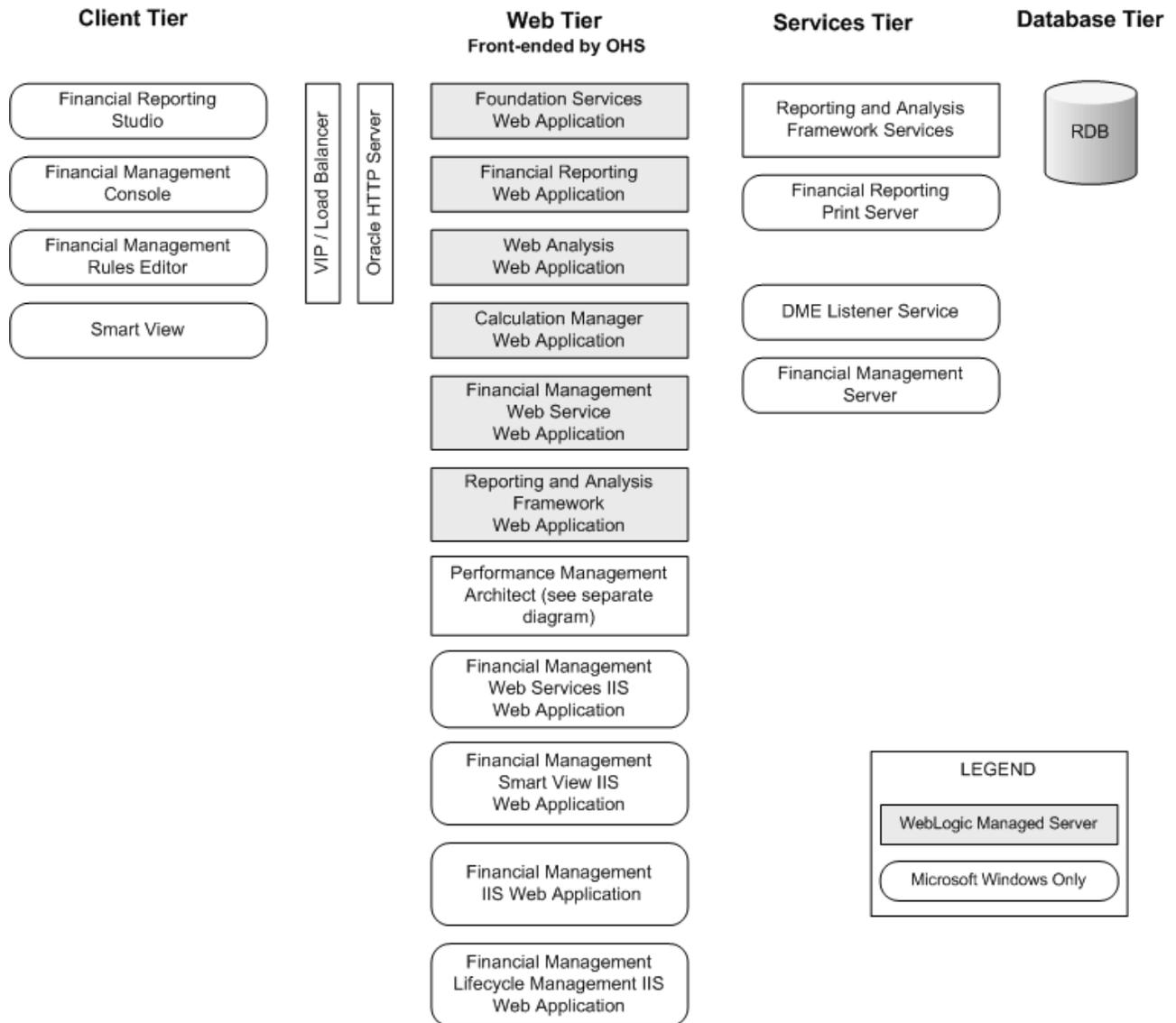


Planning Components



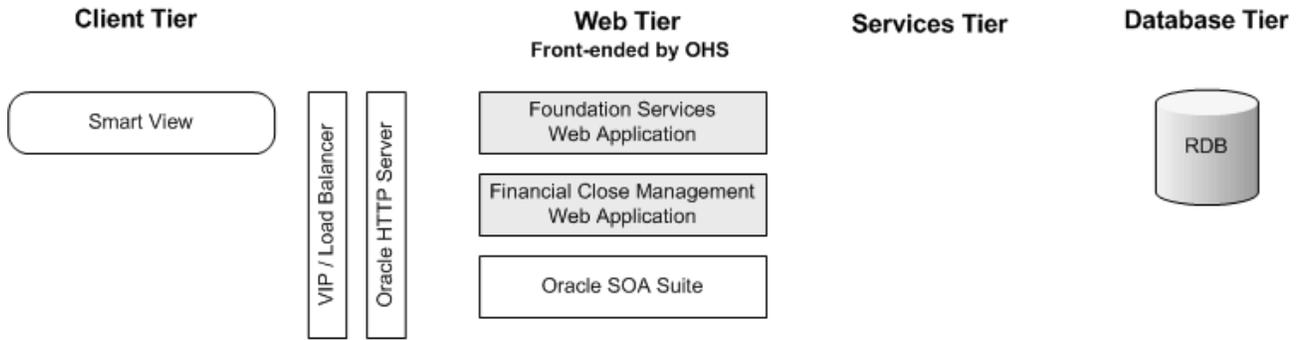
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Financial Management Components

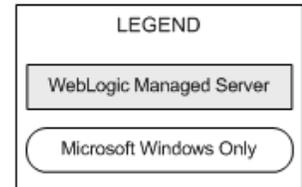


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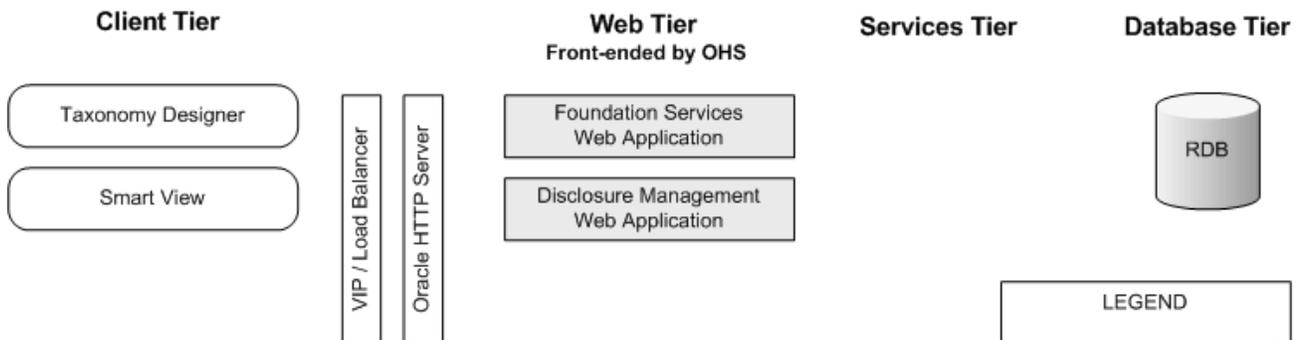
Financial Close Management Components



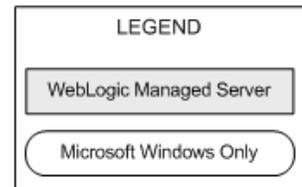
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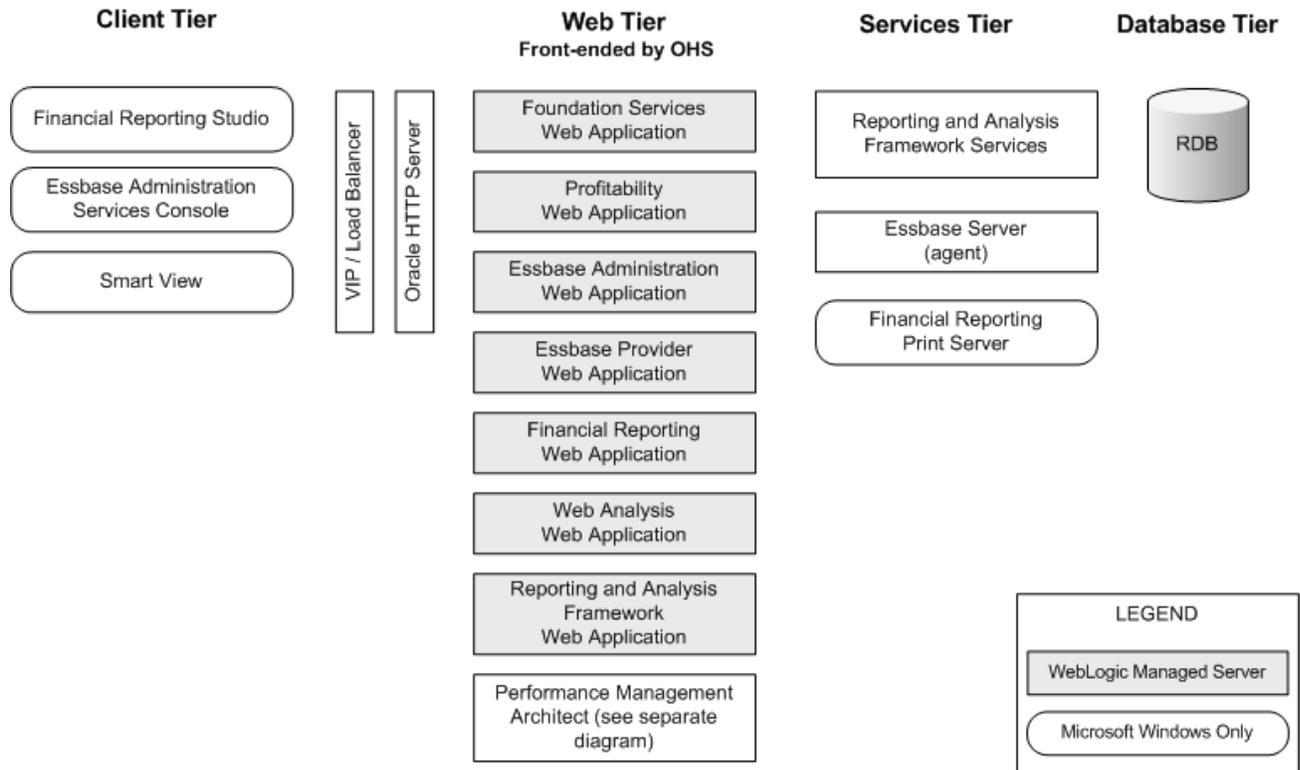
Disclosure Management Components



To obtain information about the communication between EPM System components, see "Communication Flows for 11.1.2.1 EPM System Components" on the White Papers Library page at <http://www.oracle.com/technetwork/middleware/bi-foundation/resource-library-090986.html>

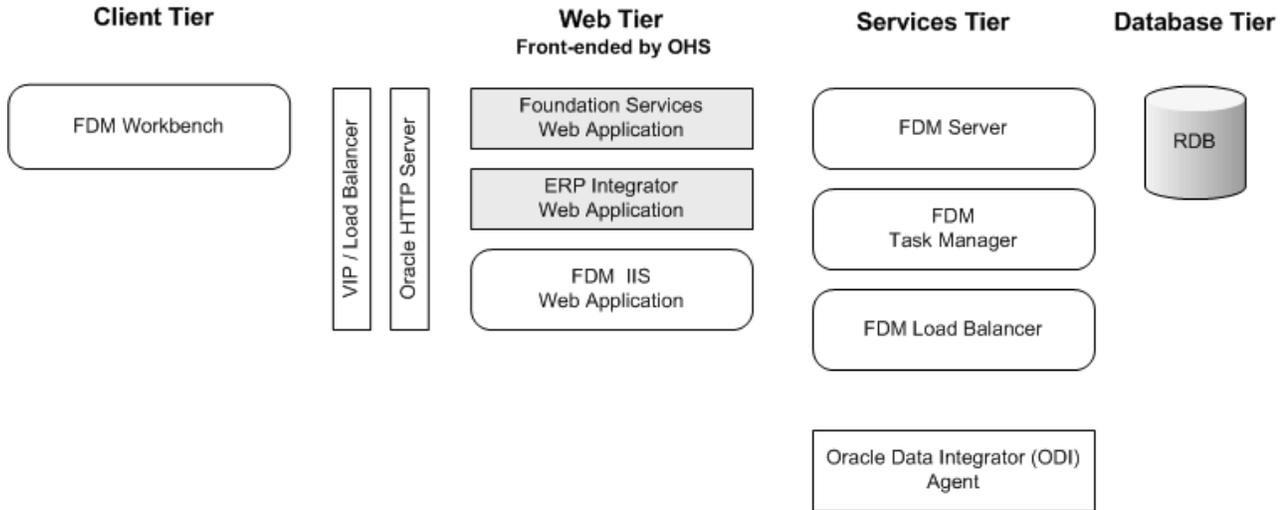


Profitability and Cost Management Components

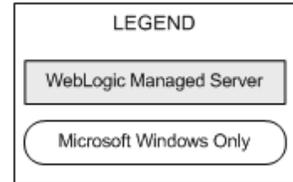


To obtain information about the communication between EPM System components, see "Communication Flows for 11.1.2.1 EPM System Components" on the White Papers Library page at <http://www.oracle.com/technetwork/middleware/bi-foundation/resource-library-090986.html>

FDM Components



To obtain information about the communication between EPM System components, see "Communication Flows for 11.1.2.1 EPM System Components" on the White Papers Library page at <http://www.oracle.com/technetwork/middleware/bi-foundation/resource-library-090986.html>



4

Planning Your Deployment

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The deployment recommendations described in this chapter are a best-practice starting point to determine your requirements. Each implementation has unique attributes; for example, types of business processes, types of usage, and application sizes. These attributes can drive adjustments to the deployment recommendations. Your company should determine whether your unique attributes will produce material differences from the deployment recommendations and which sizing recommendations will need to be adjusted. Consider employing Oracle's Technical Advisory Service (TAS) or a qualified partner to perform a Technical Requirements Analysis.

Sizing Considerations

Take the following information into consideration when sizing your infrastructure:

- User counts are approximations. Concurrent usage could be much higher or much lower based on the hardware recommended in the following sections depending on concurrent user actions, number of concurrent user per application, and number of applications.
- Number and size of servers per application could vary depending on designated use cases. More or less hardware might need to be dedicated to certain application functions depending on the scenario and concurrent usage.
- Use case scenarios, times between queries, volume of report generation, size of reports, and views being used could adversely affect these general guidelines.
- Adequate load and performance testing should be integrated into the testing phase of your implementation to validate your production environment hardware sizing and to assess the overall technical readiness prior to going live.
- The RDBMS server does not have to be dedicated and can reside on an existing server. Requirements for the RDBMS vary greatly. For example, in a Planning implementation it would vary greatly depending on use of Planning Line Item detail and the setup of data staging tables for use with the Planning application.

- All recommendations are based on application best practices. Requirements might vary if any or all applications are not built within best practice guidelines.
- Server CPU is a physical processor. Multi-core technology is supported and a dual core is counted as 2 CPUs but only with the understanding that performance is based on the manufacturer's claim and not by any testing done by Oracle.
- The deployment diagrams are samples for a production environment, and do not include development, quality assurance, or test environment recommendations.
- Guidelines do not include external overhead such as network latency, firewalls, or SSL incorporation.

Additional considerations:

- The Administration Services server size can vary greatly depending on the use of Oracle Hyperion Business Rules.
- Increased disk space for the database repository is required under certain circumstances. Some of the reasons may be:
 - You are using Financial Management. Since all Financial Management application data is stored in database tables, more disk space is needed for storage of Financial Management applications.
 - The database and Essbase are on the same server or share disk space.
 - You are using Financial Reporting or Interactive Reporting against the relational database.

Planning Considerations

When implementing Planning, it is best to create multiple environments. At a minimum there should be a development and production environment using totally different hardware. The best scenario is to have three environments (development, test, and production) with the test and production using identical hardware and software configuration.

Single-server environments (where all components are on a single server) are not a recommended configuration unless you are implementing a single Planning application with fewer than 10 total users.

Financial Management Considerations

When implementing Financial Management, it is best to create multiple environments. At a minimum, there should be a development and production environment using totally different hardware. The best scenario is to have three environments (development, test, and production) with the test and production using identical hardware and software configurations.

Creating a cluster should be considered when one or more of the following conditions are present:

- There is a large number of concurrent users.

- 24x7 operation is required.
- High availability is required.

Note: For detailed information about high availability solutions, see the *Oracle Hyperion Enterprise Performance Management System High Availability and Disaster Recovery Guide*.

Single-server environments (where all components are on a single server) are not a recommended configuration unless you are implementing a single Financial Management application with fewer than 10 total users.

Sample Deployment Scenarios

These diagrams depict typical scenarios for a Planning, Financial Management, and Essbase deployment for 100, 500, and 1000 users with 35% concurrency.

- [Essbase 100 Users](#)
- [Essbase 500 Users](#)
- [Essbase 1000 Users](#)
- [Planning 100 Users](#)
- [Planning 500 Users](#)
- [Planning 1000 Users](#)
- [Financial Management 100 Users](#)
- [Financial Management 500 Users](#)
- [Financial Management 1000 Users](#)
- [“Financial Close Management Deployment Diagram for 100 Users” on page 39](#)
- [Financial Close Management 500 Users](#)

Note: If you print these diagrams, clear the “Print Color as Black” setting in the Adobe Acrobat Print dialog box. For optimum viewing of these diagrams in PDF format, try increasing the view magnification to 120%.

Essbase Deployment Diagram for 100 Users

Essbase 100 users (35 active)

Assumptions:

35 active users
1 Essbase Application



Client Tier

- Web Browser
- Smart View for Office***
- Administration Services Console***
- Essbase Studio Console***
- Essbase Integration Services Console***
- Essbase Excel Add-In***



HTTP Web and J2EE Servers

Recommended Sizing (minimum)

Windows/Linux – 2 x 3 GHz+ 16 GB RAM
UNIX – 2 x 2.15 GHz+ 16 GB RAM

32 GB Disk (SAN or Local)

Installed Products:

Oracle HTTP Server
WebLogic Server

Web and Web Application Tier

Foundation Services Managed Server (includes EPM Workspace and Shared Services Web Applications)
Provider Services Web Application
Administration Services Web Application
Performance Management Architect Web Application
Performance Management Architect Data Synchronizer Web Application



Essbase

Recommended Sizing (minimum)

Windows/Linux – 4 x 3 GHz+ 8 GB RAM
UNIX – 4 x 2.15 GHz+ 8 GB RAM

32 GB Disk (SAN or Local)

Installed Components:

Essbase Server
Essbase Studio Server
Essbase Integration Server



Other Services

Recommended Sizing (minimum)

Windows – 2 x 3 GHz+ 8 GB RAM

32 GB Disk (SAN or Local)

Installed Components:

Performance Management Architect Web Services (IIS) ** ***
Performance Management Architect Server ***

Services\Daemon Tier



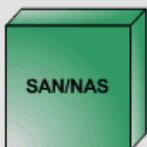
RDBMS Server

Recommended Sizing (minimum)

Windows/Linux – 2 x 3 GHz+ 8 GB RAM
UNIX – 2 x 2.15 GHz+ 16 GB RAM

Installed Products:

RDBMS



Database Tier

100 GB RDBMS Storage
200 GB Essbase Storage

Separate LUNs for RDBMS and Essbase cubes recommended

* machine sizing refers to Core
** single instance only
*** Windows only

Essbase Deployment Diagram for 500 Users

Essbase 500 users (175 active)

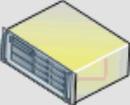
Assumptions:

175 active users
1 Essbase Application



Client Tier

- Web Browser
- Smart View for Office***
- Administration Services Console***
- Essbase Studio Console***
- Essbase Integration Services Console***
- Essbase Excel Add-In***



HTTP Web and J2EE Servers

Recommended Sizing (minimum)

Windows/Linux – 4 x 3 GHz+ 16 GB RAM
UNIX – 4 x 2.15 GHz+ 16 GB RAM

32 GB Disk (SAN or Local)

Installed Products:

Oracle HTTP Server
WebLogic Server

Web and Web Application Tier

Foundation Services Managed Server (includes EPM Workspace and Shared Services Web Applications)
Provider Services Web Application
Administration Services Web Application
Performance Management Architect Web Application
Performance Management Architect Data Synchronizer Web Application



Essbase

Recommended Sizing (minimum)

Windows/Linux – 4 x 3 GHz+ 16 GB RAM
UNIX – 4 x 2.15 GHz+ 16 GB RAM

32 GB Disk (SAN or Local)

Installed Components:

Essbase Server
Essbase Studio Server
Essbase Integration Server



Other Services

Recommended Sizing (minimum)

Windows – 4 x 3 GHz+ 16 GB RAM

32 GB Disk (SAN or Local)

Installed Components:

Performance Management Architect Web Services (IIS) ** ***
Performance Management Architect Server ***

Services\Daemon Tier



RDBMS Server

Recommended Sizing (minimum)

Windows/Linux – 4 x 3 GHz+ 8 GB RAM
UNIX – 4 x 2.15 GHz+ 16 GB RAM



Database Tier

100 GB RDBMS Storage
200 GB Essbase Storage

Separate LUNs for RDBMS and Essbase cubes recommended

Installed Products:

RDBMS

* machine sizing refers to Core
** single instance only
*** Windows only

Essbase Deployment Diagram for 1000 Users

Essbase 1000 users (350 active)

Assumptions:
350 active users
1 Essbase Application



Web Browser
Smart View for Office ***
Administration Services Console***
Essbase Studio Console***
Essbase Integration Services Console***
Essbase Excel Add-In***

Client Tier

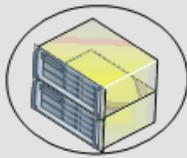


HTTP Web Server (load balanced)

Recommended Sizing (minimum per server)
Windows/Linux – 2 x 3 GHz+ 8 GB RAM
UNIX – 2 x 2.15 GHz+ 8 GB RAM
32 GB Disk (SAN or Local)

Installed Components:
Oracle HTTP Server

Web Tier



J2EE Servers (Clustered)

Recommended Sizing (minimum)
Windows/Linux – 8 x 3 GHz+ 16 GB RAM
UNIX – 8 x 2.15 GHz+ 16 GB RAM
32 GB Disk (SAN or Local)

Installed Components:
WebLogic Server
Foundation Services Managed Server (includes EPM Workspace and Shared Services Web Applications)
Provider Services Web Application
Administration Services Web Application
Performance Management Architect Web Application
Performance Management Architect Data Synchronizer Web Application

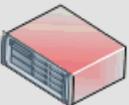
Web Application Tier



Essbase

Recommended Sizing (minimum)
Windows/Linux – 8 x 3 GHz+ 32 GB RAM
UNIX – 8 x 2.15 GHz+ 32 GB RAM
32 GB Disk (SAN or Local)

Installed Components:
Essbase Server
Essbase Studio Server
Essbase Integration Server



Other Services

Recommended Sizing (minimum)
Windows – 4 x 3 GHz+ 16 GB RAM
32 GB Disk (SAN or Local)

Installed Components:
Performance Management Architect Web Services (IIS) ** ***
Performance Management Architect Server ***

Services/Daemon Tier



RDBMS Server

Recommended Sizing (minimum)
Windows/Linux – 4 x 3 GHz+ 8 GB RAM
UNIX – 4 x 2.15 GHz+ 16 GB RAM

Installed Products:
RDBMS



100 GB RDBMS Storage
200 GB Essbase Storage

Separate LUNs for RDBMS and Essbase cubes recommended

Database Tier

* machine sizing refers to Core
** single instance only
*** Windows only

Planning Deployment Diagram for 100 Users

Planning 100 users (35 active)



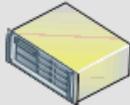
Web Browser
Smart View for Office ***
Administration Services Console***
Financial Reporting Studio Client***
Performance Management Architect File Generator***
Performance Management Architect Batch Client***

Client Tier

Assumptions:
35 active users
1 Planning Application

Planning includes Workforce Planning, Capital Expense Planning, and Public Sector Budgeting.

HTTP Web and J2EE Servers



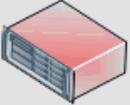
Recommended Sizing (minimum)
Windows/Linux – 4 x 3 GHz+ 8 GB RAM
UNIX – 4 x 2.15 GHz+ 8 GB RAM
32 GB Disk (SAN or Local)

Installed Components:
Oracle HTTP Server
WebLogic Server

Web and Web Application Tier

Foundation Services Managed Server (includes EPM Workspace and Shared Services Web Applications)
Performance Management Architect Web Application
Performance Management Architect Data Synchronizer Web Application
Calculation Manager Web Application
Provider Services Web Application
Administration Services Web Application
Reporting and Analysis Framework Web Application
Financial Reporting Web Application
Web Analysis Web Application
Planning Web Application
ERP Integrator Web Application

Essbase



Recommended Sizing (minimum)
Windows/Linux – 4 x 3 GHz+ 16 GB RAM
UNIX – 4 x 2.15 GHz+ 16 GB RAM
32 GB Disk (SAN or Local)

Installed Components:
Essbase Server

Services\Daemon Tier

Other Services



Recommended Sizing (minimum)
Windows – 2 x 3 GHz+ 8 GB RAM
32 GB Disk (SAN or Local)

Installed Components:
Performance Management Architect Web Services (IIS) ** ***
Performance Management Architect Server ***
Reporting and Analysis Framework Services
Financial Reporting Print Server Service *** (Ghostscript or Adobe)
Oracle Data Integrator (ETL)

RDBMS Server



Recommended Sizing (minimum)
Windows/Linux – 2 x 3 GHz+ 8 GB RAM
UNIX – 2 x 2.15 GHz+ 16 GB RAM

Installed Products:
RDBMS



Database Tier

100 GB RDBMS Storage
200 GB Essbase Storage

Separate LUNs for RDBMS and Essbase cubes recommended

* machine sizing refers to Core
** single instance only
*** Windows only

Planning Deployment Diagram for 500 Users

Planning 500 users (175 active)



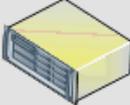
Client Tier

- Web Browser
- Smart View for Office ***
- Administration Services Console***
- Financial Reporting Studio Client***
- Performance Management Architect File Generator***
- Performance Management Architect Batch Client***

Assumptions:

175 active users
1 Planning Application

Planning includes Workforce Planning, Capital Expense Planning, and Public Sector Budgeting.



HTTP Web and J2EE Servers

Recommended Sizing (minimum)

Windows – 4 x 3 GHz+ 16 GB RAM
UNIX – 4 x 2.15 GHz+ 16 GB RAM
32 GB Disk (SAN or Local)

Installed Components:

Oracle HTTP Server
WebLogic Server

Web and Web Application Tier

Foundation Services Managed Server (includes EPM Workspace and Shared Services Web Applications)
Performance Management Architect Web Application
Performance Management Architect Data Synchronizer Web Application
Calculation Manager Web Application
Provider Services Web Application
Administration Services Web Application
Reporting and Analysis Framework Web Application
Financial Reporting Web Application
Web Analysis Web Application
Planning Web Application
ERP Integrator Web Application



Essbase

Recommended Sizing (minimum)

Windows/Linux – 4 x 3 GHz+ 8 GB RAM
UNIX – 4 x 2.15 GHz+ 16 GB RAM
32 GB Disk (SAN or Local)

Installed Components:

Essbase Server



Other Services

Recommended Sizing (minimum)

Windows – 4 x 3 GHz+ 16 GB RAM
32 GB Disk (SAN or Local)

Installed Components:

Performance Management Architect Web Services (IIS) ** ***
Performance Management Architect Server ***
Reporting and Analysis Framework Services
Financial Reporting Print Server Service *** (Ghostscript or Adobe)
Oracle Data Integrator (ETL)

Services\Daemon Tier



RDBMS Server

Recommended Sizing (minimum)

Windows/Linux – 4 x 3 GHz+ 8 GB RAM
UNIX – 4 x 2.15 GHz+ 16 GB RAM

Installed Products:

RDBMS



Database Tier

100 GB RDBMS Storage
200 GB Essbase Storage

Separate LUNs for RDBMS and Essbase cubes recommended

* machine sizing refers to core
** single instance only
*** Windows only

Planning Deployment Diagram for 1000 Users

Planning 1000 users (350 active)



Client Tier

- Web Browser
- Smart View for Office ***
- Administration Services Console***
- Financial Reporting Studio Client***
- Performance Management Architect File Generator***
- Performance Management Architect Batch Client***

Assumptions:
350 active users
1 Planning Application

Planning includes Workforce Planning, Capital Expense Planning, and Public Sector Budgeting.

HTTP Web Server (load balanced)



Recommended Sizing (minimum per server)

Windows/Linux – 2 x 3 GHz+ 8 GB RAM
UNIX – 2 x 2.15 GHz+ 8 GB RAM

32 GB Disk (SAN or Local)

Installed Components:
Oracle HTTP Server

Web Tier

J2EE Servers (Clustered)



Recommended Sizing (minimum per server)

Windows/Linux – 4 x 3 GHz+ 16 GB RAM
UNIX – 4 x 2.15 GHz+ 16 GB RAM

32 GB Disk (SAN or Local)

Installed Components:

WebLogic Server

Foundation Services Managed Server (includes EPM Workspace and Shared Services Web Applications)

Performance Management Architect Web Application

Performance Management Architect Data Synchronizer Web Application

Calculation Manager Web Application

Provider Services Web Application

Administration Services Web Application

Reporting and Analysis Framework Web Application

Financial Reporting Web Application

Web Analysis Web Application

Planning Web Application

ERP Integrator Web Application

Web Application Tier

Essbase



Recommended Sizing (minimum)

Windows/Linux – 8 x 3 GHz+ 32 GB RAM
UNIX – 8 x 2.15 GHz+ 32 GB RAM

32 GB Disk (SAN or Local)

Installed Components:
Essbase Server

Services\Daemon Tier

Reports



Recommended Sizing (minimum)

Windows/Linux – 4 x 3 GHz+ 16 GB RAM
UNIX – 4 x 2.15 GHz+ 16 GB RAM

32 GB Disk (SAN or Local)

Installed Components:
Reporting and Analysis Framework Services

Other Services



Recommended Sizing (minimum)

Windows – 4 x 3 GHz+ 16 GB RAM

32 GB Disk (SAN or Local)

Installed Components:
Performance Management Architect Web Services (IIS)** ***
Performance Management Architect Server ***
Financial Reporting Print Server Service*** (Ghostscript or Adobe)
Oracle Data Integrator (ETL)

RDBMS Server

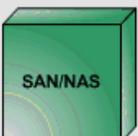


Recommended Sizing (minimum)

Windows/Linux – 4 x 3 GHz+ 16 GB RAM
UNIX – 4 x 2.15 GHz+ 16 GB RAM

Installed Components:
RDBMS

SAN/NAS



100 GB RDBMS Storage
200 GB Essbase Storage

Separate LUNs for RDBMS and Essbase cubes recommended

Database Tier

* machine sizing refers to Core
** single instance only
*** Windows only

Financial Management Deployment Diagram for 100 Users

Financial Management with FDM 100 users (35 active)

Client Tier



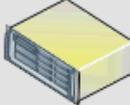
- Web Browser
- Smart View for Office ***
- Financial Reporting Studio Client ***
- Performance Management Architect File Generator***
- Performance Management Architect Batch Client***
- Financial Management Console***
- FDM Workbench Client ***

Assumptions:

- 35 active users
- 1 Financial Management Application

Web and Web Application Tier***

HTTP Web and J2EE Server



Recommended Sizing (Minimum)

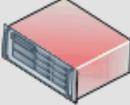
Windows – 2 x 3 GHz+ 8 GB RAM
32 GB Disk (Local)

Installed Components:

- Oracle HTTP Server
- WebLogic Server
- Foundation Services Managed Server (includes EPM Workspace and Shared Services Web Applications)
- Performance Management Architect Web Application
- Performance Management Architect Data Synchronizer Web Application
- Calculation Manager Web Application
- Reporting and Analysis Framework Web Application
- Financial Reporting Web Application
- Web Analysis Web Application
- Financial Management Web Services Web Application
- Financial Management Web Services IIS Web Application
- Financial Management Smart View IIS Web Application
- Financial Management IIS Web Application
- Financial Management LCM IIS Web Application
- Disclosure Management Web Application
- FDM Web Application (IIS)
- ERP Integrator Web Application

Services\Daemon Tier***

Financial Management and FDM



Recommended Sizing (Minimum)

Windows – 2 x 3 GHz+ 8 GB RAM
64 GB Disk (Local)

Installed Components:

- Financial Management Server
- FDM Server
- FDM Task Manager
- FDM Load Balancer

Other Services



Recommended Sizing (Minimum)

Windows – 2 x 3 GHz+ 8 GB RAM
32 GB Disk (Local)

Installed Components:

- Performance Management Architect Web Services (IIS) ***
- Performance Management Architect Server ***
- Financial Reporting Print Server Service (Ghostscript or Adobe)
- Reporting and Analysis Framework Services
- Oracle Data Integrator (ETL)

Database Tier

RDBMS Server



Recommended Sizing (Minimum)

Windows/Linux – 2 x 3 GHz+ 8 GB RAM
UNIX – 2 x 1.2 GHz+ 8 GB RAM

Installed Components:

- RDBMS



100 GB RDBMS Storage

* machine sizing refers to Core
** single instance only
*** Windows only

Financial Management Deployment Diagram for 500 Users

Financial Management with FDM 500 users (175 active)

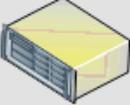


Client Tier

- Web Browser
- Smart View for Office ***
- Financial Reporting Studio Client ***
- Performance Management Architect File Generator***
- Performance Management Architect Batch Client***
- Financial Management Console***
- FDM Workbench Client ***

Assumptions:

- 175 active users
- 1 Financial Management Application



HTTP Web and J2EE Server

Recommended Sizing (Minimum)

Windows – 4 x 3 GHz+ 16 GB RAM
32 GB Disk (Local)

Installed Components:

- Oracle HTTP Server
- WebLogic Server

Web and Web Application Tier ***

- Foundation Services Managed Server (includes EPM Workspace and Shared Services Web Applications)
- Performance Management Architect Web Application
- Performance Management Architect Data Synchronizer Web Application
- Calculation Manager Web Application
- Reporting and Analysis Framework Web Application
- Financial Reporting Web Application
- Web Analysis Web Application
- Financial Management Web Services Web Application
- Financial Management Web Services IIS Web Application
- Financial Management Smart View IIS Web Application
- Financial Management IIS Web Application
- Financial Management LCM IIS Web Application
- Disclosure Management Web Application
- FDM Web Application (IIS)
- ERP Integrator Web Application



Financial Management

Recommended Sizing (Minimum)

Windows – 8 x 3 GHz+ 16 GB RAM
64 GB Disk (Local)

Installed Components:

- Financial Management Server
- FDM Server
- FDM Task Manager
- FDM Load Balancer

Services\Daemon Tier***



Other Services

Recommended Sizing (Minimum)

Windows – 2 x 3 GHz+ 8 GB RAM
32 GB Disk (Local)

Installed Components:

- Performance Management Architect Web Services (IIS) ***
- Performance Management Architect Server ***
- Financial Reporting Print Server Service (Ghostscript or Adobe)
- Oracle Data Integrator (ETL)
- Reporting and Analysis Framework Services



RDBMS Server

Recommended Sizing (Minimum)

Windows/Linux – 4 x 3 GHz+ 16 GB RAM
UNIX – 4 x 1.2 GHz+ 16 GB RAM

Installed Products:

- RDBMS



Database Tier

100 GB RDBMS Storage

* machine sizing refers to Core
** single instance only
*** Windows only

Financial Management Deployment Diagram for 1000 Users

Financial Management with FDM 1000 users (350 active)

Assumptions:
350 active users
1 Financial Management Application



Client Tier

- Web Browser
- Smart View for Office ***
- Financial Reporting Studio Client ***
- Performance Management Architect File Generator***
- Performance Management Architect Batch Client***
- Financial Management Console***
- FDM Workbench Client ***



HTTP Web Server (load balanced)

Recommended Sizing (minimum per server)

Windows – 2 x 3 GHz+ 8 GB RAM
32 GB Disk (Local)

Installed Components:

Oracle HTTP Server

Web Tier***



J2EE Servers (Clustered)

Recommended Sizing (minimum per server)

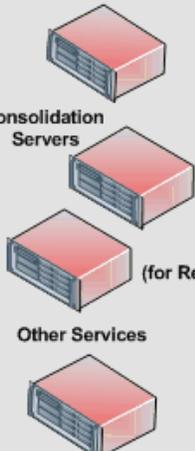
Windows – 4 x 3 GHz+ 16 GB RAM
32 GB Disk (Local)

Installed Components:

WebLogic Server

Foundation Services Managed Server (includes EPM Workspace and Shared Services Web Applications)
Performance Management Architect Web Application
Performance Management Architect Data Synchronizer Web Application
Calculation Manager Web Application
Reporting and Analysis Framework Web Application
Financial Reporting Web Application
Web Analysis Web Application
Financial Management Web Services Web Application
Financial Management Web Services IIS Web Application
Financial Management Smart View IIS Web Application
Financial Management IIS Web Application
Financial Management LCM IIS Web Application
Disclosure Management Web Application
FDM Web Application (IIS)
ERP Integrator Web Application

Web Application Tier***



Financial Management With FDM

Recommended Sizing (minimum)

Windows – 8 x 3 GHz+ 16 GB RAM
64 GB Disk (Local)

Consolidation Servers

Recommended Sizing (minimum)

Windows – 4 x 3 GHz+ 8 GB RAM
32 GB Disk (Local)

Other Services

Recommended Sizing (minimum)

Windows – 2 x 3 GHz+ 8 GB RAM
32 GB Disk (Local)

Installed Components:

Financial Management Server
FDM Server
FDM Task Manager
FDM Load Balancer

Services\Daemon Tier***

Installed Components:

Financial Management Server

Performance Management Architect Web Services (IIS) ** ***
Performance Management Architect Server ***
Financial Reporting Print Server Service *** (Ghostscript or Adobe)
Oracle Data Integrator (ETL)
Reporting and Analysis Framework Services



RDBMS Server

Recommended Sizing (minimum)

Windows/Linux – 4 x 3 GHz+ 16 GB RAM
UNIX - 4 x 1.2 GHz+ 16 GB RAM

Installed Components:

RDBMS



Database Tier

100 GB RDBMS Storage

* machine sizing refers to Core
** single instance only
*** Windows only

Financial Close Management Deployment Diagram for 100 Users

Financial Close Management 100 users (35 active)

Client Tier



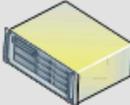
Web Browser
Smart View for Office ***

Assumptions:

35 active users
1 Financial Close Management Application

Web and Web Application Tier

HTTP Web and J2EE Server



Recommended Sizing (Minimum)
Windows/Linux – 2 x 3 GHz+ 8 GB RAM
32 GB Disk (Local)

Installed Components:
Oracle HTTP Server
WebLogic Server
Foundation Services Managed Server (includes EPM Workspace and Shared Services Web Applications)
Financial Close Web Application
SOA Server (Oracle BPEL Process Manager, Oracle Web Services Manager (OWSM))

Database Tier

RDBMS Server



Recommended Sizing (Minimum)
Windows/Linux – 2 x 3 GHz+ 8 GB RAM
UNIX – 2 x 1.2 GHz+ 8 GB RAM

Installed Components:
RDBMS



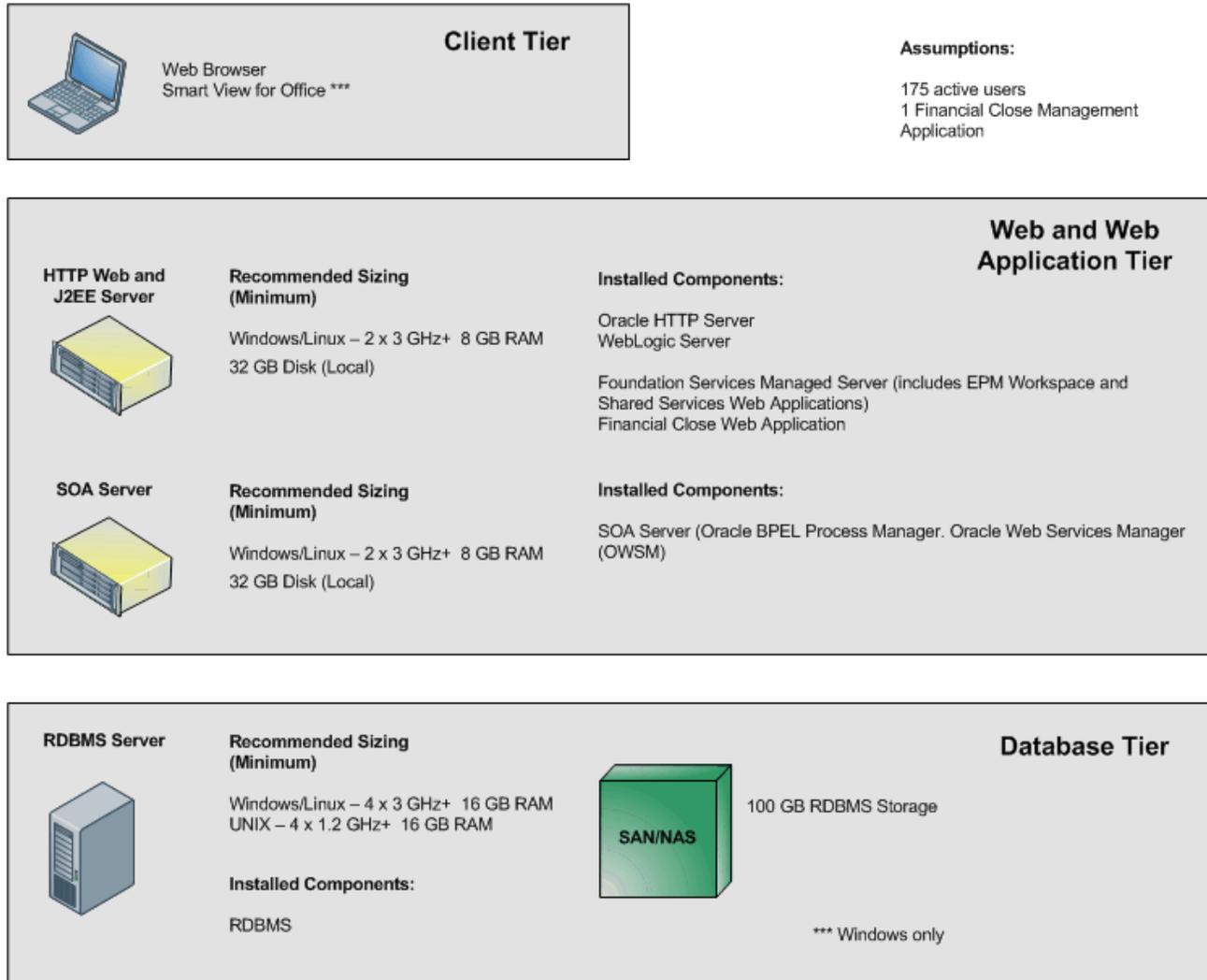
100 GB RDBMS Storage

*** Windows only

Note: If you are implementing Financial Close Management with other EPM System products, you must take their sizing needs into consideration.

Financial Close Management Deployment Diagram for 500 Users

Financial Close Management 500 users (175 active)



Note: If you are implementing Financial Close Management with other EPM System products, you must take their sizing needs into consideration.

Disk Space and RAM

This section describes client and server disk space and RAM requirements for EPM System products.

Client Disk Space and RAM

This section does not apply to Web browser clients.

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.

The following table describes the required disk space for EPM System client components.

Product Family	Component	Disk Space (Minimum) ¹	Notes
Oracle Hyperion Enterprise Performance Management System Installer	EPM System Installer and all EPM System product assemblies	16 GB	After installation, the installation files and assemblies can be removed.
Foundation Services	Common client components	400 MB	
	Oracle Hyperion Smart View for Office for Office	100 MB	
	Performance Management Architect	20 MB	File generator and batch client components only
Essbase	Essbase Runtime Client	150 MB	
	Essbase Administration Services Console	300 MB	
	Essbase Integration Services Console	90 MB	
	Essbase Studio Console	80 MB	
Reporting and Analysis	Oracle Hyperion Financial Reporting Studio	400 MB	
	Oracle Hyperion Interactive Reporting Studio	700 MB	
	Oracle Hyperion Dashboard Development Services	190 MB	
	Oracle Hyperion SQR Production Reporting Studio	90 MB	
	Oracle Hyperion SQR Production Reporting Activator	30 MB	
	Production Reporting Remote	10 MB	
	Production Reporting Viewer	40 MB	
	Oracle Hyperion Web Analysis Studio	40 MB	

Product Family	Component	Disk Space (Minimum) ¹	Notes
Financial Performance Management Applications	Offline Planning	280 MB	
	Financial Management Client	100 MB	
	Strategic Finance Client	700 MB	
	Oracle Hyperion Strategic Finance Reader	700 MB	
	Disclosure Management	300 MB	
Oracle's Data Management	FDM Workbench	200 MB	

¹Disk space does not include the common client components installed on the machine with 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 EPM System components.

Component	Disk Space (Minimum)	RAM (Minimum)
WebLogic Server (includes WebLogic, JDK, utils, JRockit, and Modules)	1.4 GB	500 MB
Oracle HTTP Server	1.2 GB	1 GB
Common Oracle libraries	900 MB	NA
Shared Services	800 MB ¹	1.5 GB
Performance Management Architect	125 MB	1 GB for Dimension Server 512 MB each for Web Tier and Data Synchronizer
Calculation Manager	45 MB	256 MB
Essbase Server	2 GB	1 GB
Application Programming Interface	40 MB	256 MB
Administration Services	1 GB ²	32 MB multiplied by the number of concurrent Administration Server users For example, 32 MB * 10 users = 320 MB
Essbase Integration Server	340 MB	256 MB
Provider Services	680 MB	340 MB

Component	Disk Space (Minimum)	RAM (Minimum)
Essbase Studio Server	120 MB	256 MB
Reporting and Analysis Framework	2 GB For services: 400 MB For importing files: 2 GB	1 GB For services: 1 GB
Financial Reporting	400 MB	1 GB
Interactive Reporting	1 GB	1 GB
Production Reporting	400 MB	256 MB
Web Analysis	2 GB	1 GB
Financial Management Server	64 GB (10 GB available)	4 GB
Database Server for Financial Management	24 GB	4 GB
Financial Close Management ³	8 GB	4GB
Planning	8 GB (10 GB available)	2 GB
Performance Scorecard	4 GB recommended	1 GB ⁴
Strategic Finance Server	700 MB ⁵	2 GB
Profitability and Cost Management	8 GB	2 GB
Disclosure Management	8 GB	4 GB
FDM Database Server	<ul style="list-style-type: none"> ● Dependent on size of the FDM application ● Multiple HDDs to spread processing 	1 GB per 75 concurrent users (2 GB minimum)
FDM folder structure	Dependent on size of the FDM application	
FDM Application Server	400 MB	2 GB per 75 concurrent users
FDM Web Server	400 MB	2 GB
ERP Integrator	300 MB	2 GB
Data Relationship Management Database Server	15 GB	2 GB
Data Relationship Management Application Server	500 MB	2 GB

¹This 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.

²Allow extra disk space for data files and outline files that are copied to Administration Server during data loading and outline editing, respectively.

³Requirements for Oracle SOA Suite are not included.

⁴1 GB includes Performance Scorecard and Alerter servers.

⁵Sufficient storage should be included to contain the entities, their backup archives, administrative and transaction files, and user background task logs, such as consolidation reports.

Note: For data storage and binary installation, Essbase supports the use of a disk array device. For details, see the *Oracle Hyperion Enterprise Performance Management System High Availability and Disaster Recovery Guide*.

5

Installation Planning Checklist

In This Chapter

Product-Specific Installation Planning51

The following table provides a checklist to use to prepare for installing EPM System products. Oracle recommends that you review the checklist with your consultant at least one week before installation. Completing the checklist before installation helps ensure a smoother, faster installation.

Table 3 Pre-installation Planning Checklist

Task	Comments	Check When Completed
Preparing the work area		
Prepare a work area for consultants who are assisting with the installation.	<ul style="list-style-type: none"> ● Internet access—a direct connection outside the firewall ● Work area and computer (ideally located where the servers on which you are installing EPM System products are located), with network access ● Telephone 	
Ensure that you can access the Oracle® E-Delivery (http://edelivery.oracle.com/) site.		
Obtaining third-party licenses		
Obtain required third-party license keys.	<p>Some third-party products require license keys or license files. Requesting and receiving a license key can require several days.</p> <p>For Web application servers, consider which type of license works best for your organization. For example, you might not need a license for the highest level of functionality; a license for a lower level of functionality might meet your needs.</p>	
Preparing the software		

Task	Comments	Check When Completed
Download the EPM System Installer, and the required product installation assemblies from the media packs for the products that you purchased.	<p>Download from the Oracle® E-Delivery (http://edelivery.oracle.com/) site.</p> <p>Review the Media Pack Readme on Oracle® E-Delivery to identify the products that are required and optional for use with your products.</p> <p>Tip: Oracle recommends that you download files to a shared drive.</p> <p>See the “Preparing for Installation” chapter of the <i>Oracle Hyperion Enterprise Performance Management System Installation and Configuration Guide</i> for information about how to unzip and organize the files.</p>	
Ensure that the products meet EPM System product release compatibility requirements.	See the Release Compatibility tab in the <i>Oracle Hyperion Enterprise Performance Management System Certification Matrix</i> (http://www.oracle.com/technology/software/products/ias/files/fusion_certification.html listed in the Oracle Business Intelligence product area.)	
Install all third-party components that are required by EPM System products and validate that all third-party product versions meet system requirements.	<p>See the <i>Oracle Hyperion Enterprise Performance Management System Certification Matrix</i> (http://www.oracle.com/technology/software/products/ias/files/fusion_certification.html listed in the Oracle Business Intelligence product area.)</p> <p>Ensure that you have obtained all licenses that are required by third-party software.</p>	
Gathering required documentation		
Download the EPM System installation and product documentation for the products that you purchased.	<p>In addition to this guide, download the following files from the Oracle® E-Delivery (http://edelivery.oracle.com/) site or from the Oracle Documentation Library (http://www.oracle.com/technology/documentation/epm.html) on Oracle® Technology Network:</p> <ul style="list-style-type: none"> ● <i>Oracle Hyperion Enterprise Performance Management System Installation and Configuration Guide</i> ● <i>Oracle Hyperion Enterprise Performance Management System Security Administration Guide</i> ● <i>Oracle Hyperion Enterprise Performance Management System Installation and Configuration Troubleshooting Guide</i> ● Other installation and deployment documentation required for your deployment. (See Chapter 1, “Installation Documentation Roadmap.”) ● The documentation for the products that you are installing 	
Preparing the hardware		

Task	Comments	Check When Completed
Plan your deployment architecture.	<p>For example, before you configure EPM System products, you need to know whether you will deploy in a clustered environment. See:</p> <ul style="list-style-type: none"> ● Chapter 2, “EPM System Product Descriptions” for information about EPM System product architecture ● Chapter 2, “EPM System Product Descriptions” for information about platform support ● See the <i>Oracle Hyperion Enterprise Performance Management System Certification Matrix</i> (http://www.oracle.com/technology/software/products/ias/files/fusion_certification.html listed in the Oracle Business Intelligence product area) for information about system requirements ● <i>Oracle Hyperion Enterprise Performance Management System High Availability and Disaster Recovery Guide</i> for information about deploying in a clustered environment 	
Ensure that the necessary hardware is available for your deployment architecture, and verify that the computers meet system requirements.	<p>For assistance in planning your deployment architecture, see “Sample Deployment Scenarios” on page 29.</p> <p>For system requirements, see the <i>Oracle Hyperion Enterprise Performance Management System Certification Matrix</i> (http://www.oracle.com/technology/software/products/ias/files/fusion_certification.html listed in the Oracle Business Intelligence product area.)</p>	
Prepare each server for the EPM System installation.	<ul style="list-style-type: none"> ● Update server software as needed. For example, ensure that required service packs, hotfixes, and so on are installed. ● Disable unnecessary services. 	
If you are clustering for load-balancing or failover, ensure that IT prepares the load balancer (hardware, software) or the failover mechanism.	<p>Ensure that the load balancer or failover mechanism is tested and ready before you start the installation. See the <i>Oracle Hyperion Enterprise Performance Management System High Availability and Disaster Recovery Guide</i> for additional information.</p>	
Check network bandwidth and latency for distant sites.		
Synchronize server time.	<p>When servers are not time synchronized, authentication errors that result in user access problems can occur between the EPM System application servers.</p>	
Arrange backup functionality.	<p>After the installation, Oracle advises that you perform a full backup of all servers and databases. After the initial backup, include servers and databases in daily backup procedures. See the <i>Oracle Hyperion Enterprise Performance Management System Backup and Recovery Guide</i>.</p>	
Resolve potential firewall problems	<p>Use port information in this document (See Chapter 7, “Ports.”) to open a restricted range of ports in your firewalls for client to server or server to server communication. Additional information about ports is available in <i>Communication Flows for 11.1.2.1 EPM System Products</i> on http://www.oracle.com/technetwork/middleware/bi-foundation/resource-library-090986.html</p>	
Disable anti-virus software.	<p>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.</p>	

Task	Comments	Check When Completed
Preparing databases		
<p>If necessary, install a database client and prepare a database for EPM System products that require a repository for relational storage.</p>	<ul style="list-style-type: none"> ● Be sure to install a supported version of the database software. See the <i>Oracle Hyperion Enterprise Performance Management System Certification Matrix</i> (http://www.oracle.com/technology/software/products/ias/files/fusion_certification.html listed in the Oracle Business Intelligence product area.) ● Set up database client access from the servers to the database setup. ● Set up user accounts to access the database. ● If you are using an Oracle database, install the full database client and test the database client with the <code>TNSPing</code> command. <p>If the database is installed, perform a full backup.</p> <p>For additional information about preparing databases, see “Preparing a Database” on page 53.</p>	
Preparing the security infrastructure		
<p>Collect the information needed to configure external security user directories in Oracle Hyperion Shared Services Console.</p>	<p>See “Configuring User Directories” in <i>Oracle Hyperion Enterprise Performance Management System User and Role Security Guide</i>.</p>	

Task	Comments	Check When Completed
Prepare a user account	<p>Windows:</p> <ul style="list-style-type: none"> ● Do not use the Administrator user to install and configure. Run EPM System Installer and Oracle Hyperion Enterprise Performance Management System Configurator as a user with administrator rights. Install and configure as an administrator and as the same user for all EPM 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." ● Before installing in a Windows 2008 environment, ensure that you disable User Account Control (UAC). 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. This also requires a reboot. <p>UAC must remain disabled in order for EPM System server components to function properly. UAC can be enabled on end-user client desktops.</p> <ul style="list-style-type: none"> ● When you upgrade or apply the maintenance release, install and configure using the same user that was used to install and configure the earlier release. <p>UNIX</p> <ul style="list-style-type: none"> ● Prepare a user account (not the root user). Install and configure as the same user for all EPM System products. On UNIX machines, for all Oracle products, the user that is installing must be part of the same group; the group must have write permission to the central inventory (oraInventory). ● If you have installed any other Oracle products, the user who will be installing EPM System products must be in the same group as the user who installed the other Oracle products. For example, both users must be part of oinstall. If you are upgrading EPM System products, follow this requirement even if you used multiple users to install components in previous releases. 	
Create domain accounts.	<ul style="list-style-type: none"> ● DCOM account, if required for your product (for example, hypdcom) – Domain user or system account with local Administrator rights and "Log On Locally" and "Interactive Logon" rights. ● Hyperion administrator (for example, hypadmin) – Domain user account 	
Obtain an account for external authentication with access to the user directory.	<ul style="list-style-type: none"> ● Create a login (which can be a service account) with Browse privileges for the user directory. ● Ensure that the service account name does not include special characters. ● Ensure that the service account's Distinguished Name (DN) can access the user directory. ● Note the user directory port. ● Be familiar with the name of a Primary Domain Controller that can access MSAD (if applicable). ● Ensure that the server can communicate with the user directory. <p>See the <i>Oracle Hyperion Enterprise Performance Management System User and Role Security Guide</i>.</p>	

Task	Comments	Check When Completed
<p>If you are using secure communication, ensure the availability of SSL certificates for all components.</p>	<p>See the <i>Oracle Hyperion Enterprise Performance Management System Security Administration Guide</i>.</p> <p>Oracle recommends a secure sockets-capable server in a production environment, or where the local network is not protected by some other means (such as a firewall), or where public users can access the Web server.</p>	
<p>If you are using the embedded Shared Services Native Directory, consider whether to provision users or groups. Oracle recommends that you provision groups to reduce administrative overhead. If you provision by group, decide whether to use Native Directory groups or external authentication provider groups.</p>	<p>See the <i>Oracle Hyperion Enterprise Management System User and Role Administration Guide</i>.</p>	
<p>Setting up Web application servers and Web servers</p>		
<p>Ensure that WebLogic Server is available for EPM System product deployment. The application server and the product that you are deploying must be installed on the same computer.</p>	<ul style="list-style-type: none"> ● If you are not using the version of WebLogic provided during installation, ensure that your existing version is the supported version. See the <i>Oracle Hyperion Enterprise Performance Management System Certification Matrix</i> (http://www.oracle.com/technology/software/products/ias/files/fusion_certification.html listed in the Oracle Business Intelligence product area.) ● To identify the products that require an application server and to view the list of supported application servers, see “Tier Architecture ” on page 17. ● For additional information about setting up a Web application server, see “Preparing Web Application Servers” on page 63. ● For UNIX, ensure that you have root access to the application server installation directory. 	
<p>Ensure that a Web server is available for EPM System product deployment.</p>	<ul style="list-style-type: none"> ● If you are not planning to use the Oracle HTTP Server provided during installation, ensure that your existing version is the supported version. See the <i>Oracle Hyperion Enterprise Performance Management System Certification Matrix</i> (http://www.oracle.com/technology/software/products/ias/files/fusion_certification.html listed in the Oracle Business Intelligence product area.) ● Make sure that you meet the installation prerequisites for Oracle HTTP Server and review the Oracle HTTP Server installation documentation and Release Notes for details. ● To identify the products that require a Web server and the list of supported Web servers, see http://www.oracle.com/technology/software/products/ias/files/fusion_certification.html. ● For additional information about setting up a Web server, see “Preparing Web Servers” on page 63. 	

Task	Comments	Check When Completed
If you are using software load balancing, in the Web server, prepare the load balancer plug-in to the Web application server.	See your load balancer documentation.	
Resolving ports		
Identify and resolve port conflicts.	Review the list of EPM System product default ports in Chapter 7, "Ports."	
Preparing for product configuration		
Collect the information needed to configure products after installation.	See "Configuring EPM System Products" in the <i>Oracle Hyperion Enterprise Performance Management System Installation and Configuration Guide</i>	

Product-Specific Installation Planning

The following table describes additional planning required for specific EPM System products.

Table 4 Additional Pre-Installation Planning Checklist

Task	Comments	Check When Completed
Prepare the Production Reporting Server	<p>A C compiler is required to relink the Production Reporting Server executables for all platforms except Sun Solaris. For the AIX platform, a C++ compiler is required. If you need an installed C++ compiler, you can download the required C++ components from the following locations.</p> <p>For AIX, go to:</p> <p>http://www-1.ibm.com/support/docview.wss?uid=swg24001174</p> <p>No changes to the Oracle Hyperion SQR Production Reporting Server linking scripts are required.</p>	
Prepare the runtime environment on AIX.	<p>Interactive Reporting, Financial Reporting, Web Analysis, and, in some cases, Essbase Server require an updated C++ runtime environment version on AIX 5L.</p> <p>To obtain the update:</p> <ul style="list-style-type: none"> ● Go to the IBM technical support Web site (https://techsupport.services.ibm.com/) ● Search the PTF number (U489780) or the fileset (x1C.aix50.rte.6.0.0.7), and download the file 	

6

Preparing Your Environment

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Preparing a Database

Before you install and configure most EPM System products, you must create a database using a supported RDBMS (Oracle Database, Microsoft SQL Server, or IBM DB2).

EPM System supports 32-bit as well as 64-bit versions of all supported databases; however, the version of the database should match the operating system. For example, a 64-bit database version can be used only on a 64-bit operating system.

For simplicity and ease of deployment, you can use one database repository for all products (with the exceptions noted below). When you configure multiple products at one time using EPM System Configurator, one database is configured for all selected products.

Caution! To use a different database for each product, perform the “Configure Database” task separately for each product. 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.

The following products and product components require unique databases:

- Performance Management Architect interface data source
- Extended Analytics for Financial Management and Extended Analytics for Strategic Finance
- Planning – Each Planning application should have its own repository.
- Performance Scorecard
- FDM – Use an Oracle Database instance exclusively for FDM.

For information about the FDM database, see the *Oracle Hyperion Financial Data Quality Management DBA Guide*.

- Data Relationship Management. See the *Oracle Hyperion Data Relationship Management Installation Guide*.

Upgrade Note!

If you are upgrading from a previous release of EPM System products, see the *Oracle Hyperion Enterprise Performance Management System Installation and Configuration Guide* for information about replicating or reusing databases.

Using an Oracle Database

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

Oracle Database Installation Information

- Install the full Oracle Database client on the following machines before you start your installation of EPM System products:
 - Performance Management Architect Dimension server
 - Financial Management application server
 - FDM Application Server and any machine that has FDM Workbench
 - Strategic Finance

Note: It is important to install the full database client as part of the installation because the PATH variable is updated to include the path to the `/bin` folder of the Oracle client. This setting is required for successful configuration.

Note: If you are using Oracle Database 10.2.0.4+, you must use a minimum of Oracle Database client 11.1.0.6.0.

Note: Performance Management Architect and Financial Management both require that a 64-bit Oracle Database client be installed. Strategic Finance and FDM both require that a 32-bit Oracle Database client be installed. Note that Strategic Finance only uses the Oracle OLEDB driver supplied in the Oracle Database client install.

Financial Management and FDM can coexist on Windows 2008 64-bit systems using IIS7; however, there is a required sequence for installing the Oracle Database clients to support this scenario. You must install the Oracle Database 32-bit client first, then install the Oracle Database 64-bit client. If you already have installed both Oracle Database clients, uninstall the 64-bit client and install it again.

- If you are using FDM or Performance Management Architect Dimension Server, Oracle Data Provider (ODP) for .NET 2.0 (from the Oracle Data Access Component (ODAC) package) is required and must be installed by a user with Windows administrator rights.

- In order to use Oracle RAC/SCAN, install OCI (Oracle Call Interface) as part of the Oracle database client installation.
- If your database resides on a remote computer, create a Net Service Name that enables the product to connect to the remote database.
- Use the global database server name when specifying locations and paths. Do not use `localhost` as a server name.

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)

Note: The UTF-8 character set must be applied to the client and to the Oracle database.

Oracle Database Roles and Privileges

Oracle Database user IDs should have the following roles and privileges:

- CREATE SESSION
- CREATE VIEW
- RESOURCE

Required Oracle Database Account (FDM Only)

The default tablespace used by FDM is the `USERS` tablespace. To ensure that users do not exceed a space-used threshold or if you have questions about the appropriate value for the quota, consult with your database administrator.

Oracle recommends that you review the *Oracle Hyperion Financial Data Quality Management DBA Guide* before creating the database instance.

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
Shared Services & EPM Workspace	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
Performance Management Architect	Oracle recommends starting with at least 250MB.
Administration Services	The amount of space needed depends on the metadata created; Oracle recommends starting with at least 32 MB.
Essbase Studio	The amount of space needed depends on the metadata created; Oracle recommends starting with at least 32 MB.
Reporting and Analysis	The amount of 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 Reporting and Analysis 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.
Planning and 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 <p>Note: You can adjust the size of the system table database to match the size of the application.</p>
Financial Management and 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 <p>Note: You can adjust the size of the system table database to match the size of the application.</p>
Performance Scorecard	500 MB
Profitability and Cost Management	Oracle recommends starting with at least 250 MB.
FDM	See the <i>Oracle Hyperion Financial Data Quality Management DBA Guide</i> .

Oracle Database Configuration Considerations

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 EPM 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 <code>SEGMENT SPACE MANAGEMENT</code> parameter is set to <code>AUTO</code> when you create tablespace, to improve performance.
Reporting and Analysis	Dedicate a tablespace to Reporting and Analysis. Determine the tablespaces to be used as the default tablespace and the temporary tablespace for this user. Do not use the SYSTEM tablespace.

Product	Tablespace Considerations
Financial Management	Set up a temporary tablespace greater than 1GB.
FDM	See the <i>Oracle Hyperion Financial Data Quality Management DBA Guide</i> .
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/All Products	Set the <code>nls_length_semantics</code> parameter to <code>char</code> : <code>nls_length_semantics=char</code>
Planning	For Oracle Database 10g, Planning recommends that <code>CURSOR_SHARING</code> in Oracle be set to the default setting, "EXACT."
Financial Management	Set Oracle <code>OPEN_CURSORS</code> to 5000.
Performance Scorecard	Set Oracle <code>OPEN_CURSORS</code> to 1500 or greater.
FDM	See the <i>Oracle Hyperion Financial Data Quality Management DBA Guide</i> .

Operating System Configuration for Oracle Database

For Reporting and Analysis, set the necessary environment variables:

- (UNIX/Linux)
 - ORACLE_HOME
 - PATH
 - (Solaris/Linux) LD_LIBRARY_PATH
 - (AIX) LIBPATH
 - (HP) SHLIB_PATH

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:

- Set `READ_COMMITTED_SNAPSHOT = ON`
- Set `ALLOW_SNAPSHOT_ISOLATION = ON`
- Select the SQL Server and Windows authentication option when you set the security properties for the database.
- All products support Latin Collation for the SQL Server database. Use this statement: `SQL_Latin1_General_CP1_CI_AS`. However, if you are using Oracle SOA Suite (required as part of a Financial Close Management deployment), then Oracle recommends that the Financial Close Management database be kept separate and set it to `SQL_Latin1_General_CP1_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`.

Note: For FDM, Windows accounts that run MSSQL Server Windows service must have read access to the FDM `Data` folder.

Microsoft SQL Server Sizing Guidelines

The following table describes the Microsoft SQL Server sizing guidelines.

Product	Sizing Guideline
Shared Services	Start with 100 MB, and add more as the number of migrations with Lifecycle Management and the number of audit records increases.
EPM 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.
Performance Management Architect	Oracle recommends starting with at least 250 MB.
Administration Services	The space needed depends on the metadata created; Oracle recommends starting with at least 32 MB.
Essbase Studio	The space needed depends on the metadata created; Oracle recommends starting with at least 32 MB.
Planning and 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 <p>Note: You can adjust the size of the system table database to match the size of the application.</p>

Product	Sizing Guideline
Financial Management and 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 <p>Note: You can adjust the size of the system table database to match the size of the application.</p>
Performance Scorecard	500 MB
Profitability and Cost Management	Oracle recommends starting with at least 250 MB.
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%
FDM	See the <i>Oracle Hyperion Financial Data Quality Management DBA Guide</i> .

Using an IBM DB2 Database

This section includes information about IBM DB2 database installation, database creation, required roles and privileges, sizing guidelines, and configuration.

IBM DB2 Installation Information

During IBM DB2 installation, consider:

- When installing IBM DB2, clear the OLAP Starter Kit option.
- For Performance Management Architect, ensure that your DB2 database is installed on a different computer, and not on the Dimension Server machine where the DB2 9 Runtime Client and DB2 .NET Data Provider must be installed.

Note: If DB2 9 Runtime Client is installed on the Performance Management Architect computer, verify that an entry exists in the Global Assembly Cache.

- If you use an IBM DB2 database for Financial Management, DB2 Runtime Client and DB2 .NET Data Provider must be installed on the same machine as the Financial Management Application Server.
- For Reporting and Analysis, ensure that the IBM DB2 Client Application Enabler is installed on the computers on which you install services. For Core Services and Job Factory Service, if you use an IBM DB2 RDBMS, and Reporting and Analysis Services are on separate machines, use the Client Application Enabler to create a client connection to the Reporting and Analysis database.

IBM DB2 Database Creation Considerations

For the best compatibility with non-ASCII character sets, an IBM DB2 database must be created using Unicode Transformation Format UTF-8 encoding (character set). Use of UTF-8 is required if you need multilingual support (multicharacter set support).

Use the Client Configuration Assistant to set up a database alias that enables the EPM System product to connect to the database. Be sure to select “Register this Database for ODBC and As a System Data Source.”

IBM DB2 Roles and Privileges

Database users must be assigned the following privileges:

- CREATETAB
- BINDADD
- CONNECT

IBM DB2 Sizing Guidelines

The following table describes the IBM DB2 sizing guidelines.

Product	Sizing Guideline
Shared Services	Start with 100 MB, and add more as the number of migrations with Lifecycle Management and the number of audit records increases.
EPM 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.
Performance Management Architect	Oracle recommends starting with at least 250 MB.
Administration Services	The space needed depends on the metadata created; Oracle recommends starting with at least 32 MB.
Essbase Studio	The space needed depends on the metadata created; Oracle recommends starting with at least 32 MB.
Planning and 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 Note: You can adjust the size of the system table database to match the size of the application.
Financial Management and 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 Note: You can adjust the size of the system table database to match the size of the application.
Performance Scorecard	500 MB

IBM DB2 Database Configuration Considerations

The following table describes IBM DB2 database configuration considerations.

Product	Tablespace Considerations
General—All products	<p>Minimum tablespace requirements:</p> <ul style="list-style-type: none"> ● A buffer pool and a tablespace with a 32 KB page size ● A system temporary buffer pool and a system temporary tablespace with a 32 KB page size <p>Note: The default tablespace for the database user that owns the repository must not be partitioned.</p> <p>Increase settings as follows:</p> <ul style="list-style-type: none"> ● <i>bufferpool_name</i> buffer pool from 1000 (default) to 32000 (about the size of the largest audit table and indexes) ● IBMDEFAULTBP buffer pool from 1000 (default) to 100000 ● <i>tmp_bufferpool_name</i> buffer pool from 1000 (default) to 8000 (temporary space buffer pool) ● DBHEAP from 1200 (default) to 33000 ● SORTHEAP from 256 (default) to 2000 ● LOGBFSIZ from 16 (default) to 128 ● Increase the heap size: <ul style="list-style-type: none"> ○ DRDA_HEAP_SZ parameter – 2048 or greater ○ STMHEAP, APPLHEAPSZ, and APP_CTL_HEAP_SZ parameters – 8096
Shared Services and Essbase Studio	<ul style="list-style-type: none"> ● Increase PAGESIZE to 32K. ● Increase <i>bufferpool</i> to 32768.
Performance Management Architect	<ul style="list-style-type: none"> ● Increase the heap size: <ul style="list-style-type: none"> ○ LOGFILSZ to 4096 ○ APPLHEAPSZ to 8192 ○ STMTHEAP to 10240 ● Ensure that the user has privileges to create tablespaces and buffer pools. ● Ensure that the user has been granted the right to use the temporary tablespace.

Product	Tablespace Considerations
Planning	<p>Before you configure Planning, you must configure the database with a large enough tablespace (having a page size of at least 32 K) in order to support the Planning tables.</p> <p>The following sample SQL script creates the necessary buffer pool and tablespace. Change the names and the disk location to reflect your needs. By default, the tablespace is named <i>HSPSPACE8_1</i> and is created in the C:\DB2DATA\HSPSPACE8_1 directory. The other settings are also defaults; the administrator should adjust the settings as appropriate for the environment.</p> <p>Example:</p> <pre>CREATE BUFFERPOOL hspool8_1 SIZE 250 PAGESIZE 32 K; CREATE REGULAR TABLESPACE hspspace8_1 PAGESIZE 32 K MANAGED BY SYSTEM USING ('c:\db2data\hspspace8_1') EXTENTSIZE 32 OVERHEAD 24.1 PREFETCHSIZE 8 TRANSFERRATE 0.9 BUFFERPOOL HSPPOOL8_1;</pre> <p>The database administrator must ensure that the user who logs on to the Planning relational database has rights to use the new tablespace.</p>

Performance Scorecard–Specific IBM DB2 Database Configuration Requirements

You must complete the following procedure before you configure Performance Scorecard.

► To prepare the IBM DB2 server:

- 1 Increase the database log size to 6500.
- 2 Modify this script with information specific to your database:

```
SET HPSDB=<hpsdatabase>
SET ADMIN=<adminusername>
SET ADMINPWD=<adminpassword>
SET TBSFILE=<table space file location>
SET TMPFILE=<temp file location>
DB2 CONNECT TO %HPSDB% USER %ADMIN% USING %ADMINPWD%
DB2 UPDATE DATABASE CONFIGURATION FOR %HPSDB% USING APPLHEAPSZ 512
DB2 CREATE BUFFERPOOL HPS_BP SIZE 250 PAGESIZE 32 K
DB2 TERMINATE
DB2STOP
DB2START
DB2 CONNECT TO %HPSDB% USER %ADMIN% USING %ADMINPWD%
DB2 CREATE REGULAR TABLESPACE HPS_SPACE1 PAGESIZE 32 K MANAGED BY SYSTEM USING
('%TBSFILE%') EXTENTSIZE 32 OVERHEAD 24.1 PREFETCHSIZE 32 TRANSFERRATE 0.9
BUFFERPOOL HPS_BP
DB2 COMMENT ON TABLESPACE HPS_SPACE1 IS 'HPS Table Space'
DB2 GRANT USE OF TABLESPACE HPS_SPACE1 TO PUBLIC
DB2 CREATE SYSTEM TEMPORARY TABLESPACE HPS_TEMP PAGESIZE 32 K MANAGED BY SYSTEM
USING ('%TMPFILE%') EXTENTSIZE 32 OVERHEAD 24.1 PREFETCHSIZE 32 TRANSFERRATE 0.9
BUFFERPOOL HPS_BP DB2 COMMENT ON TABLESPACE HPS_TEMP IS 'HPS Temporary Table Space'
DB2 TERMINATE
DB2STOP
DB2
```

- 3 Save the file as `name.bat`.
- 4 From the Command Center, execute the script.
- 5 Windows 2003 users, perform these steps:
 - a. Select **Control Panel**, then **Computer Management**, and then **Users and Groups**.
 - b. On the **User Accounts** box, click **Advanced**.
 - c. Select **DB2Admin**, right-click and select **Properties**.
 - d. On the **Properties** box, select **Member Of**.
 - e. Select **Users**, click **Remove**, and click **Save**.

Preparing Web Application Servers

Many EPM System products require a Web application server. To identify the products that require a Web application server, see the “Architecture” section in *Oracle Hyperion Enterprise Performance Management System Installation Start Here*.

WebLogic Server

- Oracle provides a limited-use license of WebLogic Server for use with EPM 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” in the *Oracle Hyperion Enterprise Performance Management System Installation and Configuration Guide*.

Preparing Web Servers

To view the list of supported Web servers, see the *Oracle Hyperion Enterprise Performance Management System Certification Matrix* (http://www.oracle.com/technology/software/products/ias/files/fusion_certification.html)

Oracle HTTP Server

Oracle installs Oracle HTTP Server during the installation of Foundation Services, using the Oracle HTTP Server silent installer.

Caution! Before you install EPM 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 “Oracle HTTP Server Installation Prerequisites” in the *Oracle Hyperion Enterprise Performance Management System Installation and Configuration Guide*.

Microsoft Internet Information Services (IIS)

The following products require IIS to be installed with ASP.NET support enabled before configuration of the EPM System product:

- Performance Management Architect Service (Dimension Server)
- Financial Management
- Strategic Finance
- FDM
- Data Relationship Management

Notes about IIS:

- If .NET is not detected, the installation program will install it.
- If you are using Windows 2008, you must install ASP Role Services before installing EPM System products that require IIS. If you are using Windows 2008, you must install .NET 3.5 before installation of Data Relationship Management.
- 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.

Enabling Existing .NET 2.0 Framework (Windows 2003)

Performance Management Architect requires .NET 2.0 Framework on the machine where you install the Dimension server. If .NET 2.0 Framework is not installed on your machine, Oracle Hyperion Enterprise Performance Management System Installer automatically installs it for you.

If you are using Windows 2003 and .NET 2.0 is installed, you must register and enable .NET 2.0 with IIS.

- To enable .NET 2.0 on Windows 2003 machines:
 - 1 **Open IIS Manager.**
 - 2 **In the left pane, select **Web Service Extensions**.**
 - 3 **If ASP.NET 2.0 is listed in the right pane, enable it by ensuring that the **Status** column is set to **Allowed**.**
 - 4 **If ASP.NET 2.0 is not listed in the right pane and .NET 2.0 is installed, register .NET 2.0 with IIS:**
 - a. From the command prompt, go to: C:\Windows\Microsoft.NET\Framework\v2.0.50727
 - b. Enter `aspnet_regiis.exe -iru`.
 - c. Repeat steps 1–3.

32-Bit/64-Bit Microsoft IIS 6.0/7.0 Support

Microsoft IIS 6.0 can be configured to support 32-bit application runtimes or 64-bit application runtimes on 64-bit operating systems. Microsoft IIS 6.0 cannot be configured to support both simultaneously. Therefore, in general, when installing and configuring EPM System products with Microsoft IIS 6.0, install 32-bit runtimes and 64-bit runtimes for EPM System Web tier components on different computers.

Specifically, FDM (32-bit) and Strategic Finance (32-bit) cannot be deployed on the same computer where Financial Management (64-bit) and Performance Management Architect (64-bit) are deployed. On 32-bit platforms, all EPM System products can coexist.

Note: For IIS 7 (the default on Windows 2008 systems), 32-bit and 64-bit components can coexist. However, for FDM and Strategic Finance, you need to install IIS 6.0 compatibility mode when running IIS 7.0.

Financial Management Web Server Environment

For Apache Web server, for synchronous load requests in Financial Management that take more than five minutes to respond, avoid a timeout by setting `ProxyTimeout` to the IIS request timeout 3600s.

Apache HTTP Server

If you plan to use Apache HTTP Server in an SSL enabled UNIX environment, before you install and configure EPM System, download and install the Apache 2.2.8 binaries that support SSL.

Preparing Web Browsers

This section contains required browser settings and information about enabling ActiveX for Reporting and Analysis.

Browser Settings

Ensure that browser preferences and options are enabled:

- For Internet Explorer and Mozilla 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.
- 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**, then **Languages**.
 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 EPM 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.

- For Internet Explorer 7, select **Tools**, then **Internet Options**, then **Security**, then **Custom Level**, and then **Miscellaneous**. Ensure that the setting for “Include local directory path when uploading files to a server” is set to **Enable**.
- For Internet Explorer (Reporting and Analysis only):
 - Enable ActiveX. See [“Enabling ActiveX \(Reporting and Analysis\)”](#) on page 66.
 - Add the Reporting and Analysis Web site to the trusted zone. For example, in Internet Explorer, select **Tools**, then **Internet Options**, then **Security Tab**, then **Trusted Sites**, and then click **Sites**.

Enabling ActiveX (Reporting and Analysis)

To enable EPM System Web applications to function properly, Internet Explorer must be configured to enable support for ActiveX technologies.

EPM System products do not download ActiveX components to the browser. Instead, only HTML, JavaScript, and XML are sent to and by the client browser.

Guidelines to enable XML components:

- In the Web browser security settings, enable ActiveX controls and plug-in execution by setting **“Run ActiveX controls and plug-ins”** to “Enable.”
- Enable ActiveX controls and plug-in execution by adding the Project Reporting and Analysis site as a trusted site and changing the custom security settings for trusted sites.
- Provide group policies that define the controls required for handling XML (the MS XML parser and XMLHttpRequest controls) and enable these administrator approved controls for all sites or for select trusted sites.
- All other ActiveX controls and plug-ins remain disabled. Group policies can be implemented by zone by enabling the controls for sites in the trusted zone.
- For Active X enabled controls, enable the setting **“Script ActiveX controls marked safe for scripting.”**

7

Ports

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This chapter contains information about default port numbers for EPM System products including where the port can be configured. 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” in the *Oracle Hyperion Enterprise Performance Management System Installation and Configuration Guide*.

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 5 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.

SSL Ports

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

Foundation Services Ports

See these sections for information about Foundation Services ports:

- [“Foundation Services Ports” on page 70](#)
- [“Performance Management Architect Ports” on page 71](#)
- [“Calculation Manager Web Application Ports” on page 72](#)

Foundation Services Ports

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

Table 6 Foundation Services Web Application Ports

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

The following table describes the Oracle Hyperion Foundation Services Web Server ports and where you can configure them.

Table 7 Web Server Ports

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

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

Performance Management Architect Ports

The following table describes the Performance Management Architect Web application ports and where you can configure them.

Table 8 Performance Management Architect Web Application Ports

Port Type	Default Port Number	Where Configurable
Performance Management Architect Web Application		
Listen port	19091 (can be configured for SSL)	EPM System Configurator
SSL listen port	19047	EPM System Configurator
Data Synchronizer Web Application (Performance Management Architect)		
Listen port	19101 (can be configured for SSL)	EPM System Configurator
SSL listen port	19145	EPM System Configurator

The following table describes the Performance Management Architect Dimension Server default service ports and where you can configure them.

Table 9 Performance Management Architect Server Ports

Services	Default Port Number	Where Configurable
Performance Management Architect Server	5251	<i>EPM_ORACLE_HOME</i> /products/Foundation/BPMA/AppServer/DimensionServer/ServerEngine/bin/BPMA_Server_Config.xml. In BPMA_Server_Config.xml, under<DimensionServer>, change <Port>portnumber</Port>
Net JNI Bridge	5255	<i>EPM_ORACLE_HOME</i> /products/Foundation/BPMA/AppServer/DimensionServer/ServerEngine/bin/BPMA_Server_Config.xml. In BPMA_Server_Config.xml, under<SessionManager>, change <NetJNIBridgePort>portNumber</NetJNIBridgePort>

The following table describes the Performance Management Architect Web server default service ports and where you can configure them.

Table 10 Performance Management Architect Web Services (IIS) Port

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

Calculation Manager Web Application Ports

The following table describes the Oracle Hyperion Calculation Manager Web application ports and where you can configure them.

Table 11 Calculation Manager 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” on page 72](#)
- [“Administration Services Ports” on page 73](#)
- [“Provider Services Ports” on page 73](#)
- [“Essbase Studio Ports” on page 74](#)

Essbase Ports

The following table describes the Essbase default service ports and where you can configure them.

Table 12 Essbase Default Service Ports

Service	Default Port Number	Where Configurable
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
Oracle Essbase Integration Services Server	3388	<i>EPM_ORACLE_HOME/products/Essbase/eis/bin/ais.cfg</i> Add <i>-Pportnumber</i>

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

Note: When multiple instances of Essbase Server are installed on one computer, you must specify a unique port number for each instance. By default, the first instance of Essbase Server uses port number 1423, which is specified in EPM System Configurator. Specify a different port number for the second instance during configuration with EPM System Configurator. You connect to subsequent installations by specifying the machine name and the agent port number, in the form: *machineName:agentPort* when connecting.

Table 13 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

The following table describes the Oracle Essbase Administration Services Web application ports and where you can configure them.

Table 14 Administration Services 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

The following table describes the Oracle Essbase Provider Services Web application ports and where you can configure them.

Table 15 Provider Services 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

The following table describes the Oracle Essbase Studio ports and where you can configure them.

Table 16 Essbase Studio Server Ports

Port Type	Default Port Number	Where Configurable
Listen port	5300	<i>MIDDLEWARE_HOME</i> /user_projects/epmsystem1/BPMS/bpms1/bin/server.properties Parameters: transport.port= <i>new port number</i>
HTTP listen port	9080	<i>MIDDLEWARE_HOME</i> /user_projects/epmsystem1/BPMS/bpms1/bin/server.properties Parameters: Server.httpPort= <i>new port number</i>

Reporting and Analysis Ports

See these sections for information about Oracle Hyperion Reporting and Analysis ports:

- [“Reporting and Analysis Framework Ports” on page 74](#)
- [“Financial Reporting Ports” on page 75](#)
- [“Interactive Reporting Ports” on page 76](#)
- [“Web Analysis Ports” on page 76](#)

Reporting and Analysis Framework Ports

The following table describes the Reporting and Analysis Framework Web application ports and where you can configure them.

Table 17 Reporting and Analysis Framework Web Application Ports

Port Type	Default Port Number	Where Configurable
Listen port	45000	EPM System Configurator
SSL listen port	45043	EPM System Configurator

The following table describes the Reporting and Analysis Framework default service ports and where you can configure them.

Table 18 Reporting and Analysis Framework Default Service Ports

Service	Default Port Number	Where Configurable
Reporting and Analysis Framework Agent	6860	From EPM Workspace, select Navigate, then Administer, then Reporting and Analysis, and then Agents.

Service	Default Port Number	Where Configurable
Reporting and Analysis Framework Services <ul style="list-style-type: none"> ● Global Services Manager (GSM) ● Core Service ● Service Broker ● Job Service ● Event Service ● Repository Service 	6800–6805 Each service listed in this table is assigned a port within the range, either the default range 6800–6805 or the range specified during configuration.	<ul style="list-style-type: none"> ● Use EPM System Configurator when you are installing or configuring Reporting and Analysis Framework Services for the first machine. ● To change a port number or find out the exact port used by a particular component: from EPM Workspace, select Navigate, then Administer, then Reporting and Analysis, then Services, and then the Properties dialog box of Reporting and Analysis Framework Services.

Financial Reporting Ports

The following table describes the Financial Reporting Web application ports and where you can configure them.

Table 19 Financial Reporting Web Application Ports

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

The following table describes the Financial Reporting default service ports and where you can configure them.

Table 20 Financial Reporting Default Service Ports

Service	Default Port Number	Where Configurable
Financial Reporting Print Service	8297	Launch JConsole (Java Monitoring and Management Console) using <code>EPM_ORACLE_HOME/products/biplus/bin/FRConfig.cmd (.sh)</code> . Then select Attributes on the MBeans tab to view and set the properties and values.
Financial Reporting Scheduler Service	8299	Launch JConsole (Java Monitoring and Management Console) using <code>EPM_ORACLE_HOME/products/biplus/bin/FRConfig.cmd (.sh)</code> . Then select Attributes on the MBeans tab to view and set the properties and values.
RMI Services	Anonymous ports are assigned by default for communication	You can also configure a range of ports by setting <code>RMIPortRangeLower</code> and <code>RMIPortRangeUpper</code> within the Oracle Hyperion Financial Reporting configuration.
Remote ADM Server	Dynamic	<code>EPM_ORACLE_HOME/common/ADM/11.1.2.0/lib/ADM.properties</code>

Interactive Reporting Ports

The following table describes the Interactive Reporting default service ports and where you can configure them.

Table 21 Interactive Reporting Default Service Ports

Service	Default Port Number	Where Configurable
<ul style="list-style-type: none">Interactive Reporting Logging ServiceInteractive Reporting Intelligence ServiceData Access Service (DAS)Oracle Hyperion Interactive Reporting Job Service	6810, 6811 (Log Service) 6812, 6813 (Intelligence Service): 6814, 6815 (Data Access Service) 6816, 6817 (Job Service)	<ul style="list-style-type: none">Use EPM System Configurator when you are installing or configuring Reporting and Analysis Framework Services for the first machine.To change a port number or find out the exact port used by a particular component: from Oracle Hyperion Enterprise Performance Management Workspace, select Navigate, then Administer, then Reporting and Analysis, then Services, and then the Properties dialog of Oracle Hyperion Reporting and Analysis Framework Services

Web Analysis Ports

The following table describes the Oracle Hyperion Web Analysis Web application ports and where you can configure them.

Table 22 Web Analysis Web Application Ports

Port Type	Default Port Number	Where Configurable
Listen port	16000	EPM System Configurator
SSL listen port	16043	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” on page 77](#)
- [“Planning Ports” on page 78](#)
- [“Performance Scorecard Ports” on page 78](#)
- [“Strategic Finance Ports” on page 79](#)
- [“Profitability and Cost Management Ports” on page 79](#)
- [“Financial Close Management Ports” on page 80](#)
- [“Disclosure Management Ports” on page 80](#)

Financial Management Ports

The following table describes the Financial Management Web application ports and where you can configure them.

Table 23 Financial Management Web Service Web Application Port

Port Type	Default Port Number	Where Configurable
Listen port	6373	EPM System Configurator
SSL listen port	6383	EPM System Configurator

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

Table 24 Financial Management Default Service Port

Service	Default Port Number	Where Configurable
Financial Management Service	135-plus ephemeral high-range ports (1024-5536)	Windows settings-Fix DCOM ephemeral ports. See the Microsoft support article describing how to set the ports used by DCOM: http://support.microsoft.com . Search for "restrict DCOM port."
Financial Management DME Listener Service (for use with Oracle Hyperion EPM Architect)	9097	In the NT registry on the machine on which DMEListener is running. <code>HKEY_LOCAL_MACHINE\Software\HyperionSolutions\HyperionManagement\Server</code>

The following table describes the Financial Management Web server port and where you can configure it.

Table 25 Financial Management IIS Web Application Port

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

Note: The Financial Management IIS Web Applications: Financial Management Web Services IIS Web Application, Financial Management Smart View IIS Web Application, Financial Management IIS Web Application, and Financial Management LCM IIS Web Application.

The following table describes the Oracle Hyperion Financial Management SMTP port for e-mail alerts and where you can configure it.

Table 26 Financial Management SMTP Port for Email Alerts

Default SMTP Port for Email Alerts	Where Configurable
25	EPM System Configurator

Planning Ports

The following table describes the Planning Web application ports and where you can configure them.

Table 27 Planning Web Application Ports

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

The following table describes the Planning default service ports and where you can configure them.

Table 28 Planning RMI Server Port

Service	Default Port Number	Where Configurable
Planning RMI Server	11333	<p><i>EPM_ORACLE_HOME/common/RMI/VersionNumber/HyperionRMI_Port.properties</i></p> <p>Parameter: <code>registryPort</code></p> <p>Note: You cannot change this port using the EPM System Configurator.</p> <p>To change the Planning RMI Server port:</p> <ol style="list-style-type: none"> 1. In the <code>HyperionRMI_Port.properties</code> file, change the <code>registryPort</code> value to the new port number. 2. In Oracle Hyperion Planning, select Administration, then Manage Properties, and then System Properties. 3. Add a new parameter, <code>COMMON_RMI_PORT</code>, and specify the same port value that you entered in <code>HYPERIONRMI_Port.properties</code>. This updates the <code>HSPSYS_PROPERTIES</code> database. 4. Restart the Hyperion RMI Registry service. 5. Restart the Hyperion Planning Service.

Performance Scorecard Ports

The following table describes the Performance Scorecard Web application ports and where you can configure them.

Table 29 Performance Scorecard Web Application Ports

Port Type	Default Port Number	Where Configurable
Listen port	18080	EPM System Configurator
SSL listen port	18443	EPM System Configurator

The following table describes the Oracle Hyperion Performance Scorecard Alerter Web application ports and where you can configure them.

Table 30 Performance Scorecard Alerter Web Application Ports

Port Type	Default Port Number	Where Configurable
Listen port	18081	EPM System Configurator
SSL listen port	18444	EPM System Configurator

Strategic Finance Ports

The following table describes the Strategic Finance default service port and where you can configure it.

Table 31 Strategic Finance Default Service Port

Service	Default Port Number	Where Configurable
Strategic Finance Server	7750	EPM System Configurator Note: If you change this port, you must also change it for each Strategic Finance client in the Connection dialog box.

The following table describes the Oracle Hyperion Strategic Finance Web server port and where you can configure it.

Table 32 Strategic Finance Web Server Port

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

Profitability and Cost Management Ports

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

Table 33 Profitability and Cost Management Web Application Ports

Type of Port	Default Port Number	Where Configurable
Listen port	6756	EPM System Configurator
SSL listen port	6743	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 34 Financial Close Management Web Application Ports

Type of Port	Default Port Number	Where Configurable
Listen port	8700	EPM System Configurator
SSL listen port	8743	EPM System Configurator
SOA Server	8001	Oracle WebLogic Server Admin Console

Disclosure Management Ports

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

Table 35 Disclosure Management Web Application Ports

Type of Port	Default Port Number	Where Configurable
Listen port	8600	EPM System Configurator
SSL listen port	8643	EPM System Configurator

Data Management Ports

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

- [“FDM Ports” on page 80](#)
- [“ERP Integrator Ports” on page 81](#)
- [“Data Relationship Management Ports” on page 82](#)

FDM Ports

The following table describes the FDM default service ports and where you can configure them.

Table 36 FDM Default Service Ports

Service	Default Port Number	Where Configurable
FDM load balancer and FDM application server	135-plus ephemeral high-range ports (1024-65536)	Windows settings—Fix DCOM ephemeral ports. For more information, see the Microsoft support article describing how to set the ports used by DCOM: http://support.microsoft.com . Search for “restrict DCOM port.”
File sharing	137-139, 445	Controlled by the operating system. By default, file sharing is enabled between all FDM application servers and the data server. Default port numbers are the following: <ul style="list-style-type: none"> ● NetBIOS Datagram Service = port 138 ● NetBIOS Name Resolution = port 137 ● NetBIOS Session Service = port 139 If NetBIOS is turned OFF, then use SMB = port 445
Firewall	135 plus ephemeral high-range ports (1024-65536)	Windows settings—Fix DCOM ephemeral ports. For more information, see the Microsoft support article describing how to set the ports used by DCOM: http://support.microsoft.com . Search for “restrict DCOM port.”

Note: For FDM, the DCOM port 135 must be open if you are running in a DMZ environment.

The following table describes the Oracle Hyperion Financial Data Quality Management Web server port and where you can configure it.

Table 37 FDM Web Server (IIS) Port

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

ERP Integrator Ports

The following table describes the Oracle Hyperion Financial Data Quality Management ERP Integration Adapter for Oracle Applications Web application ports and where you can configure them.

Table 38 ERP Integrator Web Application Ports

Port Type	Default Port Number	Where Configurable
Listen port	6550	EPM System Configurator
SSL listen port	6553	Oracle Hyperion Enterprise Performance Management System Configurator

Data Relationship Management Ports

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

Table 39 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 Oracle Hyperion Data Relationship Management Web server ports and where you can configure them.

Table 40 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.)

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